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## RESEARCH AND DEVELOPMENT

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### FACULTY OF ARTS & HUMANITIES

#### DEPARTMENT OF ARCHAEOLOGY

- **Projects: (i) Completed**

UNESCO funded project “*Sui Vihar Excavations and Archaeological Reconnaissance of Southern Punjab*” has been completed.

- **Research Collaboration**

Funding grants for R&D

- Pakistan National Commission for UNESCO approved project amounting to Rs. 0.26 million.

#### DEPARTMENT OF ENGLISH LANGUAGE & LITERATURE

- **Publications**

##### Book

- Spatial Constructs in Alamgir Hashmi’s Poetry: A Critical Study by Amra Raza Lambert Academic Publishing, Germany 2011

- **Conferences, Seminars and Workshops, etc.**

- Workshop on Creative Writing by Rizwan Akthar, Departmental Ph.D Scholar in Essex, October 11<sup>th</sup>, 2010, Department of English Language & Literature, University of the Punjab, Lahore.
- Seminar on Fullbright Scholarship Requisites by Mehreen Noon, October 21<sup>st</sup>, 2010, Department of English Language & Literature, University of the Punjab, Lahore.

- **Research Journals**

Department of English publishes annually two Journals:

- Journal of Research (Humanities) HEC recognized ‘Z’ Category
- Journal of English Studies

#### Research Collaboration

- **Foreign Linkages**

St. Andrews University, Scotland

#### DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE

- **R & D-An Overview**

A Research Wing was introduced with its various operating desks. In its first phase a Translation Desk was launched:

Translation desk (French – English/Urdu and vice versa):

- Professional / legal documents; Regular / personal documents;
- Latest research papers, articles and reviews;

The translation desk aims to provide authentic translation services to the public sector and to facilitate mutual collaboration at international level especially with the French counterparts. It addresses various businesses and multi national companies, online sales and advertisements, and those who plan to pursue higher education abroad.

- **Newly launched Project**

A project entitled “French translation of Iqbal’s persian poetry” was initiated in October 2011 by Dr. Saleha Nazeer, sponser by Directorate of Research & Development, University of the Punjab, Lahore, Grant Rs. 1,50,000, duration aproximately one year.

- **Conferences, Seminars and Workshops, etc.**

- Conference: “*Traduire pour découvrir ou neutraliser*” / held on 8<sup>th</sup> April, 2011 at the University of Franche-Comte in Besancon, France; paper presented by Dr. Saleha Nazeer
- One day workshop “Publishing your Research” attended by Dr. Saleha Nazeer, Beacon House National University (BNU), Lahore (2-4-2011).

### **Research Collaboration**

- **Funding grants for R&D**

- Research Grant F.Y. 2010-11, Dr. Saleha Nazeer & Dr. Nighat Jamal

### **DEPARTMENT OF HISTORY**

- **Publications:**

- Muhammad Iqbal Chawla (2011) Role of the Majlis-i-Ahrar Islam-Hind in the Kashmir Movement of 1931, *Pakistanniat: A journal of Pakistan Studies* Vol 3, No.2 University of North Texas U.S.A
- Muhammad Iqbal Chawala (2011) Mount batten and the NWFP Referendum: Revisited *Journal of the Research Society of Pakistan*. Vol 48, No.1.
- Muhammad Iqbal Chawala (2011) Waul and the Dying days of Raj.

### **DEPARTMENT OF LITRARY HISTORY**

- **Publications**

- Kh. Muhammad Zakariya, *Kulliyat-e-DaghDehlvi* – Edited with a foreward.
- Kh. Muhammad Zakariya, *NazarNama (A travelling by MahmoodNizami)* – Edited with a foreward.

- **Conferences, Seminars and Workshops etc:**

- Iqbal and Khawaja Abdul Hakeem. Khalifa Abdul Hakeem Memorial Lecture (Quaid-e-Azam Library, Feb, 2011)
- Iqbal and Akbar Allahbadi, (Iqbal Memorial Lecture – delivered at Undergraduate Center, PU, Lahore. April 2011)

## DEPARTMENT OF PHILOSOPHY

- **Publications**

- Kh. Muhamdmad Saeed "Islamic Art and its spiritual message" International Journal of Humanities and Social Sciences (2011) Volume 1 No.2 pp.227-234

## CENTRE FOR SOUTH ASIAN STUDIES

- **Publications**

- Jahangir Tamimi (2010) Indian Foreign Policy: A critique, by CSAS, P. U. Press.
- Jahangir Tamimi (2010) Indo – Pakistan Estrangement, by CSAS, P. U. Press.
- Saleem Mazhar, Naheed S. Goraya & Musarat Jabeen (2010) Post 9/11 Globe, by CSAS, P. U. Press.
- Jahangir Tamimi (2010) Muslim Music in South Asia, by CSAS, P. U. Press.

- **Conferences, Seminars and Workshops, etc.**

- Irshad Ahmad Arif, 19-10-2010, Present status of Occupied Kashmir & Our Responsibilities by CSAS.
- Hamid Saeed Akhtar, 23-12-2010 - East Pakistan Debacle & Our Contemporary Responsibilities by CSAS.
- Mujtaba Shuja-ur-Rehman & Shamashad Ahmad Khan, 12-01-2011 – Regional Economical Cooperation in South Asia by CSAS.
- Mujeeb-ur-Rehman Shami, 04-02-2011 – Kashmir Issue & Its Prospective Solution by CSAS.
- Mowahid Hussain Shah, 09-06-2011 – Pak-US Relations: Key Challenges by CSAS.

- **Research Journals**

- South Asian Studies Vol. 25, No.2, by CSAS, P. U. Press.
- South Asian Studies Vol. 26, No.1, by CSAS, P. U. Press.

## PAKISTAN STUDY CENTRE

- **R&D-An Overview**

The Centre is conducting research on different themes of Pakistan Studies, and on a variety of subjects dealing with the developments taking place in the world.

The Centre publishes research works in shape of books, monographs as well as in our research journal 'Pakistan Vision'. 38 books have been published so far.

- The Centre's research journal, 'Pakistan Vision', is published bi-annually. It has been recognized by Higher Education Commission and has been made available on Centre's website.
- The Centre has been trying to play a more effective role in the promotion of academic and research collaboration with other universities, Pakistan Study Centres and other institutions. The Centre has established linkages with scholars and academicians of national and international repute.

- **Publications**

- **Book**

- Sher Muhammad Garewal, *Mountbatten's Viceroyalty and the Creation of Pakistan*

- **Research Journal**

- *Pakistan Vision*, (Journal) Vol. 12, No. 1, July 2011
  - *Pakistan Vision*, (Journal) Vol. 11, No. 2, December 2010

- **Regional Publications**

- *India Desk*, July-September 2011
  - *India Desk*, April-June 2011
  - *Inside Pakistan*, Vol. 1, No. 4, March 2011
  - *India Desk*, February-March 2011
  - *India Desk*, December-January 2010-2011
  - *Inside Pakistan*, Vol. 1, No. 3, December 2010
  - *India Desk*, October-November 2010

- **Conferences & Seminars Organized**

- Seminar on '*Heritage Preservation in Pakistan: International Principles and Practice*' on Wednesday, July 27, 2011. Keynote Speaker: Prof. Dr. Rafique Mughal, Department of Archaeology, Boston University, Boston, U.S.A. & Member, ICOMOS, Pakistan.
  - Seminar on '*Osama Bin Laden Saga: Future Course of Action for Pakistan*' on Wednesday, July 20, 2011. Keynote Speaker: Prof. Dr. Adnan Sarwar, Principal, University Law College, University of Peshawar, Peshawar
  - Seminar on '*The Great Mughals: Relationships, Emotions and Monuments*' on Friday, April 22, 2011. Keynote Speaker: Prof. Francis Robinson, Professor of History at Royal Holloway College, University of London and Sultan Oman Fellow at Oxford University.
  - Seminar on '*Evolution of Federalism in Pakistan*' on Tuesday, November 23, 2010. Keynote Speaker: Prof. Dr. Syed Jaffar Ahmad (Director, Pakistan Study Centre, University of Karachi, Karachi)

- **Publication of Research Journal *Pakistan Vision***

- Two issues of the bi-annual research journal, '*Pakistan Vision*', were published during the period under review.
  - *Pakistan Vision*, Vol. 12, No. 1, July 2011
  - *Pakistan Vision*, Vol. 11, No. 2, December 2010

- ***Pakistan Vision*, Vol. 12, No. 1, July 2011**

- M. Abid / Q. Abid, The Simla Conference: A futile attempt to bypass Pakistan Scheme
    - Syed Farooq Hasnat, Pakistan - U.S. Relations on Slippery Grounds: An Account of Trust and its Deficit

**Pakistan Vision, Vol. 11, No. 2, December 2010**

- Massarrat Abid / Qalb-i-Abid, Partition Demand: From Cripps Mission to Gandhi-Jinnah Talks

**PUNJAB UNIVERSITY COLLEGE OF ART & DESIGN**

- **Projects: (i) Completed**

- Mr. Amjad Pervez supervised and Organized Graphic Design Exhibition 2011 at College of Art & Design, University of the Punjab, Lahore.

- **Publications:**

- Rahat Naveed Masud read a paper on *پاکستان مصوری کے معمار* at Alhamra International Conference on Literature & Culture 14-16 May, 2011.
- Rahat Naveed Masud exhibition in Art Expo Malaysia 2011 at Matrade Exhibition & Convention Centre, Kuala Lumpur, Malaysia from Oct. 28 to Nov. 1, 2011.
- Rahat Naveed Masud *from Chicago to Lahore: Connecting Edge*, Yates Gallery, Chicago, USA 2010.
- Rahat Naveed Masud exhibition of the Contemporary Art Works by 17<sup>th</sup> of Pakistan's most talented Artists at the Omani Society for Fine Arts, Muscat, Oman 2010.
- Rahat Naveed Masud solo Show *Ishq Series*, Art scene Gallery, Karachi 2011.
- Rahat Naveed Masud solo Show *Ishq Series*, Ejaz Gallery, Lahore 2011.
- Rahat Naveed Masud group Show, Co-opera Art Gallery 2011.
- Rahat Naveed Masud group Show, Vogue Art Gallery 2011.
- Rahat Naveed Masud passage through Pakistan, Royaart Gallery, Lahore 2011.
- Rahat Naveed Masud 4<sup>th</sup> Annual Exhibition of Paintings by Women Artists 2010, organized by Punjab Council of the Arts 2010.
- Rahat Naveed Masud exhibition of Women Artists of Pakistan, National Gallery, Islamabad 2010.
- Shaukat Mahmood on Paintings birds and animals, *Sunday Plus* of daily *The Nation* July 25, 2010.
- Shaukat Mahmood the Saint of Sikri, *Sunday Plus* of daily *The Nation*, August 8, 2010.
- Shaukat Mahmood the Forgotten Fort of Harrand, *Sunday Plus* of daily *The Nation*, August 29, 2010.
- Shaukat Mahmood ramadan and Eid al-Fitr, *Sunday Plus* of daily, *The Nation*, September 05, 2010.
- Shaukat Mahmood Hiran Minar: Hunting resort of Emperor Jahangir, *Heritage* Issue 09, 2010.
- Shaukat Mahmood elegance in Stone: Stone carvings of Makli, *Heritage*, Issue 09, 2010.
- Shaukat Mahmood forts without future, Paper contributed to the, Second International Conference on Islamic Archaeology, held at Islamabad. January 21-23, 2011.
- Shaukat Mahmood the Mosque of Wazir Khan, *Heritage*, Issue 10, 2011.
- Shaukat Mahmood pietra-Dura, from Italy with love, *Heritage*, Issue 10, 2011.
- Shaukat Mahmood Babri Mosque: A true perspective, *Sunday Plus* of daily *The Nation*, February 06, 2011.

- Shaukat Mahmood the Real Story of Babri Mosque, *Sunday Plus* of daily *The Nation*, February 13, 2011.
- Shaukat Mahmood the Indus Queen, *Sunday Plus* of daily *The Nation*, March 27. 2011.
- Shaukat Mahmood a Majestic Haveli of the Sikh Era, Haveli Naunehal Singh, *Sunday Plus* of daily *The Nation*, April 03, 2011.
- Shaukat Mahmood conservation of Historic Buildings, *Sunday Plus* of daily, *The Nation*, June 05, 2011.
- Shaukat Mahmood Albercht Durer and his Magic Square, *Sunday Plus* of daily *The Nation*, May 22, 2011.
- Shaukat Mahmood making of a Arabesque *Sunday Plus* of daily *The Nation*, May 15, 2011.
- Shaukat Mahmood Unique Tombs of the Past, Story of Gunbad-I Qabus, *Sunday Plus* of daily *The Nation*, July 24, 2011.
- Anis A. Siddiqi storey telling as Tools for Teaching Architectural Theory and Design – THAAP 2010, International Conference organized by ‘Trust for History of Art and Architecture in Pakistan, November 2010, Lahore, Pakistan.
- Shahida Manzoor “Interpreting Modern Art & Modernity”. Oriental College magazine, Lahore: Punjab University Press, Vol.86, No.1, Serial No. 319, P. 9-17 2011.
- Ali Azmat "Let a thousand flowers bloom", Ejaz Gallery, Lahore 2011.
- Ali Azmat tribute to Usman Ghauri, IVS Gallery, Karachi 2011.
- Ali Azmat "ICON" Alhamra Gallery, Lahore 2011.
- Ali Azmat "Act of Peace", 4 contemporary artists, Ocean Gallery, Karachi 2010.
- Ali Azmat Ramzan Show, Canvas Gallery, Karachi 2010.
- Ali Azmat "1947, the year we were born "Art Expo, Malaysia” 2010.
- Ali Azmat "Art for Life", Alumni Show, Alhamra Gallery, Lahore 2010.
- Ali Azmat "Silent Auction" Koel Gallery, Karachi 2010.
- Anila Zulfiqar spring show at Vogue Art Gallery Lahore, March 2011.
- Anila Zulfiqar Group show at Coopera Art Gallery Lahore, March 2011.
- Anila Zulfiqar Group show at Kunj ART Gallery Karachi December 2010.
- Anila Zulfiqar Group show organized by Alumni PU at Alhamra Art Gallery Lahore August 2010.
- Anila Zulfiqar Group Show of Painting at Vogue Art Gallery Lahore 2010.
- Anila Zulfiqar Group show of painting at Co-opera Art Gallery Lahore 2010.
- Anila Zulfiqar National Show of Painting at Alhamra Art Gallery Lahore 2010.
- Anila Zulfiqar National Show of Young Painters at Alhamra Art Gallery Lahore 2010.
- Anila Zulfiqar Group Show of Painting at Revivers Art Gallery Lahore 2010.
- Naela Amir 5 Artists Show at *Roya at Art Gallery* , March 2010
- Naela Amir Group Show at *Co-opera Art Gallery* March 2010

- Naela Amir Group Show at *Co-opera Art Gallery* March 2011
- Aqsa Malik Women Artist Exhibition (2010).
- Aqsa Malik Art for Life Alhamra Art Gallery (2010).
- Aqsa Malik AAP Annual Exhibition (2010).
- Atif Amir Art for Life Al-Hamra Art Gallery 20 10.
- Atif Amir WRENCH, the Drawing Room Art Gallery 2010
- Atif Amir Art for Life, Alumni Exhibition for fundraises. 2010
- **Workshops Conferences, Seminars and, etc.**
  - Amjad Pervez conducted a workshop on “Four Colour Reproduction” for the Students and workers of Press at Department of Press & Publications, University of the Punjab, Lahore in 2011.
  - Amjad Pervez conducted a “Pre-Press” workshop at Department of Press & Publications, University of the Punjab, Lahore in 2011.
  - Amjad Pervez conducted a workshop of “Colour Reproductive Originals” at Govt. Poly Technique for Printing & Graphic Arts, Lahore, with collaboration of Chief Inspector Mohammad Asim.
  - Amjad Pervez Attended a seminar on “Transliteration Methods” 2011 in Research Centre of College of Art & Design, University of the Punjab, Lahore.
  - Amjad Pervez attended a seminar on “Styles of Calligraphy” 2011 in Research Centre of College of Art & Design, University of the Punjab, Lahore.
  - Exhibition and workshop by Australian artist, Mr. Murtaza Haq at Anna Molka Art Gallery, College of Art & Design on 4<sup>th</sup> July, 2011.
  - Seminar in honour of Prof. Anna Molka Ahmad on 7<sup>th</sup> June, 2011.
  - Seminar by Ahmad Javed, an eminent scholar and humanist on 26 May, 2011 at College of Art & Design.
  - Seminar in honour of Prof. Dr. Shaukat Mahmood recipient of Sitara-e-Imtiaz on 6<sup>th</sup> May, 2011.
  - A lecture on *Miniature Techniques* by Murad Khan Mumtaz at College of Art & Design on 25 November, 2010.
  - A lecture on the biography of Sadequain on Thursday, December 9, 2010 by Dr. Salman Ahmad, Founder, President of Sadequain Foundation.
  - Seminar *Art of Documentary Making* with the collaboration of Dawn News at College of Art & Design 2010.
  - Presentation by Umair Ghani on carvings/Architecture/Sculpture in Northern Valleys of Pakistan at College of Art & Design on Thursday 28<sup>th</sup> October, 2010.
  - A Seminar on “Baolis” by M/S Humaira Iftikhar, Amna Gillani and Asma Usmani, M. Phil scholars from Govt. College of Home Economics, Gulberg, Lahore on 29<sup>th</sup> of March, 2011 at the Research Centre, College of Art & Design, University of the Punjab, Lahore.

- A Seminar on “Exploring Internet as a Research Tool” by Prof. Dr. Kanwal Amin, Chairperson, Department of Library and Information Science, Punjab University, Lahore at the Research Centre of the College of Art & Design, University of the Punjab, Lahore on 17 Feb. 2011.
- Sculpture Workshop at College of Art & Design, University of the Punjab, Lahore 2010.

## **GUJRANWALA CAMPUS**

### **• R&D- An Overview**

Universities are known for creation of knowledge through its research and development activities. The faculty members at the Gujranwala Campus have got their nineteen papers published in national and international journals and they have participated in six national and international conferences.

Three seminars were arranged at the Gujranwala Campus.

### **• Publications**

- E. Malik, M.M. Ghafoor, S. Naseer “A case study on Telecom sector of Pakistan” published in Far East Journal 2011, Vol 2, No.1, Jan 2011.
- Malik, M. E. Nawab, S., Naeem, B. & Danish, R. Q. (2010) Job Satisfaction and Organizational Commitment of University Teachers in Public Sector of Pakistan, International Journal of Business and Management, 5(6), 17-26. CANADA (Recognized Y Category by HEC)
- Danish, R. Q. & Usman, A. (2010). Impact of Reward and Recognition on Job Satisfaction and Motivation: An Empirical study from Pakistan, International Journal of Business and Management, 5(2), 159-167. CANADA (Recognized Y Category by HEC)
- Usman, A. & Danish, R. Q. (2010). Leadership Spirituality in Banking Professionals and Its Impact on Organizational Commitment, International Journal of Business and Management, 5(3), 185-193. CANADA (Recognized Y Category by HEC)
- Malik, M. E., Danish, R. Q. & Ali, U. (2010) Impact of Spiritual Consciousness on the Job Performance of Banking Executives, Interdisciplinary Journal of Contemporary Research in Business, 2(1), 142-158. UNITED KINGDOM (Recognized Y Category by HEC)
- Malik, M. E., Danish, R. Q. Ali, U. (2010). Impact of Job Climate and Extrinsic Rewards on Job Satisfaction of Banking Executives; A Case of Pakistan, Interdisciplinary Journal of Contemporary Research in Business, 1(12), 125-139. UNITED KINGDOM (Recognized Y Category by HEC)
- Usman, A. & Danish, R. Q. (2010). Spiritual Consciousness in Banking Managers and Its Impact on Job Satisfaction, International Business Research, 3(2), 1-10. USA (Recognized Y Category by HEC)
- Malik, M. E., Danish, R. Q. & Usman, A. (2010). Impact of Service Quality of institution on Students’ Satisfaction, Journal of Management Research. 2(2), 1-10. USA (Recognized Y Category by HEC)



- Malik, M.E., Danish, R. Q & Ali, U. (2011). Impact of Motivation to Learn and Job Attitudes on Organizational Learning Culture in a Public Service Organization of Pakistan, African Journal of Business/-anish, R. Q. & Munir, Y. (2011) Employee's Participative Behavior in Managerial Decision Making and Its Impact on Organizational Outcomes, Business and Social Sciences Review, 1(2), 4-13.
- Bodla, M. A, Danish, R. Q. (2011). Moderating Role of Social Exchange Perceptions between Perceived Organizational Politics and Antisocial Behavior, Journal of Economics and Behavioural Studies, 3(5), 279-286. AUSTRALIA (Recognized Y Category by HEC).
- Malik, E., Ali, R, Ghafoor, M.M. & Danish, R. Q. (2011). Perception of Job Psychology Moderating Role of Age on Relationship between Job Climate, Extrinsic Rewards and Job Satisfaction, World Applied Sciences Journal, 13(6), 1367-1374. AUSTRALIA (Recognized X Category by HCE)
- Usman, A., Ghafoor, M. M. & Danish, R. Q. (2011). Impact of Motivation to Learn, Organisational Commitment and Job Satisfaction on Organizational Learning Culture: A case of Pakistan, Business & Management Quarterly Review, 2(3), 108-115. USA (Recognized Y Category by HEC)
- Malik, E., Danish, R. Q., & Munir, Y. (2011). Employees Turnover Intention: Is this HR Failure of Employee's better employment opportunity? International Conference on Innovation, Management and Services. Singapore: IEDRC, Thomson & ISI Indexed.
- Malik, E., Danish, R. Q., & Munir, Y. (2011). The Impact of Leadr's Emotional Quotient on Organizational effectiveness. International Journal of Business and Social Sciences, 2(18), 114-118. USA.
- Nawaz, R., Nawaz, M. M. and Danish, R. Q. (2011). Role of Leadership to Nurture Creativity in Organizations, Business and Social Sciences Review, 1(5), 5-10.
- Nawaz, M. M., Danish, R. Q. and Munir, Y. (2011). Analyzing Supply Chain Management Success Factors: A Case Study from Pakistan, Business and Social Sciences Review, 1(5), 16-28.
- Nazir, MS, Fani, HR and Nawaz, MM (2011). "Capital Structure Decisions: A case of Pakistani Listed Textile Firms", Middle-East Journal of Scientific Research, Vol 9, No. 2, pp 218-224
- **Conferences, Seminars and Workshops, etc.**
  - A Seminar was arranged by LAW Department in March 2011 on Eighteenth Constitutional Amendment. Civil Judge, Fazal Zada Khan was the speaker.
  - Mr. Rizwan Qaiser Danish delivered a lecture as resource person in a workshop on Literature Review & Managing References Using EndNote@ Software, April 1, 2011, Organized by IBA and DLIS, University of the Punjab.

- One Day Training on Legal Requirements of a New Business, 22<sup>nd</sup> March, 2011, was jointly organized by University of the Punjab, Gujranwala Campus and SMEDA.
- One Day Seminar on Role of Intellectual Property for establishing New Business Ventures, 25<sup>th</sup> May, 2011, was jointly organized by University of the Punjab, Gujranwala Campus and IPO.
- Mr. Rizwan Qaiser Danish presented a paper at International Conference on Applied Business Research, Ras Al Khaimah, United Arab Emirates, November 29-December 3, 2010.
- Mr. Rizwan Qaiser Danish presented a paper at Global Business & Social Science Research Conference. June 20-21, 2011, Radisson Blue Hotel, Beijing, China.
- Mr. Rizwan Qaiser Danish presented a paper at International Conference on Innovation, Management and Services. ICIMS 2011, 16-18 September, 2011, Singapore: IEDRC
- Mr. Rizwan Qaiser Danish presented a paper at The 8<sup>th</sup> International Post Graduate Research Colloquium, Behavioral Science Research Institute, Srinakharinwirot University, Bangkok, Thailand, September 22-23, 2011.
- Mr. Rizwan Qaiser Danish participated in the LUMS International Marketing Colloquium 26-27 Feb, 2011, LUMS, Lahore.

## **FACULTY OF BEHAVIOURAL & SOCIAL SCIENCES**

### **DEPARTMENT OF POLITICAL SCIENCE**

#### **• Projects**

##### **Completed**

- Umbreen Javaid, Chairperson, Punjab University funded project on “Pakistan’s Security and effects of Terrorism and Counter Terrorism”, (2010 – 2011).
- Iram Khalid, Associate Professor, Punjab University funded project on “Insurgency: Counter insurgency: a case of SWAT – Pakistan. (2010-2011).
- Rana Eijaz Ahmad, Assistant Professor, Punjab University funded project on “An alternate structure of governance, a case study of Pakistan. (2010-2011).

##### **Newly launched Projects**

- Umbreen Javaid, Punjab University funded project “political of Religious Extremism and Terrorism in Pakistan” (2011-2012).
- Iram Khalid, Punjab University funded project on Socio-religious frangmentation: A case of Pakistan”. (2011-2012)
- Rana Eijaz Ahmad, Punjab University funded project “Democracy: A form government or human instinct. (2011-2012).

#### **• Publications**

- Umbreen Javaid ‘Politics of Religious Extremism in Pakistan’. *International Journal of Academic Research*. Vol. 3, No. 4. July 2011. pp: 416-420.

- Umbreen Javaid 'Genesis and Effects of Religious Extremism in Pakistan', *International Journal of Business and Social Science (IJBS)*, Vol.2, No.7, 2011, pp: 282-288.
- Umbreen Javaid 'War on Terror Partnership: Effect, Concerns and Implications for Pakistan and USA'. *Research Journal of International Studies*. Issue 18, Jan. 2011, pp: 85-92.
- Umbreen Javaid 'The War on Terror: Pakistan's Apprehensions", *African Journal of Political Science and International Relations*. March Issue, 2011. pp: 125-131.
- Umbreen Javaid 'Partnership in War on Terror and mounting extremism in Pakistan' *Journal of South Asian Studies*, University of the Punjab, Lahore, Vol. 26, No.2, Jul-December, 2011 pp: 227-239.
- Umbreen Javaid 'FATA a Breeding Ground of Extremism in Pakistan', *Journal of Political Studies*, Vol. 18 Issue 2, Winter 2011, Pp. 173-186.
- Umbreen Javaid 'Urgency for Inter-State Dialogue for Fighting Terrorism in South Asia' *Journal of Political Studies*, Vol. 18 Issue 1, Summer 2011, pp:01-14
- Umbreen Javaid 'Thriving Fundamentalism and Militancy in Pakistan: An Analytical Overview of their Impact on the Society', *South Asian Studies*. Vol.26, No.1, Jan-Jun, 2011, pp:9-18.
- Umbreen Javaid 'War on Terror and its unanticipated effects on extremism in Pakistan', *Journal of Social Sciences*, Vol. XVIII No. 2 Autumn 2010, pp: 101-116.
- Umbreen Javaid 'Concerns of Balochistan: Effects and Implications on Federation of Pakistan. *Journal of Political Studies*, Issue XVIII, Winter 2010, Vol. 1, Issue 2, pp: 113-125
- Iram Khalid "Politics of Intervention: A Case of Kosovo, Afghanistan and Iraq", *International Journal of Business and Social Sciences*, USA, May 2011.
- Iram Khalid "Dynamics of Political development in Afghanistan", *International Journal of Business and Social Sciences*, USA, May 2011.
- Iram Khalid "Trans-Boundary Water Sharing Issues: A Case of South Asia", *Journal of Political Studies*, Vol. XVIII, Winter 2010.
- Iram Khalid "Re-Energizing India-US Relations", *Journal of South Asian Studies*, Vol. 26, No. 1, 2011, Center For South Asian Studies, University of The Punjab, Lahore.
- Iram Khalid "Afghanistan: Quest for Peace and Stability Historical Context" *Journal of Political Studies*, Vol. 18, Issue 2, Winter 2011.
- Iram Khalid Afghanistan: New Great Game and Role of India (A Pakistani Perspective) *Journal of South Asian Studies*, Vol. 26, No. 2, 2011, Center For South Asian Studies, University of The Punjab, Lahore.
- Iram Khalid "Will enhanced powers of judiciary stop future military takeover in Pakistan? *IPRI Journal*, Islamabad.

- Iram Khalid “Socio-religious fragmentation: a challenges to Paksitan’s National integration” Journal of Research Society of Pakistan, Vol 48, No.2, 2011, University of The Punjab, Lahore.
- Abida Eijaz and Rana Eijaz Ahmad, Discourses of Feminism in the Perspective of Allama Iqbal and the West published in Canadian Social Science Vol. 7, No. 5, 2011, pp. 190-197.
- Rana Eijaz Ahmad and Abida Eijaz, *Global Economy: New Actors and New Perspectives* published in Research Journal of International Studies United Kingdom- Issue 21 October, 2011.
- Abida Eijaz and Rana Eijaz Ahmad, *Challenges of Media Globalization for Developing Countries* Published in International Journal of Business and Social Science, United States Vol. 2 No. 18; October 2011.
- Rana Eijaz Ahmad and Abida Eijaz, *Commercialization of Religion in Pakistan*, published in American International Journal of Contemporary Research, United States Vol. 1 No. 2; September 2011.
- Rana Eijaz Ahmad and Abida Eijaz, *China as an Emerging Economic Giant and its Impact on the Region* published in British Journal of Economics, Finance and Management Sciences 20 September 2011, Vol. 1 (2).
- Rana Eijaz Ahmad and Abida Eijaz, *Demands, Capabilities, Decisions And Outcome* Published in International Journal of Business and Social Science United States Vol. 2 No. 15; August 2011.
- Rana Eijaz Ahmad and Abida Eijaz, *Pakistan and the West: Entwined, Entangled and Engaged* published in International Journal of Humanities and Social Science United States Vol. 1 No. 8; July 2011.
- Rana Eijaz Ahmad and Abida Eijaz, *Role of Education in the Consolidation of Islamic Solidarity* published in International Journal of Humanities and Social Science United States. Vol. 1 No. 6; June2011.
- Rana Eijaz Ahmad, *Security, Political Dimensions and Consequences of NATO Expansion in the Region* published in A Research Journal of South Asian Studies Vol. 25, No. 2, July-December 2010, pp. 411-416.
- Rana Eijaz Ahmad, *Armies in The Process Of Political Modernization* published in Pakistan Economic and Social Review Volume 48, No. 2 (Winter 2010), pp. 307-306.
- Conferences, Seminars and Workshops, etc.
- Rana Eijaz Ahmad organized a lecture on “Intelligent Power and Conflict Resolution” by Prof. Dr. Syed Arif Kamal on March 31, 2011.
- Rana Eijaz Ahmad organized a lecture on ‘Constitutional Institutions in Pakistan’ by Andrew Ng (Head of Advocacy & Dialogue Unite), Canada, on Jan 26, 2011.
- Rana Eijaz Ahmad organized a lecture on “US-Foreign Policy making“ by Ms. Isobel Coleman, US Scholar with coordination of US Consulate, Lahore on October 20, 2010.

- **Research Journals**

- Journal of Political Studies (Biannual) HEC Recognized category 'Y'

**Research Collaboration**

- **Funding grants for R&D**

- Rs.430,000 (HEC – for Journal's Publication)

**DEPARTMENT OF SOCIAL WORK**

- **Trainings/Workshops Attended/Others**

- Conducted two days training workshop of Young Social Entrepreneurs on National Level in Collaboration with Yes Network Pakistan and British Council Lahore Office.

**Research Articles**

- Muhammad Arshad paradigm shift in Social Work in Pakistan. Published in "Inter Disciplinary Journal of Contemporary Research in Business, (IJCRB UK) , Volume 3, No.1, 2011
- Muhammad Arshad child Protection in Disaster Management in South Asia. Published in "Research Journal of South Asian Studies", Volume 26, Number.1, 2011.
- Muhammad Arshad institutional Care for Children in Pakistan. Inter Disciplinary Journal of Contemporary Research in Business. (IJCRB UK). (Published in Volume 3, No.2, 2011).
- Muhammad Arshad islamic Concept of Social Welfare. Accepted for Publication in "Inter Disciplinary Journal of Contemporary Research in Business", (IJCRB UK) in Volume 3, No.2, 2011.

- **Trainings/Workshops Attended/Others**

- Conducted a training workshop for staff of child protection units in Punjab. The participants were delivered lectures on case management. 28/29-12-2011, Social Welfare Department, Govt. of Punjab/ UNICEF
- Conducted 2days training workshop for staff of Child Welfare Institutions / Darul Aman/ Dar-ul-Falah, Punjab. The participants were delivered lectures on standards operating procedures for case management in Child Welfare Institutions". 30/31-12, 2011, Social Welfare Department, Govt. of Punjab/ UNICEF

**Research Articles**

- Zahid Javed institutional Care for Children in Pakistan *Inter Disciplinary Journal of Contemporary Research in Business*. IJCRB UK. (Published in Volume 3, No.2, June 2011).
- Zahid Javed Islamic Concept of Social Welfare. *Inter Disciplinary Journal of Contemporary Research in Business*. IJCRB UK. (Published in Volume 3, No.2, June 2011).
- Zahid Javed child Protection in Disaster Management in South Asia. A Research Journal of South Asian Studies, Volume 26, Number. 01 Jan-Jun 2011.

- Zahid Javed Paradigm shift in Institutional Care for children in Pakistan. *Inter Disciplinary Journal of Contemporary Research in Business*. IJCRB UK, Vol 3, No. 1 May, 2011.
- Zahid Javed Screening for Depression in the Community by Lady Health Workers., *Inter Disciplinary Journal of Contemporary Research in Business*. IJCRB, Vol. 3, No. 1 May, 2011.

### **Lecture Delivered**

- Aliya Khalid delivered a lecture in a media seminar on “Role of Media in Child Protection” conducted by Social Welfare Department, Govt. of Punjab/UNICEF at Ambassador Hotel, Lahore on 03-12-2011.

### **INSTITUTE OF COMMUNICATION STUDIES**

#### **• Projects**

##### **Competed Projects:**

- “Articulation of Political Discourse: Influences on Mass Media Contents” (2010-2011) submitted by Abida Eijaz

#### **• Publications**

- Bushra H. Rahman Research Publication titled “Analysis of the coverage of Muslim political women in Time and Newsweek” in the *Journal of Media Studies*. 2010 Vol: 25, 1
- Bushra H. Rahman presented a research paper titled, “connectivity through religion: a case of religious journalism in Pakistan (2000-2010)” presented in the 2011 conference of the International Association of Mass Communication Research (IAMCR) at Kadir Has University, Istanbul, Turkey in the conference theme “Cities, Connectivity and Creativity”
- Abida Eijaz research paper on “Exploitations in the Name of Religion: The Case of Pakistan,” published in *Religia A Wspolczesne Stosunki iedzynarodowe*. Krakow: Krakowska Akademiaim. Pp196-207 ISBN 978-83-7571-101-1 Year: 2010.
- Abida Eijaz research paper on “Pakistan and the West: Entwined, Entangled and Engaged,” published in *International Journal of Humanities and Social Sciences*, Vol.1 No.7; July 2011.
- Abida Eijaz research paper on “Role of Education in the Consolidation of Islamic Solidarity,” published in *IJHSS*, Vol.1 No.6; 2011.
- Abida Eijaz media Sphere and Public Sphere Negotiating the Concept of Taliban, Publication in process in the *Journal of Pakistan Vision* 2011.
- Abida Eijaz Challenges of Media Globalization for Developing Countries published in *International Journal of Humanities and Social Sciences*, Vol.1 No.8; August 2011
- Shah, M. and Chen, X. (2011) Rethinking advertising skepticism in China after West (Review article). *Canadian Journal of Social Science*, 7 (1): 58-75
- Shah, M. Chen, X., Kumar, A. (2011) "Does Consumer Believe on Advertiser? Advertising Skepticism in India and China." *Asian Social Science*, 7 (3): 26-36

- Shah, M. and Chen, X. (2010) "Relational Corporate Social Responsibility: Pubic Relations Implications in Culturally Confucius China." International Journal of Business and Social Science, 1 (3):118-124
- Shah, M. and Chen, X. (2010) "Advertising Wounds, Public Relations Cure: Corporate Social Responsibility perspective in China." International Journal of Business and Social Science, 1 (2):137-151
- Shah, M. "Relational Corporate Social Responsibility: Developing an Understanding on Confucius and Islamic Respective" 1st World Congress on Islamic Public Relations Practice, 5th-8th December 2011, Kula Lumpur, Malaysia.
- **Conferences, Seminars, Workshops:**
  - Organized a seminar on "The Role of International Powers for the Solution of Kashmir Issue" at Institute on October 21, 2010. Sajjad Mir, Sajjad Bukhari, Shamshad Khan, Farrukh Sohail Goindi are the guest speakers.
  - Organized a seminar on "Media for Special Persons" at Hameed Nizami Memorial Conference Room, Institute of Communication Studies on December 02, 2010. Dr. Jamil was the guest speaker.
  - Organized a seminar on Majlis-e-Mubahisa "Islam Main Jamhooriat Ka Tasawar" at Hameed Nizami Memorial Conference Room, ICS on February 03, 2011.
  - Organized a seminar on "Political motivation & awareness among youth" at Hameed Nizami Memorial Conference Room, ICS on October 13, 2011. Mr. Ibrar-ul-Haq (well-known singer and Chairman, Sahara Trust) was the guest speaker.
- **Research Journals:**
  - Biannual Journal of Media Studies
  - Biannual Journal of Media Studies
  - Communication Studies Bulletin (Newsletter)
  - A bilingual annual magazine "IMAGE"
  - Weekly Newspaper "IBLAGHIAT" as future plan

#### ZAFAR ALI KHAN CHAIR

- **Project: Completed**  
To discover and publish rare and unpublished letters of Late Maulana Zafar Ali Khan. The project is completed and is ready to be published in a book form.
- **Newly launched**  
An anthology of articles on Molana Zafar Ali Khan's life, services and achievements.
- **Publications**

- Zahid Munir Aamir, *The Story of A Nation* (November 19, 2010) The Egyptian Gazette Cairo No 42,377.
- Zahid Munir Aamir, Islam a feasible way to achieve humanitarian Ideal. (December 17, 2010) The Egyptian Gazette Cairo No 42,401
- Zahid Munir Aamir, Arabs' knowledge contribution to Europe. (December 24, 2010) The Egyptian Gazette Cairo No 42,406 Qahira Ishq aur Iqbal, (December 2010) Monthly Al Hamra Lahore
- Zahid Munir Aamir, real custodians of nature, (December 31, 2010) The Egyptian Gazette Cairo No 42,411
- Zahid Munir Aamir, Ahram ki azmat se nigon sar hyn Aflak (Dec. 2010) Monthly Insha Kolkata India.
- Zahid Munir Aamir, Dar al Obra myn Archestra ki bazm (Dec 2010) Monthly Mahe Nau Lahore
- Zahid Munir Aamir, Maulana Zafar Ali Khan ka Aik Nadir Khat (Jan 2011) Daryaft Issue 10 National University of Modern Languages Islamabad
- Zahid Munir Aamir, Muslims are intoxicated with West. (January 07 2011) The Egyptian Gazette Cairo No 42,416
- Zahid Munir Aamir, an Address to the Valley of Nile, (January 14 ,2011) The Egyptian Gazette Cairo
- A Message to Arab Intelligentsia (January 21, 2011) The Egyptian Gazette Cairo
- Zahid Munir Aamir, Dr Mahmood Ahmad Ghazi ki Yaad myn (Jan.2011) Monthly Al Shariah Gujranwala
- Zahid Munir Aamir, Misri Tanqeed se Mukalima (Feb 2011) Monthly Qaumi Zaban Karachi
- Zahid Munir Aamir, Nehr Suez k Sath Sath, (May 2011) Monthly Al Hamra Lahore
- Zahid Munir Aamir, Aao na ham bhi sair kareen Koh e Toor ki(A Travelouge of Mount Sinai) Episode#1, (August 2011) Monthly Al Hamra Lahore
- Zahid Munir Aamir, Dr Wazir Agha ka sawanahi Khaka (Sep-Dec 2011) Quarterly Asaleeb Sargodha No13 Aao na ham bhi sair kareen Koh e Toor ki
- Zahid Munir Aamir, (A Travelouge of Mount Sinai) Episode#2 (September 2011) Monthly Al Hamra Lahore Aao na ham bhi sair kareen Koh e Toor ki
- Zahid Munir Aamir, (A Travelouge of Mount Sinai) Episode#3, (October 2011) Monthly Al Hamra Lahore
- Zahid Munir Aamir, Abulhol ke Dais Mein Quaid e Azam Ki Awaz Sep (Oct. 2011) Monthly Mah e Nau Lahore
- Zahid Munir Aamir, Kashmir Zaigham Laulabi Kashmiri ki Byaz Mein (2011) Me'yar 4 Research Journal Department of Urdu, International Islamic University Islamabad Vol 3 Issue 6 Chapter contributed in a research based book published from Japan
- Zahid Munir Aamir, Iqbal's rationale of an independent homeland for the Muslims of South Asia. (2010) IAS 3<sup>rd</sup> International Conference New Horizons in Islamic Area Studies Papers/Handouts



book. Organizing Committee IAS 3<sup>rd</sup> International Conference. National Institute for the Humanities Waseda University Japan.

- **Conferences, Seminars and Workshops, etc.**

- The 7<sup>th</sup> Forum for Korea-Middle East Cooperation. Consolidating Arab-Korea Partnership in the 21<sup>st</sup> Century. Centre for International cooperation & strategy, Republic of Korea.held at Konrad Cairo.Egypt. Invited to interact with Korean scholars and exploring the venus of research on subjects of mutual interest. 30 November 1<sup>st</sup> December 2010
- IAS 3<sup>rd</sup> International Conference New Horizons in Islamic Area Studies, Continuity, contestations and the Future. Kyoto University & Waseda University at Kyoto International Conference Centre Kyoto. Japan Presented research Paper captioned Iqbal's rationale of an independent homeland for the Muslims of South Asia. 17-19 December 2010
- International Conference on Knowledge and Education in Classical Islam Historical Foundations- Contemporary Impact. Georg August University Gottingen, Germany Presented Research Paper The Impact of Classical Islamic Learning on the Contemporary Educational System of Pakistan October 1-5 2011
- An Evening with Dr Zahid Munir Amir Urdu Writers, Central Coffee House Heidelberg, Germany dressed the Ceremony October 8,2011
- Annual Celebrations Pak German Friendship Association Karlsruhe, Germany Lecture delivered on Responsibilities of Pakistani's abroad October 8,2011
- A Meetings with Spanish Muslims Seville Jamia Mosque, Seville Spain, Muslims in Spain October 12, 2011

## **INSTITUTE OF SOCIAL & CULTURAL STUDIES**

- **Publications**

- Munawar, R.(2011). Negotiating Political Spaces: Analyzing Decentralization and Women's Political Empowerment in Pakistan. Germany:VDM Verlag
- Zakar, R., Muhammad Zakria Zakar, Rafael Mikolajczyk, Alexander Krämer. Intimate partner violence and its association with women's reproductive health in Pakistan. *International Journal of Genecology and Obstetrics* (in press).
- Zakar, R., Muhammad Zakria Zakar, Claudia Hornberg, Alexander Krämer. 2011. Coping strategies adopted by pregnant women in Pakistan to resist spousal violence. *International Journal of Genecology and Obstetrics* (in press). doi:10.1016/j.ijgo.2011.08.006
- Zakar, R., Muhmmad Zakria Zakar, Alexander Krämer. 2011. Spousal violence against women in the context of marital inequality: Perspectives of Pakistani religious leaders. *International Journal of Conflict and Violence*, 5(2) (in press).

- Wilke, B., Jochen Hippler, Muhammad Zakria Zakar. 2011. Violence Research from North Africa to South Asia: A Historical and Structural Overview. *International Journal of Conflict and Violence*. 5 (1) 2011, pp. 32 – 54
- Zakar, R., Muhammad Zakria Zakar, Alexander Krämer. 2011. Primary health care physicians' response to the victims of spousal violence against women in Pakistan. *Health Care for Women International*, 32(9), 811-832.
- Zakar, M. Z., Rubeena Zakar, Taha Itani, Alexander Krämer. Paternal factors associated with adverse birth outcomes: Evidence from Pakistan Demographic and Health survey. Mainz//2011. 56. Jahrestagung der Deutschen Gesellschaft für Medizinische Informatik, Biometrie und Epidemiologie (gmds), 6. Jahrestagung der Deutschen Gesellschaft für Epidemiologie (DGEpi). DOI: 10.3205/11gmds252, URN: urn:nbn:de:0183-11gmds2528
- Zakar R., Muhammad Zakar Zakar, Taha Itani, Alexander Krämer. Determinants of maternal health care services utilization in Pakistan. Mainz//2011. 56. Jahrestagung der Deutschen Gesellschaft für Medizinische Informatik, Biometrie und Epidemiologie (gmds), 6. Doc11gmds251 DOI: 10.3205/11gmds251, URN: urn:nbn:de:0183-11gmds2511
- Ahmad,K., & Hafeez, M. (2011) .Factors Affecting Social Participation of Elderly People: A Study in Lahore. *Journal of Animal & Plant Sciences*, 21(2): 283-289
- Ahmad,K., & Hafeez, M. (2011). Factors Affecting Social Participation of Elderly People: A Study in Lahore. *The Journal of Animal & Plant Sciences*, 21(2): 283-289.
- Ahmad,K. (2011). Older Adults' Social Support and its Effect on their Everyday Self-maintenance Activities: Findings from the Household survey of urban Lahore-Pakistan. *Research Journal of South Asian Studies*, 26 (1): 37-52

## **FACULTY OF COMMERCE**

### **HAILEY COLLEGE OF BANKING AND FINANCE**

#### **• Publications**

- Khawaja Amjad Saeed, Principles of Auditing 2012, Khawaja Publications, pages 425.
- Khawaja Amjad Saeed, Advanced Auditing 2012, Khawaja Publications, pages 575.
- Khawaja Amjad Saeed, Information Technology For Business Executives (*Jointly Authored*): with Two Sections namely: Concepts & Applications 2011, Khawaja Publications.
- Khawaja Amjad Saeed, Company Law in Pakistan 2012, Khawaja Publications, pages 446.
- Khawaja Amjad Saeed, Management: Concepts & Cases (12), Khawaja Publications..
- Khawaja Amjad Saeed, Strategic Management, 2009-10, Khawaja Publications, pages 291.
- Khawaja Amjad Saeed, The Economy of Pakistan 2011, Oxford University Press, pages 467.
- Khawaja Amjad Saeed, Mercantile & Industrial Laws in Pakistan 2010, Khawaja Publications, pages 212.

**Conferences, Seminars and Workshops etc**

- Khawaja Amjad Saeed, Accounting & Auditing (Comsats, Islamabad) 2011
- Khawaja Amjad Saeed, Analysis and Interpretation of Financial Statements (Dhaka Bangladesh) 2011
- Khawaja Amjad Saeed, Career Counseling and Scope of MBA& BBA In Pakistan (Comsats, Islamabad) 2011
- Khawaja Amjad Saeed, Corporate Strategies for the Green World (Daejon-South Korea) (2011) 2011
- Khawaja Amjad Saeed, Domestic Features of Labour with Reference to Youth & Gewendar (Bukhtiar Labour Hall,LHR) 2011
- Khawaja Amjad Saeed, Effective Leadership (Lecture Theatre of PMD Department, Lahore) 2011
- Khawaja Amjad Saeed, Global Exports 2011(Rapport Bangladesh Limited) (2011)
- Khawaja Amjad Saeed, Global Exports 2012 (Rydes Lakehand Resort, Queenstown, New Zealand) (2011)
- Khawaja Amjad Saeed, HR (Rapport Bangladesh Ltd, Dhaka, Bangladesh) 2011
- Khawaja Amjad Saeed, List Financial Sector Performance (Sheraton Hotel, Karachi) 2011
- Khawaja Amjad Saeed, Management Development (Shah Abdul Latif University, Khairpur Sindh) 2011
- Khawaja Amjad Saeed, Pakistan Fiscal Policy-Concepts & Application 2011
- Khawaja Amjad Saeed, Personal Leaders, Excellence, Ethics & Morality, Positive Attitude (NBP-Staff College, Lahore) 2011
- Khawaja Amjad Saeed, Preparing for the World of Work (PU-HCBF) 2011
- Khawaja Amjad Saeed, Rise of HR Challenges & Way Forward (Rapport Bangladesh Ltd, Dhaka, Bangladesh) 2011
- Khawaja Amjad Saeed, The Challenges & Prospects of Islamic Banking in Pakistan (Riphah University, Islamabad) 2011
- Khawaja Amjad Saeed, Time Management (PU-IAS Auditorium, New Campus, Lahore) 2011
- Khawaja Amjad Saeed, Total Quality Management & Business Process Re-Engineering (MPDD Auditorium Lahore) 2011
- Khawaja Amjad Saeed, Training and Development (MPDD Lahore) 2011
- Khawaja Amjad Saeed, Trends and Strategies in HRM (MPDD Lahore) 2011
- Khawaja Amjad Saeed, Understanding Asian Perspectives on Leadership (University Of Malaya, Malaysia) 2011
- Khawaja Amjad Saeed, Auditing (Types, Tools, Techniques and Emerging Trends) (COMSATS-Islamabad) 2010
- Khawaja Amjad Saeed, Corporate Governance (can be delivered anywhere) 2010
- Khawaja Amjad Saeed, Economic Development (National Management College, Lahore) 2010
- Khawaja Amjad Saeed, Economic Development- A Case Study (Business & Economics Society International) 2010

- Khawaja Amjad Saeed, Economic Progress & Stability & Debt Ridden Approach (TECH Society, Lahore) 2010
- Khawaja Amjad Saeed, Global Exports 2010 (Can be delivered anywhere) 2010
- Khawaja Amjad Saeed, Human Resource As a Brand (Rapport Bangladesh Ltd)
- Khawaja Amjad Saeed, Islamic Banking in Pakistan (Al-Huda, Expo Centre, Lahore) 2010
- Khawaja Amjad Saeed, Macro and Micro Economics (National Management College, Lahore) 2010
- Khawaja Amjad Saeed, Monetary and Fiscal Policy vis-a-viz Global Financial Management (National Management College, Lahore) 2010
- Khawaja Amjad Saeed, Prosperity Through Austerity (Economics Department, University of the Punjab, Lahore)
- Khawaja Amjad Saeed, Rethinking Leadership & the Future of Work (2<sup>nd</sup> Lahore Management & HRD Summit)
- Khawaja Amjad Saeed, SAARC 2010 (Lecture Theater, HCBF)

#### **Research Articles**

- Khawaja Amjad Saeed, Corporate Strategies for the Green World. 2011
- Khawaja Amjad Saeed, Business & Economics Society International 2011

#### **• Conferences and Workshops Attended by HCBF 2010-2011**

- FAST Business Plan Competition 2010
- Lahore Chambers of Commerce (LCCI) Business Walk

Eurasia international model United Nations conferences in Germany 2011

#### **HAILEY COLLEGE OF COMMERCE**

##### **• Publication**

- 206 Research Publications of HCC Faculty Members in 2010-11.

##### **• Conferences, Seminars**

- 07 Seminars and Workshop National and International attended the by HCC faculty members

#### **Research Journal**

- Hailey College Published Annual Journal Al-Iqtisad

#### **FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES**

##### **DEPARTMENT OF ECONOMICS**

##### **• Publications**

- Hafeez ur Rehman, Atif Ali Jaffri and Imtiaz Ahmed (2010), Impact of foreign direct investment (FDI) inflows on equilibrium real exchange rate of Pakistan. *South Asian Studies* (A research journal of South Asian Studies), Volume 25, No. 1 (January-June), pp. 125-141.

- M. Shahbaz, Hafeez ur Rehman and N. Amir (2010), The Impact of trade and financial-openness on government size: A case study of Pakistan. *Journal of Quality and Technology Management*, Volume VI, Issue I (June), pp. 105-118.
- Ahsan Ali Mangi, Hafeez ur Rehman and Imtiaz Ahmed (2011), An analysis of preventive health care in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, Volume 3, No. 1 (May), pp. 1237-1248.
- Hafeez ur Rehman, Furrugh Bashir and Ismat Nasim (2011), Students' involvement in economic activity during their studies: A case study of Pakistan. *International Journal of Business and Social Science*, Volume 2, No. 14, pp. 199-206.
- Hafeez ur Rehman, Imran Sharif Chaudhry, Muhammad Zahir Faridi and Farrukh Bashir (2011), Rural-urban saving differentials in Pakistan: Investigation from primary data. *South Asian Studies* (A research journal of South Asian Studies), Volume 26, No. 1 (January-June), pp. 19-35.
- Nabeela Asghar, Masood Sarwar Awan and Hafeez ur Rehman (2011), An econometric analysis of the relationship between education and economic growth in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, Volume 3, No. 2 (June), pp. 1437-1445.
- Asma Awan, Nabeela Asghar and Hafeez ur Rehman (2011), The impact of exchange rate, fiscal deficit and terms of trade on external debt of Pakistan: A cointegration and causality analysis. *Australian Journal of Business and Management Research*, Volume 1, No. 3, pp. 10-24.
- Muhammad Tahir Rashid, Khalil Ahmad, Pervaiz Azim and Hafeez ur Rehman (2011), Measuring the impact of inflation on conditional stock market volatility in Pakistan: An application of IGARCH Model. *Middle Eastern Finance and Economics*, Issue 13, pp. 36-42.
- Hafeez ur Rehman, Furrugh Bashir and Muhammad Zahir Faridi (2011), Saving behavior among different income groups in Pakistan: A micro study. *International Journal of Humanities and Social Sciences*, Volume 1, No. 10, pp. 268-277.
- Muhammad Rehman, Javed Iqbal and Hafeez ur Rehman (2011), Nonlinearity in inflation: A case of Pakistan. *Pakistan Economic and Social Review*, Volume 49, No. 1, pp. 1-12.
- Wasim ul Rehman, Chaudhary Abdul Rehman, Hafeez ur Rehman and Ayesha Zahid (2011), Intellectual capital performance and its impact on corporate performance: An empirical evidence from Modaraba sector of Pakistan. *Australian Journal of Business and Management Research*, Volume 1, No. 5, pp. 8-16.
- Wasim ul Rehman, Muhammad Ilyas and Hafeez ur Rehman (2011), Intellectual capital performance and its impact on financial returns of companies: An empirical study from insurance sector of Pakistan. *African Journal of Business Management*, Volume 5(20), pp. 8041-8049.

- Muhammad Afzal, Hafeez ur Rehman, M. Shahid Farooq and Kafeel Sarwar (2011), Education and economic growth in Pakistan: A cointegration and causality analysis. *International Journal of Educational Research*, Volume 50, pp. 321-335. <http://dx.doi.org/10.1016/j.ijer.2011.10.004>
- Nabeela Asghar, Asma Awan and Hafeez ur Rehman (2011), Exploring the linkages among economic growth, openness, income inequality, education and health in Pakistan. *Canadian Social Science*, Volume 7, No. 6, pp. 82-88. <http://dx.doi.org/10.3968/j.css.1923669720110706.094>
- Hafiz Khalil Ahmad and Ilyas Muhammad (2011), Trends in Total Factor Productivity in Paistan Interdisciplinary. *Journal of Contemporary Research in Business* February, 10, pp. 81-89.
- Hafiz Khalil Ahmad, Ch. Abdul Rehman, Muhammad Ilyas, Syed Kamran Maqbool and Muhammad Tahir Rashid (2011), Impact of Attitudes, Organization Characteristics and External market on Employee Turnover Intentons in Private Sectro Universities of Lahore. *European Journal of Social Sciences*, Volume 21/1, pp. 87-93.
- Hafiz Khalil Ahmad and Muhammad Ilyas (2011), Productivity trends in Pakistan: An Analysis of Services Sector. *Interdisciplinary Journal of Contemporary Research in Business*, Volume 2(12), pp. 21-18.
- Hafiz Khalil Ahmad, Raza Ali, Amjad Waqas and Akram Muhammad (2011), Financial Performance of Non-Banking Finance Companies in Pakistan Interdisciplinary. *Journal of Contemporary Research in Business*, Volume 2(12), pp. 732-744.
- Hafiz Khalil Ahmad, Asghar Anum Ullah, Sami, Zaman, Bedi-uz and Muhammad Tahir Rashid (2011), The Relationship Between inflation and Inflation Uncertainty: A Case Study for SAARC Region Countries. *International Research Journal of Finance and Economics*, Volume 66, pp. 85-98.
- Hafiz Khalil Ahmad and M. Mukhtar Khan (2011), A Comparative Analysis of Productivity of Airline Industry: Evidence from Selected Asian Airlines. *International Journal of Business and Social Science*, Volume 2(15) pp. 224-230.
- Hafiz Khalil Ahmad and Riaz Ammara (2011), An Econometric Model of Poverty in Pakistan: ARDL Approach to Co-Integration. *Asian Journal of Business and management Sciences*, Volume 1(3), pp. 75-84.
- Hafiz Khalil Ahmad, Sumaira Khalil and Allah Ditta Saeed (2011), Does Thee Exist Okun's Law in Pakistan? *International Journal of Humanities and Social Science*, Volume 1(12), pp. 293-299.
- Hafiz Khalil Ahmad and Madiha Zafar (2011), Export Growth and Volatility of Exchange Rate: A Panel Data Analysis. *Business and Social Science Review*, Volume April (1/4), pp. 35.
- Hafiz Khalil Ahmad, Tanveer Ahmad, Naveed Sami Ullah and Tahir Rashid (2011), Role and Performance of Government and NGOs in Relief Assistance: A Case study of 2005 Earthquake. *International Journal of Business and Social Science*, Volume 3(2), pp. 1726-1736.

- Mumtaz Anwar Ch. and Muhammad Khalid Rashid (2011), Effectiveness of Foreign Aid in the light of MDGs on the Education Sector. *Interdisciplinary Journal of Contemporary Research in Business*, Volume 3(1), pp. 377-389.
- Mumtaz Anwar Ch. and Muhammad Khalid Rashid (2011), Effectiveness of Foreign Aid in the light of MDGs on the Education Sector. *Interdisciplinary Journal of Contemporary Research in Business*, Volume 3(2), pp. 1992-2003.
- Muhammad Afzal, Muhammad Ilyas, Hafiz Khalil Ahmad and Tahir Mahmood (2010), Determinants of manufacturing value added in Pakistan application of bounds testing approach to cointegration *Pakistan Economic and Social Review*, Volume 48(2), pp. 209-223.
- Muhammad Afzal (2010), Microeconomic Analysis of Private Returns to Education and Determinants of Earnings. *Pakistan Economic & Social Review*, Volume 49(1), pp. 39-68.
- **Conferences, Seminars and Workshops, etc.**
  - Essay Competition 2010 on Self Reliance under Prof. Qazi M. Fareed Memorial Economic Society.
- **Research journals**
  - Pakistan Economic and Social Review

#### DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

- **R&D-An Overview (5 – 10 lines)**

DLIS published its HEC recognized annual Pakistan Journal of LIS,

- **Publications**

##### **Research Papers Published**

- Kanwal Ameen. (2011). Changing scenario of librarianship in Pakistan: Managing with the challenges and opportunities. *Library Management*, 32: (3), 171-182. [UK]
- Kanwal Ameen, & Sanda Erdelez. (2011). Instructing usability evaluation in LIS curriculum: A case of the U.S. *Pakistan Journal of LIS*, (12), 1-7.
- Kanwal Ameen, & Sanda Erdelez. 2011. Instructing Usability Evaluation in LIS Curriculum: A case of the U.S. *Pakistan Journal of LIS*, 12; 1-7.
- Nosheen Fatima Warraich & Kanwal Ameen (2011). Employment and learning outcomes of LIS graduates: A case of Pakistan, *Education for Information*, 28 (4), 315-324. [UK]
- Nosheen Fatima Warraich & Kanwal Ameen (2011). Employability skills of LIS graduates in Pakistan: needs and expectations, *Library Management*, 32 (3), 209-224. [UK]
- Nosheen Fatima Warraich & Kanwal Ameen (2011). LIS Professionals' staffing patterns: A case of Pakistani universities. *Library Philosophy and Practice*. [USA]

- Midrar Ullah, Kanwal Ameen, & Salman Bakhtar (2010/2011). Professional activities, needed competencies and training needs of medical librarians in Pakistan. *Education for Information*, 28 (2-4), 115-123.
- Arif, Mohammad & Kanwal Ameen. (2011). Library electronic resources use—students' attitude: Technology acceptance model. *Pakistan Library and Information Science Journal*, 42(2), 3-12.
- Alia Arshad & Kanwal Ameen. (2011). Reality versus expectations: A Survey of University of the Punjab's Libraries using SERVQUAL. *Library Philosophy and Practice*. [USA]
- Alia Arshad & Kanwal Ameen. (2010). Service quality of the University of the Punjab's Libraries: An exploration of user's perceptions. *Performance, Measurement and Metrics*, 11(3): 313-325.
- Mahmood, K., & Richardson Jr., J. V. (2011). Adoption of Web 2.0 in US academic libraries: A survey of ARL library websites. *Program: Electronic Library and Information Systems*, 45(4), 365-375.
- Mahmood, K. (2010). Attitude towards Internet: Survey of LIS professionals in Pakistan. *Library Philosophy and Practice*, 1-10.
- Mahmood, K., & Richardson Jr., J. V. (2011). Adoption of Web 2.0 in US academic libraries: A survey of ARL library websites. *Program: Electronic Library and Information Systems*, 45(4), 365-375.
- Ahmad, S., & Mahmood, K. (2011). Library and information science education in Pakistan – A decade of development – 2000-2009. *Pakistan Library and Information Science Journal*, 42(3), 3-12.
- Butt, K., Qutab, S., & Mahmood, K. (2011). Access and use of the Internet in the libraries of Lahore, Pakistan. *Chinese Librarianship: An International Electronic Journal*, 31, 1-14.
- Mairaj, M. I., & Mahmood, K. (2011). Development of agricultural libraries in Pakistan. *Pakistan Library and Information Science Journal*, 42(1), 26-41.
- Rehman, S. U., Shafique, F., & Mahmood, K. (2011). A survey of user perception and satisfaction with reference services in university libraries of Punjab. *Library Philosophy and Practice*, 1-14.
- Shafique, F., & Mahmood, K. (2011). Availability of needed information to educational administrators in Pakistan: A survey. *Chinese Librarianship: An International Electronic Journal*, 32, 1-33.
- Nosheen Fatima Warraich & Kanwal Ameen (2011). Employment and learning outcomes of LIS graduates: A case of Pakistan, *Education for Information*. 28 (4), 315-324.
- Nosheen Fatima Warraich & Kanwal Ameen (2011). Employability skills of LIS graduates in Pakistan: needs and expectations, *Library Management*, 32(3), 209-224.
- Nosheen Fatima Warraich & Kanwal Ameen (2011). LIS Professionals' Staffing Patterns: A case of Pakistani Universities. *Philosophy and Practice* [Electronic refereed journal] [USA]



- Nosheen Fatima Warraich & Sajjad Ahmad (2011). Pakistan Journal of Library and Information Science: A Bibliometric Analysis *Pakistan Journal of LIS*.

- **Books Published**

- Mahmood, K. (2011). *Impact of Web 2.0 technologies on US academic libraries: A study of ARL libraries*. Saarbrücken, Germany: LAMBERT Academic Publishing.
- Alia Arshad & Kanwal Ameen (2011). User's Perceptions and Expectations of Quality Library Services: A Survey of University of the Punjab's Libraries. Germany: VDM Verlag Dr. Mueller e.K.

- **Conferences / Seminars / Workshops**

Organized by the Department:

- A 3-day interactive workshop on “Developing Academic Librarians as Knowledge Workers” from 26th to 28th July, 2011. Prof. Dr. Kanwal Ameen and Prof. Dr. Khalid Mahmood (from PU DLIS), Muhammad Anwar Chaudhry and Mohsin Rauf (from University of Management & Technology, Lahore), Dr. Amra Raza, Shamaila Dodhy and Shireen Raheem (from PU Department of English Language & Literature), Bushra Almas (from FC University), and Dr. Ghazala Irfan (from Lahore University of Management Sciences) were the resource persons.
- One day workshop on “Managing References Electronically: EndNote Software” on 19<sup>th</sup> July, 2011. Prof. Dr. Kanwal Ameen, Prof. Dr. Khalid Mahmood and Muhammad Anwar Chaudhry (Chief Librarian, University of Management & Technology, Lahore) were the resource persons. Faculty and doctoral students from various departments of the University of the Punjab participated in this hands-on training workshop.
- A seminar on “National Agenda for Research in Library & Information Science” on 9th July, 2011. Prof. Dr. Mumtaz Ali Anwar, Prof. Dr. Kanwal Ameen, Mirza Muhammad Naseer (PhD scholar) and Prof. Dr. Khalid Mahmood were the speakers. LIS faculty, PhD/MPhil scholars and other researchers attended the seminar and suggested measures for promoting LIS research in Pakistan.
- A seminar on “Information Literacy in Academic Libraries” on 27th May, 2011 in collaboration with the Pakistan Automation Group (PAKLAG). Prof. Dr. Kanwal Ameen and Prof. Dr. Khalid Mahmood were the resource persons.
- A talk by Leonard Kniffel, editor and publisher of the journal *American Libraries*, on “Writing for Profession: Tricks and Tips for LIS Professionals” on 18th October 2010 in collaboration with Pakistan Library Association Punjab and the U.S. Consulate, Lahore.
- A workshop on “Personal Knowledge Management for Enhancing Professional Productivity” conducted by Dr. Abdus Sattar Chaudhry on 29th January, 2011.

- A seminar on “Identify and Rectify the Common Errors of English in Pakistan” on 21st February, 2011. Dr. Gazala Irfan, Associate Professor, Department of Humanities and Social Sciences, Lahore University of Management Sciences (LUMS) was the resource person.
- Dr. Ann Marlow Riedling, Associate Professor, School of Library & Information Science, San Jose State University, USA, visited the Department in October 2010. She discussed LIS curriculum with the faculty and shared her teaching and research experiences.  
As Invited Speaker Dr. Kanwal Ameen
- Key Note Speaker at National Conference on “Changing Paradigm of LIS Profession in Pakistan” organized by the Dept. of LIS, Allama Iqbal Open University, Islamabad, 19-20 Oct., 2011
- Presented paper on “Professional Activities, Needed Competencies and Training Needs of Medical Librarians in Pakistan” co-authored with Midrar Ullah and Salman Bakhtiar at A-LIEP 2011 Asia-Pacific Conference on Library & Information Education and Practice: Issues, Challenges and Opportunities (22-24 June 2011, Pullman Putrajaya Lakeside, Malaysia).
- Chaired 3 days NTS Committee meeting on LIS held in Islamabad on Jan. 1, 2011
- Prof. Dr. Kanwal Ameen delivered a lecture on “The Role of Library and Its Status in the Development of Civil Society in Pakistan” on 9th March, 2011, organized by the International Islamic Philosophical Association of Pakistan at the Lahore Gymkhana Club.
- Participated as resource persons in the ‘New Faculty Orientation Program 2011, organized by the IAS, Human Resources Development Center on 8th July, 2011.
- Participated as resource persons in a workshop on “Exploring Electronic Resources for Research” organized by the PU Institute of Quality & Technology Management on 14th February, 2011.
- Delivered a lecture for research students and faculty on “Exploring Internet as a Research Tool” at the College of Art and Design, University of the Punjab on 17th February, 2011.
- Resource person and Organizer of the workshop on “Developing Academic Librarians as Knowledge Workers” held at the Department in July 26-28, 2011.
- Resource person and Organizer of the workshop on “Managing References Electronically: EndNote software” held at the Department on July 19, 2011.
- Resource person and Organizer of a seminar on “National Agenda for Research in Library and Information Science” held at the Department on July 9, 2011.
- Resource person in the seminar on “Information Literacy in Academic Libraries” organized jointly by Pakistan Library Automation Group and the Department on May 27, 2011.
- Delivered a lecture at a seminar on the “Status of librarianship in the United States” organized by Pakistan Library Association, Lahore, March. 26, 2011

- Speaker on “The Role of Library and its Status in the Development of Civil Society in Pakistan” at a monthly session of International Islamic Philosophical Association held on March 9, 2011 at Gymkhana Club.
- Status of Librarianship in the United States: Some experiences and observations in the Punjab University Library on March 25, 2011 in a seminar organized by PLA Punjab.
- A presentation at the Punjab Education Foundation on “Initiating Information Literacy as Part of School Education” on June 8, 2011.
- Participated in a panel discussion organized by PTV, Lahore on the issues of libraries in Pakistan.
- Chaired a session in “International Conference on 21st Century Vision for Libraries”, 13-14 October, 2010, Islamabad, organized by Pakistan Library Association (Federal Branch) in collaboration with the Embassy of United States of America.
- Dr. Khalid Mahmood participated in “iConference,” Seattle, USA, Feb. 8-11, 2011.
- Dr. Khalid Mahmood participated in “Competitiveness & Innovation: Annual Conference of Association for Library and Information Science Education (ALISE),” San Diego, USA, Jan. 4-7, 2011.
- Dr. Khalid Mahmood participated as resource person in the workshop on “Developing Academic Librarians as Knowledge Workers” organized by the Department in July 26-28, 2011.
- Dr. Khalid Mahmood resource person in the workshop on “Managing References Electronically: EndNote software” organized by the Department on July 19, 2011.
- Dr. Khalid Mahmood organizer and resource person in a seminar on “National Agenda for Research in Library and Information Science” held at the Department on July 9, 2011.
- Dr. Khalid Mahmood resource person in the workshop on “PakLAG KOHA with DSpace” organized by Pakistan Library Automation Group, Islamabad, Jun. 27-29, 2011.
- Dr. Khalid Mahmood resource person in a seminar on the “Information Literacy in Academic Libraries” organized jointly by Pakistan Library Automation Group and the Department held on May 27, 2011.
- Dr. Khalid Mahmood delivered a lecture at the seminar on “World Book & Copyright Day” organized by Pakistan Library Association, Pakistan Librarians Welfare Organization and Allama Iqbal Open University, Lahore, April. 23, 2011.
- Dr. Khalid Mahmood participated as resource person in the workshop on “Publishing Your Research” organized by Beaconhouse National University and Institute of Research Promotion, Lahore, Apr. 2, 2011.
- Dr. Khalid Mahmood delivered a lecture on “Myths and realities of LIS profession in the United States” organized by Air University and Pakistan Library Automation Group, Islamabad, March 29, 2011.

- Dr. Khalid Mahmood delivered a lecture at the seminar on “Status of librarianship in the United States” organized by Pakistan Library Association, Lahore, Mar. 26, 2011.
- Dr. Nosheen presented her paper, in co-authorship with Prof. Dr. Kanwal Ameen, on “Alumni perception of library and information science program and graduate employment outcomes at the University of the Punjab” at the Asia-Pacific Conference on Library & Information Education and Practice: Issues, Challenges and Opportunities, 22-24 June 2011, Putrajaya, Malaysia.
- Dr. Nosheen presented her Paper on “Role of CPD in maintaining the intellectual capital of research libraries” included in the proceedings of the World Library and Information Congress: 77<sup>th</sup> IFLA Conference 13-18 August 2011, San Juan, Puerto Rico.
- Dr. Nosheen Resource persons in the New Faculty Orientation Program 2011 organized by the PU Human Resources Development Center on 8th July, 2011. They delivered lectures on “Information Resource Management.”
- Dr. Nosheen participated as resource persons in a workshop on “Exploring Electronic Resources for Research” organized by the Institute of Quality & Technology Management, PU on 14th February, 2011.
- Dr. Nosheen organized a workshop on “Managing References Electronically: EndNote software” held at the Department on July 19, 2011.
- Syeda Hina Batool delivered a lecture on “Internet: Smart Searching Skills” at the College of Art and Design, University of the Punjab on 17th February, 2011.
- Ms. Umera Shah participated in “International Conference on 21st Century Vision for Libraries”, 13-14 October, 2010, Islamabad, organized by Pakistan Library Association (Federal Branch) in collaboration with the Embassy of United States of America.
- **Research Journals**
  - Pakistan Journal of Library and Information Science, HEC recognized annual journal*
- **Funding Grants for R&D**
  - Dr. Kanwal Ameen got PU travel grant to present her paper in Asia-Pacific Conference on Library & Information Education and Practice: Issues, Challenges and Opportunities (22-24 June 2011, Pullman Putrajaya Lakeside, Malaysia).
  - Dr. Nosheen Fatima Warraich got HEC travel grant to attend and present her paper in the Asia-Pacific Conference on Library & Information Education and Practice: Issues, Challenges and Opportunities (22-24 June 2011, Pullman Putrajaya Lakeside, Malaysia).
  - Dr. Nosheen Fatima Warraich got PU travel grant to attend and present her paper co-authored with Dr. Kanwal Ameen in World Library and Information Congress: 77<sup>th</sup> IFLA General Conference and Assembly 13-18 August 2011, San Juan, Puerto Rico. (Not Availed)

## INSTITUTE OF ADMINISTRATIVE SCIENCES

### Publications

- Zafar Iqbal Jadoon & Nasira Jabeen *Public Administration Education in Pakistan: Issues, Challenges and Opportunities* Pakistan Vision, Pakistan Study Centre, University of the Punjab Vol. 11 No. 1, P 121-141
- Aisha Rizwan & Zafar Iqbal Jadoon *Agencification in Pakistan: A comparative study of service delivery and regulatory agencies* 32<sup>nd</sup> International conference, European group of Public Administration, Toulouse, France (September 8-10, 2010)
- Nasira Jabeen & Zafar Iqbal Jadoon *Gender and local governance in Pakistan: Promoting participation through capacity building* South Asian Studies Vol. 25 No.2 (July-December, 2010) P255-281
- Nasira Jabeen *National Speaker on Gender Equity & Governance in Pakistan* Governance Institutes Network International, Islamabad International Conference (16<sup>th</sup> - 18<sup>th</sup> Dec, 2009)
- Nasira Jabeen & Zafar Iqbal Jadoon *Good enough governance: a possible governance framework for South Asia* Asian Profile Vol. 37, No.3 (June, 2009) P209-224
- Nasira Jabeen & Zafar Iqbal Jadoon *Gender and local governance in Pakistan: Representation vs. Participation* International NGO Journal Vol. 4 (5) (May, 2009) P264-276
- Nasira Jabeen & Zafar Iqbal Jadoon *Good Governance in South Asia: Constraints and Possibilities* Pakistan Management Review XLV, No.2 (2008) P21-34
- Zafar Iqbal Jadoon, Nasira Jabeen & Farah Zeba *Towards Effective Implementation of Semester System in Pakistan: Lessons from Punjab University* 2<sup>nd</sup> International Conference on Assessing Quality in Higher Education, ICAQHE International Conference IQTM University of the Punjab, Pakistan (1-2 December, 2008) P360-377

## INSTITUTE OF BUSINESS ADMINISTRATION

### • Publications

- Muhammad Ehsan Malik, Ghafoor, M M, & Naseer S (2011). Organizational Effectiveness: A case Study of Telecommunication and Banking Sector of Pakistan, *Far East Journal of Psychology and Business*, 2(1), 37-48 HONG KONG.
- Muhammad Ehsan Malik, Danish, R. Q & Ali, U. (2011). Impact of Motivation to Learn and Job Attitudes on Organizational Learning Culture in a Public Service Organization of Pakistan, *African Journal of Business Management*, 5(3), 844-854. NIGERIA (Recognized W Category by HEC) IF; 1.105
- Muhammad Ehsan Malik, Danish, R. Q., & Munir, Y. (2011). Employee's Turnover Intension: Is this HR Failure or Employee's better employment opportunity? *International Conference on*

*Innovation, Management and Service IPEDR, 14, 326-331 IACSIT Press, SINGAPORE. Thomson & ISI Indexed*

- Muhammad Ehsan Malik & Naeem, B. (2011). Role of Spirituality in Job Satisfaction and Organizational Commitment among Faculty of Institutes of Higher Learning in Pakistan, *African Journal of Business Management* 5(4), 1236-1244. NIGERIA (Recognized “W” Category by HEC) IF; 1.105
- Muhammad Ehsan Malik & Naeem, B. (2011). Faculty Members’ Perceptions of Organizational Justice in Institutes of Higher Learning of Pakistan, *African Journal of Business Management* 5(16), 6698-6706 NIGERIA (Recognized “W” Category by HEC) IF; 1.105.
- Muhammad Ehsan Malik & Naeem, B. (2011). Interrelationship between Customer Based Brand Equity Constructs: Empirical Evidence from Hotel Industry of Pakistan, *Interdisciplinary Journal of Contemporary Research in Business* 3(4), 795-804. UNITED KINGDOM (Recognized Y Category by HEC).
- Muhammad Ehsan Malik & Naeem, B. (2011). Miles and Snow Strategy Topology: A Critical Commentary, *Interdisciplinary Journal of Contemporary Research in Business* 3(4), 805-812. UNITED KINGDOM (Recognized Y Category by HEC).
- Muhammad Ehsan Malik & Naeem, B. (2011). Banking Clients’ Perceived Service Quality and Behavioral Responses, *European Journal of Social Sciences* 23(3), 466-473. UNITED KINGDOM
- Muhammad Ehsan Malik & Naeem, B. (2011). Impact of Perceived Organizational Justice on Organizational Commitment of Faculty: Empirical Evidence from Pakistan, *Interdisciplinary Journal of Research in Business* 1(9), 92-98. UNITED STATE OF AMERICA.
- Muhammad Ehsan Malik, Khan M.A, Akash, R. S. I., Khan M. I. & Hussain F (2011). Co-integration and Causality Analysis of Emerging Equity Markets and Developed Equity Markets (An Empirical Analysis of Karachi Stock Exchange, *Interdisciplinary Journal of Contemporary Research in Business* 3(7), 167-193. UNITED KINGDOM (Recognized Y Category by HEC).
- Muhammad Ehsan Malik & Naeem, B. (2011). Big Question: Is Pakistani Faculty of Higher Education Spiritual? *Interdisciplinary Journal of Contemporary Research in Business* 3(8), 598-609. UNITED KINGDOM (Recognized “Y” Category by HEC).
- Muhammad Ehsan Malik, Naeem, B., & Ali, B.B (2011). How Do Workplace Spirituality and Organizational Citizenship Behavior influence Sales Performance of FMCG Sales Force? *Interdisciplinary Journal of Contemporary Research in Business* 3(8), 610-620. UNITED KINGDOM (Recognized “Y” Category by HEC).
- Muhammad Ehsan Malik, Naeem, B., & Nasir, A.M. (2011). Hotel Service Quality and Brand Loyalty. *Interdisciplinary Journal of Contemporary Research in Business* 3(8), 620-629. UNITED KINGDOM (Recognized “Y” Category by HEC).

- Muhammad Ehsan Malik, Naeem, B., & Nasir, A.M. (2011). Impact of Service Quality on Brand Image: Empirical Evidence from Hotel Industry. *Interdisciplinary Journal of Contemporary Research in Business* 3(8),630-636. UNITED KINGDOM (Recognized “Y” Category by HEC).
- Muhammad Ehsan Malik, Naeem, B., & Arif, Z. (2011). Impact of Perceived Service Quality on Banking Customers’ Loyalty. *Interdisciplinary Journal of Contemporary Research in Business* 3(8),637-645. UNITED KINGDOM (Recognized “Y” Category by HEC).
- Muhammad Ehsan Malik, Naeem, B., & Arif, Z. (2011). How do Service Quality Perceptions Contribute in Satisfying Banking Customers? *Interdisciplinary Journal of Contemporary Research in Business* 3(8),646-653. UNITED KINGDOM (Recognized “Y” Category by HEC).
- Muhammad Ehsan Malik, Naeem, B., & Ali, B.B (2011). Sales Force Organizational Citizenship Behavior: Role of Meaning at work and Conditions for Community. *Interdisciplinary Journal of Contemporary Research in Business* 3(8),654-661. UNITED KINGDOM (Recognized “Y” Category by HEC).
- Muhammad Ehsan Malik & Naeem, B. (2011). Role of Perceived Organizational Justice in Job Satisfaction: Evidence from Higher Education Institutions of Pakistan *Interdisciplinary Journal of Contemporary Research in Business* 3(8),662-673. UNITED KINGDOM (Recognized “Y” Category by HEC).
- **Conferences, Seminars and Workshops, etc.**
  - Prof. Dr. Muhammad Ehsan Malik, Director-IBA attended International Conference on “Management Research (ICMR 2010)” jointly organized by Superior University, Lahore Pakistan and University of New Castle, Australia held at Superior University, Lahore on 02-04 December 2010.
  - Prof. Dr. Muhammad Ehsan Malik, Director-IBA chaired a Parallel Session and participated in a “Panel Discussion on Marketing” as a “Panelist” at International Conference on “Management Research” jointly organized by Superior University, Lahore Pakistan and University of New Castle, Australia held at Superior University, Lahore on 2<sup>nd</sup> December 2010.
  - Prof. Dr. Muhammad Ehsan Malik, Director-IBA delivered a lecture on “Right to Education: Legal Implications in Pakistan (A brief session in context of eighteenth amendment) ” in a seminar jointly organized by University Law College in collaboration with Human Rights and Minorities Affairs Department, Government of Punjab at University Law College on February 23, 2011.
  - Prof. Dr. Muhammad Ehsan Malik, Director-IBA participated as Peer Review Team member in AMDISA’s South Asian Quality Assurance Systems (SAQS) meeting held at Institute of Management and Technology (IMT), Ghaziabad, India for SAQS Accreditation process from March 8 to March 10, 2011.

- Prof. Dr. Muhammad Ehsan Malik, Director-IBA delivered a lecture as keynote speaker on the topic “Nature & Role of Literature Review” on March 31, 2011 in a two-day workshop on “Literature Review & Managing References Using EndNote® Software” jointly organized by Institute of Business Administration (IBA) Punjab University and Department of Library & Information Sciences, University of the Punjab at IBA held on March 31 and April 1, 2011.
- Prof. Dr. Muhammad Ehsan Malik, Director-IBA attended International Conference on “Legal Education in the Context of Globalization” held at Tsinghua University, Beijing, China from April 23 to 24, 2011.
- Prof. Dr. Muhammad Ehsan Malik, Director-IBA attended AMDISA'S 54<sup>th</sup> Executive Board meeting being Executive Board Member held at Nepal Administrative Staff College, Katmandu, Nepal on 15 May, 2011.
- Prof. Dr. Muhammad Ehsan Malik, Director-IBA attended the 11<sup>th</sup> South Asian Management Forum on “Managing Change for Sustainable Development in the SAARC Region” held at Nepal Administrative Staff College, Katmandu, Nepal on 16 May to 18 May, 2011.
- Prof. Dr. Muhammad Ehsan Malik, Director-IBA participated as Discussant in a session on a research paper entitled “Implementation of Universal design in South Asian & Japan” held at Nepal Administrative Staff College, Katmandu, Nepal on 16 May 2011.
- Prof. Dr. Muhammad Ehsan Malik, Director-IBA delivered a lecture as a Resource Person on “Administrative Structure and Culture of the University of the Punjab” in a HRDC New Faculty Orientation Program 2011 organized by Institute of Administrative Sciences University of the Punjab on 05 July 2011.
- Prof. Dr. Muhammad Ehsan Malik, Director-IBA participated in the 2<sup>nd</sup> Asia's Best B-School Awards ceremony presented by CMO Asia and received the “Innovation Leadership Award” at Suntec, Singapore on 22<sup>nd</sup> July 2011.
- IBA arranged two-day workshop in collaboration with Department of Library & Information Sciences (DLIS), University of the Punjab on “Literature Review & Managing References Using EndNote® Software” at IBA on March 31 and April 1, 2011.
- IBA arranged a workshop/seminar in collaboration with the Small and Medium Enterprise Development Authority (SMEDA) on “Legal Requirements of a new Business” on February 21, 2011 at IBA.
- IBA arranged a seminar in collaboration with Coca Cola on “KO Graduate Training Program” on June 28, 2011 at IBA.



## INSTITUTE OF BUSINESS & INFORMATION TECHNOLOGY

### • Research Publications

#### Research Papers:

- Aamir Sarwar, Title is 'Work Stress and Family Imbalance: In Financial Sector of Pakistan', 'International Journal of Business and Social Sciences' IJBSS No. 13 (Special Issue), PP:250-261 July 2011, Vol.2, HEC Recognized and Impact Factor (IF) Nil
- Aamir Sarwar, Title is 'Impact of Employee Empowerment: on Employees Job Satisfaction and Commitment with the Organization. Interdisciplinary Journal of Contemporary Research in Business (IJCRB), No.2, pp:664-683 June 2011, Vol.3, HEC Recognized and Impact Factor (IF) Nil
- Aamir Sarwar, Title is "Safety & Soundness of Financial Sector of Pakistan": CAMEL Rating Application, Interdisciplinary Journal of Contemporary Research in Business (IJCRB),No.2, pp:624-630 June 2011, Vol.3, HEC Recognized and Impact Factor (IF) Nil
- Shamaila Gull, Co-Author Rushda Tariq, title is 'Impact of Loyalty Programs In Grocery Retailing on Loyalty of Local Customers in Lahore Pakistan' Shamaila Gull, Interdisciplinary Journal of Contemporary Research in Business Vol: 3, No:4, Page No: 271-286 ISSN: 2073-7122 August 2011, Vol.No. No.3, HEC Recognized and Impact Factor (IF) Nil
- Mrs. Shamaila Gull, title is 'Interdisciplinary Journal of Contemporary Research In Business'. July 2011, Pg: 1007, Vol.No.3, HEC Recognized and Impact Factor (IF) Nil
- Mrs. Shamaila Gull, Co-Author Haroon Arshad, title is 'Investment Priorities of Generation x Working in Pvt Sector of Pakistan'. Journal of Management Economics & Finance. July 2011, Vol.No.1, HEC Recognized and Impact Factor (IF) Nil
- Shamaila Gull, Co-Author, Nazish Rizvi and Amina Ashraf, title is "Motives Behind Channel Choice in Multichannel, Air Travel Retail Context, among Pakistani Consumers",
- Farheen Batool Zaidi, Co-Author, Zahra Abbas, Title is "A Study on the Impact of Rewards on Employee Motivation in the Telecommunications sector of Pakistan". Vol No. 3, issue No. 4, year 2011, pages (978-998).
- Farheen Batool Zaidi, Interdisciplinary Journal of Contemporary Research in Business. July 2011, issue No. 3 (pp.978-998) IJCRB ISSN 2073-7122, Vol no. 3, HEC Recognized and Impact Factor (IF) Nil.
- Farheen Batool Zaidi , Co-Author, Zahra Abbas, Title is "Relationship Between Demographic Characteristics and Burnout among Public Sector University Teachers of Lahore"
- Farheen Batool Zaidi, Interdisciplinary Journal of Contemporary Research in Business, August 2011, Vol no. 3, HEC Recognized and Impact Factor (IF) Nil.

- Syeda Nazish Zehra Rizvi, Co-Author, Sadia Malik, Title is “Impact of sales promotion on organizations’ profitability and consumer perception in Pakistan”, Interdisciplinary Journal of Contemporary Research in Business, Vol:3 No-5, Page No: 296-310 ISSN: 2073-7122, September 2011, Vol no. 3, HEC Recognized and Impact Factor (IF) Nil.
- Syeda Nazish Zehra Rizvi, Co-Author, Shamaila Gull and Amina Ashraf, Title is “Motives Behind Channel Choice in Multichannel Air Travel Retail Context, among Pakistani Consumers”, Interdisciplinary Journal of Contemporary Research in Business, Vol: 3, No:4, Page No: 271-286 ISSN: 2073-7122, August 2011, Vol no. 3, HEC Recognized and Impact Factor (IF) Nil.
- Asim Tanvir, Title is “Adoptability issues of GPS in public sector in Pakistan”. International Conference of Economics, Management, Business and Innovation Technology in Paris, August, 2011.
- **Book Published By The Faculty Members**
  - Aamir Sarwar “Work Stress and family Imbalance: in Financial Sector of Pakistan” VDM, Germany, pages 250.
  - Aamir Sarwar, Impact of Employee Empowerment: on Employees Job Satisfaction and Commitment with the organization. LAP, Germany, pages 236.
  - Shamaila Gull, Co-Author Farah Saleem, Negative Reciprocity and association Between Organizational Deviance and Organizational Ethics, VDM, Germany, pages 307.
  - Farheen Batool Zaidi, Co-Author Sidrah Anwar, Employee Empowerment on the Service Quality, VDM, Verlag Dr. Mullery, Germany, pages 97.
  - Syeda Nazish Zehra Rizvi, Co-Author Tayyaba Rana, Impact of CSR on Organizational Commitment, VDM, Verlag Dr. Mullery, Germany, pages 147.

## **FACULTY OF EDUCATION**

### **DEPARTMENT OF SPECIAL EDUCATION**

#### **Research and Development:**

- The research papers of faculty members have been published in various journals. They have also presented their papers at international conferences.
- **Publications:**
  - Humara Bano, “Pure Tone Audiometry in Children”, in Pakistan Pediatric Journal. ISSN 0304 4904, Volume 34 (1) 2010. (Pp. 28-32).
  - Hina Fazil, Perceptions of Prospective special Education Teachers about Autism and its implications for Children with Autism in Pakistan, Pakistan Journal of Special Education, Vol.(10) 2009. 53-60.

- **Conferences, Seminars and Workshops, etc.:**
  - Dr. Humara Bano, Participated in 3<sup>rd</sup> International Conference on “Education in Pakistan: Issues, Challenges & Reforms” on 21 October, 2010.
  - Dr. Humara Bano, Participated in 3<sup>rd</sup> International Conference on Assessing Quality in Higher Education, ICAQHE, 2010 arranged by University of the Punjab, Pakistan in collaboration of HEC, UMT, NTU, held on December 6-8, 2010
  - Dr. Humara Bano, attended a National Workshop on “*Curriculum Development on Inclusive Education*” from 14 to 16 March, 2011 at NISE arranged by Comprehensive Health and Education Forum (CHEF) International.
  - Dr. Humara Bano, delivered a lecture on “*Inclusive Education in Pakistan*” on 16-6-2011 at Amin Maktab (Center for Special Education and Training), Gulberg, Lahore.
  - Dr. Humara Bano, attended a National Conference at IER titled “Golden Jubilee Graduate Students Conference 2011 with theme: *Rethinking Education for Pakistan in 21 Century*” on September 17, 2011
  - Dr. Humara Bano, attended “2<sup>nd</sup> National Symposium of Developmental Pediatrics” on “Developmental Pediatrics in the 21<sup>st</sup> Century” on Wednesday, 25<sup>th</sup> May 2011 held at Department of Developmental Pediatrics, The Children’ Hospital & Institute of Child Health Lahore.
  - Dr. Humara Bano, participated in a “One Day Workshop on EndNote Software on July 19, 2011 held at Department of Library & Information Sciences University of the Punjab, Lahore.
  - Dr. Humara Bano, attended in Golden Jubilee Post Graduate Students Conference 2011 with title “Rethinking Education in Pakistan in 21<sup>st</sup> Century” organized by Institute of Education & Research, University of the Punjab, Lahore on September 17, 2011.
  - Dr. Hina Fazil, presented a paper on “implications of UN convention on the rights of persons with disabilities education policy 2007 in Pakistan” in international conference on education held in Barcelona Spain July 2011.
  - Dr. Hina Fazil, delivered lectures to primary schools teachers on “development and implementation of an IEP” and “introduction to exceptionalities” during teacher training workshop on inclusive education organized by CHEF International held on 18-19 July 2011 in Peshawar.
  - Dr. Hina Fazil, delivered a lecture on “Management of mentally retarded children with visual problems” on June 17, 2011 at Amin Maktab, Lahore during teacher training workshop.
  - Dr. Hina Fazil, participated in 3<sup>rd</sup> International Conference on “Education in Pakistan: Issues, Challenges & Reforms” on 21 October, 2010.
  - Dr. Rukhsana Bashir, participated in 3<sup>rd</sup> International Conference on “Education in Pakistan: Issues, Challenges & Reforms” on 21 October, 2010.

- Dr. Rukhsana Bashir, attended one day seminar “Right Based Education for All” on International day of Person with Disabilities held on December 02, 2010 in University of Management & Technology, Lahore.
- Dr. Rukhsana Bashir, International Day of Person with disabilities on December 03, 2010 organized by Ghazali Trust & Punjab Welfare Trust for the Disables.
- Dr. Rukhsana Bashir, participated in a consultative meeting on “Provincial Stakeholders consultation workshop (Policies & Practices for Promoting inclusive Development) organized by Sight Saver, UK aid.
- Dr. Rukhsana Bashir, participated in 2<sup>nd</sup> National Symposium of Developmental Pediatrics’ on May 25, 2011 organized by the Children Hospital, Lahore.
- Mrs. Ghulam Fatima, attended a seminar on Parvarish-e-Atfaal maen Maan ka Kirdaar” on May 19, 2011 held at IER, University of the Punjab, Lahore.
- Mrs. Ghulam Fatima, participated in a “Two Days Workshop on Literature Review & Managing References Using EndNote Software from April 31-01, 2011 held at IBA, University of the Punjab, Lahore.
- Mrs. Ghulam Fatima, participated in a “One Day Workshop on EndNote Software on July 19, 2011 held at Department of Library & Information Sciences University of the Punjab, Lahore.
- Mrs. Ghulam Fatima, presented a paper on “Perceptions of parents about social development of their children with Down syndrome” in Golden Jubilee Post Graduate Students Conference 2011 with title “Rethinking education in Pakistan in 21<sup>st</sup> Century” organized by Institute of Education & Research, University of the Punjab, Lahore on September 17, 2011.
- Mrs. Ghulam Fatima, attended a video conferencing on “Enhancing Professional Competencies of Teachers” on June 25, 2011 held at Centre for Undergraduate Studies, University of the Punjab, Lahore.
- Mrs. Ghulam Fatima, attended “2<sup>nd</sup> National Symposium of Developmental Pediatrics” on “Developmental Pediatrics in the 21<sup>st</sup> Century” on Wednesday, 25<sup>th</sup> May 2011 held at Department of Developmental Pediatrics, The Children’ Hospital & Institute of Child Health Lahore.
- Mrs. Ghulam Fatima, attended an “International conference on Education in Pakistan: Issues, Challenges and reforms” held on 21 to 23 October 2010 organized by IER, University of the Punjab, Lahore.
- Mrs. Ghulam Fatima, attended an “International Child and Family Conference” with theme “Parenting: Practices and Implications” from 14, 15 October, 2011 held at College of Home Economics, Lahore.

- Mrs. Samina Ashraf, a research paper is published in Reflexion Journal entitled “Classroom Communication and Academic Achievement of Students with Hearing Impairment in Segregated and Inclusive settings| in March, 2011.
- Mrs. Samina Ashraf, participated in 3<sup>rd</sup> International Conference on “Education in Pakistan: Issues, Challenges & Reforms” on 21 October, 2010.
- Mrs. Samina Ashraf, attended an “International Child and Family Conference” with theme “Parenting: Practices and Implications” from 14 to 15 October, 2011 held at College of Home Economics, Lahore.

## INSTITUTE OF EDUCATION AND RESEARCH

### • Research Achievements

#### Research Projects Sponsored by National and International Agencies.

- Hafiz M. Iqbal Prof. Dr Rizwan Akram Rana Dr. Nasir Mahmood and Dr. Muhammad Saeed *Using Portfolio to Assess Teachers Implementation of the National Professional Standards for Teachers in Pakistan* UNICEF (2011). amount 5.6 Million
- Hafiz Muhammad Iqbal, Dr. Rizwan Akram Rana and Dr. Nasir Mahmood *Baseline Study on International Inspiration Project* British Council(2011) amount 1.92 million
- Hafiz Muhammad Iqbal, Dr. Rizwan Akram Rana and Dr. Nasir Mahmood *Evaluation of the Impact of Connecting Classrooms Project* British Council (2011) amount 0.59 million
- Hafiz Muhammad Iqbal, Dr. Rizwan Akram Rana and Dr. Nasir Mahmood *Impact Analysis of Connecting Classroom Project* British Council, Pakistan (2011) amount 1.90 million
- Nasir Mahmood *Impact of Cooperative Learning Intervention on Students’ Achievement and logical reasoning* University of the Punjab, On going project, amount 0.2 million

### Publications

- Mumtaz Akhter, Islamic Educational Approach to Environment Protection: A Strategic Approach for Secure and Peaceful. *World International Journal of Business and Social Science*, 1 (3), December 2010
- Muhammad Saeed Shahid Expectations and Experiences of Pupil Teachers during Teaching Practices: Theoretical and Practical Implication. *Procedia Social and Behavioral Science*, 29.
- Muhammad Shahid Farooq, Role of Learning Styles in the Quality of Learning at Different Levels. *Informatica Economica*, 15, 28-45
- Muhammad Shahid Farooq, Education and Economic Growth in Pakistan: A Cointegration and Causality Analysis. *International Journal of Educational Research*, 50(6), 321-335.
- Muhammad Shahid Farooq, Factors Affecting Students’ Quality of Academic Performance: A Case of Secondary School Level. *Journal of Quality and Technology Management*, 7(2).

- Muhammad Shahid Farooq, Perceptions of Prospective Teachers about Factors Influencing Classroom Management. *Journal of Quality and Technology Management*, 7(1), 23-38
- Shaukat Ali Raza & Abir Hussain Naqvi, Assessing Need for Teaching Development of Faculty at Universities of Pakistan: A Student Perspective. *Bulletin of Education and Research*, 33(2) 49-62.
- Shaukat Ali Raza & Dr. M. Amir Hashmi, Dr. Ashi Zeeshan, Efficiency and Market Power in Pakistani Dairy Processing Industry in Pakistan. *Asian Social Science*, 7(10): 24-29
- Shaukat Ali Raza & Abir Hussain Naqvi, Human and Social Capital Development for Self Efficacy of University Graduates: Bases for Development of Society. *Asian Social Science*, 7(9) 244-254
- Shaukat Ali Raza & Abir Hussain Naqvi, Quality of Pakistan University Graduates as Perceived by Employers: Implications for Faculty Development. *Journal of Quality and Technology Management*, 7(1), 57-72.
- Shaukat Ali Raza, Dr. M. Aamir Hashmi, Empirical Analysis of Job Stress on Job Satisfaction Among University Teachers in Pakistan. *International Business Research*, 4(3), 267-270
- Shaukat Ali Raza, Sustainable Rural Development through Women Participation in SMEs Business Growth in Sindh. *Journal of Sustainable Development*, 4(1), 240-245
- Nasir Mahmood, Developing a Scale to Measure Attitude Towards Science Learning Among School Students. *Bulletin of Education and Research*, 33(1), 55-66.
- Tahira Afridi, Impact Analysis of HEC-Based Training Programmes on the Performance of the University Teachers in Pakistan. *Australian Journal of Business and Management Research*, 1(6) 35-40
- Tahira Afridi, Internationalization of SMEs and Organizational Factors in a Developing Country: A Case Study of ICT Industry in Pakistan Australian. *Journal of Business and Management Research*, 1 (7) 129-138
- Muhammad Saeed, Status of Physical Facilities in Government Schools of Punjab. *Journal of Research & Reflection in Education*, 5(2), 105-127
- Muhammad Saeed, Ensuring Textbook Quality Through Evaluation: An Issue in Pakistan Literacy Information & Computer Education. *Infonomics Society Journal*, 2(4), 503-512
- Muhammad Saeed, Effect of Teacher and Parent Related Factors on Pakistan Secondary Grade Students' Achievement in Physics. *International Journal of Science in Society*, 2(2), 51-71.
- Hashmi, M.A., Tirmzi, S. H., and Shah, F. A, Development and Validation of Intelligence Test for Grade Six Students: (Age Group 11-12 years) *Journal of Educational Research*, 13(2), 19-29.
- Hashmi, M.A., Tirmzi, S. H., and Shah, F. A., Development and Validation of Intelligence Test for Grade Seven Students: (Age Group 12-13 years). *Journal of Educational Research*, 14(1)

- Hashmi, M.A. and Sheikh, F.M, Investigating Teachers' Academic Excellence As a Predictor of Acceptable Teaching through Students' Evaluation of Teachers. *New Horizons, Karachi, 05 (02)*, 40-53
- Hashmi, M.A. and Sheikh, F.M, A comparative Analysis of the Effect of Teacher Education on Motivation, Commitment and Self Efficacy. *New Horizons, Karachi, 05 (02)*, 54-58
- Bhatti, N., Hashmi, M.A.Shah, N., Rahpoto, M.S and Sheikh, F.M, New Growth Theories and Liberalization: Measurement of Effect of Technology Transfer on Pakistan Economy. *Modern Applied Science, 5(3)* 85-93
- Bhatti, N., Hashmi, M.A. Raza, S.A., Sheikh, F.M.and Shafiq, K., Empirical Analysis of Job Stress and Job Satisfaction among University Teachers in Pakistan. *International Business Research, 4 (3)* 264-270
- Hashmi, M.A., Nazeer, A., Akbar,A., and Naqvi, S.I.H., The Culture of Institution and Emotional development: A Comparative study among the Students of Public University and Traditional Religious Institutions. Ubiquitous Learning: *An International Journal, 03(03)*, 03-17
- Hashmi, M.A., Shah, A.A., Mehmood, T. Shah, S.M., and Shaikh, F.M, "Performance of SMEs in Export Growth and its Impact on Economy of Pakistan" Canada: *International Journal of Business and Management, 06(07)*, 287-297
- Khurshid, K., Gillani. I. G. and Hashmi, M.A., A Study of the Representation of Female Image in The Text Book of English and Urdu at Secondary School Level. *Pakistan Journal of Social Sciences, 30 (02)*, 425-437
- Bhatti, N., Raza, S.A., Hashmi, M.A., Zeeshan, A., and Shaikh, F.M, Efficiency and Market Power in Pakistani Dairy Processing Industry in Pakistan. *Asian Social Science 07 (10)*, 24-29
- Ashi & Hashmi, A. & N. A. Bhatti, Impact of Technology on Business Schools: Perceptions of Faculty & Management. *Research & Reflections in Education, 5(2)*, 128-143
- Ashi & Hashmi, A., Impact of Changes in Demographical Shifts on Business Schools: Opinions of Faculty & Management. *Bulletin of Education & Research, 33(2)*, 1-22
- Bhatti,N. Raza, S.A; Hashmi,M. A. Ashi; Sheikh, F. M., Efficiency and Market Power in Pakistan Dairy Processing Industry in Pakistan. *Asian Social Science, 7(10)*, 24-29
- Ashi, Kumar,A; Abbas,Q; Ghumro,I., Job Characteristics as Predictors of Job Satisfaction and Motivation. *Asian Journal of Business Management Sciences, 1(4)*, 206-216
- Tahira Basharat, Hafiz Muhammad Iqbal, & Fariha Bibi, The Confucius Philosophy and Islamic Teaching of Lifelong Learning: Implications for Professional Development of Teachers. *Bulletin of Education and Research, 33(1)*, 31-46
- Rizwan Akram Rana & Nasir Mahmood, The Relationship Between Test Anxiety and Academic Achievement. *Bulletin of Education and Research, 32(2)*, 63-74

- Iqbal, H.M., Shahzad, S. & Sohail, S., Differences in Pakistani high school students' views about science. *Procedia Social and Behavioral Sciences*, 2, 4689-4694.
- Iqbal, H.M., Sohail, S. & Shahzad, S, Learning and study strategies used by university students in Pakistan. *Procedia Social and Behavioral Sciences*, 2, 4717-4721.
- Dilshad, M. & Iqbal, H. M, Quality indicators in teacher education programmes. *Pakistan Journal of Social Sciences*, 30(2), 401-411.
- Iqbal, H. M. & Shafiq ur Rahman, Evaluating the achieved objectives: performance of grade-IV students in mathematics. *Bulletin of Education and Research*, 32(2), 1-22.
- Iqbal, H. M., Pell, A. W., & Sohail, S, Introducing science experiments to rote-learning classes in Pakistani Middle Schools. *Evaluation & Research in Education*, 23(3), 191-212.
- Nasir, M & Zaheer, A., Effect of cooperative learning vs. traditional instruction on prospective teachers' learning experience and achievement. *Journal of Faculty of Educational Sciences*, 43(1), 151-164
- Nasir, M. & Zafar, I., Effectiveness of group reflection activity for professional growth of prospective teachers during practice teaching. *Journal of Theory and Practice in Education*, 6(1).125-139.
- Nasir, M. & Zafar, I., Unraveling the changing pattern of self-confidence of prospective teachers: Transition from theory of teaching to practice. *Journal of Behavioral Sciences*, 20(2), 15-35
- Nasir, M. & Raana, M., Pakistan: System of Education. In International Encyclopedia of Education 3rd Edition. Edited by Eva Baker, Penelope Peterson and Barry McGaw, Elsevier 2010?
- **Conferences, Seminars and Workshops**
  - Prof .Dr. Mumtaz Akhter Participated in “ 3<sup>rd</sup> International Conference on Statistical Sciences” November 25-27, 2010 organized by College of Statistical and Actuarial Sciences, University of the Punjab Lahore
  - Prof. Dr. Mumtaz Akhter Participated and presented paper in “International Conference on Enhancing Learning Experiences in Higher Education” held on 2-3 December 2010 at Rayson Huang Theatre (RHT), HKU, Hong Kong.
  - Prof. Dr. Mumtaz Akhter Participated in 3<sup>rd</sup> International Conference on assessing Quality in Higher Education, December 6-8, 2010, organized by IQTM, University of the Punjab Lahore.
  - Prof. Dr. Mumtaz Akhter Participated in “Sharing and Dissemination of Canada Pakistan Basic Education Project Knowledge Resources for Quality Education” 7 December 2010 arranged by Canada Pakistan Basic Education Project at Pearl Continental Lahore.
  - Prof. Dr. Mumtaz Akhter Participated in “Strategic Planning: Inception Workshop for the University Core Team Invitation for Participation” in February 2-3, 2011 at Pearl Continental Lahore.



- Prof. Dr. Mumtaz Akhter Participated in “American Reciprocal Programme Pakistani Educational Leadership (PEL) Project on March 4, 2011 at Islamabad.
- Prof. Dr. Mumtaz Akhter Participated in “Four Weeks Summer Institute at PSU-an Intensive Programme of Learning under Pakistani Education Leadership Institute (PELI) USA from 30-06-2011 to 05-08-2011.
- Prof. Dr. Mumtaz Akhter Participated in 1<sup>st</sup> International Conference on Exploring Leadership and Learning Theories in Asia” held at Universiti Saina Malaysia (USM), Penange, Malaysia from 15-17 February, 2011.
- Prof. Dr. Rizwan Akram Rana Participated & presented paper in 1<sup>st</sup> International Conference on Exploring Leadership and Learning Theories in Asia” held at Universiti Saina Malaysia (USM), Penange, Malaysia from 15-17 February, 2011.
- Prof. Dr. Hafiz Muhammad participated & presented paper in Exploring Factors Affecting Grade VIII Students’ Attainment in Science: The issue of medium of Instruction. Present a paper in AERA Conference being held in New Orleans Louisiana, USA from April 8-12, 2011.
- Prof. Dr. Hafiz Muhammad Iqbal participated in Challenges to Islam in Contemporary World. Paper presented in the National Seminar on Challenges to Islam in the Contemporary World, organized by the Ministry of Education, Islamabad, 24 January 2011.
- Prof. Dr. Hafiz Muhammad Iqbal participated in Implementing Uniform Education System to National Cohesion. Paper presented in the Seminar Cohesion, organized by the Ministry of Education Islamabad, 22 January 2011.
- Prof. Dr. Hafiz Muhammad Iqbal & Shafiq-ur-Rehman participated in Evaluating the achieved objectives: performance of grade 4 students in mathematics. Paper presented in 3rd International Conference on Education in Pakistan: Issues, Challenges and Reforms” held at University of the Punjab, Lahore, October 21-23, 2010.
- Prof. Dr. Hafiz Muhammad Iqbal participated in Investigation of reliability of the adapted science attitude scale among Pakistani students. Paper presented in 3rd International Conference on Education in Pakistan: Issues, Challenges and Reforms” held at University of the Punjab, Lahore, October 21-23, 2010.
- Prof. Dr. Hafiz Muhammad Iqbal participated in Beliefs of secondary school students about English language learning in Pakistan. Paper presented in 3rd International Conference on Education in Pakistan: Issues, Challenges and Reforms” held at University of the Punjab, Lahore, October 21-23, 2010.

- Prof. Dr. Hafiz Muhammad Iqbal participated and Presented paper on The Environmental Literacy of Secondary School Teachers of Punjab, in 3rd International Conference on Education in Pakistan: Issues, Challenges and Reforms” held at University of the Punjab, Lahore, October 21-23, 2010.
- Prof. Dr. Hafiz Muhammad Iqbal participated & presented paper on “A comparison of the level of professional esteem of science and arts teachers at secondary level” in 3rd International Conference on Education in Pakistan: Issues, Challenges and Reforms” held at University of the Punjab, Lahore, October 21-23, 2010.
- Prof. Dr. Hafiz Muhammad Iqbal participated & presented paper on “Developing a new scale to measure causal attribution beliefs among school students in Pakistan” in 3rd International Conference on Education in Pakistan: Issues, Challenges and Reforms” at University of the Punjab, Lahore, October 21-23, 2010.
- Prof. Dr. Hafiz Muhammad Iqbal participated & paper on “Madrasa Reforms in Pakistan” in 3<sup>rd</sup> International Conference on Education in Pakistan: Issues, Challenges and Reforms at University of the Punjab, Lahore, October 21-23, 2010.
- Dr. M. Athar Hussain participated and presented paper titled “Reforming ELT Syllabus in Modern Pedagogical Context” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Dr. Nasir Mahmood participated and presented paper titled “Relationship of Socio-Economic factors to English language learning among secondary school students” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Prof. Dr. Hafiz Muhammad Iqbal & Shafiqur Rehman participated and presented paper titled “Evaluating the achieved objectives: performance of grade 4 students in mathematics” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Rizwan Akram Rana participated and presented paper titled “Relationship between students academic achievement and perceptions about laboratory skills in Physics: Implications for Physics teaching and learning” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Rizwan Akram Rana, Asim Nazir & Afshan Mumtaz participated and presented paper titled “Exploring students’ beliefs about physics and learning physics in higher education” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.

- M. Anwer / Hafiz M. Iqbal participated and presented paper titled “Investigation of reliability of the adapted science attitude scale among Pakistani students” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Moafia Nadir/ Hafiz M. Iqbal participated and presented paper titled “Beliefs of Secondary School Students about English language Learning in Pakistan” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Ashi Zeeshan participated and presented paper titled “Perception of university students about media factors affecting the academic achievement” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Dr. Muhammad Saeed participated and presented paper titled “Effect of gender on professional attitude and job performance of regular and contractual secondary school teachers” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Fouzia Tabassum / Hafiz M. Iqbal participated and presented paper titled “A comparison of the level of professional esteem of science and arts teachers at secondary level” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Dr. Shaukat Ali Raza participated and presented paper titled “Students evaluation of frame factors and teaching process: Implications for educational leadership” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Dr. Muhammad Saeed participated and presented paper titled “Perceptions of PSTs about their professional competencies, expectations and needs” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Dr. Aamir Hashmi participated and presented paper titled “Perception of university teachers about academic programs of HEC” in 3<sup>rd</sup> International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.
- Dr. Nasir Mahmood Presented a paper as co-author titled Exploring the effectiveness of two cooperative learning models in teacher education: An experimental study. Second International Conference on Realizing the Millennium Development Goals (MDGs) through Teacher Education.

Abstracts of the in Second International Conference on Realizing the Millennium Development Goals (MDGs), September 20-21, 2010, Avari Hotel, Lahore.

- Dr. Nasir Mahmood Participated as panelist in Roundtable on Federal-Provinces Role and Responsibilities in Education, Center for Civic Education, Pakistan. September 21, 2010. Marriot Hotel, Islamabad.
- Dr. Nasir Mahmood Presented a paper as co-author titled, "Relationship of socio-economic factors to English language learning among secondary school students" in 3<sup>rd</sup> International Conference on Education in Pakistan: Issues, Challenges and Reforms, October 21-23, 2010, Faculty of Education, University of the Punjab, Lahore, Pakistan.
- Dr. Nasir Mahmood Presented a paper as co-author titled, "Effect of micro-teaching on prospective teachers' efficacy beliefs regarding cooperative learning implementation" in 3<sup>rd</sup> International Conference on Education in Pakistan: Issues, Challenges and Reforms, October 21-23, 2010, Faculty of Education, University of the Punjab, Lahore, Pakistan.
- Dr. Nasir Mahmood Presented a paper as co-author titled, "The relationship between moral reasoning and moral knowledge of the secondary school students" in 3<sup>rd</sup> International Conference on Education in Pakistan: Issues, Challenges and Reforms, October 21-23, 2010, Faculty of Education, University of the Punjab, Lahore, Pakistan.
- Dr. Nasir Mahmood Presented a paper as co-author titled, "A survey of graduate students' course experience in higher education" in 3<sup>rd</sup> International Conference on Education in Pakistan: Issues, Challenges and Reforms, October 21-23, 2010, Faculty of Education, University of the Punjab, Lahore, Pakistan.
- Dr. Nasir Mahmood Presented a paper as co-author titled, "Is concept mapping beneficial for all" in 3<sup>rd</sup> International Conference on Education in Pakistan: Issues, Challenges and Reforms, October 21-23, 2010, Faculty of Education, University of the Punjab, Lahore, Pakistan.
- Dr. Nasir Mahmood Presented a paper as co-author titled, "Is concept mapping beneficial for all" in 3<sup>rd</sup> International Conference on Education in Pakistan: Issues, Challenges and Reforms, October 21-23, 2010, Faculty of Education, University of the Punjab, Lahore, Pakistan.
- Dr. Nasir Mahmood Presented a paper titled, Evaluation study of the effectiveness of Continuous Professional Development (CPD) program for teachers in Punjab, Pakistan, International Conference on New Trends in Education and Their Implications, 11-13 November 2010, Antalya, Turkey.
- Dr. Nasir Mahmood Presented a paper titled, Teacher's Perception about National Professional Standards for Teachers in Pakistan (NPSTP), 31<sup>st</sup> Annual International Seminar of International Society of Teacher Education (ISfTE), May 16-20, 2011, University of Adger, Kristiansand Norway.

- **Conferences Organized by IER**

- 3<sup>rd</sup> International Conference on “Education in Pakistan” Issues, Challenges and Reforms” Organized by Faculty of Education, University of the Punjab, Lahore from 21-23 October, 2010.

- **Research Journals**

- Bulletin of Education and Research (BER), Institute of Education and Research, University of the Punjab Lahore Volume 33. No. 1, 2011.
- Bulletin of Education and Research (BER), Institute of Education and Research, University of the Punjab Lahore Volume 33. No. 2, 2011.

## **FACULTY OF ENGINEERING & TECHNOLOGY**

### **INSTITUTE OF CHEMICAL ENGINEERING & TECHNOLOGY**

- **R&D – Overview**

The institute is engaged in R & D for development of new materials and new processes that are essential for industrial advancement. Strategic areas of focus are (i) energy and sustainability; (ii) Gas Cleaning; (iii) Fisher Tropsch Synthesis; (iv) Polymer sciences; and (v) waste water treatment.

- **Projects:**

- **Completed**

<b>Principal Investigator</b>	<b>Title of Research Project</b>	<b>Sponsoring</b>
Prof. Dr. Zahoor-ul-Hassan Rizvi	Mitigation of Internal corrosion in Natural Gas Transmission Line due to bacteria, CO <sub>2</sub> , H <sub>2</sub> S and moisture	SNGPL – Pakistan

- **Newly Launched**

<b>Project Title</b>	<b>Funded by</b>	<b>Approved Amount</b>	<b>Approved Date</b>
Catalytic Hydrodechlorination of Chlorophenols	Higher Education Commission	Rs. 992,585/-	24-05-2011
Development and Characterization of Promoted Iron Catalysts for Fischer Tropsch Synthesis to Study Gas to Liquid Technology	Higher Education Commission	Rs. 3,754,153/-	01-10-2010
Fast Pyrolysis of Agricultural Residues for the production of Bio Oil /Liquid Fuel	Higher Education Commission	Rs.2088786/-	14-12-2010
	Punjab University	Rs. 1.360 million	07-02-2011
Biogas Techno-economic feasibility for the production of 5 MMCFD Biogas Plant	SNGPL	-----	----

**• Publications**

- A. Ijaz, A. Shafeeq, A. Muhammad, S. S. Daood, Optimized values for a sieve plate pulsed column for acetic acid, water and kerosene system, *Journal of Quality and Technology Management*, VI(I) 2010, 119-133.
- Munir, S.; Nimmo, W.; Gibbs, B.M., (2011). The Effect of air staged, cocombustion of pulverised coal and biomass blends on NO<sub>x</sub> emissions and combustion efficiency. *Fuel* 90 (2011) 126–135.
- Munir, S.; Nimmo, W.; Gibbs, B. M., (2010). Sheameal and Cotton Stalk as potential fuels for co-combustion with coal. *Bioresource Technology*, 101 (19). 7614–7623.
- Munir, S.; Nimmo, W.; Gibbs, B.M., (2010). Co-combustion of Agricultural Residues with Coal: Turning Waste into Energy. *Energy & Fuels*, 24 (3), 2146-2153.
- Daood, S.S.; Munir, S.; Nimmo, W.; Gibbs, B.M., (2010). Char oxidation study of sugar cane bagasse, cotton Stalk and Pakistani Coal under 1% and 3% oxygen concentrations. *Biomass and Bioenergy*. 34 (3), 263-271.
- A. Muhammad, A. Shafeeq, Z. H. Rizvi, A. Ijaz and M. I. Abdul Mutalib, Experimental solubility of CO<sub>2</sub> and CH<sub>4</sub> in imidazolium based ionic liquid; [C6mim][BF<sub>4</sub>] at high pressures, 2nd International Conference on Chemical, Biological and Environmental Engineering (ICBEE 2010), Egypt, 02-04 Nov., 2010.
- Shafeeq, S. S. Daood, A. Muhammad and A. Ijaz, Effect of variable reflux ratio on binary distillation in a laboratory scale distillation Column, 2nd International Conference on Chemical, Biological and Environmental Engineering (ICBEE 2010), Egypt, 02-04 Nov., 2010.
- A. Muhammad, A. Shafeeq, A. Ijaz, T. Murugesan, M. I. Abdul Mutalib , Solubility of carbon dioxide in fresh and recycled ionic liquid [C6mim][PF<sub>6</sub>] at pressures up to 60 bar, International Conference on Process Engineering and Advanced Material (ICPEAM2010)/24th Symposium of Malaysian Chemical Engineers (SOMChE2010), Malaysia, 15-17 June 2010.
- A. Ijaz, M. Saleem, A. Shafeeq, A. Muhammad, Clogging Performance of Plain and Pleated Fibrous Microfiltrex Cylindrical Filter Candles, International Conference on Process Engineering and Advanced Material (ICPEAM2010)/24th Symposium of Malaysian Chemical Engineers (SOMChE2010), Malaysia, 15-17 June 2010.
- A. Shafeeq, A. Muhammad, A. Ijaz, M. I. Abdul Mutalib, “A software application for scheduling multiproduct chemical batch processes, International Conference on Process Engineering and Advanced Material (ICPEAM2010)/24th Symposium of Malaysian Chemical Engineers (SOMChE2010), Malaysia, 15-17 June 2010.
- A. Shafeeq, Syed Sheraz Daood, A. Muhammad and A. Ijaz, “Effect of variable reflux ratio on binary distillation in a laboratory scale distillation column”, *Proceedings of 2010 2nd International*

Conference on Chemical, Biological and Environmental Engineering (ICBEE 2010), Egypt, 2-4 November, 2010.

#### **Book Chapter**

- A. Shafeeq, M.I. Abdul Mutalib, K.A. Amminudin and A. Muhammad, "A novel matrix approach to determine makespan for zero wait batch processes". Advances in industrial engineering and operations research published by Springer, 2008, pp 143-153.(ISBN: 978-0-387-74903-7)

#### **Books**

- A. Shafeeq, "Multiproduct Batch Process Scheduling" published by VDM Verlag Dr. Müller, May 2011 (ISBN: 978-363935244).
- **Conferences, Seminars and Workshops etc.**
  - Two days "4<sup>th</sup> Symposium on Engineering Sciences" has been arranged by ICET at Punjab University held on 1<sup>st</sup> – 2<sup>nd</sup> March 2011.
- **Research Journals**
  - HEC recognized Journal of Faculty of Engineering and Technology is being published jointly by the Faculty of Engineering and Technology which falls in "Y-category" set by the HEC.

#### **Research Collaboration**

- **Indigenous**
  - Informal research collaboration at faculty members' level within the university and other universities exists, however a formal collaboration is under consideration.
- **Foreign Linkages**
  - University has signed a few MOUs with the foreign universities however, MOUs keeping in view the specific needs of the Institute are under consideration.
- **Funding grants for R&D**
  - University of the Punjab has approved a budget more than Rs. 50 Million for promoting R & D activities and 5 faculty members were awarded funding from this budget for carrying out their research. HEC approved a sum of Rs. 7.0 Million for various research projects in the area of interest.

#### **INSTITUTE OF QUALITY & TECHNOLOGY MANAGEMENT**

##### **● R&D-An Overview**

Ph.D. in TQM program has been re launched after a gap of 8 years. 13 Students have completed first term of course work. All the MS TQM thesis supervised in this Institute are checked by Turnitin software before submission.

- **Projects:**

- **Completed:**

- Muhammad Usman Awan has successfully completed research project about quality in higher education institutions funded by University of the Punjab.

- **Publications**

- Yousaf, M., Iqbal, J., Ahmad, R.M., Ijaz, A. The Roll of Cu additions in Al on the properties of hot-dip-aluminized steel, *Journal of Quality and Technology Management*, 2010, VI., II, 149-164.
- Irfan, S.M., Ijaz, A. Comparison of Service Quality between Private and Public Hospitals: Empirical Evidences from Pakistan, *Journal of Quality and Technology Management*, 2011, VII, I, 1-22.
- Ijaz, A., Irfan, S.M. An assessment of service quality of private hospitals in Pakistan: A patient perspective, *Indian Journal of Commerce and Management studies*, 2011, II, 2, 20-32., ISSN-2229-5674.
- Shafiq, U., Ijaz, A. Removal of Arsenic from Water using Pine Leaves, *Journal of the Taiwan Institute of Chemical Engineering*, Elsevier, Inc. JTICE-384, pg 1-8, 2011.
- Ijaz, A. Internal customer Job Satisfaction and role of TQM practices, *Far East Journal of Psychology and Business A Journal of Far East Research Centre*, (accepted for publication) Vol.5 No 1, 2011, 2011.
- Awan, M.U., Asif, M., Ahmad, N. and Khan, M.K. (2011), "A model for Total Quality Management in Higher Education". The paper has been accepted for publication in 2012 in an impact factor journal "Quality and Quantity".
- Awan, M.U. and Khalid. M. (2011), "Development of Service Quality Scale in Academic Libraries". This paper has been accepted for publication in an impact factor (0.68) journal "Quality & Quantity". This journal is published by Springer and is regarded as one of the most reputed journals in the area of Methodology studies.
- Tanvir, M.F. "Surrealistic Images and Motifs: Differentiating the Theme of Death in Plath and Dickinson." *Journal of Research (Humanities)*, University of the Punjab, Lahore, Pakistan. Volume XLVI, December 2010. ISSN 0555-7666.
- Tanvir, M.F. "The Self-Identity Problematic in Edwin Muir's Poetry: Philosophical and Psychological Perspectives." Paperback: 92 pages, Publisher: LAP LAMBERT Academic Publishing (7 Dec 2010) Language: English ISBN-10: 3843380112, ISBN-13: 978-3843380119, Product Dimensions: 22 x 15 x 0.5 cm

- **Conferences, Seminars and Workshops, etc.**

- 3<sup>rd</sup> International Conference on Assessing Quality in Higher Education was organized in collaboration with Higher Education Commission, University of Management & Technology



Lahore, Mehran University of Engineering & Technology Jamshoro and National Textile University Faisalabad.

- Prof. Dr. Aamir Ijaz attended a dialogue on Quality Assurance Policy in Singapore held on 19th January 2011.
- Prof. Dr. Aamir Ijaz presented a paper entitled “Service Quality and Student Satisfaction: a study of business school in Public sector of Pakistan” in Shanghai International conference on Social Science (SICSS) 2011 in China held on 17th to 20th August 2011.
- Workshop on Research Management was conducted on 12<sup>th</sup> November, 2010.
- Prof. Dr. Aamir Ijaz delivered a lecture on Self-Assessment in a workshop on self-Assessment Exercise in December 2010 at King Edward Medical College (KEMC), Lahore.
- Workshop on self-Assessment Exercise was conducted in January 2011 at the University of Health Sciences (UHS), Lahore; Prof. Dr. Aamir Ijaz was the focal person of this workshop.
- Director IQTM attended a forum in Higher Education Quality Assessment on November 2011 in Islamabad
- 15<sup>th</sup> meeting of QEC’s under the QAA, HEC on 25<sup>th</sup> to 26<sup>th</sup> April, 2011 at HEC regional centre, Peshawar attended by Director IQTM.
- 16<sup>th</sup> meeting of QEC’s under the QAA, HEC on 15<sup>th</sup> to 16<sup>th</sup> November, 2011 at HEC regional centre, Peshawar attended by the Director IQTM.

- **Research Journals**

Institute publishes two research journals.

- Journal of Quality & Technology Management is recognized by HEC in category X.
- Journal “International Journal on Quality & Innovation is published by international published Inter Science.

## **OFFICE OF RESEARCH, INNOVATION AND COMMERCIALIZATION (ORIC)**

- **Indigenous Achievements**

- 2<sup>nd</sup> Workshop on Research Management 12<sup>th</sup> November, 2010
- Two workshops on Research Management were conducted on 27<sup>th</sup> July, 2010 & 12<sup>th</sup> November, 2010, respectively and 3<sup>rd</sup> one is planned in May 2012.
- Workshop on Exploring Electronic resources for Research “Downloading books & journals” was held in the Al- Razi Hall, Centre for Undergraduate Studies, on 14<sup>th</sup> Feb, 2011.
- Workshop on the “Role of Higher Education Commission in the Universities” was held in the Al- Razi Hall, Centre for Undergraduate Studies, on 15<sup>th</sup> March 2011.
- ORIC has organized the World Quality Day in collaboration with Quality Enhancement cell and IQTM.

- Website of Office of Research Innovation & Commercialization (**ORIC**) has been developed & can be viewed on the main page of the University of the Punjab, which shows objective, mission & function of ORIC. Soon list of all the research projects been carried out by faculty members will be placed there.

- **Foreign Linkages**

On the advice of worthy Vice Chancellor, ORIC staff of Punjab University (Director Prof. Dr. Aamir Ijaz & Deputy Directors Dr. Amir Shafeeq and Dr. Shakil Ahmad) participated in a 5 Days (January 23-27, 2012) extensive training sessions on “Capacity Building for ORIC’s Managers” organized by HEC and British Council at NUST, Islamabad. The other participants were ORIC officials from 13 different Universities of Pakistan. The core objectives of this program were to develop the understanding of significance of Intellectual Properties (IP) in commercialization, Technology transfer process, setting up the technology incubation centers, Proposal and report writing for the purpose of availing the funding opportunities. The platform has provided an excellent opportunity for ORIC office of Punjab University to strengthen the research culture in Punjab University in line with the research vision of worthy Vice Chancellor.

- **Funding Grants for R&D**

Higher Education Commission (HEC) has allocated 15% share to ORIC from the grants awarded to the following projects of Punjab University.

- “Catalytic Hydrodechlorination of Chlorophenols” 2011
- “Detoxification of Industrial Sludge using Aquatic Plants and Indigenous Microbes” 2011

## **DEPARTMENT OF TEXTILE ENGINEERING & TECHNOLOGY**

- **Conferences, Seminars and Workshops, etc.**

- Workshop conducted on “Enhancing Quality and Productivity through Testing” on 9-10<sup>th</sup> March, 2011 in collaboration with Institute of Textile and Industrial Sciences (UMT) and Textile Testing International
- Paper presented “Recycling textile dyebath using conventional methods and membrane technology” in international conference on textile and clothing organized by University of Management & Technology held on 28-29<sup>th</sup> March, 2011.
- Analytical Methods Developed for Phthalate In Textile Products. A Joint work with Textile Testing International (Duration Six Months).
- Participated in the meeting of committee for promotion of technical textiles in Pakistan at National Textile University Faisalabad on 06.06.2011.

## COLLEGE OF ENGINEERING & EMERGING TECHNOLOGY

### • R&D – Overview

In the academic year 2010-11, it was focused to establish new labs and up-gradation of the existing labs. In the Department of Metallurgy and Materials Engineering, in addition to the existing equipment related to Foundry, Metallography, Corrosion Testing etc., new equipment to meet the requirements of currently introduced subject “Welding Engineering” have been purchased and made functional to facilitate the students to get on-hand training on the said equipments, however, request for construction of lab has been submitted to university. Similarly, the obsolete apparatus of different labs was replaced with the state of art new equipments and also existing labs were strengthened with the new equipments. e.g. Optical microscope with image analysis software, Automatic digital Rockwell hardness tester and Micro-vicker hardness tester. Department of Electrical Engineering has well established labs for the robotics, wireless communications, data structure and analysis etc. Similarly Department of Polymer Engineering & Technology has well established well equipped with synthesis, characterization and processing facilities. Characterization labs have state of the art equipments covering the fields of thermal, spectroscopy, paint, membrane, mechanical, chromatography, processing, visco elasticity and rheology. Synthesis platform has facilities from lab scale synthesis to pilot plant scale production.

### • Projects:

#### Completed

- University funded research project on “grey cast iron” and “Semi-solid processing of aluminum alloys” are near to completion.
- Establishment of Research Laboratories for Polymer and Material Synthesis, Characterization, Rheology and Processing. (Completed)
- Establishment of Polymer Lab (In process)
- Establishment of Industrial Research Lab for Polymer and Material Synthesis (In process)

#### Newly Launched

- A new university funded project on “Corrosion” has been launched in this academic year.
- Treatment of Industrial Waste Water by Using Polyurethane Based Composite Membrane
- Development of Gas Separation Membrane

Sr. #	Author	Title
1	M.F.Hanif, P.J.Smith, D.P. Taylor, P.a.Martin	MIMO Cognitive Radio with antenna selection, IEEE transactions on wireless communications, December 2011.
2	Farah Kanwal, Saadat Anwar Siddiqi, Aisha Batool, Tahir Jamil, Waheed Mushtaq.	Synthesis and characterization of Polypyrrole-Zinc Oxide (PPy-ZnO). In Press, “Synthetic Metals” 2011.

3	Muhammad Zafar, Muddassir Ali, Shahzad Masood Khan, Tahir Jamil, Muhammad Taqi Zahid Butt	Effect of additives on the properties and performance of cellulose acetate derivative membranes in the separation of isopropanol/water mixtures. In Press, "Desalination" 2011.
4	Mohammad Zuber, Khalid Mahmood Zia, Ijaz Ahmad Bhatti, Tahir Jamil, Fazal-ur-Rehman, Ali Rizwan.	Modification of cellulosic fabric using polyvinyl alcohol, Part-II: Colorfastness Properties. Carbohydrate Polymers, In Press, Accepted Manuscript, Available online 11 November 2011
5	Khalid Mahmood Zia, Mohammad Zuber, Ali Rizwan, Tahir Jamil, Shazia Tabasum, Muhammad Shahid Carbohydrate Polymers	Modification of cellulosic fabric using polyvinyl alcohol, Part-I: Physicochemical properties., In Press, Accepted Manuscript, Available online 15 October 2011
6	Misbah Sultan, Khalid Mahmood Zia, Haq Nawaz Bhatti, Tahir Jamil, Rizwan Hussain, Mohammad Zuber	Modification of cellulosic fiber with polyurethane acrylate copolymers. Part I: Physicochemical properties.. Carbohydrate Polymers, 87(1-4), 397(2012).
7	Khalid Mahmood Zia, Mohammad Zuber, Mehdi Barikani, Rizwan Hussain, Tahir Jamil, Sohail Anjum	Cytotoxicity and mechanical behavior evaluation of chitin-bentonite clay based polyurethane bio-nanocomposites. International Journal of Biological Macromolecules, 49 (5-1), 1131(2011).
8	Mohammad Zuber, Khalid Mahmood Zia, Shazia Tabassum, Tahir Jamil, Syed Barkaat-ul-Hasin, Muhammad Kaleem Khosa	Preparation of rich handles soft cellulosic fabric using amino silicone based softener, part II: Colorfastness properties., International Journal of Biological Macromolecules, 49 (1), 1(2011).
9	Muddassir Ali, Muhammad Zafar, Tahir Jamil, Muhammad Taqi Zahid Butt	Influence of glycol additives on the structure and performance of cellulose acetate/zinc oxide blend membranes.. Desalination, 270 (1-3), 98(2011).
10	Khalid Mahmood Zia, Shazia Tabassum, Syed Barkat-ul-Hussain, Mohammad Zuber, Tahir Jamil, Muhammad Asghar Jamal.	Preparation of rich handles soft cellulosic fabric using amino silicone based softener. Part-I: Surface smoothness and softness properties. International Journal of Biological Macromolecules, 48 (3), 482(2011).
11	Farah Kanwal, Saadat Anwar Siddiqi, Aisha Batool, M Imran, Mushtaq Waheed, Tahir Jamil,	.Synthesis of polypyrrole–ferric oxide (Ppy–Fe <sub>2</sub> O <sub>3</sub> ) composites and study of their structural and conducting properties. Synthetic Metals, 161 (3-4), 335(2011).
12	Kashif Mairaj Deen, Ijaz Hussain Khan, Khalid Mehmood Ghauri	Failure of Crude Oil heater Tubes. Journal of the Pakistan Institute of Chemical Engineers, Vol 39, No. 1 (2011).
13	K.M.Deen, I.H.Khan, R.Ahmad, Z.H.Rizvi, J.Ahmad	Remaining life assessment of platforming reactor vessels. Engineering Failure Analysis 18 (2011) 1247-1252.

14	A.Salam	Flow stress-strain rate behavior of Ti-3Al-2.5V alloy at low temperatures in the superplastic range. Journal of Materials Engineering and performance.
15	M.Rafi Raza, Faiz Ahmad, N.I. Khan,R. Ahmad, A. Salam	Development and strengthening of 2219 aluminium alloy by mechanical working and heat treatment, Journal of applied sciences 2011.
16	Murad Habib	The design and implementation of a single-Phase Off-Grid Inverter 1000w. University of the Punjab Conference Portal, 4 <sup>th</sup> Symposium on Engineering Sciences.
17	Abid, K., F., Rahman, Schmidt, C., Pfaff, G. and Koenig,	Interference pigment coated solar cells for use in high radiant flux environments. Jordan Journal of Mechanical and Industrial Engineering. 4(1) (2010). page 129 – 134. ISSN 1995-6665.
18	Abid, K., and F. Rahman,	Gated Lateral p-i-n Junction Device for Light Sensing. Photonics Technology Letters, IEEE.23(13) (2011): p. 911-913.
19	Abid, K., and F. Rahman,	High spectral responsivity gated silicon photodiodes. UK Semiconductors 2011, University of Sheffield, UK. p. 117.
20	Abid, K., A.Z. Khokhar, and F. Rahman,	High responsivity silicon MOS phototransistors. Sensors and Actuators A: Physical, 2011. doi: 10.1016/j.sna.2011.10.008
21	Abid, K., Chee Heng Teo, Nireeksha S. Karode, F. Rahman,	Interfacial behaviour of polyaniline as an organic electronic material. Journal of physics and chemistry of solids. 72 (2011) page 886–890.
22	Abid, K., Xingshang Wang, A. Z. Khokhar, S.Watson, S. Al-Hasani and F.,Rahman	, Electrically tuneable spectral esponsivity in gated silicon photodiodes. Applied Physics Letters. 99, 231104 (2011); doi: 10.1063/1.3665613
23	Abid, K., and F., Rahman,	High Responsivity Gated Silicon p-i-n Photodiode with Enhanced Blue and Ultraviolet Response. Submitted to Applied Physics-B. {Preliminary through}
24	Abid, K. and F., Rahman,	Optical polarization detection by a lateral p-i-n photodiode with integrated metal grating.Submitted to Applied physics B. {Preliminary through}
25	Umar Farooq et. al.	[C1]. “Comparative Analysis of Zero Order Sugeno and Mamdani Fuzzy Logic Controllers for Hurdle Avoidance Behaviour in Mobile Robot Navigation,” Proc. International Conference and Workshop on Current Trends in Information Technology, Dubai UAE Oct 26-27, 2011 (Available @ IEEEExplore). [C2]. “Application of Neural Network Based Model Predictive Control to Power Switching Converter,” Proc. International Conference and

		<p>Workshop on Current Trends in Information Technology, Dubai UAE Oct 26-27, 2011 (Available @ IEEEXplore).</p> <p>[C3]. “Design, Low Cost Implementation and Comparison of MIMO Mamdani Fuzzy Logic Controllers for Wall Tracking Behaviour of Mobile Robot”, Proc. International Conference on Information and Communication Technologies, Karachi Pakistan, July 23-24, 2011 (Available @ IEEEXplore).</p> <p>[C4]. “Fuzzy Logic Based Robust Pole Placement Controller for DC-DC Buck Converter,” Proc. International Conference on Information and Communication Technologies, Karachi Pakistan, July 23-24, 2011 (Available @ IEEEXplore).</p> <p>[C5]. “Comparative Analysis of Fuzzy Logic Controller for Corridor Following Behaviour of Mobile Robot,” Proc. International Conference on Computer Networks and Information Technology, Abbotabad Pakistan, July 11-13, 2011 (Available @ IEEEXplore).</p> <p>[C6]. “Fuzzy Logic Based Path Tracking Controller for Wheeled Mobile Robots,” Proc. International Conference on Intelligence &amp; Information Technology, Lahore, Oct 28-30, 2010 (To appear in IEEEXplore).</p> <p>[C7]. “Fuzzy Logic Reasoning System for Line Following Robot,” Proc. International Conference on Intelligence &amp; Information Technology, Lahore, Oct 28-30, 2010 (To appear in IEEEXplore).</p> <p>[C8]. “Fuzzy Logic Based Real Time Obstacle Avoidance Controller for a Simplified Model of Hexapod Walking Robot,” Proc. International Conference on Intelligence &amp; Information Technology, Lahore, Oct 28-30, 2010 (To appear in IEEEXplore).</p> <p>[C9]. “Fuzzy Logic Applied to Liquid Level Control System,” Proc. International Conference on Intelligence &amp; Information Technology, Lahore, Oct 28-30, 2010 (To appear in IEEEXplore).</p> <p>[C10]. “Design and Implementation of a Neural Network Based Controller for Mobile Robot</p>
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		<p>Navigation in Unknown Environments,” Proc. International Conference on Intelligence &amp; Information Technology, Lahore, Oct 28-30, 2010 (To appear in IEEEXplore).</p> <p>[C11]. “RFID Based Security and Access Control System,” Proc. International Conference on Intelligence &amp; Information Technology, Lahore, Oct 28-30, 2010 (To appear in IEEEXplore).</p> <p>[C12]. “Design and Low Cost Implementation of a Fuzzy Logic Based Controller for Wall Following Behavior of a Mobile Robot,” Proc. 2nd International Conference on Signal Processing Systems, Dalian China, July 7-9, 2010 (Online Available @ IEEEXplore).</p> <p>[C13]. “Comparative Analysis of Fuzzy Logic and Neural network Based Controllers for Line Tracing Task in Mobile Robots,” Proc. 2nd International Conference on Signal Processing Systems, Dalian China, July 7-9, 2010 (Online Available @ IEEEXplore).</p> <p>[C14]. “Design and Development of Microcontroller Based Autonomous Peg Placement Robot,” Proc. 3rd IEEE International Conference on Computer Science and Information Technology, Chengdu China, July 9-11, 2010 (Online Available @ IEEEXplore).</p> <p>[C15]. “A Low Cost Microcontroller Implementation of Fuzzy Logic Based Hurdle Avoidance Controller for a Mobile Robot,” Proc. 3rd IEEE International Conference on Computer Science and Information Technology, Chengdu China, July 9-11, 2010 (Online Available @ IEEEXplore).</p> <p>[C16]. “Cost Effective Wireless Attendance and Access Control System,” Proc. 3rd IEEE International Conference on Computer Science and Information Technology, Chengdu China, July 9-11, 2010 (Online Available @ IEEEXplore).</p> <p>[C17]. “Design and Development of an Autonomous Ball Potting Robot for NERC Contest,” Proc. 2nd IEEE International Conference on Advance Computer Control, Shenyang,</p>
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		<p>China, March 27-29, 2010 (Online Available @ IEEEXplore).</p> <p>[C18]. "Design and Development of an Image Processing Based Automatic Library Storage System," Proc. 2nd IEEE International Conference on Advance Computer Control, Shenyang, China, March 27-29, 2010 (Online Available @ IEEEXplore).</p> <p>[C19]. "Effective Techniques to Reduce Cross Border Interference in Cellular Networks," Proc. International Conference on Telecom Technology and Applications, Bali, Indonesia, March 19-21, 2010 (Online Available @ IEEEXplore).</p> <p>[C20]. "GPS-GSM Integration for Enhancing Public Transportation Management Services," Proc. International Conference on Telecom Technology and Applications, Bali, Indonesia, March 19-21, 2010 (Online Available @ IEEEXplore).</p> <p>[C21]. "A Self Teaching Image Processing and Voice Recognition Based Intelligent and Interactive System to Educate Visually Impaired Children," Proc. 2nd SPIE International Conference on Digital Image Processing, Singapore, Feb 28-30, 2010 (Online Available SPIE Digital Library).</p> <p>[C22]. "Ball-Scorer: Design and Fabrication of a Ball Scoring Robot," Proc. 2nd International Conference on Computer and Automation Engineering, Singapore, Feb 26-28, 2010 (Online Available @ IEEEXplore).</p> <p>[C23]. "A Low Cost Microcontroller Implementation of Neural Network Based Hurdle Avoidance Controller for a Car-like Robot," Proc. 2nd International Conference on Computer and Automation Engineering, Singapore, Feb 26-28, 2010 (Online Available @ IEEEXplore).</p> <p>[C24]. "Microcontroller Based Low Cost Controlled Rectifiers Training Module for Power Electronics Laboratory," Proc. International Conference on Signal Acquisition and Processing, Bangalore, India, Feb 9-10, 2010</p>
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		(Online Available @ IEEEXplore). [C25]. “An Integrated Library Management System for Book Search and Placement Tasks,” Proc. International Conference on Signal Acquisition and Processing, Bangalore, India, Feb 9-10, 2010 (Online Available @ IEEEXplore).
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- **Conferences, Seminars and Workshops etc.**

- Two days workshop had been conducted on “Non Destructive Evaluation of Weldments & their Remedies” by Metallurgy & Materials Engineering Department, University of the Punjab Lahore dated 13 -14<sup>th</sup> December 2010.
- Two days “4<sup>th</sup> Symposium on Engineering Sciences” has been arranged by CEET in collaboration with ICET in Punjab University held on 1<sup>st</sup> – 2<sup>nd</sup> March 2011.
- Conducted two days course on “ASME codes, Section VIII-division-1” by Metallurgy & Materials Engineering Department, University of the Punjab Lahore dated 2-3<sup>rd</sup> April 2011.

- **Research Journals**

- Faculty journal of Engineering and Technology is being published jointly by the Faculty of Engineering and Technology which falls in “Y-category” set by the HEC.

### Research Collaboration

- **Indigenous**

- Informal research collaboration at faculty members’ level within the university and other universities exists, however a formal collaboration is under consideration. College is also offering testing and characterization facilities to different Departments and organizations such as Department of Chemistry PU Lahore, Government College University (GCU) Lahore, Government College University (GCU) Faisalabad, National University of Sciences and Technology (NUST) Islamabad, Plastic Technology Center (PTC) Karachi, Quaid-e-Azam University Islamabad, Center for Solid State physics PU Lahore, De Montmorency College of Dentistry Lahore, Bahaudin Zakria University (BZU) Bahawalpur, University of Engineering & Technology (UET) Lahore etc.

- **Foreign Linkages**

University has signed a few MOUs with the foreign universities however, MOUs keeping in view the specific needs of the college are under consideration.

- **Funding grants for R&D**

A sum of Rs. 7.5 million have been sanctioned by the University for the Up Gradation of existing labs and establishing new labs in Department of Metallurgy and Materials Engineering. A sum of Rs. 54 million have been sanctioned by the HEC to Department of Polymer Engineering and Technology for the establishment of research processes and projects and a sum of Rs. 0.25 million have been granted by the University of the Punjab, for development of Gas separation.

## CENTRE FOR COAL TECHNOLOGY

- **R&D-An Overview**

The Centre was established in 2003 to provide trained manpower for utilization of huge coal deposits available in Pakistan in order to achieve self-reliance in the energy sector. It focuses its teaching/ research activities on characterization of indigenous coals and their use for coal gasification, coal fired electricity generation, domestic utilization of coal, substitution of furnace oil/ natural gas by coal in the industrial sector and transfer of coal technology from developed / developing countries to Pakistan.

- **Projects:**

Funding for the completed Research Project was provided from departmental dues and budget heads of Chemical and Materials, Machinery and equipment, contingencies etc. funding for the newly launched programs is being provided from departmental dues and budget heads of Chemical and Materials, Machinery and equipment, contingencies etc. Punjab University has also provided Rs. 150,000/- for coal gasification project. The duration for a project is approximately two years, The investigators involved are Prof. Dr. Shahid Munir, Prof. Dr. Shafqat Nawaz, Mr. Khurran Shahzad (Asstt. Professor) and students of Centre for Coal Technology. All the projects are as under.

**Completed:**

**List of Research Projects Completed**

- Ash Specific Gravity relationship of Pakistani Coals for Control of washing operations
- Agglomeration of indigenous Chamalang coal by using kerosene oil
- Agglomeration of indigenous Duki coal by using furnace oil
- Demineralization of indigenous Much coal by hydrothermal treatment with lime
- Cleaning of indigenous Degari coal by floatation using oleic acid collector
- Desulphurization of high sulphur indigenous Lakhra coal by mild chemical oxidation using Potassium permanganate
- Desulphurization of high sulphur indigenous Lakhra coal by leaching with cupric chloride
- Efficiency of a coal fired boiler functioning in Tahir Ghee Industry at Muridke
- Agglomeration of indigenous Harnai coal by using diesel oil
- Desulphurization of high sulphur indigenous Jhampir coal by mild chemical oxidation using sodium hypochlorite
- Effect of froating and collecting agents on the floatation of indigenous Makarwal coal
- Effect of different mixtures of ionic collectors for cleaning of indigenous Salt Range coal by floatation
- Desulphurization of a indigenous Hangu coal by leaching with ferric chloride
- Washability curves for indigenous coals
- Cleaning of coal indigenous Cherat coal by froth flotation using non-ionic collectors
- Cleaning of indigenous Kotli coal by froth flotation using mixture of ionic and non-ionic collectors
- Characterization of indigenous Makarwal coal and cotton stock biomass mixtures
- Characterization of Naran coal and rice husk biomass mixtures

- Characterization of Naran coal and sugarcane baggase biomass mixtures
- Design of a bubbling fluidized bed coal gasifier
- Beneficiation of indigenous Lakhra coal by froth flotation using different ionic collectors

#### **Newly Launched Research Projects**

- Characterization of bottom ash coming from coal gasification plant at Mughal Steel Mills Lahore.
- Characterization of fly ash coming form coal gasification plant at Mughal Steel Mills Lahore
- Effect of moisture on grinding index (HGI) of indigenous coals.
- Effect of blending on grindability index (HGI) of indigenous and imported coals.
- Effect of coal rank on the grindability index (HGI) of some indigenous coals
- Studies on strength of cement/ fly ash; cement/ fly ash/ sand and cement / sand building blocks. Fly ash obtained from Lakhra power plant.
- Studies on strength of cement/ fly ash; cement/ fly ash/ sand and cement / sand building blocks. Fly ash obtained from Olympia Chemicals, Khushab.
- Effect of addition of fly ash, obtained form Lakhra power plant, on the strength of concrete.
- Effect of addition of fly ash, obtained from Olympia Chemicals Khushab, on the strength of concrete.
- Thermogravimetric Analyzer (TGA) of some indigenous and imported coals.
- Effect of particle size, volatile matter, mineral matter and fixed carbon on the apparent density of indigenous coals.
- Heavy media separation of some indigenous coals.
- Design of a low NOx coal fired burner.
- Preparation of easily combustible briquettes from coke dust obtained from Pakistan Steel Mills, Karachi.
- Combustion and pyrolysis behaviour of some indigenous coals and gram sticks biomass.
- Preparation of Humic acid from indigenous lignite.
- Characterization and Thermogravimetric Analyzer (TGA) of corn colb.
- Removal of slags from surface of coal fired boilers by chemical treatment.
- Optimization of bubbling fluidized bed gasifier
- Agglomeration of coal fins using vegetable oil

#### **Research Collaboration**

##### **Indigenous**

- Research projects are assigned to the students keeping in view the problems faced by local industry utilizing coal.
- Collaborating with the Punjab Govt. for assessment of feasibility reports submitted by organizations for the installation of coal-fired power generation plants in Punjab based on locally available coals.

- Collaborating with the Punjab Govt. for assessment of coal quality from the newly discovered coal deposits in Punjab.

### **Foreign Linkages**

Director of the Centre, Prof. Dr. Shahid Munir is a co-investigator of the International Strategic Partnership in Research Education (INSPIRE) Programme funded by British Council and Higher Education Commission Pakistan to investigate the co-combustion of Pakistani coal with Pakistani biomass. As a result of the collaboration with University of Leeds and University of Sheffield, International Conference to held UK Pakistan Coal Conference has been organized in Leeds UK from 3<sup>rd</sup>-5<sup>th</sup> July 2012.

## **FACULTY OF LAW**

### **UNIVERSITY LAW COLLGE**

- **Conferences, Seminars and Workshops, etc.**

- Seminar on United Nations and International Law 13<sup>th</sup> October, 2011.
- Seminar on Right to Education: Legal Implications Pakistan (A brief session in context of Eighteenth Amendment) February 23, 2011.
- WorkShops: The Law College students attended the Death Penalty Defence Workshop in Punjab Bar Council on 13<sup>th</sup> – 14<sup>th</sup> April 2011.

### **Research Collaboration**

- **Funding grants for R&D**

Link – Lexis Nexis

## **FACULTY OF LIFE SCIENCES**

### **DEPARTMENT OF APPLIED PSYCHOLOGY**

- **R&D-An Overview**

A Centre for Psychological Research and Services has been established as a unit of the Department of Applied Psychology. The aim is to produce high quality research. Information on Departmental research is available on [www.pu.edu.pk/appsy](http://www.pu.edu.pk/appsy). Since its inception, the centre has also been actively engaged in rendering informal professional counseling and assessment services to the individuals. Appropriate services are also provided to the organizations such as: Social Welfare Departments, Prisons, Staff Training Institutions, Civil Defense, Selection Boards, Business Organizations and Educational Institutions. Research projects are integral part of all academic programs and faculty members are actively involved in carrying out individual research as well research supervision. They win research grants each year, present their research work at international forums and publish research work in journals of repute.

- **Projects:**

- **Completed Projects**

- Rukhsana Kausar, Member, Punjab University Dengue Research Group
    - Rukhsana Kausar, Member Research Consortium as Collaborating Partners on “Global Climate Change and Health Security: Concepts, Methodology and Burden of Disease Assessment for Asia” with Prof. Dr. Alexander Krämer, Dr. MMH Khan, Heiko Jahn, Belfield University, Germany (ongoing).
    - Rukhsana Kausar, Collaborative INDIGO-Depression Project on Stigmatization of patients with psychiatric disorders, with Prof. Graham Tormicroft and Dr. Tine Van Bortel, Institute of Psychiatry, King’s College London.
    - Rukhsana Kausar, Pakistan. Translation of Manual for Child Survivors of Disasters. Funded by University of the Punjab, Lahore.
    - Rukhsana Kausar, Pakistan. Gender Differences in perusal of Higher Education, Funded by University of the Punjab, Lahore
    - Iram Fatima, Sources of academic stress in intermediate science students, funded by University of the Punjab, Lahore.
    - Rafia Rafique, Coronary Heart Disease (CHD) Risk Profiles of Urban and Rural Population: A Comparative Analysis, funded by University of the Punjab, Lahore.
    - Rafia Rafique, Positive and Negative Psychological Correlates, Gender Specific and Traditional Factors for First Onset Angina in a Sample of Pakistani Women. Funded by University of the Punjab, Lahore
    - Shazia Khalid, “Impact of Employer Branding on the Selection and Recruitment Process” . Funded by University of the Punjab, Lahore
    - Afifa Anjum, Stress and burnout in doctors working in public and private hospitals of Lahore. Funded by University of the Punjab, Lahore
    - Afifa Anjum, “Is there any Generation gap: A study of conflicts, beliefs and values of two generations” 2011. Funded by University of the Punjab, Lahore
    - Omama Tariq, Procrastination in university students. Funded by University of the Punjab, Lahore
    - Tahira Mubashar, Relationship of Organizational Justice Perceptions and Perceived Social Support to Organizational Commitment and Citizenship Behavior: The Mediating Role of Emotional Health. Funded by University of the Punjab, Lahore.
    - Tahira Mubashar, Locus of Control, Creativity and Professional Success: A Comparative Analysis of National and Multinational Companies. Funded by University of the Punjab, Lahore

**Publications**

- Rukhsana Kausar, Khan, N., Kausar, R & Choudhry, H. R. (2011). Demographic Characteristics and Implications of Dhat Syndrome in Pakistan. *Indian Journal of Clinical Psychology*, 38 (1), 69-78, ISSN: 0303-2582.
- Rukhsana Kausar, Khan, N., & Kausar, R. Choudhry, H. R. (2011). Psychological distress and manifestation of Dhat syndrome in relation to parental strictness. *FWU journal of Social Sciences*, 5(2), 40-55. ISSN: 1995-1272.
- Rukhsana Kausar, Khan, N. & Kausar, R. (2011). Psychometric Properties of Revised Dhat Syndrome Symptom Checklist. *Journal of Behavioural Sciences*, 21 (2), 47-58. ISSN: 1028-9097.
- Rukhsana Kausar, Khan, N., Kausar, R., Flach, C., & Howard, L. (2011), Psychological and Gynecological Morbidity in Women Presenting with Vaginal Discharge in Pakistan, *International Journal of Mental & Cultural Health*, 1-13 (UK, Rutledge, Taylor and Francis Group).
- Rukhsana Kausar, Kausar, R., & Yousaf, S. (2011). State Anxiety and Coping Strategies Used by Patient with Hepatitis C in Relation to Interferon Therapy. *Pakistan Journal of Clinical and Social Psychology*, 9, 57-61. ISSN: 1727-4931.
- Rukhsana Kausar, Ahmed, S., & Kausar, R. (2011). Comparison of Study Habits and Academic Performance of Pakistani British and White British Students. *Pakistan Journal of Clinical and Social Psychology*, 9, 21-26. Y Category, ISSN: 1727-4931.
- Rukhsana Kausar, Kausar, R., & Kazmi, S. R. (2011). Perceived Parental Acceptance Rejection and Self-concept of Pakistani Adolescents. *Journal of Indian Academy of Applied Psychology*, 37 (2), 224-232, ISSN 0019 4247.
- Rukhsana Kausar, Kausar, R. & Anwar, T. (2010). Perceived Stress, Stress Appraisal and Coping Strategies Used in Relation to Television Exposure of Terrorism. *Pakistan Journal of Clinical and Social Psychology*. 8 (2), 119-131, ISSN: 1727-4931.
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- Rukhsana Kausar, Kausar, R., & Khan A. Q. (2010). Stress Appraisal and Psychological well being of Medical Professional working in emergency Units. *Journal of Behavioural Sciences*, 20 (2), 49-62, Y category, ISSN: 1028-9097.

- Rukhsana Kausar, Kausar, R., & Kanwal, S. (2010). Psychological Effects of Terror Attacks on Children: Acute Stress Symptoms. *Indian Journal of Clinical Psychology*, 37 (2), 158-162. ISSN: 0303-2582.
- Rukhsana Kausar, Kausar R., & Saghir, S. (2010). Posttraumatic Growth and Marital Satisfaction after Breast Cancer: Patient and Spouse Perspective. *Pakistan Journal of Clinical and Social Psychology*, 8 (1), 3-17. Y Category, ISSN: 1727-4931.
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- Rukhsana Kausar, Kausar, R., (2010). Perceived Stress, Academic workload and Coping Strategies used by University Students. *Journal of Behavioural Sciences*, 20 (1), 31-46, Y Category. ISSN: 1028-9097.
- Rukhsana Kausar, Kausar, R., & Sharaf, S. (2010). Personality Characteristics and Psychosocial adjustment problems of women prisoners in Pakistan. In Munaf. S (ed.). *Pakistani Women: Psychological and Social Issues* (pp. 111-128). Karachi: BCC & T Press, University of Karachi.
- Rukhsana Kausar, Haq, H., Kausar, R. (2010). Resilience, Stress appraisal and Coping Strategies used by Traffic Wardens in Relation to Terror Attacks. *Proceedings of 1<sup>st</sup> International Conference on Forensic Psychology: Issues and Interventions*, Organized by Government College University, Lahore, Pakistan, Pp. 15-25, 31<sup>st</sup> March – 3<sup>rd</sup> April, 2010.
- Rukhsana Kausar, Iqbal, A., & Kausar, R. (2010). Marital Conflicts and related Demographic Variables as Determinants of Psychological Distress in Infertile Couples. *Proceedings of 1<sup>st</sup> International Conference on Forensic Psychology: Issues and Interventions*, Organized by Government College University, Lahore, Pakistan, Pp. 66-78, 31<sup>st</sup> March – 3<sup>rd</sup> April, 2010.
- Yasmin N. Farooqi and Afifa Anjum, Farooqi, Y. N; Anjum, A; Gull, A & Nayab, B., S. (2011). Gender Differences in Hallucinations Reported by the Patients Suffering from Schizophrenia. *International Journal of Clinical Psychiatry*. DOI: 10.5923/j.ijcp.20110101.02
- Yasmin N. Farooqi, Farooqi, Y. N., & Malik, S. (2011). Workplace Harassment and Posttraumatic Stress Symptoms among Pakistani Female Doctors and Nurses. *Interdisciplinary Journal of Contemporary Research in Business*. Institute of Interdisciplinary Business Research IIBR, International Research Centre, www.ijcrb.webs.com, Vol. 3, 6, pp. 56-69. ISSN 2073 7122.
- Yasmin N. Farooqi, Farooqi, Y. N., & Rasul, F. (2011). Sex Differences in Perceived Quality of Life of Patients Suffering from Obsessive Compulsive Disorders. *Pakistan Journal of Psychological Research*, 26, (1), 61-71.

- Yasmin N. Farooqi, Farooqi, Y. N., & Habib, M. (December, 2010). Gender Difference in Anxiety, Depression and Stress among Survivors of Suicide Bombing. *Pakistan Journal of Social & Clinical Psychology*, 8, (2), 145-155.
- Yasmin N. Farooqi, Farooqi, Y. N., Tariq, S., & Burns, D. D. (2010). Gender Differences in Anxiety among Pakistani Survivors of Suicide Bomb Blast. *International Journal of Peace and Development Studies*. Available Online at <http://www.academicjournals.org/IJPDS>. *Academic Journals*, 1 (1),1-5, ISSN 2141-2677.
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- Yasmin N. Farooqi, Farooqi, Y. N., & Ahsan, S. (2010). Gender Differences in Anxiety and Depression among Pakistani Cancer Patients. *Journal of Research Society*, 47 (1), 79-95.
- Iram Fatima, Fatima, I., & Suhail, K. (2010) Belief in a just world and subjective wellbeing: Mothers of normal and Down syndrome children. *International Journal of Psychology*, 45, 461–468.
- MS Afifa Anjum, Anjum, A. & Ali, H. (2011). Effect of Emotional Intelligence and Perceived Work Environment on Performance of Bankers. *International Journal of the Computer, the Internet and Management*, 19(2), 50-54.
- MS Afifa Anjum, Anjum, A., Gull, A., & Nayab, S. (2011). Pakistani Researches in Applied Psychology: Psychological Problems of Pakistani Society (In Y. N. Farooqi. Eds.). Germany: Lambert Academic Publishing (LAP).

#### **Conferences, Seminars and Workshops, etc.**

- Prof. Dr. Rukhsana Kausar, Presented a paper on Coping Strategies and Life satisfaction among Older Adults in Pakistan. Presented as a member of Working Group 2: Costs and Opportunities of Pakistan's Rapidly Changing Age Structure: Demographic Dividend, Ageing and Urbanization, First International Conference on 'Promotion of Social Science Research in Pakistani Universities: Prospects and Challenges', Organized by the Higher Education Commission's Committee for Development of Social Sciences and Humanities in Pakistan (CDSSHP), Islamabad, Pakistan, 18-20 April, 2011.
- Prof. Dr. Rukhsana Kausar, Presented a paper on Moral Values and Forgiveness in Children studying in Private vs. Public schools in Pakistan. Presented at the 12<sup>th</sup> European Congress of Psychology, Istanbul, Turkey, 4-8 July, 2011.
- Prof. Dr. Rukhsana Kausar, Presented a paper on Psychological Morbidity in Women Presenting with Vaginal Discharge in Pakistan. Presented at the 12<sup>th</sup> European Congress of Psychology, Istanbul, Turkey, 4-8 July, 2011



- Prof. Dr. Rukhsana Kausar, Presented a paper on What Psychologists have learned from flood in Pakistan. Presented at the 3<sup>rd</sup> Clinical Psychology Conference, Dhaka, Bangladesh, 27-28 October, 2011.
- Prof. Dr. Rukhsana Kausar, Presented a paper on Maladjustment in Children with Somatization Disorder. 13<sup>th</sup> Conference of Pakistan Psychological Association, Lahore, 18-19 November, 2011.
- Prof. Dr. Rukhsana Kausar, Presented a paper on Effect of Childhood abuse on Personality of adolescents with conversion disorder. 14<sup>th</sup> Conference of Pakistan Psychological Association, Islamabad, 10-11 January, 2012.
- Prof. Dr. Rukhsana Kausar, Attended 10<sup>th</sup> National Child Rights Conference, Organized by Child Rights and Abuse Committee Pakistan Pediatric Association and Pakistan Psychiatric Association, Punjab in collaboration with the Children Hospital Lahore and Protection and Help of Children Against Abuse and Neglect, Lahore, 6-7th December, 2010.
- Prof. Dr. Rukhsana Kausar, Chaired a scientific session, 10<sup>th</sup> National Child Rights Conference, Organized by Child Rights and Abuse Committee Pakistan Pediatric Association and Pakistan Psychiatric Association, Punjab in collaboration with the Children Hospital Lahore and Protection and Help of Children Against Abuse and Neglect, Lahore, 6-7th December, 2010.
- Prof. Dr. Rukhsana Kausar, Facilitator, symposium on “Post-Disaster psychological intervention”, 3<sup>rd</sup> Clinical Psychology Conference, organized by Bangladesh Clinical Psychologists’ Society and Department of Clinical Psychology, Dhaka University, Bangladesh, 26-27th October, 2011.
- Prof. Dr. Rukhsana Kausar, Chaired a scientific session, 3<sup>rd</sup> Clinical Psychology Conference, organized by Bangladesh Clinical Psychologists’ Society and Department of Clinical Psychology, Dhaka University, Bangladesh, 26-27th October, 2011.
- Prof. Dr. Rukhsana Kausar, Chaired a scientific session, 13<sup>th</sup> Conference of Pakistan Psychological Association, Lahore, 18-19 November, 2011.
- Prof. Dr. Rukhsana Kausar, Gave a special lecture on “Psychological implications of disabilities in Pakistan” at Seminar on “Special Children: awareness, education and integration” Jointly organized by Ghazali Education Trust and Punjab Welfare Trust for the Disabled, Lahore, 3<sup>rd</sup> December, 2010.
- Prof. Dr. Rukhsana Kausar, Invited Lecture on “writing Research Thesis” at Psychology Department, MAO post graduate college, Lahore, 26 April, 2011.
- Prof. Dr. Rukhsana Kausar, Invited Lecture on “How to write a Research Article” at the 2<sup>nd</sup> National Symposium on “Developmental Paediatrics in the 21<sup>st</sup> Century, Organized by The Children’s Hospital & Institute of Child Health, Lahore Pakistan, 25<sup>th</sup> May, 2011.

- Prof. Dr. Rukhsana Kausar, Participated in a two day consultative workshop on Effective Techniques of Test item development, organized by Higher Education Commission and National Testing Service, Islamabad, 17-18 Jan, 2011.
- Prof. Dr. Rukhsana Kausar, Conducted a two day workshop on “Advanced Regression Analyses” at National Institute of Psychology, Quaid-i-Azam University, Islamabad, March 24-25, 2011.
- Prof. Dr. Rukhsana Kausar, Conducted a two day Faculty Development workshop on “Basic Statistics using SPSS”, Karakorum International University Gilgit, 3-4 July, 2011.
- Prof. Dr. Rukhsana Kausar, Conducted 1st TOT workshop on Test Item Construction Techniques organized by HEC and NTS, Pakistan, at Learning Innovation Division Building HEC, Islamabad, 14-17<sup>th</sup> June, 2011.
- Prof. Dr. Rukhsana Kausar, Conducted 2<sup>nd</sup> TOT workshop on Test Item Construction Techniques organized by HEC and NTS, Pakistan, HEC regional Centre, Karachi, 11-14<sup>th</sup> July, 2011.
- Prof. Dr. Rukhsana Kausar, Attended a workshop on “Management of Autism Spectrum Disorders” by Prof. Dr. Jill Taylor, 22<sup>nd</sup> February, 2011, at Department of Applied Psychology, University of the Punjab, Lahore.
- Prof. Dr. Rukhsana Kausar, Attended a two day workshop on “Neuro-Linguistic Programming (NLP) by Lord Shoukat Nawaz Khan, 11-12 February, 2011 at Department of Applied Psychology, University of the Punjab, Lahore.
- Prof. Dr. Rukhsana Kausar, Attended 10<sup>th</sup> National Child Rights Conference, Organized by Child Rights and Abuse Committee Pakistan Pediatric Association and Pakistan Psychiatric Association, Punjab in collaboration with the Children Hospital Lahore and Protection and Help of Children Against Abuse and Neglect, Lahore, 6-7<sup>th</sup> December, 2010.
- Prof. Dr. Rukhsana Kausar, Chaired a scientific session in 1<sup>st</sup> Child and Family Conference “Family Stressors and Solutions” Organized by Department of Human Development and Family Studies, Government College of Home Economics, Lahore, on 22<sup>nd</sup> Oct, 2010.
- Prof. Dr. Rukhsana Kausar, Participated in Panel Discussion on “Behaviour Problems in Children: Diagnosis and management” In 1<sup>st</sup> Child and Family Conference: Family Stressors and Solutions” Organized by Department of Human Development and Family Studies, Government College of Home Economics, Lahore, on 22<sup>nd</sup> Oct, 2010.
- Prof. Dr. Rukhsana Kausar, Participated in Panel Discussion on Research in Psychology: Indigenous and Cultural Context, at National Conference on Research in Psychology: Indigenous and Cultural Context, organized by National Institute of Psychology, Quaid-e-Azam University, Islamabad, October 14, 2010.

- Prof. Dr. Rukhsana Kausar, Attended a two day workshop on Art as therapy for trauma victims by Dr. Frances Anderson, USA, Applied Psychology Department, University of the Punjab, 21-22<sup>nd</sup> October, 2010.
- Prof. Dr. Rukhsana Kausar, Organized Three Day workshop on “Structural Equation Modeling Using AMOS” for M.Phil and PhD students, by Dr. Jamil A. Malik, National Institute of Psychology, Quaid-e-Azam University, Islamabad, 28-30<sup>th</sup> November, 2011.
- Prof. Dr. Rukhsana Kausar, Organized Four Day workshop on Autism Spectrum Disorders: Diagnosis, Assessment and Intervention, by Prof. Dr Jill Taylor, Foreign Faculty and Dean of Humanities, Karakoram International University, Gilgit, 19-22<sup>nd</sup> February, 2011.
- Prof. Dr. Rukhsana Kausar, Organized two days workshop on Neuro-Lingustic Programming (NLP), by Lord Shaukat Nawaz Khan, British Pakistanis Foundation (UK), 11-12 February, 2011
- Prof. Dr. Rukhsana Kausar, Coordinator of Consultative workshop on Effective Techniques of Test item development, organized by Higher Education Commission and National Testing Service, Islamabad, 17-18 Jan, 2011.
- Prof. Dr. Rukhsana Kausar, Organized a two day workshop on “Art as therapy for child victims of trauma” by Dr. Frances Anderson, Fulbright Fellow, Illinois, USA, on 22-23 Oct, 2010
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N; Anjum, A; Gull, A; & Nayab, S. (2011). Gender Differences in Hallucinations Reported by the Patients Suffering from Schizophrenia. 19<sup>th</sup> National Psychiatric Conference. P.C, Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N; Tufail, K. (2011) Types of Violence Reported by Female Hospitalized Patients with Disability. 1<sup>st</sup> National Psychiatric Conference. P.C, Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). Invited as Speaker at 12<sup>th</sup> Annual International Education Week. USEFP, PC Hotel, Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). My Exciting Journey as a Fulbrighter at UCSB (2002). 12<sup>th</sup> Annual International Education Week. USEFP, PC Hotel, Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). Muslim Mental Health: APA Division 36 (Psychology of Religion). 119<sup>th</sup> Annual Convention of the American Psychological Association. Washington, D.C, U.S.A.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Tariq, Z. (2011). Relationship between Faith in Allah and Life Satisfaction among the Cardiac Patients. 119<sup>th</sup> Annual Convention of the American Psychological Association. Washington, D.C, U.S.A.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). Mentoring and Career Counseling. Four Day New Faculty Orientation Program. HRDC, Institute of Administrative Sciences, University of the Punjab, Lahore,

- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). Depression Manifested By Male and Female Children of the Single Parents (By Death). National Symposium on Depression. P.C Rawalpindi, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Rasul, F. (2011). Sex Differences in Perceived Quality of Life of Patients of OCD. World Psychiatric Association Thematic Conference. Istanbul, Turkey.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Tariq, S. (2011). Internet Addiction and Academic Achievement of Female University Students. World Psychiatric Association Thematic Conference. Istanbul, Turkey.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Chaudhry, M. (2011). Depression and Anxiety among Patients Suffering from Breast Cancer and Uterus Cancer. World Psychiatric Association Thematic Conference. Istanbul, Turkey.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). Invited as Lead Speaker at 1<sup>st</sup> International Conference on Promotion of Social Science Research in Pakistani Universities: Prospects and Challenges. Islamabad, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). Deficiencies and Solutions for Conducting Doctoral Research in Pakistani Universities. 1<sup>st</sup> International Conference on Promotion of Social Science Research in Pakistani Universities: Prospects and Challenges. Islamabad, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Malik S. (2011). Workplace Harassment and Posttraumatic Stress Disorder among Female Doctors and Nurses. 8<sup>th</sup> International Neuropsychon on Psychiatric Updates & Media/Public Awareness. Avari Hotel, Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Tariq S. (2011). Internet Addiction and Academic Achievement Female University Students. 8<sup>th</sup> International Neuropsychon on Psychiatric Updates & Media/Public Awareness. Avari Hotel, Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Chaudhry, M. (2011). Depression and Anxiety among Patients Suffering from Breast Cancer and Uterus Cancer. 8<sup>th</sup> International Neuropsychon on Psychiatric Updates & Media/Public Awareness. Avari Hotel, Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Rasul, F. (2011). Sex Differences in Perceived Quality of Life of Patients of OCD. 1<sup>st</sup> International Conference on Emerging Trends in Psychology. Department of Psychology, G.C University, Lahore, Pakistan
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). Autism Spectrum Disorder: Diagnosis, Assessment & Intervention by Prof. Dr. Jill Taylor, Dean of Humanities. Department of Applied Psychology, University of the Punjab, Lahore, Pakistan. (participated)

- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N (2010). Application of Beck's Cognitive Therapy to Depression. 1<sup>st</sup> International Conference on Cognitive Behavior Therapy (CBT). Auditorium of FJMC/SGRH Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). One Day Workshop on Turnitin Anti-Plagiarism Software. Punjab University Library, University of the Punjab, Lahore, Pakistan.
- Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N. (2011). Managing Human Resources in Universities. One Day Interactive Workshop Governance and Management Series. HRDC, Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan.
- Dr. Naumana Amjad, Discipline of Psychology in Pakistan- Reflections on Past, Considerations for future. Key note address at GCU Mental health week, March, 2011.
- Dr. Iram Fatima, Gave a Seminar on research report writing in Queen marry college Lahore
- MS Rafia Rafique, The First International Conference on Interdisciplinary Research and Development. Theme: Interdisciplinary Approach to Research and Development. Organized by the Interdisciplinary Network of the Royal Institute of Thailand 30<sup>th</sup> May to 1<sup>st</sup> June 2011.
- MS Rafia Rafique, 2<sup>nd</sup> National Symposium "Developmental Pediatrics in the 21<sup>st</sup> century" 25<sup>th</sup> May, 2011. Shaukat Raza Khan Auditorium, The Children's Hospital and Institute of Child Health
- MS Rafia Rafique, International Neuropsychon on psychiatric updates & media / public awareness "Optimizing Psychiatric Care and Rehabilitation for Victims of Psychotrauma" 15<sup>th</sup> to 17<sup>th</sup> April, 2011, Avari hotel Lahore. 7
- MS Rafia Rafique, First international conference on "Emerging Trends in Psychology", (29<sup>th</sup>-30<sup>th</sup> March, 2011). Department of Psychology, GC University, Lahore.
- MS Rafia Rafique, 10<sup>TH</sup> National Child Rights Conference (5<sup>th</sup> -7<sup>th</sup> December, 2010), The Children's Hospital Lahore. Organized by Childs Rights and Abuse Committee Pakistan Pediatric Association.
- MS Rafia Rafique, 3<sup>rd</sup> International Conference on "Statistical Sciences" (25<sup>th</sup> -27<sup>th</sup> November, 2010), University of the Punjab, Lahore.
- MS Rafia Rafique, National Conference on Research in Psychology: Indigenous and Cultural Perspective. (14<sup>th</sup> October, 2010), Department of Applied Psychology, Quaid-e-Azam University, Islamabad.
- MS Rafia Rafique, Turnitin Anti-Plagiarism software training, 11th May 2011, Punjab University, Main Library.
- MS Rafia Rafique, Workshop on "Research Management" (12<sup>th</sup> November, 2010), Research office, University of the Punjab, Lahore.
- MS Rafia Rafique, Workshop on "Art as Therapy for Trauma Victims". (20<sup>th</sup> -21<sup>st</sup> October, 2010), Department of Applied Psychology, University of the Punjab.

- Ms. Shazia Khalid, Paper Presented; “Conflict Types and Management Styles in Pakistani Organizations” 13<sup>th</sup> –16<sup>th</sup> July, 2011, Joint Conference of the 18th Annual International Conference on Advances in Management & 4th Annual International Conference on Social Intelligence. Cancun, Mexico. USA.
- Ms. Shazia Khalid, Paper Presented; “Impact of Emotional Intelligence-Training on Occupational Stress” 13<sup>th</sup> –16<sup>th</sup> July, 2011, Joint Conference of the 18th Annual International Conference on Advances in Management & 4th Annual International Conference on Social Intelligence. Cancun, Mexico. USA.
- Ms. Shazia Khalid, Paper Presented; “Relationship between emotional intelligence and organizational commitment of employees working in service oriented organizations” 13<sup>th</sup> –16<sup>th</sup> July, 2011, Joint Conference of the 18th Annual International Conference on Advances in Management & 4th Annual International Conference on Social Intelligence. Cancun, Mexico. USA
- MS Saima Ghazal, Attended 49<sup>th</sup> Annual Edwards Bayesian Research Conference in Fullerton, California ( Jan 12-14, 2011).
- MS Shazia Khalid, Attended International Conference on Advances in Management (ICAM2011), Center for Advanced Studies in Management, USA.
- MS Afifa Anjum, International Conference on Interdisciplinary Research and Development Theme: Interdisciplinary Approach to Research and Development. Organized by the Interdisciplinary Network of the Royal Institute of Thailand, 30<sup>th</sup> May to 1<sup>st</sup> June, 2011
- MS Afifa Anjum, International Neuropsychon on Psychiatric updates & media / public awareness “Optimizing Psychiatric Care and Rehabilitation for Victims of Psychotrauma”, at Avari Hotel Lahore, 15 to 17th April, 2011
- MS Afifa Anjum, Workshop on “Management of Autism Spectrum Disorders” by Dr. Jill Taylor, Dean, Faculty of Social Sciences, Karakorum International University, at Department of Applied Psychology, University of the Punjab, Lahore, 22<sup>nd</sup> February 2011
- MS Afifa Anjum, Attended International Conference on Interdisciplinary Research and Development. Theme: Interdisciplinary Approach to Research and Development. Organized by the Interdisciplinary Network of the Royal Institute of Thailand, 30<sup>th</sup> May to 1<sup>st</sup> June 2011
- MS Afifa Anjum, Attended International Neuropsychon on psychiatric updates & media / public awareness “Optimizing Psychiatric Care and Rehabilitation for Victims of Psychotrauma” 15th to 17th April, 2011, Avari hotel Lahore
- MS Afifa Anjum, Attended First International Conference on “Emerging Trends in Psychology”, Department of Psychology, GC University, Lahore, 29<sup>th</sup> -30<sup>th</sup> March, 2011

- MS Afifa Anjum, A two- days workshop on “Neuro-Linguistic Programming (NLP) by Lord Shoukat Nawaz Khan, at Department of Applied Psychology, University of the Punjab, Lahore, 11-12 February, 2011
- MS Afifa Anjum, A two-days workshop on “Art as Therapy for Trauma Victims” by Dr. Farnces Anderson, USA, at Department of Applied Psychology, University of the Punjab, 20th -21st October, 2010
- MS Afifa Anjum, Turnitin Anti-Plagiarism software training, Punjab University, Main Library, 11<sup>th</sup> May, 2011
- MS Omama Tariq, Attended a workshop on “ Management of Autism Spectrum Disorders” by Prof. Dr. Jill Taylor, Dean, Faculty of Social Sciences, Karakarm International U niversity, 22nd February, 2011, at Department of Applied Psychology, University of the Punjab, Lahore.
- MS Omama Tariq, Attended a workshop on “HRDC New Faculty Orientation Program” issued by Human Resource Development Center, Institute of Administrative Sciences, University of the Punjab, 5-8, July, 2011.
- MS Omama Tariq, Attended a one day workshop on “ Research Management” jointly organized by H EC, Quality Enhancement Cell & Institute Of Quality And Technology Management, 12 November, 2010 at Institute Of Quality And Technology Management, University of the Punjab
- MS Omama Tariq, Attended a one day workshop on “Attention Deficit Hyperactivity Disorder” by Dr. Anjum Bashir, consultant child psychiatrist and president British Pakistan Psychiatric Association and Dr Asifa Zainab, consultant child psychiatrist at North Hampton, U.K, at Special Education and Training Centre, 23<sup>rd</sup> December, 2010.
- MS Omama Tariq, Attended a two day workshop on Art therapy for trauma victims by Dr. Farnces Anderson, USA, at Department of Applied Psychology, University of the Punjab, 21-22nd October, 2010.
- MS Tahira Mubashar, Attended a workshop on “Management of Autism Spectrum Disorders” by Prof. Dr. Jill Taylor, Dean, Faculty of Social Sciences, Karakarm International University, 22nd February, 2011, at Department of Applied Psychology, University of the Punjab, Lahore.
- MS Tahira Mubashar, Attended a workshop on “HRDC New Faculty Orientation Program” issued by Human Resource Development Center, Institute of Administrative Sciences, University of the Punjab, 5-8, July, 2011.
- MS Tahira Mubashar, Attended a one day workshop on “Research Management” jointly organized by HEC, Quality Enhancement Cell & Institute Of Quality And Technology Management, 12 November, 2010 at Institute of Quality And Technology Management, University of the Punjab

- MS Tahira Mubashar, Attended a two day workshop on Art therapy for trauma victims by Dr. Farnces Anderson, USA, at Department of Applied Psychology, University of the Punjab, 21-22<sup>nd</sup> October, 2010.
- Mr. Faiz Younis Butt, Presented Paper on "Exploring Gender Role Socialization in Pakistan" at University of Management and Technology, October 16, 2010.

- **Research Journals**

The department publishes its official journal "Journal of Behavioral Sciences (JBS)" on biannual basis since 1990. JBS has blind peer review policy and is an internationally recognized journal which includes empirical studies, review articles and case studies from a wide range of topics. Higher Education Commission (HEC) of Pakistan has placed JBS in 'X' category. It has been indexed and cited in different well-known data bases like Ebsco Host, Pro Quest, Asianet and Universal Digital Library (UDL), which is a Malaysian based on-line library.

Moreover, publishing of "Psychological Abstracts" is another distinguished feature of department. It includes abstracts of research work carried out by students and faculty members of the department.

### Research Collaboration

- **Foreign Linkages**

- Dr. Rukhsana Kausar is member Research Consortium as Collaborating Partners on "Global Climate Change and Health Security: Concepts, Methodology and Burden of Disease Assessment for Asia" with Prof. Dr. Alexander Krämer, Dr. MMH Khan, Heiko Jahn, Belfield University, Germany.
- Dr. Rukhsana Kausar conducted collaborative INDIGO-Depression Project on Stigmatization of patients with psychiatric disorders, with Prof. Graham Tormicroft and Dr. Tine Van Bortel, Institute of Psychiatry, King's College London.

- **Funding grants for R&D**

- Detail provided in Chapter 2, R & D section

### DEPARTMENT OF BOTANY

- **R&D-An Overview (5 – 10 lines)**

During the period under report 07 papers have been published in impact factor journals and 05 papers have been published in other journals by the faculty members. Similarly six research projects have been completed by the faculty members and two new research projects are in progress.

- **Projects:**

#### Completed

Sr. No.	Principal investigator	Title of the project	Duration	Amount in Rs.	Sponsored by
1.	Firdaus-e-Bareen	Role of plants and	7-7- 2008 - 2011	3,796,380/-	Higher



		associated resistant fungi in metal uptake from tannery sludge and solid waste.	(completed)		Education Commission (HEC), Pakistan
2.	Firdaus-e-Bareen	Role of some growth promoters in enhancement of metal uptake and stress alleviation in selected plants grown in tannery waste contaminated soil.	(completed) 2011	250,000/-	University of the Punjab, Lahore
3.	A.N. Khalid	Diversity of Micromycetes in different polluted water samples and their role in detoxification	(completed) 2011	2,00,000/-	University of the Punjab, Lahore
4.	Humera Afrasiab	"Effects of 2, 4-D (2, 4-Dichlorophenoxyacetic acid) and TIBA (2,3,5-Triiodobenzoic acid) on callogenesis and regeneration from different explants of Rice ( <i>Oryza sativa</i> L) cultivars IRR19 and Bas-386"	(completed) 2011	1,50,000/-	University of the Punjab, Lahore.
5.	Farkhanda Jabeen	Antibacterial activities of selected plants extracts against Pesticides degrading bacteria	(completed) 2011	1,50,000/-	University of the Punjab, Lahore.
6.	Ambreen Ahmed	<i>Enterobacter sp.</i> : impact on the growth of <i>Brassica oleracea</i> .	(completed) 2011	1,00,000/-	University of the Punjab, Lahore.

**(ii) Newly launched**

Sr. No.	Principal investigator	Title of the project	Duration	Amount in Rs.	Sponsored by
1.	Firdaus-e-Bareen	Detoxification of industrial sludge using aquatic plants and indigenous microbes.	03.08.2011-02.08.2014 (in progress)	2,760,230/-	Higher Education Commission (HEC), Pakistan
2.	A.N. Khalid	A contribution to the Rust flora of AJK (Azad Jammu & Kashmir) and adjacent Northern areas of Pakistan	2009-2012 (in progress)	2,306,000/-	Pakistan Science Foundation (PSF)

## Publications

- Firdaus-e-Bareen. (2011). the role of environmental variables in the distribution pattern of aquatic hyphomycetes in a semi-tropical canal water habitat. *Biological Diversity and Conservation* 4: 1-14.
- Firdaus-e-Bareen, Nazir, A. and Ahmad, S. (2011). Role of live autochthonous fungi in removing toxic metals from tannery and textile effluents. *African Journal of Biotechnology* 10: 6072-6081 (I.F. 0.573)
- Nazir, A. and Firdaus-e-Bareen. (2011). Synergistic effect of *Glomus fasciculatum* and *Trichoderma pseudokoningii* on *Heliathus annuus* to decontaminate tannery sludge from toxic metals. *African Journal of Biotechnology* 10:4612-4618. (I.F. 0.573)
- Firdaus-e-Bareen and Tahira, S.A. (2011). Metal accumulation potential of wild plants in tannery effluent contaminated soil of Kasur, Pakistan: Field trials for toxic metal cleanup using *Suaeda fruticosa*. *Journal of Hazardous Materials* 186: 443-450. (I.F. 4.144)
- Afrasiab, H. and Jafar, R. (2011). Effect of different media and solidifying agents on callogenesis and plant regeneration from different explants of rice (*Oryza sativa* L) varieties Super Basmati and IRRI-6. *Pakistan Journal of Botany*. 43(1): 487-501(I.F. 0.947)
- Afshan. N. S., Iqbal, S.H., Khalid A.N. & Niazi, A.R. 2011. Some additions to the Uredinales of Azad Jammu and Kashmir (AK & K), Pakistan. *Pakistan Journal of Botany*. 43(2): 1373-1379 (I.F. 0.947)
- Afshan. N. S., Khalid A.N. Niazi. & Iqbal, S.H. New records of Uredinales from Fairy Meadows, Pakistan. 2011. *Mycotaxon* 115: 203–213. doi: 10.5248/115.203. (I.F. 0.510)
- Manzoor, F., Malik, S. Habipour, French, J.R.J. and Jabeen, F. (2010). Survey of termites in forest of Punjab: Pakistan. *African Journal of Environmental Science and Technology*. 4(11):790-796.
- Rahim, A., Hasnain, S., and Jabeen, F. (2011). Effect of Calcium, Magnesium, Sodium and Potassium on farm plantations of various agroecological zones of Punjab, Pakistan. *African Journal of Environmental Science and Technology*. 5(5): 450-459.
- Rahim, A., Hasnain, S., Shamsi, A and Jabeen, F. (2011). The phytosociological analysis of saline area of Tehsil Ferozewala, District Sheikhpura, (Punjab), Pakistan. *African Journal of Environmental Science and Technology* 5(4):316-326.
- Ahmed A. and Hasnain S. (2010). Auxin producing *Bacillus* sp.: Auxin quantification and effect on the growth *Solanum tuberosum*” *Pure and Applied Chemistry*. 82 (1): 313-319. (I. F: 2.289)
- Zulfiqar A., Paulose, B., Chhikara, S. and Dhanker, O.P. (2011). Identifying genes and gene networks involved in chromium metabolism and detoxification in *Crambe abyssinica* *Environmental Pollution* 159 (10) 3123 – 3128. (I.F. 3.395)

**Conferences, Seminars and Workshops, etc.**

- Prof. Dr. Khan Rass Masood, Chaired a session attended 2<sup>nd</sup> International Conference of plant \_\_\_\_\_ held in Jan 2011 at GCU, Lahore.
- Prof. Dr. Firdaus-e-Bareen attended the 2<sup>nd</sup> International Conference of Plant Scientists (ICPS 2011) held in January 22-24 at GCU, Lahore and presented one oral presentation titled “Comparative efficacy of rice-straw-compost vs. commercial fertilizer on rice crops”.
- Dr. Humera Afrasiab attended second International Conference of Plant Scientists, Fes 22 – 24, 2011 Biology Block, Govt. College University, Lahore.
- Ms. Farkhanda Jabeen attended 2<sup>nd</sup> International Conference of Plant Scientist held at Department of Botany, GC University Lahore on Feb. 22-24, 2011.
- Ms. Farkhanda Jabeen attended Researchers Exchange Programme. INSPIRE Pakistan held on December 13-14, 2010, in Department of Botany, Lahore College for Women University.
- Ms. Farkhanda Jabeen. and Hasnain, S. attended Bioremediation of Endosulfan contaminated Soils using Indigenous Bacterial Strains. In an International Symposium on “Bioremediation and Sustainable Environmental Technologies” June 27-30, 2011 Reno, Nevada, USA.
- Ms. Asma Zulfiqar attended the workshop on “Research Methodologies using Statistical Techniques in Biological Sciences”(January 3-8, 2011) organized by Department of Statistics and Computer Sciences, University of Veterinary and Animal Sciences Lahore.
- Ms. Asma Zulfiqar attended workshop on Research Management (November 12, 2010) organized by Institute of Quality and Teaching Management (University of the Punjab) in collaboration with HEC Quality Enhancement cell.
- Ms. Asma Zulfiqar attended the workshop as participant on Development of Sustainable and Collaborative Research Networks (December 13-14, 2010) held in Lahore College for Woman University.
- Ms. Ambreen Ahmed attended 2<sup>nd</sup> International Conference and 11<sup>th</sup> National Conference of Plant Scientists at GCU, Lahore (22-24<sup>th</sup> Feb, 2011)
- Ms. Ambreen Ahmed attended Seminar on “Dengue fever” (21<sup>st</sup> Sep, 2011) organized by Department of Microbiology and Molecular Genetics at MMG, PU.
- Ms. Ambreen Ahmed attended Seminar on “Biological Role of Mycotoxins” (17<sup>th</sup> Mar, 2011) organized by Department of Microbiology and Molecular Genetics at MMG, PU.
- Ms. Ambreen Ahmed attended Seminar on “Proteomic in Biomedical Sciences” (18<sup>th</sup> March, 2011) organized by Department of Microbiology and Molecular Genetics at MMG, PU.
- Ms. Ambreen Ahmed attended Seminar on “Granulomatous diseases of Nose” (26<sup>th</sup> September, 2011) organized by Department of Microbiology and Molecular Genetics at MMG, PU.

- Ms. Ambreen Ahmed attended workshop on “Biosafety” by Sure Bio Diagnostics on 4<sup>th</sup> March, 2011 at Department of Microbiology and Molecular Genetics, PU.

### **Research Collaboration**

- **Indigenous**

- Prof. Dr. Muhammad Saleem has research collaboration with Dr. Habib Ullah at LUMS and Dr. Shaukat at PCSIR, Lahore.

- **Foreign Linkages**

- Prof. Dr. Muhammad Saleem has foreign linkages with Imperial College, UK and Brunel University, USA.

### **DEPARTMENT OF SPORTS SCIENCES & PHYSICAL EDUCATION**

- **Projects:**

- Completed (24)

- **Conferences, Seminars and Workshops, etc.**

- Workshop on Small Area Games held in Department of Sports Sciences & Physical Education in June, 2011.

### **DEPARTMENT OF ZOOLOGY**

- **R&D-An Overview**

The Department of Zoology, a discipline of natural sciences, meets the need of trained manpower in a vast basic and interdisciplinary framework concerning animal sciences. The Department has earned international recognition for academic excellence and prominence in various fields of research like Cell, Biology, Molecular Biology, Physiology, Developmental Biology, Entomology, Microbiology, Palaeontology, Parasitology, Environmental Biotechnology, Toxicology, Clinical Endocrinology, Fisheries etc.

Fish Research Farm comprises of an area of 5 acres, including nursery ponds, research ponds and production ponds. Some Approximately 2500-3000kg fish is annually sold to the employees of Punjab University.

In view of economic importance of honeybee farming, University of the Punjab has embarked upon research and development activities on honeybee from 2004 onwards. The European bee *Apis mellifera* farm comprising 200 hives has been established at the campus. Research work is being carried out for improvement in management techniques, quality queen breeding and control of pests and diseases to increase honey yield of colonies. Further infra-structure is being developed for teaching and research facilities. Beekeeping training programmes and workshops for honeybee management have been organized at the campus for dissemination of technical knowledge among students, farmers, extension workers, officers of alien department and hobbyists.

• **Projects: (i) Completed (during 2010)**

<b>Researcher/sponsoring Agency</b>	<b>Title</b>	<b>Financial Support (million rupees)</b>	<b>Objectives</b>
Muhammad Akhtar/ University of the Punjab	Studies on the fossil mammals of the Soan Formation 1 year (2010-2011)	0.2	Studies on the fossil mammals of the Soan Formation
Tanveer Akhtar/ University of the Punjab	Malaria: Molecular Basis of Drug Resistance in Pakistan Scenario	0.2	To identify drug resistant genes.
Syed Shahid Ali/ University of the Punjab	Toxicity and resistance pattern in various populations of stored grain pest, <i>Trogogerma ganarium</i> against a pyrethroid insecticide, "deltamethrin".	0.2	To evaluate the level of resistance against pesticides to achieve control of this pest which is responsible for huge loses of stored grains in Pakistan.
Javed Iqbal Qazi/ University of the Punjab	Isolation and termite biocontrol potential of chitinase producing bacteria.	0.2	To verify colloidal chitin hydrolysis potential of chitinolytic bacterial isolates that had been preserved in microbiology lab. The bacteria have been characterized for colloidal chitin hydrolysis at 30°C.
Mohammad Shafiq Ahmed/ University of the Punjab	Toxicological Effects Caused by Some Heavy Metals in Fishes from River Ravi at Baloki Headworks.	0.15	To identify toxic effects on growth in fishes
Zafar Iqbal / University of the Punjab	Study on some aspects of biology of freshwater fish gold fish ( <i>Carassicus auratus</i> ) and prevalence of disease in some ornamental fish	0.15	Studies on disease and biology of gold fish.
Nabila Roohi / University of the Punjab	Identification and prognostic significance of malignancy associated biomarker/s in patients with Hodgkin's and non Hodgkin's Lymphoma.	0.125	To identify biomarkers of Lymphoma for its early diagnosis.
Najma Shaheen / University of the Punjab	Identification of bacterial isolates from contact lenses or lens cases, their antibiotic resistance profile and responses to selected antimicrobials.	0.125	To study the antibiotic resistance in bacteria isolated from contact lenses.

**(ii) Newly launched (during 2011)**

<b>Researcher/sponsoring Agency</b>	<b>Title</b>	<b>Financial Support (million rupees)</b>	<b>Objectives</b>
Tanveer Akhtar/ University of the Punjab	Genetic studies of Leukemia in Pakistan population.	0.25	To identify gene variation in Leukemia.
Syed Shahid Ali/ University of the Punjab	Screening, identification and characterization of cellulolytic bacteria from the local bacterial isolates.	0.25	To search for the local bacterial isolates and enzymes, which can be used to upgrade the cellulosic waste to high quality products.
Javed Iqbal Qazi/ University of the Punjab	Cultivation of H <sub>2</sub> -yielding bacteria in food wastes	0.25	To provide biohydrogen, a clean, environmentally compatible and future fuel, from food wastes in economically feasible way.
Zafar Iqbal / University of the Punjab	Fungal infections in some freshwater fishes.	0.2	To investigate fungal infections in some ornamental fishes.
Nabila Roohi / University of the Punjab	Identification and prognostic significance of protein biomarkers associated with breast cancer in women	0.15	To identify biomarkers of breast cancer.
Abida Butt/ University of the Punjab	Effect of size and density of prey on the web structure of <i>Neoscona theisi</i> (Araneae : Arancidae)	0.15	To check plasticity in the web structure of <i>N. theisi</i> .
Azmat Jadoon / University of the Punjab	Effect of Neem ( <i>Azadirachta indica</i> ) to DMBA induced mammary gland tumor in female rats.	0.15	To see the protective effect of <i>Azadirachta indica</i> (Neem) on mammary gland tumor and determine Therapeutic effect of <i>Azadirachta indica</i> (Neem) on mammary gland tumor.
Najma Shaheen / University of the Punjab	Molecular characterization of bacterial isolates from contact lens solution and antimicrobial efficacy of commercial lens solution.	0.15	Isolation of pathogenic base from lens solution.
Nadeem Sheikh / University of the Punjab	Diet induced obesity and inflammation studies in rats. Impact on liver functionality.	0.15	Liver function under high fat diet.

Ayesha Aihetasham/ University of the Punjab	Effect of plant extracts of Aloc barbadensis, Allium sativum, Ficul racemosa and Ficus Bengalensis on Heterotermes indicola (Wasmann)	0.15	To study the toxicity of different plant extracts to compare which one is more targeted and to study the perecentage consumption of H. indicola (Wasmann) on extracts from 5 plant species.
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- **Publications**

- Khan, M.A., Akhtar, M., Roohi, G., Iqbal, M. and Samiullah, K. 2011. *Sivaceros gradiens* Pilgrim 1937 (Mammalia, Bovidae, Boselaphini) from the Lower Siwaliks of Dhok Bun Amir Khatoon, Chakwal, Pakistan: Systematics and Biostratigraphy. *Turkish J. Zool.*, 34:281-286. (Impact Factor=0.23).
- Khan, M.A., Akhtar, M., Khan, A.M., Ghaffar, A., Iqbal, M. and Samiullah, K. 2011. New Fossil Locality in the Middle Miocene of Lava from the Chinji Formation of the Lower Siwaliks, Pakistan. *Pakistan J. Zool.*, 43(1): 61-72. (Impact Factor=0.20).
- Khan, M.A., Illiopoulos, G., Akhtar, M., Ghaffar, A., and Haq, Z. 2011. The longest tusk of cf. *Anancus sivalensis* (Proboscidea, Mammalia) from the Tatrot Formation of the Siwaliks, Pakistan. *Current Science* (Indian Institute of Science, Bangalore; India), 100(2): 249-255. (Impact Factor=0.78).
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- Khan, A.M., Cerdeno, E., Khan, M.A. and Akhtar, M. 2011. *Chilotherium intermedium* (Rhinocerotidae : Mammalia) from the Siwaliks of Pakistan : Systematic Implications. *Pakistan J. Zool.*, 43(4): 651-653. (Impact Factor=0.20).
- Khan, M.A., Manzoor, F. Ali, M. Bhatti, Z.H. and Akhtar, M. 2011. A new collection of Hipparionine from the type locality of the Dhok Pathan Formation of the Middle Siwaliks. *J. Anim. Pl. Sci.* 21(1): 83-89. (Impact Factor=0.25).
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- Iqbal, M., Khan, M.A., Atiq, M., Ikram, T. and Akhtar, M. 2011. *Dorcatherium minus* (Tragulidae-Artiodactyla-Mammalia) from the Nagri Type Area of the Nagri Formation, Middle Siwaliks, Northern Pakistan: New Collection. *Yerbilimleri*, 32(1): 59-68. Bulletin of Earth Sciences Application and Research Centre of Hacettepe University. (International publication).

- Khan, A.A., Khan, M.A., Iqbal, M., Akhtar, M. and Sarwar, M. 2011. *Sivatherium* (Artiodactyla, Ruminantia, Giraffidae) from the Upper Siwaliks, Pakistan. *J. Anim. Pl. Sci.* 21(2): 202-206. (Impact Factor=0.25).
- Ali, Z., Shelly, S.Y., Bibi. F., Joshua, G., Khan, A.M., Khan, B.N. and Akhtar, M. 2011. Peculiarities of Mangla Reservoir: Biodiversity with sustainable use options. *J. Anim. Pl. Sci.* 21(2 Suppl.): 372-380. (Impact Factor=0.25).
- Ali, Z., Shelly, S.Y., Bibi. F., Joshua, G., Khan, A.M., Khan, B.N. and Akhtar, M. 2011. Salt range wetlands complex, exploratory /baseline survey. *J. Anim. Pl. Sci.* 21(2 Suppl.): 410-414. (Impact Factor=0.25).
- Ghaffar, A., Akhtar, M., Butt, M.J., Khan, M.A. and Ikram, T. 2011. Late Miocene Hyaenids from the Middle Siwaliks of Pakistan. *Pakistan J. Zool.*, 43(5): 855-862. (Impact Factor=0.20).
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  - Rahmatullah Qureshi, Waseem A. Khan, G. R. Bhatti, Babar Khan, Shahid Iqbal, M. Shafiq Ahmad, Mohammad Abid, and Atif Yaqoob. 2011. First Report on the Biodiversity of Khunjerab National Park, Pakistan. *Pak. J. Botany*, 43(2): 849-861. [http://pakbs.org/pjbot/PDFs/43\(2\)/ PJB43\(2\)0849.pdf](http://pakbs.org/pjbot/PDFs/43(2)/ PJB43(2)0849.pdf) (IF= 0.947)
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- Samiullah, K., Akhtar, M., Ghaffar, A., and Muhammad Akbar Khan, M.A., 2011. *Giraffokeryx punjabiensis* (Artiodactyla, Ruminantia, Giraffidae) from Lower Siwaliks (Chinji Formation) of Dhok Bun Ameer Khatoon, Pakistan. *J. Sci. Technol., MSU. Thailand*, 30(4): 62-76.
- **Conferences, Seminars and Workshops, etc.**
  - All the faculty members actively participated and presented paper/poster 31<sup>st</sup> Pakistan Congress of Zoology held at Azad Jammu and Kashmir University, Muzaffarabad April 19-21, 2011.
  - Department of Zoology has conducted a seminar on “1<sup>st</sup> Wildlife Talks Series” on 04.05.2011. Mr. Zaffar Nasrullah Khan, Director General Punjab Wildlife and Parks Dr. Abdul Aleem Chaudhry Patron-in-Chief of Pakistan Wildlife Foundation Prof. Zahid Baig Mirza were speakers of this seminar.
  - Students Welfare Society of Zoology Department has conducted a lecture (We Cannot Live Alone (Ecosystems). Mr. Zahid Baig Mirza (Former Director of WWF and Pakistan Museum of Natural History, Islamabad) was invited to deliver lecture on 18.10.2010.
  - Prof. Dr. Javed Iqbal Qazi attended a workshop on “Working with proteins in post-genomic era”. January 06-07, 2010 organized by School of Biological Sciences, University of the Punjab, Lahore.
  - Shakir, H.A. and Qazi, J.I., 2011. Urban pollutants load affects growth factor of rohu in river Ravi negatively. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 26.
  - Shakir, H.A. and Qazi, J.I., 2011. Biochemical parameters of *Labeo rohita* sampled from up and down stream localities of the river Ravi. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 26.
  - Shakir, H.A. and Qazi, J.I., 2011. Heavy metal resistant bacteria from gut contents of thaila from up and down stream localities of river Ravi. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 27

- Shakir, H.A. and Qazi, J.I., 2011. Isolation of heavy metal resistant bacteria form gut contents of rohu collected form up and down stream localities of river Ravi. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 28.
- Shakir, H.A. and Qazi, J.I., 2011. River urban pollutants enhanced carbohydrate and nucleic acid while decreased protein and lipid contents of the *Cirrhina mrigala* sampled form up and down stream localities of river Ravi. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 28.
- Shakir, H.A. and Qazi, J.I., 2011. Muscle biochemical parameters of *Catla catla* sampled from up and down stream localities of river Ravi. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 29.
- Shakir, H.A. and Qazi, J.I., 2011. Chromium, lead, mercury and copper resistant bacteria from gut contents of mori from up and down stream localities of river Ravi. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 208.
- Shakir, H.A. and Qazi, J.I., 2011. Growth factor of the riverine fish, mori following exposure to urban pollutants. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 208.
- Shakir, H.A. and Qazi, J.I., 2011. Effects of urban pollutants on growth of *Catla catla* in the river Ravi. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 209.
- Siddiqui, S., Shakir, H.A. and Qazi, J.I., 2011. Intestinal derangements of *Labeo rohita* sampled from the downstream location, head bolloki, river Ravi. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 201.
- Aslam, S. and Qazi, J.I., 2011. Chromium resistant sulfur oxidizing bacteria from a soil exposed chronically to the tanneries effluents. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 23.
- Aslam, S. and Qazi, J.I., 2011. Chromium resistant phosphorus accumulating bacteria isolated from soiled sample from a suburban locality of city Kasur. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 24.
- Aslam, S. and Qazi, J.I., 2011. Bioremediation removal of nitrogen content form waste waters contaminated with heavy metal. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 24.

- Aslam, S. and Qazi, J.I., 2011. Isolation and characterization of nitrogen fixing bacteria from tanneries effluents' influenced soils. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 25.
- Aslam, S. and Qazi, J.I., 2011. Isolation and characterization of cellulolytic bacteria from tanneries effluents' influenced soils. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 25.
- Hussain, A., Bano, A.S. and Qazi, J.I., 2011. Corrosion of mild steel stimulating long term soil buried field condition differing in nutritional and biotic components. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 18.
- Qazi, J.I., Shahab, D. and Bano, A.S. 2011. Stability of biocorrosion protecting exoproducts of *bacillus thuringensis*-SN8. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 230.
- Mumtaz, T., Bano, A.S. and Qazi, J.I., 2011. Fate of three years soil buried mild steel exposed to corrosion causing *Paenibacillus dendritiformis* MB-14 and its antagonist *Bacillus subtilis* MB-6. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 231.
- Jabeen, F. and Qazi, J.I., 2011. Isolation and characterization of chitin form edible blue crab *Callinectes sapidus* and its comparison with the purified carbohydrate. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 18.
- Tufail, F., Jabeen, F. and Qazi, J.I., 2011. Designing low cost media for the cultivation of antimycotic chitinolytic bacteria of *bacillus* spp. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 51.
- Jabeen, F. and Qazi, J.I., 2011. Potential of chitinolytic bacteria for environmentally compatible termite control. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 230.
- Nasreen, Z. and Qazi, J.I., 2011. Inoculum development for escalating composting process of house hold waste. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 51.
- Nasreen, Z. and Qazi, J.I., 2011. Laboratory scale composting of vegetable and fruit waste under controlled condition. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 43.
- Qazi, J.I., Shahzad, S., and Mufti, S.A., 2011. Effect of insulin administration on recruitment of myoblast and diameter of regenerated muscle fibre in freely grafted extensor digitorum longus

- muscle in rats. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 50.
- Manzoor, A., Baig, S., Haq, I. and Qazi, J.I., 2011. Uropathogenic controlling efficacy of *Lactobacillus* strains isolated from rotten fruits and vegetable. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 39.
  - Qazi, J.I., Khaleel, H. and Mufti, S.A., 2011. Percentage of area owned by regenerated muscle fibres within cross section in a better estimate of structural recovery of muscle transplants. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 40.
  - Majeed, A.A. and Qazi, J.I., 2011. Protease production of *Bacillus* sp. employing some non-conventional low cost media. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 41.
  - Qazi, J.I. and Naeem, N., 2011. Antimicrobial effects of some herbal extracts on skin and urogenital opportunistic pathogens. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 42.
  - Rukh, L. and Qazi, J.I., 2011. Isolation of oleaginous yeasts and their cultivation in agro industrial waste. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 43.
  - Qazi, J.I., Javed, A. and Mufti, S.A., 2011. Revascularization and reinnervation of freely grafted extensor digitorum longus muscle in rats respond positively to the provision of testosterone propionate. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 44.
  - Mirza, S.S. and Qazi, J.I., 2011. Isolation and cultivation of hydrogen (biofuel) yielding bacteria in food industrial waste. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 44.
  - Mirza, M.R., Husnain, A. and Qazi, J.I., 2011. Fecundity of *Clupeoides naziri* from the river Indus at Attock Khurd. 31st Pakistan congress of Zoology (International) University of Azad Jammu and Kashmir, Muzaffarabad. (April 19<sup>th</sup> – 21<sup>st</sup>) Abstract pp 202.
  - Dr. M. Shafiq Ahmed presented a paper Habitat Evaluation of Smooth-coated Otter (*Lutrogale perspicillata*) in Indus Plains of Pakistan using Remote Sensing and GIS. ISPRS Technical Commission VIII Symposium, 9 – 12 August 2010, Kyoto, Japan.
  - participated in a workshop on Gender Mainstreaming-Concept and Implementation organized by National Centre for Rural Development, Ministry of Local Government and Rural Development, Islamabad, December 20-24, 2010

- Dr. Nabila Roohi presented a paper entitled “Identification of protein biomarker/s in patients with Hodgkin’s and non Hodgkin’s Lymphoma at 31<sup>st</sup> International Symposium, 26<sup>th</sup> to 29<sup>th</sup> December, 2010 at King Edward Medical University, Lahore.
- Dr. Abdul Majid Khan attended seminar on “organizational intelligence” organized by University of the Punjab on June 13, 2011 at Al-Razi Hall.
- Dr. Abdul Majid Khan attended workshop on January 20, 2011 organized by Fisheries Research and Training Institute Lahore on Fish Nutrition.
- Dr. Abdul Majid Khan attended workshop on November 12, 2010 organized by Institute of Quality and technology management and HEC titled “Research Management”.

- **Research Journals**

The Department of Zoology has been publishing its own research journal since 1985, the “*Punjab University Journal of Zoology*” for the promotion of research and its publication in all its branches, both pure and applied.

### Research Collaboration

- **Foreign Linkages**

- Ph.D. Students of Prof. Dr. Javed Iqbal Qazi are visiting foreign Universities in Ph.D. split program awarded by HEC Govt. Pakistan at U.K. and USA for 6 months to 1 year period. In these visits they carry bacteria isolated in our Lab. and employ them in the advance labs. of the developed countries to delineate their biotechnological potential.
- Dr. Nadeem Sheikh Memorandum of understanding with Department of Internal Medicine, Division of Gastroenterology, Georg August University Goettingen Germany.

- **Funding grants for R&D**

Mentioned above.

### CENTRE FOR CLINICAL PSYCHOLOGY

- **R&D – An Overview**

Research courses are taught at both undergraduate and graduate level. Individual research projects are essential requirement for students of masters and doctorate level whereas it is an optional for undergraduate students. Research supervisors are assigned to every student undergoing their research project at masters and doctorate level. 27 research theses are completed and added to library during this year by the MS students and 13 by BS (Hons.) students.

### Completed Projects

- **Completed**

- List of completed projects of Prof. Dr. Rukhsana Kausar, Chairperson, Department of Applied Psychology, can be seen under Applied Psychology Section.



### **Newly launched**

Five faculty members have been granted research grant to conduct individual research projects.

### **Conferences, Seminars and Workshops, etc.**

- List of Conferences, Seminars and Workshops, etc. of Prof. Dr. Rukhsana Kausar, Chairperson, Department of Applied Psychology, can be seen under Applied Psychology Section.
- Dr. Nashi Khan, Presented a paper on Psychological Morbidity in Women Presenting with Vaginal Discharge in Pakistan. Presented at the 12<sup>th</sup> European Congress of Psychology, Istanbul, Turkey, 4-8 July, 2011.

### **• Workshops and Seminars**

- Ms. Fatima Kamran, PhD scholar, University of Surrey, UK conducted a seminar on Quality of life of patients with Renal Failure.
- A one day workshop on REBT, by Ms. Saima Salman, Rational Living Institute, Singapore.
- A workshop on Psychosexual Disorders by Dr. Nashi Khan.
- Ms. MiratGul, Clinical Psychologist, Sir Ganga Ram Hospital, Lahore Conducted a workshop on Dialectical Behaviour Therapy
- Dr. Shehryar conducted a workshop on Hypnosis.
- Dr. Shehryar conducted a workshop on NLP.
- Dr. Mahmooda Aftab conducted a one day workshop on Drug Addiction.
- Dr. Shabbir Rana, Assistant Professor, Government College University, conducted a workshop on Qualitative Research.
- Dr. Mahmooda Aftab conducted a one day workshop on “Reiki” on 15<sup>th</sup> March, 2011.
- Centre for Clinical Psychology organized a three day workshop from 18<sup>th</sup> – 20<sup>th</sup> April, 2011. The title of the Workshop was Academic Problems, Separation from Parents and Effects of Terrorism on Children’s Behaviours by Ms. Amna Tariq, Consultant Clinical Psychologist from Kings College, London was the resource person for this workshop.
- Dr. Umneea Khan from the Centre for Child and Adolescent Related Disorders Graduate School of Education, The University of Western Australia, Perth, Australia conducted a one day workshop on “What Do I Know and Need to Know about Autism Spectrum Disorders” (ASD) on 10<sup>th</sup> January 2011
- Dr. Aamira SaleemRao, Consultant Clinical Psychologist (UK) conducted a workshop on “Use of Reflective Practice in Forming Hypothesis in Therapy” on 26<sup>th</sup> April, 2011.
- Dr. Mahmooda Aftab conducted three daysworkshop on “Drug Addiction and Its Psychological Rehabilitation” from 10<sup>th</sup> May, 17<sup>th</sup> May and 24<sup>th</sup> May, 2011
- Ms. NajmaTauheed, conducted workshop on “Gestalt Therapy” on Tuesday 7<sup>th</sup>, 14<sup>th</sup> & 21<sup>st</sup> June, 2011.

- Centre for Clinical Psychology organized a walk to celebrate International Mental Health Day on Tuesday 19<sup>th</sup> October, 2010. Walk started at 9.00 a.m. from Centre & ended IER at 11.00 a.m. Faculty & Students of Sociology, Social Work, Gender Studies & Applied Psychology Department were also invited on this occasion.

- **Research Journals**

- Pakistan Journal of Professional Psychology: Research & Practice 2<sup>nd</sup> Issue is in process.

### Research Collaboration

#### Indigenous

#### CENTRE OF EXCELLENCE IN MOLECULAR BIOLOGY

- **R&D-An Overview**

Different research groups like previous year are actively engaged in Plant Biotechnology, Stem Cell Research, Functional Genomics, DNA Sequencing and Genotyping, Molecular Basis of Genetic Diseases, Forensic Science, Biopharmaceutical, Seed Biotechnology, Molecular Diagnosis of diseases etc areas of molecular biology. The scientists of the Centre published research papers in high impact factor peer reviewed journals. The excellent academic environment, prevailing in the Centre attract scientists from Pakistan and abroad, to spend sabbatical assignments at the Centre.

- **Projects:**

Newly launched

Sr.r#	Project	Funding Agency
1	Effect of Genetically Modified Crops on Soil Microorganisms and Animals.	Higher Education Commission
2	A Molecular Approach to Prevent Hereditary Blindness in Pakistan.	Higher Education Commission
3	The Development of Oligonucleotide Microarray and its use in the analysis of abiotic Stress.	Higher Education Commission
4	Transformation of Bt cotton with Transcription Factor Gene of Gossypium arboreum to enhance drought tolerance.	Higher Education Commission
5	Cellular Characterization of Cotton Universal Stress Protein USP Genes and Their Role in Drought Stress.	Higher Education Commission
6	Transformation of gene constructs and genetically engineered germplasm resources/commercial genotypes resistant to develop cotton leaf curl disease and/or its insect vector.	Pak-USA Joint
7	Development & Commercialization of Cotton Leaf Curl Virus Resistant / Tolerant Indigenous Transgenic Bt and Glyphosate Resistant Cotton Hybrids.	Punjab Agriculture Research Board (PARB)
8	Development of Transgenic Cotton with Multiple Genes Resistant to Cotton Leaf Curl Virus	Punjab Agriculture Research Board (PARB)

- **Publications**

- **Research Papers**

- Manzoor S, Idrees M, Ashraf J, Mehmood A, Butt S, Fatima K, Akbar H, Rehman IU, Qadri I. Identification of ionotropic purinergic receptors in Huh-7 cells and their response towards *structural proteins of HCV genotype 3a*. *Viol J*. 2011 Sep 8; 8:431.
- Amin I, Idrees M, Awan Z, Shahid M, Afzal S, Hussain A. PCR could be a method of choice for *identification of both pulmonary and extra-pulmonary tuberculosis*. *BMC Res Notes*. 2011 Sep 8;4:332.
- Riaz M, Idrees M, Kanwal H, Kabir F. An overview of *triple infection with hepatitis B, C and D viruses*. *Viol J*. 2011 Jul 27;8:368.
- Ijaz B, Ahmad W, Javed FT, Gull S, Sarwar MT, Kausar H, Asad S, Jahan S, Khaliq S, Shahid I, Sumrin A, Hassan S. Association of laboratory parameters with *viral factors in patients with hepatitis C*. *Viol J*. 2011 Jul 21;8:361.
- Ashfaq UA, Masoud MS, Nawaz Z, Riazuddin S. *Glycyrrhizin as antiviral agent against Hepatitis C Virus*. *J Transl Med*. 2011 Jul 18;9:112.
- Ilyas M, Sadique S, Masood K, Qamar R, Chohan SN. The development of computational biology in Pakistan: still a long way to go. *PLoS Comput Biol*. 2011 Jun;7(6):e1001135. 2011 Jun 30.
- Ahmad W, Shabbiri K, Nazar N, Nazar S, Qaiser S, Shabbir Mughal MA. Human linker histones: *interplay between phosphorylation and O-β-GlcNAc* to mediate chromatin structural modifications. *Cell Div*. 2011 Jul 12;6:15.
- Butt AM, Siddique S, Tahir S, Nasrullah I, Hussain M, Idrees M, Lu J, Tong Y. Comparative sequence, antigenic and phylogenetic analysis of avian influenza (H9N2) surface proteins isolated in Pakistan between 1999 and 2008. *J Infect Dev Ctries*. 2011 Jul 4;5(6):413-24.
- Butt S, Idrees M, Rehman IU, Ali L, Hussain A, Ali M, Ahmed N, Saleem S, Fayyaz M. Establishment of stable Huh-7 cell lines expressing various hepatitis C virus genotype 3a proteins: *an in-vitro testing system for novel anti-HCV drugs*. *Genet Vaccines Ther*. 2011 Jun 28;9(1):12.
- Rehman S, Ashfaq UA, Javed T. Antiviral drugs against hepatitis C virus. *Genet Vaccines Ther*. 2011 Jun 23;9:11.
- Sarwar MT, Kausar H, Ijaz B, Ahmad W, Ansar M, Sumrin A, Ashfaq UA, Asad S, Gull S, Shahid I, Hassan S. NS4A protein as a marker of HCV history suggests that *different HCV genotypes originally evolved from genotype 1b*. *Viol J*. 2011 Jun 23;8:317. doi: 10.1186/1743-422X-8-317.
- Jahan S, Khaliq S, Samreen B, Ijaz B, Khan M, Ahmad W, Ashfaq UA, Hassan S. *Effect of combined siRNA of HCV E2 gene and HCV receptors against HCV*. *Viol J*. 2011 Jun 10;8:295.

- Ahmad W, Ijaz B, Javed FT, Kausar H, Sarwar MT, Gull S, Asad S, Shahid I, Hassan S. HCV genotype-specific correlation with serum markers: *higher predictability for genotype 4a* Virol J. 2011 Jun 10;8:293. doi: 10.1186/1743-422X-8-293.
- Ali S, Riazuddin SA, Shahzadi A, Nasir IA, Khan SN, Husnain T, Akram J, Sieving PA, Hejtmancik JF, Riazuddin S. Mutations in the  $\beta$ -subunit of rod phosphodiesterase identified in *consanguineous Pakistani families with autosomal recessive retinitis pigmentosa*. Mol Vis. 2011;17:1373-80. 2011 May 25.
- Ashfaq UA, Yousaf MZ, Aslam M, Ejaz R, Jahan S, Ullah O. *siRNAs: potential therapeutic agents against hepatitis C virus*. Virol J. 2011 Jun 6;8:276.
- Faridi R, Zahra A, Khan K, Idrees M. *Oncogenic potential of Human Papillomavirus (HPV) and its relation with cervical cancer*. Virol J. 2011 Jun 3;8:269.
- Idrees M, Ur Rehman I, Manzoor S, Akbar H, Butt S, Afzal S, Yousaf MZ, Hussain A. *Evaluation of three different hepatitis C virus typing methods for detection of mixed-genotype infections*. J Dig Dis. 2011 Jun;12(3):199-203. doi: 10.1111/j.1751-2980.2011.00496.x.
- Akram M, Idrees M, Hussain A, Afzal S, Ilyas M, Zafar S, Aftab M, Badar S, Khubaib B. *Characterization of hepatitis C Virus genotype 3a hypervariable region 1 in patients achieved rapid virological response to alpha interferon and ribavirin combination therapy*. Virol J. 2011 May 23;8:253. doi: 10.1186/1743-422X-8-253.
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- Akram M, Idrees M, Zafar S, Hussain A, Butt S, Afzal S, Rehman IU, Liaqat A, Saleem S, Ali M, Butt A. *Effects of host and virus related factors on interferon- $\alpha$ +ribavirin and pegylated-interferon+ribavirin treatment outcomes in chronic Hepatitis C patients*. Virol J. 2011 May 17;8:234.
- Khaliq S, Jahan S, Pervaiz A, Ali Ashfaq U, Hassan S. *Down-regulation of IRES containing 5'UTR of HCV genotype 3a using siRNAs*. Virol J. 2011 May 13;8:221. doi: 10.1186/1743-422X-8-221.
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- Ilyas M, Asad S, Ali L, Shah M, Badar S, Sarwar MT, Sumrin A. *A situational analysis of HIV and AIDS in Pakistan*. Virol J. 2011 Apr 25;8:191.
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- Tabassum B, Nasir IA, Husnain T. *Potato virus Y mRNA expression knockdown mediated by siRNAs in cultured mammalian cell line*. Virol Sin. 2011 Apr;26(2):105-13. Apr 7.
- Ashfaq UA, Khan SN, Nawaz Z, Riazuddin S. *In-vitro model systems to study Hepatitis C Virus*. *Genet Vaccines Ther*. 2011 Apr 6;9:7.
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- **Books Published:**

- Rao A.Q, Shahid A.A, Husnain.T (2011) Impact of PHY B Gene Transformation in Physiology and Yield of Cotton LAP Lambert Academic Publishing GmbH & Co. KG ISBN (978-3-8465-0191-7).
- Khan A, Shahid A.A Rao A.Q (2011): Epicuticular Wax as a Mechanical Barrier in Transmission of CLCuV VDM VerlagAcademic Publishing GmbH & Co. KG ISBN (978-3-639-38065-1).
- Samiullah.T, Ali.F, Rao A.Q (2011). Production and Purification of Beta-Glucosidase from Bacillus LAP Lambert Academic Publishing GmbH & Co. KG ISBN (978-3-8465-2634-7).
- Rashid, B., Husnain, T., Riazuddin, S. (2010). Gene Pyramiding: An Approach Towards Sustainable Insect Resistance. (Book) by Publishers VDM Verlag Dr. Müller Aktiengesellschaft & Co. Kg Dudweiler Landstr. 99,66123 Saarbrücken, Germany. ISBN 978-3-639-25629-1.

- **Book Chapter**

- Rashid, B., Husnain, T., Riazuddin, S. (2010) Plant Adaptation and Phytoremediation, Chapter 19 Herbicides and pesticides as potential pollutants – A global problem. Ashraf, M.; Ozturk, M.; Ahmad, M. S. A. (Eds.) 1<sup>st</sup> Ed., 482 p., Springer Netherlands - Dordrecht, Hardcover ISBN: 978-90-481-9369-1. <http://dx.doi.org/10.1007/978-90-481-9370-7>

- **Conferences, Seminars and Workshops, etc.**

- 2<sup>nd</sup> International training workshop on DNA microarray for gene expression March 07-11, 2011.

- **Research Collaboration:**

- **Indigenous**

- Bahauddin Zakaria University Multan, CCRI Multan, University of Veterinary and Animals Sciences Lahore

- **Foreign Linkages**

- Pak – USA

- **Funding grants for R&D**

- Funds of Rs 96.276 Million and 223.392 US\$ from different funding agencies for R&D

## **INSTITUTE OF AGRICULTURAL SCIENCE**

- **R&D – An Overview**

IAGS has made tremendous achievements in the field of Research and Development, while producing virus resistant cotton plants. Right now plants are under field testing, sample analyses of transgenics confirmed the presence of desired construct in the transformants. Agrobacterium inoculation of two heterologous viruses showed resistance from the transgenics. Discovery of several new plant/animal virus species, strains, variants was also in place. Identification of new whitefly

biotypes through molecular analyses. Production of genetically recombinant rabies virus vaccine by using local virus isolates and development of quick protocols for the detection and screening of rabies virus. In parallel skilled manpower has also been produced, as postgraduate students. Approx. 20 MSc (Hons) and 3 PhD students graduated from IAGS.

- **Projects**

- **Completed**

- M. Saleem Haider, 2010-11, entitled “Molecular analyses of Potato virus Y infecting potato crop in different regions of Punjab” awarded by the University of the Punjab Lahore
- Ghazala Nasim, 2008-11, entitled “VAM commercialization for higher farm production” by Higher Education Commission Pakistan
- Ghazala Nasim, 2008-11, entitled “Pak-Australia linked project on “Biology and Management of Parthenium weed” by Higher Education Commission Pakistan
- Ghazala Nasim, 2008-11, entitled “Biosorption as a solution to industrial pollution” by Environment Protection Department, Government of the Punjab, Lahore
- Ghazala Nasim, 2010-11. Entitled “Development of software for the identification of Macromycetes of Ayubia National Park.” by University of the Punjab Lahore
- Ghazala Nasim, 2010-11. “Isolation, purification and characterization of Rhizome born fungi of Ginger, *Zingiber officinale* Rosc”, by the University of the Punjab, Lahore.
- Salik Nawaz Khan, (2010-11), entitled “Post harvest disease management of tomato (*Lycopersicon esculentum* Mill.) by application of fungicides” by University of the Punjab
- Arshad Javaid, 2010-11, entitled “Management of Basal Plate Rot Disease of Onion by Extracts and Residue incorporation of *Withania somnifera*” by University of the Punjab Lahore
- Shakil Ahmed, 2010-2011, entitled “Bioconversion and Biotransformation efficacy of *Pleurotus* species without any supplementation” by the University of the Punjab (Grant Rs.150,000/-)
- Shakil Ahmed, 2008-2011, entitled “Development of Myco-technological process for treatment of Pulp & Paper industries effluent” by the Environment Protection Department, Govt. of the Punjab (Grant Rs.7.03 million).
- Amna Shoaib, Completed a research project entitled Fungi, Ultimate solution to industrial heavy metal pollution” awarded by the Environmental Protection Agency, Lahore, Pakistan in 2011 as Research Associate.
- Uzma Bashir, 2010-2011. Fungicidal Activity of Some Allelopathic Medicinal Plants against Root Rot causing Fungi. Funded by academic research, University of the Punjab, Lahore.
- Zill-e-Huma, 2010-11, entitled “Quantitative analysis of ligninolytic enzymes by *Phanerochaete chrysosporium*” by University of the Punjab, Lahore

- **Newly launched**

- M. Saleem Haider, 2011-14, entitled “Pak-US Cotton Productivity Enhancement Project” awarded by United States Department of Agriculture (USDA) through International Centre for Agricultural Research in the Dry Areas (ICARDA).
- Arshad Javaid, (2011-12), entitled “Biological Control of Charcoal Rot of Mungbean by *Trichoderma* and *Sisymbrium Irio*” by University of the Punjab Lahore.
- Arshad Javaid, (2011-12), “Lumsum Research Grant” by University of the Punjab Lahore.
- Shakil Ahmed, entitled “Management of root rot of *Arachis hypogaea L.* in rainfed areas of Punjab”, funded by HEC.
- Shakil Ahmed, entitled “Biological Treatment of pulp and paper industrial effluent by white rot fungi” funded by the University of the Punjab.
- Amna Shoaib, A project entitled “Influence of arsenic on wheat growth and its bioremediation through agricultural waste” awarded by the University of the Punjab is launched in 2011 under the Principal Investigatorship of Dr. Amna Shoaib.
- Uzma Bashir, 2011-2012. Morphological and Molecular characterization of economically important fungal species. Funded by academic research, University of the Punjab, Lahore, Pakistan.

- **Publications**

- Tahir, M., Haider, M.S. and Briddon, R.W. (2010). Chili leaf curl betasatellite is associated with a distinct recombinant begomovirus, *Pepper leaf curl Lahore virus*, in *Capsicum* in Pakistan. *Virus Research*, 149: 109-114. (Impact Factor, 2.563)
- Tahir, M., Haider, M.S. and Briddon, R.W. (2010). First report of Squash leaf curl China virus in Pakistan. *Australasian Plant Disease Notes*, 5: 21-24.
- Tahir, M., Haider, M.S. and Briddon, R.W. (2010) complete nucleotide sequences of a bipartite begomovirus, bitter gourd yellow vein virus infecting *Momordica charantia*. *Archives of Virology*, 155: 1901-1905. (Impact Factor, 1.909)
- Rashid, N., Ahmed, N., Haider, M.S. and Haq, I. (2010). Effective Solubilization and Single-Step Purification of *Bacillus licheniformis*  $\alpha$ -Amylase from Insoluble Aggregates *Folia Microbiol.*, 55(2): 133-136 (Impact Factor, 0.978).
- Parveen, R., Fani, I., Islam, N., Haider, M.S., Chohan, S. and Rehman, A. (2010). Correlation of Biweekly Environmental Conditions on CLCuV Disease Growth in Pakistan, *European Journal of Scientific Research*, 42(4): 614-621.
- Parveen, R., Fani, I., Chohan, S., Haider, M.S. and Naz, S. (2010). Effect of Nitrogen and Carbon from different organic supplements on pathogenic potential of *phytophthora capsici*, in the collar rot of chillies. *European Journal of Scientific Research*, 43(1): 107-112.

- Rasool, N., Rashid, N., Javed, M.A. and Haider, M.S. (2010). Requirement of Pro-peptide in proper folding of subtilisin-like Serine protease TK0076. *Pak. J. Bot. Accepted* (Impact Factor 0.520)
- Rashid, N., Siddiqui, M.A., Haider, M.S. and Javed, M.A. (2010). Crystallization of Fructose 1,6-bisphosphatase from the Hyperthermophilic Archaeon *Thermococcus kodakaraensis*. *Pakistan Journal of Botany*, 42(4): 2313-2316. (Impact Factor 0.520)
- Parveen, R., Fani, I., Rasheed, I., Chohan, S., Rehman, A. and Haider, M.S. (2010). Identification of *Cotton leaf curl begomovirus* in Pakistan in different Symptomatic and Asymptomatic Plants through Enzyme-linked Immunosorbent Assay (ELISA). *European Journal of Social Sciences*, 14(4): 502-507.
- Ahmad, I., Nasir, I.A., Haider, M.S., Javed, M.A., Javed, M.A., Latif, Z. and Husnain, T. (2010). *In-vitro* induction of Mutation in Potato Cultivars. *Pakistan Journal of Phytopathology*, 22(1): 51-57.
- Perveen, R., Khan, M.A., Islam, N., Haider, M.S. and Nasir, I.A. (2010). Whitefly population on different cotton varieties in Punjab. *Sarhad Journal of Agriculture*, 26(4): 583-589.
- Nasir, I.A., Tabbasum, B., Latif, Z., Javed, M.A., Haider, M.S., Javed, M.A. and Husnain, T. (2010). Strategies to control Potato Virus Y under *In-vitro* conditions. *Pakistan Journal of Phytopathology*, 22(1): 63-70.
- Haider, M.S., Afghan, S., Riaz, H., Javed, M.A., Tahir, M., Rashid, N. and Iqbal, J. (2011). Identification of two *sugarcane mosaic virus* (SCMV) variants from naturally infected sugarcane crop in Pakistan. *Pak. J. Bot.*, 43(2): 1157-1162 (Impact Factor 0.520)
- Shakoor, S., Chohan, S., Riaz, A, Perveen, R., Naz, S., Mehmood, M.A., Haider, M.S. and Ahmad, S. (2011). Screening of systemic fungicides and biochemicals against seed borne mycoflora associated with *Momordica charantia*. *African Journal of Biotechnology*, 10(36): 6933-6940. (Impact Factor 0.573)
- Nasim, G. (2010). Decaying leaf sheaths of wheat-An unusual niche for *Glomus monosporum*. *Pakistan Journal of Botany*, 42(2): 1313-1316. [IF: 0.947]
- Nasim, G. (2010). The role of arbuscular mycorrhizae in inducing resistance to water and nutrient stress in crops. In: "Plant Adaptations and Phytoremediation", Editors: M. Ashraf, M. Ozturk and M. S. A. Ahmad. Published by Springer Verlag, Germany. Pp. 119-142.
- Nasim, G., Ali, M. and Mehmood, N. (2010). Molecular analysis of *Ganoderma lucidum* isolates from Lahore. *Pakistan Journal of Botany*, 42(5): 3307-3315 [IF:0.947]
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- Nasim, G., Khokhar, I., Mushtaq, S. and Mukhtar, I. (2010). Distribution of filamentous fungi in different industrial effluents. *Mycopath*, 8(1): 43-46.

- Nasim, G., Khokhar, I., Mukhtar, I., Mushtaq, S. And Ali, A. (2010). Long-term preservation of fungal cultures by lyophilization. *Mycopath*, 8(1): 47-51.
- Ali, A., Bajwa, R., Nasim, G., Mehmood, N. and Jabeen, R. (2010). Screening of various Trichoderma isolates collected from Pakistan with their subsequent genetic homology by RAPD analysis. *International Journal of Biotechnology*, 7(4): 383-391.
- Nasim, G. (2011). Crop Straw Burning Practice-A Threat to arbuscular mycorrhizal biodiversity. *Pakistan Journal of Botany*, 43(6): 2961-2966. [IF:0.947].
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- Nasim, G. and Ali, M. (2011). Estimation of antimicrobial potential of *Ganoderma lucidum* (Leyss. ex Fr.) Karst. Extracts. *Pakistan Journal of Botany*. 43(6SI): 183-189. Special Issue (Medicinal Plants: Conservation and sustainable use. [IF:0.947].
- **Books Published:**
  - Ghazala Nasim (2010). "Identification Guide and Colour Atlas for flora of Punjab University, Quaid-e-Azam Campus". (Publishers, University of the Punjab at RT, Printers, Royal Park, Lahore, Pakistan) pp250.
  - Ghazala Nasim (2010). A monograph on "Glomalean Spore Flora of Pakistan". Published by Higher Education Commission of Pakistan (HEC) pp333.
  - Ghazala Nasim (2011). Flora of Punjab University, Sir Syed Campus and Ayubia National Park, (Publishers, University of the Punjab at RT, Printers, Royal Park, Lahore, Pakistan) pp329.
  - Ghazala Nasim & Mohammad Ali (2011). Getting the Basidio Blue Prints. Lambert Academic Publishing (LAP), Germany. pp 68
- Articles Published in Urdu:**
  - Malik, M.A., Iqbal, S.M., Ayub, N., Iqbal, U., Malik, S.R. and Akram, A. (2010). Identification of resistant sources in chickpea against *Fusarium* wilt. *Pakistan Journal of Botany*, 41(1): 417-426.
  - Yaqub, M., Iqbal, S.M., Bakhsh, A., Mansoor, M., Khan, N.U. and Iqbal, U. (2010). "Dera moth" the first yellow mosaic virus resistant variety of mothbean released in Pakistan. *Pakistan Journal of Phytopathology*, 22(1): 1-5.
  - Iqbal, S.M., Ghafoor, A., Ali, S. and Ahmad, I. (2010). Identification of resistant source of Ascochyta blight from local lentil germplasm. *Pakistan Journal of Phytopathology*, 22(1): 29-33.
  - Hussain, A., Iqbal, S.M., Ghafoor, A. and Ayub, N. (2010). Biochemical variability among the isolates of *Sclerotium rolfsii* of chickpea in Pakistan. *Pakistan Journal of Phytopathology*, 22(1): 34-39.
  - Iqbal, S.M., Ghafoor, A., Ikram-ul-Haq and Ahmad, I. (2010). Multiple disease resistance in Chickpea. *Pakistan Journal of Phytopathology*. *Pakistan Journal of Phytopathology*, 22(2): 84-94.

- Iqbal, U., Sultan, T., Iqbal, S.M., Haq, U. and Malik, S.R. (2010). Screening of local mashbean germplasm to Charcoal rot disease. *Pakistan Journal of Phytopathology*, 22(2): 126-129.
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- Steve W. Adkins, Chris O'Donnell, Naeem Khan, Thi Nguyen, Ikramullah Khan, Asad Shabbir, Kunjitapatham Dhileepan, Doug George, Zahid Hanif, Ruey Toh, Amalia Belgeri Garcia, Sheldon Navie, Lorraine Strathie, Andrew McConnachie, Lisanework Nigatu, Gul Hassan, Ghazala Nasim and Wondimagegnehu Mersie (2010). Towards the sustainable management of parthenium weed (*Parthenium hysterophorus* L.) under a changing climate: An international collaborative approach. Presented in the Third International Conference on Parthenium Weed, December 8-10, 2010, organized by Indian Agricultural Research Institute, New Delhi and Entomological Society of India with Indian Council of Agricultural Research, New Delhi, Medical Council of India, National Biodiversity Authority, India, Department of Biotechnology.
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- Nasim G. 2011. "Deforestation-An ailment or a curse", Seminar on World Environment Day, 6<sup>th</sup> June 2011, on the theme "Forests-Nature at Your Service" organized by Environment Protection Department, Government of the Punjab at Alhamra arts council, the Mall Lahore.
- Nasim G. 2011. "Scientific book reading and writing". Urdu Science Board (Cabinet Division), NEEC (National Educational Equipment Centre), 2<sup>nd</sup> July, 2011, Lahore.
- Anwar, S.A., McKenry, M.V. and Ahmad, H.A. (2011). Nematode and fungal communities associated with mango decline of southern Punjab. 50<sup>th</sup> Annual meeting of the Society of Nematologists at Corvallis, Oregon, USA, on July
- Anwar, S.A. and Iqbal, S.M. (2011). Biodiversity of among nematodes of vegetable crops. Biodiversity symposium on July 7-9, 2011 at Islamabad.
- Iqbal, S.M. and Anwar, S.A. (2011). Pathogenic Diversity in *Ascochyta Rabiei* isolates collected from Pakistan. National conference on "Sustainable Agriculture in Changing Climate", from July 07-09, 2011, at Peshawar University campus, Bara Gali, Abbottabad.
- Qaiser, S., Anwar, S.A., Javed, N. and Kamran, M. (2011). Association of plant parasitic nematodes with four vegetables genotypes. "Plant Health Care for Food Security" Annual Meeting and National symposium of Indian Society of Plant Pathologists, held on April 28-29.
- Qasir, S., Anwar, S.A. and Javid, N. (2011). Nematodes associated with four vegetables. 8<sup>th</sup>. Meeting of Pakistan Phytopathology Society at Faisalabad on November 28-29, 2011.

#### **Seminars Delivered**

- Nematodes infecting vegetables and ornamentals and their impact on growth. Workshop on Identification and Demonstration of Plant Parasitic and Beneficial Nematodes on February 10, 2011. [At Golden Jubilee Celebrations of University of Agriculture, Faisalabad].
- Anwar, W, Khan S.N., Aslam M and Tahira, JJ. 2011. Occurrence of insect associated fungi in hot agroecological zones of Pakistan. International conference on sustainable approaches for



- pest and vector control management in Pakistan. Government college university, Lahore. Feb. 21-22, 2011.
- Anwar, W, Khan S.N., and Aslam M. 2011. Occurrence of insect associated fungi in soils of cotton agroecological zones of Punjab, Pakistan 2nd International conference of plant scientists & 11th national meeting of plant scientists. Feb. 22-24, 2011
  - Bisma B, Saeed R, Khan S.N., Tahira JJ, Suliman R and Anwar W. 2011. Impact of urban waste pollution on water quality of CBDC Lahore for its impact on human health. 2nd International conference of plant scientists & 11th national meeting of plant scientists. Feb. 22-24, 2011.
  - Shah MH, Bashir RBU, Khan S.N., and Javaid A. 2011. Allelopathy of Rice mulching on the growth of *Avena sativa*. 2<sup>nd</sup> International conference of plant scientists & 11th national meeting of plant scientists. Feb. 22-24, 2011.
  - Khan S.N., Moazam X, Sadaf S and Sharif N. 2011. Post harvest fungi pathological constraints associated with guava in market. 2<sup>nd</sup> International conference of plant scientists & 11th national meeting of plant scientists. Feb. 22-24, 2011.
  - Nasrullah S Khan S.N., Mahmood, N, Moazam X and Sharif N. 2011. Evaluation of *Zea mays* L. against *Cercospora zea maydis* an emerging threat to commercial maize germplasm by application of molecular tools. 2nd International conference of plant scientists & 11th national meeting of plant scientists. Feb. 22-24, 2011.
  - Suliman R, Tahira JJ, Farooq M, Khan S.N., and Anwar W. 2011. Impact of Bamban Wala Ravi Baidian canal water quality deterioration on productivity of agricultural land. 2nd International conference of plant scientists & 11th national meeting of plant scientists. Feb. 22-24, 2011
  - Anwar, W, Khan S.N., and Aslam M. 2011. Occurrence and diversity of insect associated fungi in soils of cotton agroecological zones of Punjab, Pakistan 2<sup>nd</sup> International conference of plant scientists & 11<sup>th</sup> national meeting of plant scientists. Feb. 22-24, 2011.
  - Zaman N, Ahmad S and Khan S.N.. 2011. Weeds diversity in groundnut fields in the main groundnut growing areas of Punjab, Pakistan. 2<sup>nd</sup> International conference of plant scientists & 11th national meeting of plant scientists. Feb. 22-24, 2011.
  - Zaman N, Ahmad S and Khan S.N. 2011. Efficacy of mulching practices on root rot disease of groundnut (*Arachis hypogea* L.). 2<sup>nd</sup> International conference of plant scientists & 11th national meeting of plant scientists. Feb. 22-24, 2011.
  - Tahira JJ, Khan S.N., Suliman R and Anwar W. (2011). Impact of microbial and chemical amended soil on wheat growth. National symposium on "sustainable agriculture in changing climate" Bara Gali (Abbot Abad) organized by Pakistan agriculture Scientist forum, July 7-9, 2011.

- Khan S.N., Sarwar A and Riaz T. (2011). Effect of storage temperature on field performance and gladiolus stick quality. National symposium on “sustainable agriculture in changing climate” Bara Gali (Abbot Abad) organized by Pakistan agriculture Scientist forum, July 7-9, 2011
- Khan S.N., Ahmad I and Auyub N. 2011. Morphological and pathogenic diversity of population of *Macrophomina phaseolina* against commercial germplasm of *Helianthus annuus*. National Symposium on biodiversity of Pakistan, Pakistan museum of natural history, Islamabad, June 7-9, 2011
- Anwar W, Khan S.N. and Haider MS. 2011. Biodiversity of insect associated fungi in different agro ecological zones and land use types. National Symposium on biodiversity of Pakistan, Pakistan museum of natural history, Islamabad, June 7-9, 2011
- Dr. Ahmad Ali Shahid, Assistant Professor, 2<sup>nd</sup> International Training Workshop on DNA Microarray for Gene Expression, CEMB (March 07-11, 2011).
- Tehmina Anjum, Assistant Professor (TTS), Workshop on pulse and legume research by The Plant BioScience Cluster, on Friday 5th February 2010, ACPFG Seminar Room, Waite Campus, University of the Adelaide, Adelaide, Australia.
- Tehmina Anjum, Assistant Professor (TTS), Presented oral paper entitled “Allelochemicals: A Natural Source for Future Environment Friendly Herbicide Analogues” in the First International Conference on Organic Agriculture - Limitations and Future, October 11 –14, 2010. Ain Shams University, Cairo, Egypt.
- Tehmina Anjum, Assistant Professor (TTS), Presented oral paper entitled “A report of new bioactive Annuionone from sunflower leaves” in the First International Conference on Natural Product – Metabolomics a new frontier in natural product science, November 13 –16, 2011. Universiti Putra Malaysia, Putrajaya, Malaysia. Page # 55.
- Tehmina Anjum, Assistant Professor (TTS), Presented oral paper entitled “Effect of cultural extracts of *Trichoderma species* on *Alternaria citri*” in the 6<sup>th</sup> World Congress on Allelopathy – Allelopathy research for sustainable development- from theory to practice, December 15 –19, 2011. South China Agricultural University, Guangzhou, China. Page # 138.
- Javaid A, Iqbal D (2010). Management of *Sclerotium rolfsii* by *Coronopus didymus*. 1<sup>st</sup> International Conference on Antimicrobial Research. November 3-5, 2010, Valladolid, **Spain**.
- Javaid A, Kanwal Q, Hussain I, Sidiqi HL (2010). Antimicrobial flavonoids isolated from mango leaves. 1st International Conference on Antimicrobial Research. November 3-5, 2010, Valladolid, Spain.
- Javaid A (2011). Beneficial microorganisms for sustainable mungbean production. 2nd International Conference of Plant Scientists & 11th National Meeting of Plant Scientists, February 22-24, 2011 at GC University Lahore.

- Javaid A and Akbar M (2011). Alternative control of *Rumex dentatus* in wheat fields by metabolites of *Drechslera* spp. National Conference on Sustainable Agriculture in Changing Climate. July 7-9, 2011, Peshawar University Summer Campus, Bara Gali, Abbotabad, Pakistan.
- Dr. Shakil Ahmed, Assistant Professor, One day Training workshop on 12<sup>th</sup> November, 2010 entitled Research Management held in IQTM, PU, Lahore organized by ORIC University of the Punjab, Lahore and HEC Islamabad, participated as a Resource Person.
- The 8<sup>th</sup> National Conference of Pakistan Phytopathological Society (PPS) November 28-29, 2011, at Department of Plant Pathology, University of Agriculture, Faisalabad organized Pakistan Phytopathological Society (PPS) and sponsored by Pakistan Science Foundation (PSF), Islamabad, USDA, IAR, and HEC, Islamabad, participated as Session Chair.

#### **Organized:**

- One day Training workshop on 12<sup>th</sup> November, 2010 entitled Research Management held in IQTM, PU, Lahore organized by ORIC University of the Punjab, Lahore and HEC Islamabad.
- One day Training workshop on 27<sup>th</sup> July, 2010 entitled Research Management held in IQTM, PU, Lahore organized by ORIC University of the Punjab, Lahore and HEC Islamabad.
- One day workshop on 14<sup>th</sup> February, 2011 entitled Exploring Electronic resources for Research “Downloading Books & Journals” held in the Al-Razi Hall, Centre for Undergraduate Studies, PU, Lahore organized by ORIC and Centre for under graduate studies (CUGS), University of the Punjab, Lahore.

#### **Oral Presentation**

- The 1<sup>st</sup> International Conference on “Organic Agriculture- Limitations and Future” being held at Cairo, Egypt from October 11-14-2010. My research paper entitled “Management of root rot disease of groundnut (*Arachis hypogaea* L.) by plant extracts” has an Oral presentation.
- The 2<sup>nd</sup> International Conference of Plant Scientists February 22-24, 2011, at Department of Botany, GC University Lahore organized by Pakistan Botanical Society (PBS) and sponsored by Pakistan Science Foundation (PSF), Islamabad, Pakistan Academy of Sciences (PAS), Islamabad, Pakistan and HEC, Islamabad. The title of oral talk was Shakil Ahmed, N. Zaman and S. N. Khan. Response of groundnut genotypes against root rot disease in District Mianwali
- The 2<sup>nd</sup> International Conference of Plant Scientists February 22-24, 2011, at Department of Botany, GC University Lahore organized by Pakistan Botanical Society (PBS) and sponsored by Pakistan Science Foundation (PSF), Islamabad, Pakistan Academy of Sciences (PAS), Islamabad, Pakistan and HEC, Islamabad. The title of oral talk was Zaman N, Ahmad S and Khan SN. Weeds diversity in groundnut fields in the main groundnut growing areas of Punjab, Pakistan.
- The 2<sup>nd</sup> International Conference of Plant Scientists February 22-24, 2011, at Department of Botany, GC University Lahore organized by Pakistan Botanical Society (PBS) and sponsored by

Pakistan Science Foundation (PSF), Islamabad, Pakistan Academy of Sciences (PAS), Islamabad, Pakistan and HEC, Islamabad. The title of oral talk was Zaman N, Ahmad S and Khan SN. Efficacy of mulching practices on root rot disease of groundnut (*Arachis hypogaea* L.).

#### Poster Presentation

- October 2010 - The 1<sup>st</sup> International Conference on “Organic Agriculture- Limitations and Future” being held at Cairo, Egypt from October 11-14-2010. My research paper entitled “Management of root rot disease of groundnut (*Arachis hypogaea* L.) by plant extracts” has an Oral presentation
- November 2010 - One day Training workshop on 12<sup>th</sup> November, 2010 entitled Research Management held in IQTM, PU, Lahore organized by ORIC University of the Punjab, Lahore and HEC Islamabad, participated as a Resource Person.
- February 2011 - The 2<sup>th</sup> International Conference of Plant Scientists February 22-24, 2011, at Department of Botany, GC University Lahore organized by Pakistan Botanical Society (PBS) and sponsored by Pakistan Science Foundation (PSF), Islamabad, Pakistan Academy of Sciences (PAS), Islamabad, Pakistan and HEC, Islamabad. The ten Posters were presented.

#### Attended & Participated

- October 2010 - The 1<sup>st</sup> International Conference on “Organic Agriculture- Limitations and Future” being held at Cairo, Egypt from October 11-14-2010. My research paper entitled “Management of root rot disease of groundnut (*Arachis hypogaea* L.) by plant extracts” has an Oral presentation
- November 2010 - One day Training workshop on 12<sup>th</sup> November, 2010 entitled Research Management held in IQTM, PU, Lahore organized by ORIC University of the Punjab, Lahore and HEC Islamabad, participated as a Resource Person.
- February 2011 - The 2<sup>th</sup> International Conference of Plant Scientists February 22-24, 2011, at Department of Botany, GC University Lahore organized by Pakistan Botanical Society (PBS) and sponsored by Pakistan Science Foundation (PSF), Islamabad, Pakistan Academy of Sciences (PAS), Islamabad, Pakistan and HEC, Islamabad. The title of oral talk was Response of groundnut genotypes against root rot disease in District Mianwali and ten Posters were presented.
- Dr. Uzma Bashir, Assistant Professor, Justina Jane Tahira and Uzma Bashir 2011. Biological control of *Fusarium solani* by aqueous and organic solvent extracts of allelopathic plants leaves. 2<sup>nd</sup> international conference of plant scientists & 11<sup>th</sup> national meeting of plant scientists. Department of Botany GC university Lahore Pakistan 22<sup>nd</sup> – 24<sup>th</sup> Feb. 2011. P-116 pp166.
- Dr. Shazia Shafique, Assistant Professor Shafique, S. and Shafique, S. (2010). Fungitoxic activity of aqueous and organic solvent extracts of *Tagetes erectus* on phytopathogenic fungus – *Ascochyta rabiei*. International Conference on Antimicrobial Research, held Nov. 3-5, Valladolid, Spain, p 140.

- Dr. Sobiya Shafique, Assistant Professor Shafique, S., Shafique, S. and Javaid, A. (2010). Evaluation of fungistatic activity of rice varieties against phytopathogenic fungi. International Conference on Antimicrobial Research, held Nov. 3-5, Valladolid, Spain, p 140.
- Mr. Zakauallah, Lecturer National Symposium on “Emerging Challenges and Advances in Wastewater Management” held on June 23, 201, University of Gujrat, (Pakistan)
- Training workshop on Natural Resources Management through Community Participation organized by Pakistan Academy for Rural Development Peshawar, September 26 to October 01, 2011.

### Research Journals

- Mycopath (bi-annual research journal)
- HHG Newsletter (bi-annual)
- Agricultural News (quarterly)

### Research Collaboration

#### • Indigenous

- Central Cotton Research Institute, Multan
- Ayub Agricultural Research Institute, Faisalabad
- Environment Protection Department (EPD), Lahore
- HEC Ph.D. Scholar Aqeel Ahmad under HEC Indigenous scholarship programme, Research entitled “Inducible defense responses in tomato triggered by *Penicillium oxalicum* against *Alternaria alternata* leaf spots of tomato” is working under the supervision of Dr. Shazia Shafique.

#### • Foreign Linkages

- Punjab University – PARB – University of Toronto, Canada
- Punjab University – ICARDA –USDA, University of Arizona, USA

#### • Funding grants for R&D

- M. Saleem Haider. An amount of Rs.30,80,679/- has been granted for a research project entitled “Pak-US Cotton Productivity Enhancement Project” by USDA through International Centre for Agricultural Research in the Dry Areas (ICARDA).
- M. Saleem Haider. PARB funded research project for CLCuV resistance, Worth Rs 28 million (2009-2013)
- Tehmina Anjum. Principal investigator in one year (2010-2011) project entitled “In vitro Control of *Alternaria citri* using antifungal potentials of *Trichoderma* species”. Grant = 1,50,000/Rs by PU.
- Tehmina Anjum. Strengthening of Fungal Biotechnology Lab in Institute of Agricultural Sciences, University of the Punjab. (2011 - 2012). Grant = 0.772 Million Rs by PU.
- Tehmina Anjum. Principal investigator in one year (2011-2012) project entitled “Use of extracts from local medicinal trees to control *Alternaria* leaf spot of tomato”. Grant = 1,50,000/Rs by PU.

- Arshad Javaid (2011-12), entitled “Biological Control of Charcoal Rot of Mungbean by *Trichoderma* and *Sisymbrium Irio*” by University of the Punjab Lahore. (Grant Rs.150,000/-)
- Arshad Javaid, (2011-12), “Lumsum Research Grant” by University of the Punjab Lahore (Grant Rs.769,000/-)
- Shakil Ahmed, entitled “Management of root rot of *Arachis hypogaea L.* in rainfed areas of Punjab”, funded by HEC. (Grant Rs.1.500 million)
- Shakil Ahmed, entitled “Biological Treatment of pulp and paper industrial effluent by white rot fungi” funded by the University of the Punjab. (Grant Rs.150,000/-)
- Shazia Shafique. Principal Investigator in one year (2011) project entitled “*Cymbopogon Citratus* as a remedy to control *Alternaria* species - a cause of leaf spot diseases” Grant Rs.150, 000/-)
- Sobiya Shafique. Principal Investigator in one year (2011) project entitled “Bioefficacy of extracts of *Ageratum cornyzoides* to control *Drechslera* species” awarded by the University of the Punjab, Lahore, Pakistan, 2011. Grant Rs.150,000/-)

## INSTITUTE OF BIOCHEMISTRY AND BIOTECHNOLOGY

### • R&D-An Overview

The faculty of IBB actively pursuing research projects of national interests inter alia immunodiagnosis of viral and bacterial infections; purification and applications of industrially important enzymes; characterization of antifungal proteins of plant origin, identification of biomarkers for early diagnosis of cancer, production of monoclonal antibodies, peptide hormones, interferon's and cytokines screening of genetic disorders in local population and nanotechnology-based detection of allergens in local environment. During the year 2010-11, the Institute had several publications to its credit. In particular, many research papers were published in international impact factor journals and the research findings were presented at the national and international forum. A highly competitive research grant of US\$ 12,000 was also awarded to one of the faculty member. The faculty members also received research grants, to strengthen the research activities of the Institute.

### Projects

(i) Projects completed

Researcher/ sponsoring agency	Research project with duration	Financial support	Main goals (proposed/achieved)
Mahjabeen Saleem University of the Punjab	Molecular Cloning and Expression of Xylanase Gene from <i>Bacillus sp.</i> in <i>E. coli.</i>	Rs. 0.1 Million	Cloning and expression of xylanase gene and study of its applications in paper industry
Amtul Jamil Sami World Wild Life Fund	Comparative Studies on the Phylogenetic analysis of Indus Dolphin & Gangies Dolphin	Rs. 0.2 Million	Study of evolutionary and phylogenetic analysis of indigeneus Dolphin species.

Amtul Jamil Sami HEC	Molecular Basis of Action of Neem Derived Compounds as Bio-pesticides	Rs. 1.95 Million	Study the role of Neem derived compounds as Biopesticides.
Saima Sadaf TWAS	Recombinant production of biopharmaceutical using a prokaryotic expression system	\$ 12,000 (USD)	Cloning, expression, partial characterization and biological activity assessment of an important biopharmaceutical.
Saima Sadaf HEC	Free circulating molecular markers for cancer diagnosis and prognosis	Rs.4.19 Million	Analysis of DNA/RNA based markers for early diagnosis of cancer
Saba Irshad University of the Punjab	Linkage studies of Microcephaly in Pakistani kindred	Rs. 0.1 Million	Genetic and linkage based studies of children suffering from microcephaly.
Zahoor Qadir Samra University of the Punjab	Anti-cancer Drug Delivery through Magnetic Nanoparticles	Rs. 0.1 Million	Preparation of nano-based magnetic particles for effective delivery of anti-cancer drugs.
Mamoona Naz University of the Punjab	The role of estrogen-metabolizing genes CYP17 and Catechol-o-methyltransferase in association risk of epithelial ovarian cancer	Rs. 0.1 Million	Study of the role/association of CYP17 mutation and polymorphism with ovarian cancer.
Shahbaz Aslam University of the Punjab	Use of laccases in textile industry	Rs. 0.1 Million	Study the applications of fungal laccases in textile industry
Iram Gull University of the Punjab	Expression of Human INF- $\alpha$ 2-b in <i>E. coli</i> for Therapeutic Purposes	Rs. 0.1 Million	In house production of human interferon $\alpha$ 2 for the treatment of Hepatitis.
Afshan Iqbal University of the Punjab	Cloning and Expression of Human Tumor Necrosis Factor in <i>Escherichia coli</i> .	Rs. 0.1 Million	Cloning and expression analysis of human TNF in <i>E.coli</i> .
Beenish Kashif University of the Punjab	Enhanced production and purification of L-glutamate from bacterial strains	Rs. 0.1 Million	Production of L-glutamate and its purification.
Ferhana Hussain University of the Punjab	Over expression of human erythropoietin gene	Rs. 0.1 Million	Expression of human erythropoietin gene through recombinant DNA technology.

**(ii) Newly launched**

<b>Researcher/ sponsoring agency</b>	<b>Research project with duration</b>	<b>Financial support</b>	<b>Main goals (proposed/achieved)</b>
Mahjabeen Saleem University of the Punjab	Potential of bacterial strains for bioremediation of pulp and paper industry effluents	Rs. 0.15 Million	To check the ability of biological treatment process for decolourization of industrial effluents
Amtul Jamil Sami University of the Punjab	human eye lens of Local population.	Rs. 0.15 Million	
Amtul Jamil Sami HEC	Molecular Basis of Action of Neem ( <i>Azadirachta Indica</i> ) derived compounds as Bio-pesticides.	Rs. 2.262 Million	
Saima Sadaf PAS	Production of recombinant cytokine of therapeutic importance	Rs.1.98 Million	Production of granulocyte colony stimulating factor for neutropenia treatment
Saba Irshad University of the Punjab	Characterization of BCR-ABL in CML patients of Pakistan	Rs. 0.15 Million	<ul style="list-style-type: none"> <li>• To characterize all possible BCR-ABL Fusion Transcripts by using RT PCR</li> <li>• To check frequency of those fusion transcript in CML patients of Pakistan</li> <li>• To check the presence of a typical fusion transcripts other than b2a2, b3a2, in CML patients of Pakistan</li> </ul>
Zahoor Qadir Samra University of the Punjab	Surface Layer Proteins as Nano carrier for Therapy and Diagnosis Duration: 1 Year	Rs. 0.125 Million	<ul style="list-style-type: none"> <li>• Isolation and characterization of S-layer protein from bacteria</li> <li>• Identification by gold-conjugated antibody and microscopy</li> <li>• Conjugation of anti-cancer drug with S-layer protein.</li> </ul>



Mamoona Naz University of the Punjab	Identification of a high risk haplotype for the <i>dystrobrevin binding protei-1 (DTNBP-1)</i> gene and <i>interleukin-12B</i> in schizophrenia as genetic markers Duration: 1 Year	Rs. 0.125 Million	Role of diagnostic strategy in treatment of schizophrenia
Iram Gull University of the Punjab	Determination of uric acid levels by uric acid test strips Duration: 1 Year	Rs 0.125 Million	<ul style="list-style-type: none"> <li>• To develop easy to use enzyme based colorimetric test strips for the qualitative and semi-quantitative determination of uric acid in human whole blood, serum and urine samples.</li> <li>• Development of low cost disposable paper based uric acid test strips.</li> </ul>
M. Shahbaz Aslam University of the Punjab	Fungal laccases for paper pulp bleaching Duration: 1 Year	Rs. 0.125 Million	<ul style="list-style-type: none"> <li>• Replacing conventional and polluting chlorine based delignification procedures by enzyme based methods.</li> <li>• Providing milder and cleaner strategy for pre-treatments of wood pulp with lignolytic enzymes.</li> </ul>
Afshan Iqbal University of The Punjab	Isolation, Characterization and immobilization of extracellular alpha amylase from mutant <i>Bacillus Subtilis</i> Duration: 1 Year	Rs. 0.125 Million	<ul style="list-style-type: none"> <li>• Development of mutant <i>Bacillus subtilis</i></li> <li>• Enzyme estimation</li> <li>• Purification and characterization of the enzyme</li> <li>• Enzyme Immobilization</li> <li>• Immobilized enzyme assay</li> </ul>
Beenish Kashif Hashmi University of the Punjab, Lahore.	<i>Studies on antioxidant enzyme activities at different ripening stages of fruits and vegetables.</i> Duration: 1 Year	Rs. 0.125 Million	<ul style="list-style-type: none"> <li>• Sampling of plant material (available fruits and vegetables)</li> <li>• Preparation of enzyme extract</li> </ul>

			<ul style="list-style-type: none"> <li>• Estimation of total protein content</li> <li>• Estimation of antioxidant enzyme activity</li> <li>• Isolation and purification of the highest activity antioxidant enzyme</li> <li>• Characterization of the purified antioxidant enzyme</li> </ul>
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### Publications

- Z.Q. Samra, U. Javaid, S. Ghafoor, A. Batool, N. Dar and M.A. Athar, (2011), PCR Assay *Targetting virulence genes of Helicobacter pylori isolated from drinking water and clinical samples in Lahore metropolitan, Pakistan*. *J. Water and Health*, 9 (1) 208-216, 2011.
- H. Aziz, M. L. Gil, Y. Waheed, U. Adeeb, A. Raza, I. Bilal and M. A. Athar (2011), Evaluation of prognostic factors for peg interferon alfa-2b plus ribavirin treatment of HCV infected patients in Pakistan. *Journal of Molecular Epidemiology and Evolutionary Genetics in Infection Diseases*, 11(2011):640-645.
- H. Aziz, M.A.Athar, S.Murtaza, J. Irfan, Y. Waheed, I. Bilal and A. Raza (2011), Predictors of response to antiviral therapy in patients with chronic hepatitis C from Pakistani population. *Chinese Medical Journal*, 2011:124(9):1333-1337.
- Z.Q. Samra, S. Perviaz, S. Shaheen, N. Dar, and M.A. Athar (2011), *Determination of oxygen derived free radicals producer (Xanthine oxidase) and scavenger (Paraoxonase 1) Enzymes and lipid parameters in different cancer patients*. *Clinical Lab J*. 57:741-747.
- Z.Q.Samra, N. Dar and M.A. Athar (2011) Computational comparison of  $\beta$ -mannosidases of animals, human, microbes and plants, *Turkish journal of Veterinary and Animal Sciences*, 35(6): 395-404.
- Saleem M., Aslam F., Muhammad S Akhtar, Mohsin Tariq and Muhammad I Rajoka. Characterization of a thermostable and alkaline xylanase from *Bacillus* sp. and its bleaching impact on wheat straw pulp. *World Journal of Microbiology and Biotechnology*. DOI 10.1007/s11274-011-0842-z
- Saleem, M., Rehman A., Yasmin, R. and Munir, B. Biochemical analysis and investigation on the prospective applications of alkaline protease from a *Bacillus cereus* strain. *Molecular Biology Reports*. DOI 10.1007/s11033-011-1033-6
- Khurshid, R. Mahjabeen Saleem, M. S. Akhtar, Salim, A. Granzyme M: characterization with sites of post-translational modification and specific sites of interaction with substrates and inhibitors. *Molecular Biology Reports*, 2011,38,2953.

- Naz M., Riaz M., Saleem M. Potential role of Neuregulin 1 and TNF-alpha (-308) polymorphism in schizophrenia patients visiting hospitals in Lahore, *Molecular Biology Reports*. DOI 10.1007/s11033-010-0606-0
- Sami A. J., Farhana Tabassum and A R Shakoori., 2011, Biodegradation of cellulose and xylane by a serious paddy pest by *Oxya chinensis* *Annals of Biological sciences* 1. (3) 1-12.
- Sami A. J., F U Rahman, M. Ayaz Anwar and AR Shakoori (2011) *Pakistan Journal of Zoology Digestive Cellulose hydrolyzing activity (endo-  $\beta$ -1, 4- D-glucanase) in the gut and salivary glands of Blister beetles *Mylabris pustulata* (26) 393-401.*
- Sami A. J., and A.R. Shakoori 2011 Inhibition of cellulase activity and growth retardation of associated bacterial strains from *Aulacophora foviecollis*; a green insect pest by two glycosylated – flavonoids, isolated from *Mangifera indica* leaves *Journal of Medicinal Plant Research* Vol 18 184-190.
- Irshad S., Abdul Mannan, Bushra Mirza, Antimalarila activity of three Pakistani Medicinal Plants. *Pakistan Journal of Pharmaceutical Sciences*, (2011): 24(4): 589-591. (IF: 0.825)
- Irshad S., Muneeba Butt, Hira Younus, In-Vitro Antibacterial Activity of Two Medicinal Plants Neem (*Azadirachta indica*) and Peppermint. *International Research Journal of Pharmaceuticals*, (2011): 1(1): 1-6.
- Jamil A., Saba Irshad, “Exclusion Mapping of Primary Microcephaly in Pakistani Kindred”, *Pak. J. Biochem. Mol. Biol.* 2011; 44(3): 95-98.
- Irshad S., Sana Anwar, Blessy Shahzad, Linkage Study of Primary Microcephaly in Pakistani Kindred. *Research journal of Biology*, (2011): 1(1): 1-6.
- Irshad S., Muneeba Butt, Hira Younus, *In-Vitro* antibacterial activity of *Aloe barbadensis* Miller (AloeVera), *International Research Journal of Pharmaceuticals*, (2011): 1(2): 60-65.
- Irshad S., Irsa Mateen. “A Review on DNA VACCINES” *Journal of Health Sciences*, (2011):1(1)1-7.
- **Conferences/ Seminars/ Workshops etc**

The Institute organized a seminar on “Tuberculosis Epidemiology” and workshop on “Computational Resource for Protein Modeling”

  - Dr. Mahjabeen Saleem attended the workshop on “Computational Resources for Protein Modeling” at Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore on 14-19 March, 2011.
  - Dr. Mahjabeen Saleem attended the workshop on “Immunoassay” at PMRC, Shaikh Zayed Hospital, Lahore on 23-26 February, 2011.
  - Dr. Mahjabeen Saleem attended the seminar on “Water and Energy Crisis and its solution” at Centre for Undergraduate Studies, University of the Punjab, on 9<sup>th</sup> February, 2011

- Dr. Saima Sadaf delivered talk on “Computational Tools Cracking the Protein Structure” during the Workshop on “Computational Resources for Protein Modelling” held at the Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore (March 14-18, 2011)
- Dr. Saima Sadaf delivered lecture at 10<sup>th</sup> Biennial Conference of Pakistan Society for Biochemistry and Molecular Biology on “Biomolecular Sciences in Development” held at Dr. A.Q. Khan Institute of Biotechnology and Genetic Engineering (KIBGE), University of Karachi, Karachi (December 01-05, 2010)
- Dr. Saima Sadaf attended the workshop on “Bioinformatics Resources for Drug Discovery Research” held at PCMD, University of Karachi, Karachi (November 28-30, 2010)
- Dr. Saba Irshad attended the conferences poster presentation on “Mutational Analysis of p53 Gene in Sporadic Breast Carcinoma” in 9<sup>th</sup> Shaukat Khanum Memorial Cancer Symposium, Lahore, 26-28<sup>th</sup> November, 2010.
- Dr. Saba Irshad attended the conferences poster presentation in 31<sup>st</sup> Pakistan congress of Zoology (International), University of Azad Jammu & Kashmir, Muzaffarabad, 19<sup>th</sup> April-21<sup>st</sup> April, 2011.
- Dr. Saba Irshad attended the International workshop on “Synthetic Biology and its Dual” Use, 3-5 February, 2011, at Comstech, Islamabad.
- Dr. Saba Irshad attended the workshop on “Computational Resources for Protein Modeling” at Institute of Biochemistry and Biotechnology, Lahore, 14-19<sup>th</sup> March, 2011.
- Dr. Saba Irshad attended a Seminar on “Water and Energy Crises and its solution” at center of under graduate Studies, University of the Punjab, Lahore, on 9<sup>th</sup> February 2011.
- Dr. Saba Irshad Certificate of Participation in 1<sup>st</sup> CME Based Seminar on Medical Laboratory Technology “Molecular Biology & Laboratory Medicine”, February 10<sup>th</sup>, 2011, at KEMU, Lahore, Pakistan.
- Dr. Saba Irshad Certificate of Participation in Two day workshop “Academic Writing for Research” Held on 27<sup>th</sup> & 28<sup>th</sup> of May, 2011 in UMT, Lahore, Pakistan.
- Ms. Iram Gull attended the workshop on “Immunofluorescent Techniques” held at Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore, during October 20, 2011
- Ms. Iram Gull attended the workshop on “Fluorescent Microscopy: introduction and Applications” held at Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore, during September 24, 2011.
- Ms. Iram Gull attended the workshop on “Computational resources for protein modeling” March 14-18, 2011 by Pakistan Academy of Sciences and Pakistan society for Biochemistry and Molecular Biology held at Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore.

- Ms. Iram Gull attended the workshop on “Immunoassays” held on 23-26 February, 2011, organized by Centre of Pakistan Medical Research Council NHRC and Barts and the London UK.
- Ms. Iram Gull attended the workshop on “Molecular Diagnostics” held on January 11-12, 2011, organized by Institute of Biochemistry & Biotechnology, University of Veterinary and Animal Science, Lahore, Pakistan.
- Mr. M. Shahbaz Aslam attended the workshop on “Immunofluorescent Techniques” on October 20, 2011, organized by Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore, Pakistan.
- Mr. M. Shahbaz Aslam attended the workshop on “Fluorescent Microscopy: introduction and Applications” on dated September 24, 2011, organized by Department of Microbiology and Molecular Genetics, University of the Punjab, Lahore, Pakistan.
- Mr. M. Shahbaz Aslam attended the workshop on “Computational resources for protein modeling” March 14 to 18, 2011 by Pakistan Academy of Sciences and Pakistan Society for Biochemistry and Molecular Biology held at Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore.
- Mr. M. Shahbaz Aslam attended the 2<sup>ND</sup> workshop on “Young Researchers Skills Development” organized by NAYS on dated 7<sup>th</sup> January, 2012.
- Ms. Ferhana Hussain attended the workshop on “Computational Resources for Protein Modeling” at Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore on 14-19 March, 2011.
- Ms. Beenish Kashif Hashmi attended the workshop on “Computational Resources for Protein Modeling” at Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore on 14-19 March, 2011.
- Ms. Afshan Iqbal attended the workshop on “Computational Resources for Protein Modeling” at Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore on 14-19 March, 2011.

### **Research Collaboration**

- **Indigenous**

- A collaborative research project of Dr. Saima SADF and Prof. M. Waheed Akhtar School of Biological Sciences “Production of recombinant cytokine of therapeutic importance.” funded by Pakistan Academy of Sciences Rs. 1.982 Million (2010-2013)
- A collaborative research project of Dr. Saima SADF and Prof. M. Waheed Akhtar School of Biological Sciences “Free circulating molecular markers for cancer diagnosis and prognosis” funded by Higher Education Commission, Government of Pakistan Rs. 4.197 Million (2010-13)

## SCHOOL OF BIOLOGICAL SCIENCES

- **R&D-An Overview**

The School of Biological Sciences, now in the 10th year of its existence, has made tremendous progress not only in terms of establishing and developing first rate infrastructure in the fields of Molecular Biology, Enzymology and Protein Chemistry, but also making significant advancement in various research projects initiated by the students for their Ph.D. degrees. All these research projects fall under the category of hard core science trying to unravel vital biological processes with strongly implicating extrapolations towards providing solutions to various economic problems of the country.

- **Projects:**

(i) Completed

(ii) Newly launched

S.No	Researcher/ Sponsoring Agency	Research project with duration	Financial support	Main goals
1	Javed Iqbal/ Pak-US Collaborations	Enhance the sugarcane production in Pakistan by Modern Breeding Technology	US\$.71610.00	To look into molecular markers for resistant and susceptible gene analogues for main sugarcane diseases.
	Higher Education Commission	Strengthening of the School of Biological Sciences	Rs. 377.328 million	Infrastructure development of SBS
2	M. Waheed Akhtar Higher Education Commission Ministry of Sciences and Technology.	Study of protein biomarkers for early detection of pathological states.	Rs. 31.642 million	To characterize protein biomarkers specific in different cancers and relate their levels with state of the disease. (Under progress)
		Production of Bioenergy from plant biomass (a collaborative project with major share of the School of Biological Sciences Lab.)	Rs. 260.329 Million (129.52 million Punjab University component share)	Develop biotechnology for the production of ethanol from plants biomass (under progress).
	Government of Pakistan	Preparation of application of growth hormones injectables (part of the project "Strengthening of School of Biological Sciences)	Total amount 377.328 million (40 million share component)	

	Pakistan Academy of Sciences	Production of recombinant cytokine of therapeutic importance	Rs.1.982 million	
	Higher Education Commission	Free circulating molecular markers in cancer diagnosis of tuberculosis using amultiplex microbead immunoassay	Rs.4.198 million	
	EMRO (WHO) Switzerland	Validation study of a rapid and reliable diagnosis of tuberculosis using amultiplex microbead immunoassay.	US\$.12,729.27	
	Pak-US S&T Cooperation	Rapid detection of infection and drug resistance in tuberculosis patients by multiplex analysis	US\$.262,342.00	University of California Davis, USA
3	Shahida Hasnain Pak-US S&T project, funded by HEC USAID (2008-2011)	Bioremediation of chromium and arsenic from industrial waste waters		
	Shahida Hasnain funded by HEC (2008-2011)	Plant growth hormones from bacterial and cyanobacterial origin and its impact in tissue culture		
4	Naeem Rashid Higher Education Commission of Pakistan	Cloning, sequencing and expression of gene and biochemical characterization of starch hydrolyzing enzyme pullulanase from hyperthermophilic archaeon <i>Pyroaculum calidifontis</i> .	Rs. 3,261,635/-	
5	Muhammad Saleem Haider  Punjab Agricultural Research Board	Novel approach to generate, wide spectrum resistance to all cotton begomoviruses infecting cotton and other cultivated crops	Rs.28.1 million	

6	Sadaf Naz Higher Education Commission of Pakistan	Molecular characterization of dystonia and wolfram syndrome in Pakistan (3 years)	Rs.4,198,896.00	
	Fogarty International Centre and National Institute on Deafness and other Communication Disorders, National Institute of Health, USA	Genetic basis of moderate to severe hearing loss in Pakistan.	\$270,000.00	

- **Publications**

Research Articles

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- **Books**
  - Qamer, S. and Abdul Rauf Shakoori: *Composition of Honey Produced BY Asian And Exotic Honeybees.-Composition of Honey Produced by the Asian and Exotic Honeybees* Paperback -09-2010, VDM Verlag, Dr. Muller Aktiengesellschaft &CO KG. ISBN 9783639008289. Pp. 236.
  - Yousafzai, A.M. and Shakoori, A.R., 2011. *Pollution of Large Sub-Tropical Rivers- River Kabul, Pakistan.* VDM Verlag, Dr. Muller Aktiengesellschaft &CO KG. ISBN 978-3-639-33934-5.

- Ahmad, J.Kanwal, M. and Shakoori, A. R., 2011. Interferon Beta 1 Gene and Human Cancer. VDM Verlag, Dr. Muller Aktiengesellschaft &CO KG., Germany. ISBN 978-3-639-35935-0
- Shakoori, A.R. and Rehman, A., 2011. Protozoan Fauna of Industrial Wastes and their Role in Bioremediation, VDM Verlag, Dr. Muller Aktiengesellschaft & CO KG. Germany. ISBN 978-3-639-36906-9.
- Shakoori, A.R. and Bukhari, D.A., 2011. Molecular Characterization of Cry4 Gene from *Bacillus thuringiensis*. VDM Verlag, Dr. Muller Aktiengesellschaft &CO KG. Germany. ISBN 978-3-639-37596-1. Pp. 345
- Shakoori, A.R. and Ahmed, B., 2011. Plasmid Mediated Antibiotic Resistance in Gram-Negative Bacteria. VDM Verlag, Dr. Muller Aktiengesellschaft &CO KG. Germany ISBN 978-3-639-37920-4
- Dar, S. and Shakoori, A.R., 2011. Cadmium Metallothionein Gene of *Paramecium*. Cloning and Expression of a Synthetic Gene of *Paramecium* species. LAP Lambert Academic Publishing GmbH & Co.KG, Germany. ISBN 978-3-8454-77140-2
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- Zahid, N. and Shakoori, A.R., 2011. Functional Analysis of Promoter4 of *cus* Operon - Activity of Copper-mediated Induction of *cus* Operon Promoter in *E. coli*. LAP Lambert Academic Publishing GmbH & Co. KG, Germany. ISBN 978-3-8465-0511-3
- Chaudhary, R. and Shakoori, A.R., 2011. Copper metallothionein Gene of *Tetrahymena*. – Copper Metallothionein Gene Isoforms. LAP Lambert Academic Publishing GmbH & Co. KG, Germany. ISBN 978-3-8465-1669-0.
- Saliha, Z., Sattar, A., Farid, A. and Shakoori, A.R., 2012. Termites of Pakistan & their Control. Zoological Society of Pakistan, pp. 102. ISBN 9078-969-9715-00-6
- **Conferences, Seminars and Workshops, etc.**
  - Prof. Dr. Javed Iqbal, Attended 2<sup>nd</sup> international Conference of Plant Scientist at Lahore Feb, 22-24, 2011 and delivered a key note address entitled “Molecular marker based analysis of sugarcane genotype susceptible of resistant against Red Rot and Rust diseases.
  - Prof. Dr. Javed Iqbal, Attended Pak-US Technology Conference at Dubai March 23-28, 2011 and present paper “Enhancement of sugarcane Production in Pakistan by modern molecular tools”
  - Prof Dr A.R.Shakoori, 30<sup>th</sup> Pakistan Congress of Zoology, University of Agriculture, Faisalabad, March 2-4, 2010,
  - Prof Dr A.R.Shakoori, 31<sup>st</sup> Pakistan Congress of Zoology, held in University of Azad Jammu & Kashmir, Muzaffarabad on March 1-3, 2011.



- Prof Dr A.R.Shakoori, Participated and made presentation as an invited lecture in the 3<sup>rd</sup> International Symposium-cum-Training Course on Molecular Medicine and Drug Research held at International Center for Chemical and Biological Sciences, University of Karachi on January 30-6, 2011.
- Prof Dr M. Waheed Akhtar, From genomics to proteomics – an overview. Inaugural talk at the symposium ‘Working with Proteins in Post-genomic Era’ held at the School of Biological Sciences, University of the Punjab, Lahore, Pakistan, January 6-7, 2010.
- Prof Dr M. Waheed Akhtar, Role of non-catalytic domains on activities of cellulases and xylanases. Talk in the 14<sup>th</sup> Biotechnology Symposium, Rimini, Italy, 14–18 Sept., 2010.
- Prof Dr M. Waheed Akhtar, Engineering proteins for applications. Prof. M. I. D. Chughtai Memorial plenary talk, 10<sup>th</sup> Biennial Conference of the Pakistan Society for Biochemistry and Molecular Biology, Karachi University, Pakistan, Dec. 1-4, 2010.
- Prof Dr M. Waheed Akhtar, Engineering proteins for enhancing activities. Prof. Anwar Waqar Memorial plenary lecture, 3<sup>rd</sup> International Symposium on Molecular Medicine and Drug Research, Karachi University, Pakistan, Jan. 3-6, 2011.
- Prof Dr M. Waheed Akhtar, Developing enzymes for biomass ethanol production. Invited lecture, Workshop Biotechnology for Economic Development, COMSTECH, Islamabad, 16 – 18 February, 2011.
- Prof Dr M. Waheed Akhtar, TB diagnostics – an overview. Plenary talk, Project evaluation workshop at EMRO Office, Cairo, Egypt. 24 July, 2011.
- Prof Dr Shahida Hasnain, Participated and presented lecture entitled “Constrains/opportunities and government initiatives for Establishing Biotech Culture in Pakistan” in National Biotechnology Exhibition and Seminar 2010 held in Institute of Biochemistry & Biotechnology, University of Veterinary and Animal Sciences, Lahore on October 20-21, 2010.
- Prof Dr Shahida Hasnain, Participated and presented paper entitled “Bacterial phytohormones induce organogenesis in *Brassica oleraceae* ex-plants” in 6<sup>th</sup> International Plant Tissue Culture and Biotechnology Conference Held in University of Dhaka, Dhaka, Bangladesh on 3-5 December, 2010.
- Prof Dr Shahida Hasnain, Invited Speaker in the “2<sup>nd</sup> International Conference of Plant Scientists & 11<sup>th</sup> National Meeting of Plant Scientists under the auspicious of Pakistan Botanical Society, held at GCU Lahore February 22-24, 2011, Chair session and gave lecture on “Plant Microbe Interaction- Emerging Strategy To Enhance Plant Growth”
- Prof Dr Shahida Hasnain, Organized Workshop on “Biosafety” with collaboration with Sure Bio-Diagnostics in Department of Microbiology and Molecular Genetics, March 4, 2011

- Prof Dr Shahida Hasnain, Organized seminar on “Nanotechnology” by Dr Patrice Marche (Inserm, France) in Department of Microbiology and Molecular Genetics, March 7, 2011
- Prof Dr Shahida Hasnain, Participated in “Pakistan-U.S. Science and Technology Conference 2011” held in Dubai March 21-24, 2011. Presented work on “Bioremediation of chromium and arsenic from industrial wastewater”
- Prof Dr Shahida Hasnain, Attended National Conference on “Setting Standards for 21<sup>st</sup> Century Pakistan” Islamabad May 26, 2011 organized by HEC, participated in Exhibition on behalf of Punjab University
- Prof Dr Shahida Hasnain, Invited Speaker in the International Conference on “Prospects and Challenges to Sustainable Agriculture” University of Azad Jammu and Kashmir, Rawalakot July 14-16, 2011. Gave lecture on “Role of Microbes in Agriculture Biotechnology”
- Prof Dr Shahida Hasnain, Invited speaker and Patron in Symposium on “Dengue” organized by Department of Microbiology and Molecular Genetics, University of The Punjab, September 22, 2011. Gave lecture on “Strategy to Combat Dengue: Microbiological Approach”.
- Prof Dr Shahida Hasnain, Patron one day workshop on “Fluorescent Microscopy” organized by Department of Microbiology and Molecular Genetics, September 24, 2011
- Prof Dr Shahida Hasnain, Patron one day workshop on “Immunofluorescent Techniques” organized by Department of Microbiology and Molecular Genetics, October 20, 2011
- Prof Dr Shahida Hasnain, Participated and presented lecture entitled “Auxin synthesis and root colonization by two rhizospheric unicellular cyanobacteria” in The 6<sup>th</sup> Asian Pacific Phycological Forum “Algae, The Future Resources” organized by Society of Phycology October 9-14, 2011, Yeosu, Korea
- Prof Dr Shahida Hasnain, Attended International Symposium on “Tuberculosis – Epidemiology, Diagnostics and Treatments” organized by School of Biological Sciences, Punjab University, November 3, 2011.
- Prof Dr Shahida Hasnain, Gave lecture on “Genetics Counseling” in Symposium “Lesson Learned from Iran – Pre-marriage Counseling and Volunteer Programme” organized by Jang Group on January 12, 2012 in PC Lahore

## **SCHOOL OF PHYSICAL SCIENCE**

- **R&D-An Overview (5-10 lines)**

School of Physical Sciences contain state of the art equipments in the field of Chemistry, Physics, Space Science and Solid State Physics available at SPS building and list of equipments is following:- X-RAY DIFFRACTOMETER, HPLC, Gas Chromatograph, Food and Beverage Analyzer, CHNS Analyzer, Keithley Semiconductor Characterization System, Precision Impedance Analyzer, Automatic Weather Station.

Above equipments are available for all the researchers of University for usage. SOP has been prepared, if someone comes from in house or from outside university to use these equipments.

- **Projects:**

Completed

Research Completed on Synopsis TCAD by M.Pil in SPS.

- Muhammad Azam has successfully completed research on Opto electronic Devices in SPS.
- Arfan Bukhtiar has successfully completed research on Electronic Devices in SPS.
- Muhammad Umer has successfully completed research on Electronic Devices in SPS.
- Muhammad Farooq has successfully completed research on Power Electronics in SPS.

**Newly Launched:**

Currently following students from Solid State Physics are working on Synopsis TCAD.

- Muhammad Khalid is working on Power Electronics. (Ph.D Scholar)
- Muhammad Zeeshan is working on Opto Electronics. (M.Phil Scholar)
- The following M.Phil Scholars:-
- Muhammad Amir, Kaleem-ullah, Fakhar Abbas, Muhammad Wasim, and Hareem Arif are working on Electronics Devices.

- **Publications**

- M. N. Arshad, I. U. Khan, M. Zia-ur-Rehman, S. A. Ahmad & H. M. Rafique Methyl 4-hydroxy-2-methoxycarbonylmethyl-1,1-dioxo-1,2-dihydro-1 $\lambda^6$ ,2-benzothiazine-3-carboxylate. *Acta Cryst. E*, 67, o2527 (2011).
- Muhammad Nadeem Arshad, Islam Ullah Khan, K. Travis Holman, Abdullah M. Asiri and H. M. Rafique, N-(2-Bromophenyl)-4-methyl-N-(4-methylphenylsulfonyl) benzenesulfonamide, *Acta Cryst. E*, 67, o2356 (2011).
- M. N. Arshad, Islam Ullah Khan, Muhammad Zia-Ur-Rehman, H M Rafique, K Travis Holman, Methyl 4-hydroxy-2-isopropyl-1,1-dioxo-2H-1,2-benzothiazine-3-carboxylate, *Acta Cryst. E*, 67, o1823-4 (2011).
- M. N. Arshad, I. U. Khan, H. M. Rafique, A. M. Asiri and M. Shafiq, 2-Chloro-4-(2-iodo-benzene-sulfonamido)-benzoic acid, *Acta Cryst. E*, 67, o1327 (2011).
- Khan, M. H., Islam Ullah Khan, Muhammad Nadeem Arshad, H. M. Rafique and William T. A. Harrison, Structures of Benzenesulfonylamino-3-(4-benzenesulfonyloxyphenyl)-propionic acid and 2-(toluene-4-sulfonylamino)-3-[4-(toluene-4-sulfonyloxy)-phenyl]-propionic acid: Variations in L-tyrosine Backbone Conformation, Intramolecular Aromatic  $\pi$ - $\pi$  Stacking and Short C-H...O Interactions, *Crystals*, 1, 69(2011).

### **Solid State Physics (SPS)**

#### **Submitted for Publications:**

- "Simulation of forward and blocking characteristics in Normally-Off 4H SiC VJFET" (Submitted in Journal of Electronic letters)
- "Simulation and Analysis of Electrical Characteristics of 4H-SiC/Pt Schottky barrier Diodes." (Submitted in JVST-B)
- "Theoretical Investigation of Drift Doping in 4H-SiC VJFET" (Submitted in Journal of Low Power Electronics)
- "Simulations and Analysis of 1.4 KV Normally-off 4H SiC VJFET" (Submitted in International Journal of Electrical Engineering and Technology)
- "surface passivation of Ti/4H-SiC schottky barrier diode" (Under process for submission in Journal)
- Optimization of breakdown characteristics using Sntaurus TCAD Simulation (Under process for submission in IEEE Electronics Letters)
- "Modeling and Simulation of 1 KV/5 A Normally-off 4H- SiC VJFET" (Paper published in IEEE Conference proceeding)

#### • **Conferences, Seminars and Workshops, etc.**

- SEM Training Workshop at PINSTECH, Islamabad 21-25 February 2011
- By Dr. Hafiz. M. Rafique, Incharge XRD Lab.
- "Modeling and Simulation of 1 KV/5 A Normally-off 4H- SiC VJFET" Paper presented in 2011 IEEE 14<sup>th</sup> International Multitopic Conference [INMIC] Karachi-Pakistan, December 22-24, 2011, Organized by IEEE and Sir Syed University of Engineering and Technology, Karachi, Pakistan. (Paper published in IEEE Conference proceeding)

#### **Research Collaboration**

- Students of different departments are also using facilities/equipments for their research work in Chemistry, Physics, Solid State Physics and Space Science laboratories. If someone uses these equipment for relevant test from outside university they are charged nominally.
- **List of equipments available at SPS.**
- X-RAY DIFFRACTOMETER, HPLC, Gas Chromatograph, Food and Beverage Analyzer, CHNS Analyzer, Keithley Semiconductor Characterization System, Precision Impedance Analyzer, Automatic Weather Station.

### **FACULTY OF MEDICINE & DENTISTRY**

#### **SHAIKH ZAYED POSTGRADUATE MEDICAL INSTITUTE:**

##### • **R&D-An Overview**

Shaikh Zayed Postgraduate Medical Institute during the period from 01-10-2010 to 30-09-2011 has been fulfilling its objectives.

During this period 56 academic activities, 52 Clinicopathological Conference presented, 04 workshops conducted.

## **FACULTY OF PHARMACY**

### **COLLEGE OF PHARMACY**

- **R&D-An Overview**

- Research and development is a mandatory component for an academic institute. The faculty members at College of Pharmacy are able to do their research by submitting their projects to University and other bodies for funding.

- **Projects completed**

- Syed Saeed-ul-Hassan. Development of analytical method for the analysis of Cephalexin Antibiotic. Funded by University of the Punjab, Lahore.
- Syed Saeed-ul-Hassan. Phytochemical investigations of *Chenopodium Album* Funded by University of the Punjab, Lahore.
- Khalid Hussain. Pharmacological activities of extracts of *Daucus carota L.* Funded by University of the Punjab, Lahore.

- **Newly launched**

- Syed Saeed-ul-Hassan. Antioxidant activity of *Balota Limbata* Funded by University of the Punjab, Lahore.

- **Publications**

- Khalid Hussain<sup>1</sup>, Nadeem Irfan Bukhari, Muhammad Zeeshan Danish<sup>3</sup>, Syed Saeed ul Hassan<sup>3</sup>, Muhammad Tanveer<sup>3</sup>, "Adsorption of Paracetamol on activated charcoal in the presence of dextropropoxyphene hydrochloride, N-acetylcysteine and sorbiton", Lat. Am. J. Pharm. 29(6): 883-8 (2010). USA
- Saeed-ul-Hassan, Shafique Hussain and Tayyab Ansari, "Quantitation of Metronidazole in Pharmaceutical Suspension using High Performance Liquid Chromatographic Method", Pakistan Journal of Zoology, Vol 43 (5), 909-914 2011.
- Muhammad Yasser Mustafa, Saeed-ul-Hassan and Aftab Ahmed Anjum, "Clinical diagnosis and treatment trials of herbal medicines in treating indigestion in buffaloes and cattle", BIOLOGIA (Pakistan), Vol. 54 (2), 199-205, 2011
- Khalid Hussain, Furqan K. Hashmi, Syed S. Hassan, Abida Latif, Zhari Ismail, Amirin Sadikun, Pazilah Ibrahim, "Evaluation of Orthosiphon stamineus aqueous extract for in vitro antimycobacterial activity and its interaction with isoniazid" , Lat. Am. J. Pharm. 30 (7), 1298-1302, 2011

- Mehjabeen, Mansoor Ahmad, Noor Jahan, M. Zia-ul-Haq, S. Mehboob Alam, Asma Wazir and Saeed Ul Hassan, "Antimicrobial Screening of Some Plants of Medicinal Importance", Pakistan Journal of Botany, Vol. 43(3), 1773-1775, 2011.
- Sherjeel, Rahman, Nisar-Ur, Ahmed, Saeed, Khan, Sajid, Mahmood, and Hassan, Syed, Saeed-ul Hassan. "In Vitro Comparison of Sustained Release HPMC and Lipid-Base Matrix Systems of Diltiazem HCl, Pakistan Journal of Zoology, 42(5):515-519, 2010
- Danish, M., Zeeshan, Jamsahaid, M., A., Bashir, Bookhari, N., Khan, F., Z., Aslam, I., (2010), "Antihyperlipidemic effect of Seabuckthorn berry extract, a comparative in vivo study in rabbits" Journal of Pharmacy and Pharmacology, 62(10): 1490-1491
- Nazir, Taha, Rasool, Muhammad Hidayat, Hameed Abdul, Ahmad, Bashir, Qureshi, Javed Anver, (2010), "Ethambutol Resistance of Indigenous Mycobacterium tuberculosis isolated from Human", Brazilian Journal of Microbiology, 41: 1065-1069
- Saleem, Uzma, Rasool, Muhammad, Hidayat, Ahmad, Bashir, Sadiq Waqas, Mahmood, Saeed, Saleem, M., and Erum, Alia, (2010), "Enhanced Susceptibility of Escherichia Coli, Staphylococcus Aureus and Streptococcus Pyogenes to Fluoroquinolones in the presence of Prochlorperazine", J. App. Pharm, 2(2):75-81
- Khan, M., T., J., Alvi, M., N., Amin, Noor-ul, Mansoor, B., Saeed, M., Asif, Khan, F.Z., and Jamshaid, M., (2010), "Antibacterial and Irritant Activities of Organic Solvent Extracts of Agave Americana Linn., Albizzia lebb Benth. Achyrantes aspera Linn. And Abutilon indicum Linn - A Preliminary Investigation", Pakistan Journal of Zoology, 42(1):93-97
- Sabiha Karim. Effect of feeding garlic (allium sativum) on body weight and serum cholesterol levels in rats. Pakistan Journal of Physiology, 20117 (1).
- Sabiha Karim. Effect of cinnamon extract on blood glucose level and lipid profile in alloxan induced diabetic rats.. Pakistan Journal of Physiology, 20117 (1).
- Amir, B., Fazal, S., Nisar, S., Bukhari, N. I., Muhammad, S., Kifayat, S. "Once daily controlled release matrix tablet of prochlorperazine maleate: Influence of Ethocel® and/or Methocel® on in-vitro drug release and bioavailability". Drug Development and Industrial Pharmacy.1-10. Posted online on 13 July 2011.
- Badshah, A., Subhan, F., Rauf, K., Bukhari, N.I., Shah, K., Khan, S., Ahmed, Z., Khan, I. "Development of Controlled-Release Matrix Tablet of Risperidone: Influence of Methocel®- and Ethocel®-Based Novel Polymeric Blend on In Vitro Drug Release and Bioavailability". AAPS PharmSciTech; Online Date: 04/14/2011; DOI: 10.1208/s12249-011-9613-2. (Impact Factor: 1.211)
- Prof. Dr. Mobasher Ahmad Butt. Antidiabetic Activity of Method Extract of Blumeadacrea. Asain.J.Chem. 23, 12, 5403-5306(2011) India

- Prof. Dr. Mobasher Ahmad Butt. Study on Cyt-P-450 dependent Retinoic Acid Metabolizing Sci Pharm 79, 921935 (2011) Austria.
- Prof. Dr. Mobasher Ahmad Butt. Hepato & Nepho protective activity of S. Buck Thorn. Lat. Am.J. Pharm.30 (a): M80-4- (2011)
- Safia Sultana Munir, Misbah Sultana and Dawood Amin, "The Evaluation of Pelvic Mass", Biomedica, Vol. 26, 70-75, (Jan-Jun, 2010).
- Safia S. Munir, Dawood Amin, Misbah Sultana and Tariq Saeed, "Ovulation Induction Using Laparoscopic Ovarian Drilling in Women with Polycystic Ovarian Syndrome: Prediction of Success", Biomedica, Vol.26, 130-134, (Jul-Dec, 2010).
- Safia Sultana Munir, Dawood Amin and Misbah Sultana, "Safety of High Order Caesarean Section", Pakistan Journal of Medical & Health Sciences, Vol.5, 54-58, 2011.
- Saeed Ur Rasheed, Nazir, Uzma Ali, Hafiz Muhammad Irfan, Misbah Sultana, Sajid Bashir, Syed Saeed-ul-Hassan, "Development of Diclofenac suspension and its stability at different temperature, Pakistan Journal of Pharmacy, 24(1&2), 23-27, 2011
- Syed Saeed ul Hassan, Syed Haroon Yunus and Abida Latif, Study and Development of Methods for the Determination of Diclofenac Sodium in Pharmaceutical Preparations", Pakistan Journal of Pharmacy, Vol. 20-23 (1&2) 2007-2010, 7-10, 2011.
- Mansoor Ahmad, Imran Waheed, Muhammad Khilil-ur-Rehman, Uzma Niaz and Syed Saeed ul Hassan, "A Review on Carthamus Oxycantha" Pakistan Journal of Pharmacy, Vol, 20-23 (1&2) 2007-2010, 37-41, 2011.
- Naveed Akhtar, Jehad Hisham, Haji M. Shoaib Khan, Barkat Ali Khan, Tariq Mahmood and Tariq Saeed. "Whitening and Anti erythemic effect of cream containing Mulberry extract." Hygeia.J.D.Med.Vol. 3(1), 2011, 89-94
- Haji M Shoaib Khan, Naveed Akhtar, Fatima Rasool, Asadullah Madni, Tariq Saeed, Barkat A Khan and Tariq Mahmood. "Investigation of a new sebum control cream containing apple juice extract." Asian J Chem., Volume 23, No 2, (2011), 810-812
- Naveed Akhtar, Barkat Ali Khan, Tariq Mahmood, Haji M Shoaib Khan, Mahmood Ahmad and Tariq Saeed. "Effect of anti-oxidant and flavonoids of sea buckthorn on skin whitening and skin erythema." Asian J Chem., Volume 23, No 2, (2011): 903-906
- Muhammad Akram, H.M.Asif, Khan Usman Ghani, Naveed Akhtar, Qaiser Jabeen, Asadullah Madni, Tariq Saeed, Riazur Rehman, Khalil Ahmed and S.M. Ali Shah. "Obesity and the risk of hyperuricemia in Gadap Town, Karachi." African Journal of Biotechnology, Volume 10 (6), 2011, 996-998

- Barkat Ali Khan, Naveed Akhtar, Arshad Mehmood, Mahmood Ahmad, Tariq Saeed. "Exploring cucumber extract for skin rejuvenation." African Journal of Biotechnology, Volume 10 (7), (2011), 1206-1216
- N Akhtar, MU Rehman, HMS Khan, F Rasool, T Saeed and G Murtaza. "Penetration Enhancing Effect of Polysorbate 20 and 80 on the In Vitro Percutaneous Absorption of L Ascorbic Acid." Tropical Journal of Pharmaceutical Research June 2011; 10 (3): 281-288
- Riaz ur Rehman, M. Akram, Naveed Akhtar, Qaiser Jabeen, Tariq Saeed, S. M. Ali Shah, Khalil Ahmed, Ghazala Shaheen and H. M. Asif. "Zingiber Officinale Roscoe (pharmacological activity)." Journal of Medicinal Plants Research, Vol. 5(3), 344-348, 4 February, 2011
- H.M. Asif, Khan Usmanhni, Muhammad Akram, Naveed Akhtar, Qaiser Jabeen, S.M. Ali Shah, Riaz ur Rehman, Khalil Ahmed, Tariq Saeed. "Herbal treatment of secretory diarrhea." International Journal of Phytomedicine, 2010; 2 (4); 425-429 (ICV. 4.16)
- Naveed Akhtar, Haji Muhammad Shoaib Khan, Gulfishan, Fatima Rasool, Mehmood Ahmad, Tariq Saeed. "Formulation and in-vitro evaluation of a cosmetic emulsion containing apple juice extract." Asian J Chem, Volume 22, No 9, (2010), 7235-7242
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- Uzma Saleem, Muhammad Hidayat Rasool, Bashir Ahmad Waqas Sadiq, Saeed Mahmood, M. Saleem and Alia Erum “Enhanced Susceptibility of Escherichia Coli, Staphylococcus Aureus and Streptocococcus Pyogenes to Fluoroquinolones in the Presence of Prochlorperazine” J App Pharm 2(2) : 75-81 (2010)
- Bashir Ahmad, Uzma Saleem, Farman Matloob Khan, Alia Erum, Maqsood Alam, Saeed Mahmood “Role of High Dose in Modulating Hyperlipidemia and Hyperglycemia” J App Pharm 4(2) : 112:119 (2010)
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- Khalid Hussain, Bashir Ahmad, Furqan Khurshid Hashmi, “The additional one year pre-registration workload on pharmacy graduates: an irrational approach”. Pakistan Journal of Pharmacy, 20-23 (1 & 2) 43-44, 2007-2010.
- Khalid Hussain, Furqan K. Hashmi, “Standardization in the Evaluation System of Pakistan’s Pharmacy Institutes”. American Journal of Pharmaceutical Education, 75 (8), 2011.
- Khalid Hussain, Furqan K. Hashmi, “Unlawful and Unjustified Collection of Enrolment Fee from Pharmacy Students”. Archives of Pharmacy Practice, 2(4) 141-142, 2011
- Furqan Khurshid Hashmi, Tanveer Ahmed Khan, Muhammad Islam, Muhammad Khalid Tipu, “Vaccination coverage of mothers during pregnancy with tetanus toxoid and siblings after birth”. Pakistan Journal of Pharmacy. 24 (2), 35-39, 2011.
- Bukhari, N.I. “Biopharmaceutics and Pharmacokinetics – Activity based learning”. Raaz Printer, Nabha Road, Lahore, Pakistan. 2011.
- Babar, Z.D., Ibrahim, M.I.M. Singh, H. Bukhari, N.I. “The Reality of Medicine Price in Malaysia”. Universiti Sains Malaysia Press. 2010.
- Amjad Hussain: Author of “Manual of Clinical Pharmacy” for Pharm-D students (1st Edition 2009, 2nd Edition 2010, 3rd Edition 2011) Published by Raaz Printers 18-Nabha Road Anarkali, Lahore.

- **Conferences, Seminars and Workshops, etc.**

- Prof. Dr. Syed Saeed ul Hassan attended Two days International Conference “Multidisciplinary Approach in Medication Usage” held on 12-14<sup>th</sup> February, 2010, Jinnah Hospital Pharmacy Practices, Allama Iqbal Medical College, Auditorium, Lahore and participated in group discussion.
- Prof. Dr. Syed Saeed ul Hassan attended Two days International Seminar “Opportunities – Challenges for Pharmaceutical Care Practice at Community Pharmacy in Pakistan” held on 24-25<sup>th</sup> February, 2010 organized by Department of Pharmacy, Lahore College for Women University, Lahore and acted as Chairman in Scientific Session.
- Prof. Dr. Syed Saeed ul Hassan attended One day National Seminar on “The Role of Research and Development in Improving Access to Medicines” held on 31<sup>st</sup> May, 2010 organized by Institute of Pharmaceutical Sciences of the University of Veterinary and Animal Sciences at Conference Hall UVAS, Lahore.
- Prof. Dr. Syed Saeed ul Hassan attended One Day Seminar on “Angiogenesis in Cancer Research” on 7<sup>th</sup> June, 2010 organized by University College of Pharmacy, P. U. Lahore at Lecture Room No.1 University College of Pharmacy, University of the Punjab, Lahore. Also actively participated in Question Answer Session.
- Prof. Dr. Syed Saeed ul Hassan attended One Day Seminar on “The Quality Assurance of Pharmaceuticals” on 23<sup>rd</sup> October, 2010 organized by Pakistan Pharmacist Association at Pakistan Pharmacist Association House, 488-G, Johar Town, Lahore.
- Prof. Dr. Syed Saeed ul Hassan attended Two days National Seminar on “The Use of Animals in Science, Ethical & Practical Considerations organized by University College of Pharmacy, P. U., Lahore held on 3-4 January, 2011 at Lecture Room No.1, University College of Pharmacy, P. U. Lahore. Also actively participated in Question Answer Session.
- Sabiha Karim attended Three days Conference on “Curriculum Development” from 28<sup>th</sup> February to 2<sup>nd</sup> March, 2011 organized by Higher Education Commission and Pharmacy Council of Pakistan at HEC Regional Office, Gulberg, Lahore and actively participated in Question Answer session.
- Prof. Dr. Syed Saeed ul Hassan attended Two days National Seminar/Workshop on “Environmental Toxicology and Health” held on 8-9 March, 2011 organized by Department of Pharmacognosy & Toxicology, University of Veterinary Sciences, Lahore and acted as Chairman, Scientific Session.
- Prof. Dr. Syed Saeed ul Hassan attended One Day Seminar on “Recent Trends in Stroke Research” held on 10<sup>th</sup> March, 2011 organized by University College of Pharmacy, P.U., Lahore in collaboration with Cambridge University, United Kingdom at University College of Pharmacy, P.U. Lahore.

- Prof. Dr. Syed Saeed ul Hassan attended 16<sup>th</sup> International Pharmacy Conference & Exhibition on “Your Health & Pharmacist”, held from 28<sup>th</sup> April to 1<sup>st</sup> May, 2011 organized by Pakistan Pharmacist Association at Pearl Continental Hotel, Lahore and acted as Chairman in all Scientific Sessions.
- Prof. Dr. Syed Saeed-ul-Hassan participated in international conference entitled “Multidisciplinary Approach in Medication Usage” organized by Jinnah Hospital Pharmacy Practices, from February 12 to February 14, 2010, Allama Iqbal Medical College, Auditorium, Lahore and participated in group discussion.
- Prof. Dr. Syed Saeed-ul-Hassan participated in international seminar entitled “Opportunities - Challenges for Pharmaceutical Care Practice at Community Pharmacy in Pakistan” organized by Department of Pharmacy, Lahore College for Women University, Lahore from February 24 to February 25, 2010, Lahore and acted as Chairman Scientific Session.
- Prof. Dr. Syed Saeed-ul-Hassan participated in national seminar entitled “The Role of Research and Development in Improving Access to Medicines” organized by Institute of Pharmaceutical Sciences of the University of Veterinary and Animal Sciences, Lahore on May 31, 2010, Conference Hall UVAS, Lahore.
- Prof. Dr. Syed Saeed-ul-Hassan participated in seminar entitled “The Quality Assurance of Pharmaceuticals”, organized Pakistan Pharmacist Association on October 23, 2010, Pakistan Pharmacist Association House, 488-G, Johar Town, Lahore.
- Prof. Dr. Bashir Ahmed participated in national seminar entitled “The Use of Animals in Science, Ethical & Practical Considerations, organized by University College of Pharmacy, P. U., Lahore from January 3 to January 4, 2011, Lecture Room No.1, University College of Pharmacy, P. U., Lahore and participated in question answer session.
- Dr. Muhammad Tahir Javed Khan participated in seminar entitled “The Role of Research and Development in improving Access to Medicines” organized by Institute of Pharmaceutical Sciences, UVAS, Lahore on May 31, 2010, UVAS, Lahore.
- Dr. Muhammad Tahir Javed Khan participated in national seminar entitled “The Use of Animals in Science, Ethical & Practical Considerations, organized by University College of Pharmacy, P. U., Lahore from January 3 to January 4, 2011, Lecture Room No.1, University College of Pharmacy, P. U., Lahore and participated in question answer session.
- Dr. Khalid Hussain participated in national seminar entitled “The Use of Animals in Science, Ethical & Practical Considerations, organized by University College of Pharmacy, P. U., Lahore from January 3 to January 4, 2011, Lecture Room No.1, University College of Pharmacy, P. U., Lahore and participated in question answer session.

- Dr. Sabiha Karim participated in National seminar on use of Animals in science . Ethical & Practical Considerations. Held on 3<sup>rd</sup> & 4<sup>th</sup> January 2010, organized by HEC.
- Dr. Sabiha Karim participated in International seminar opportunities & challenges for Pharmaceutical care practice in Community Pharmacy in Pakistan. Held on 24<sup>th</sup> to 25<sup>th</sup> February 2010. Organized by Pharmacy Department of Lahore College for Women University Lahore.
- Dr. Sabiha Karim participated in Seminar on Angiogenesis in Cancer Research on 7<sup>th</sup> June 2010. Organized by University College of Pharmacy.
- Dr. Sabiha Karim participated in Seminar on quality assurance on Pharmaceuticals held on 23<sup>rd</sup> October 2010. Organized by PPA (Pakistan Pharmaceutical Association).
- Dr. Sabiha Karim participated in Seminar & workshop on Environmental Toxicology & Health held on 8<sup>th</sup> & 9<sup>th</sup> March 2011 at Department of Pharmacology & Toxicology, University of Veterinary & Animal Sciences, Lahore.
- Dr. Sabiha Karim participated in Seminar on dryness of eye held on September 2011 at College of Pharmacy, Punjab University, Lahore.
- Dr. Sabiha Karim participated in Seminar on Management of diabetes mellitus held on 18 Nov, 2011 organized by College of Pharmacy Lahore.
- Dr. Sabiha Karim participated in One day seminar on drug abuse & misuse held on March 2011 at College of Pharmacy organized by Saukat Khanum Hospital.
- Dr. Sabiha Karim participated in Seminar on anti-tobacco awareness held on 23 May 2011 at Shaukat Khanum Hospital Lahore.
- Muhammad T. Khan, Muhammad Islam, Furqan K. Hashmi, Amjad Hussain, Khalid Hussain, Nadeem I. Bukhari. Phoenix sylvestris pits: Proximate analysis and in vitro adsorption capacity for paracetamol. 16<sup>th</sup> International Pharmacy Conference and Exhibition 2011, April 28 to May 01, 2011, Lahore, Pakistan.
- Amjad Hussain, Nadeem irfan Bukhari, Khalid Hussain, Muhammad Tayyab, Madeeha Shakeel, Sameera Anjum, Saira Rehman, Tayyaba Rasool, Asima Asghar. Study of prescribing errors and their effect on patient perception and compliance in psychiatric patients of a mental hospital. 16<sup>th</sup> International Pharmacy Conference and Exhibition 2011, April 28 to May 1, 2011, Lahore, Pakistan.
- Ghulam Rasool Noor, Shahid Mukhtar, Amjad Hussain, Sabiha Karim, Furqan K. Hashmi, Khalid Hussain, Nadeem Irfan Bukhari, Design and evaluation of amlodipine besylate matrix tablest-effect of polymer ratio and the method of preparation. 16<sup>th</sup> International Pharmacy Conference and Exhibition 2011, April 28 to May 1, 2011, Lahore, Pakistan.
- Furqan K. Hashmi, Mahwish Qamar, Khalid Hussain Bashir Ahmad, Khalid Tipu, Muhammad Islam. Comparison of pneumonia treatment in pediatrics with standard treatment guidelines in a tertiary care hospital, 11<sup>th</sup> Asian Conference on Clinical Pharmacy, Manila, Philippines, 24-27 June 2011.

- Hashimi, F.K., Saleem, U., Ahmed, B., Hussain, K., Bukhari, N.I., Hassan, S.S. "The propagation of WM-68 hybridoma cell-line in different media conditions". FAPA Congress, Tapi, Taiwan, 5-8 November, 2010.
- Hussain, K., Ismail, Z., Sadikun, A., Hashmi, F.K., Latif, A., Bukhari, N.I., Hassan, S.S. Ahmad, B. "In vivo hepatoprotective activity of ethanol extracts of leaves and fruit of *Piper sarmentosum*". Natural Product Conference. Basel, Switzerland, 10-12 December, 2010
- Danish, M.Z., Bashir, A., Khan, F.Z., Bukhari, N.I., Hussain, K., Aslam, I., Chaman, S., Jamshaid, M. "In-vitro and in vivo prospective of seabuckthorn (*hippophea rhamnoides*) berry extract: an extended approach towards formulation development". 13<sup>th</sup> MipTech – The leading European Event of Drug Discovery. Penang, Malaysia, 21-24 September, 2010.
- Misbah Sultana attended three days international conference on "Multidisciplinary Approach in Medication Usage", held on 12<sup>th</sup> to 14<sup>th</sup> February, 2010 at IMC Auditorium, Jinnah Hospital Pharmacy Practices.
- Misbah Sultana attended four days "HRDC New Faculty Orientation Program 2010", held on 5-8<sup>th</sup> July, 2010 organized by Human Resources Development Centre (HRDC), Institute of Administrative Sciences (IAS), University of the Punjab, Lahore.
- Misbah Sultana attended two days national seminar on "Use of Animals in Science-Ethical & Practical Consideration" held on 3-4 January, 2011 organized by University College of Pharmacy, University of the Punjab, Lahore
- Misbah Sultana attended two days seminar / workshop on "Environmental Toxicology and Health" held on 8-9 March, 2011 organized by University of Veterinary and Animal Sciences, Lahore in collaboration with Department of Clinical Neuroscience, University of Cambridge, UK.
- Misbah Sultana attended 16<sup>th</sup> International Pharmacy Conference & Exhibition on "Your Health and Pharmacist" held on 28<sup>th</sup> April to 1<sup>st</sup> May, 2011 organized by Pakistan Pharmacist Association at Pearl Continent Hotel, Lahore.
- Amjad Hussain: Study of Prescribing Errors and Their Effect on Patient Perception and Compliance in Psychiatric Patients of a Mental Hospital presented at 16<sup>th</sup> International Pharmacy conference and exhibition 2011, organized by Pakistan Pharmacist Association.
- Amjad Hussain: 16<sup>th</sup> International Pharmacy conference and exhibition 2011, organized by Pakistan Pharmacist Association.
- Amjad Hussain: National Seminar & Workshop on environmental Toxicology and health organized by UVAS, Lahore in 2011.
- Dr. Tariq Saeed. IPMPS, 2010, Izmir, Turkey,

- Prof. Dr. Bashir Ahmad. Ist National Seminar On Use of Animals in Science- Ethical & Practical Considerations at University College of Pharmacy University of the Punjab Lahore on 3-4 January 2011.
- Prof. Dr. Bashir Ahmad. Seminar on Retail Pharmacy Management at PPA House Johar Town Lahore on 8<sup>th</sup> January 2011.
- Prof. Dr. Bashir Ahmad. Seminar and workshop on Environmental Toxicology and Health at University of Veterinary & Animal Sciences on 8-9 March 2011.
- Prof. Dr. Bashir Ahmad. Organized 16<sup>th</sup> International Pharmacy conference & Exhibition at PC Lahore on 28 April to 1<sup>st</sup> May 2011.
- Furqan K. Hashmi, Mahwish Qamar, Khalid Hussain, Bashir Ahmad, Khalid Tipu, Muhammad Islam, "Comparison of pneumonia treatment in pediatrics with standard treatment guidelines in a tertiary care hospital" 11<sup>th</sup> Asian Conference on Clinical Pharmacy, Manila, Philippines, 24-27 June 2011.
- Qaurat ul Ain, Maria Rehman, Bushra Mubarak, Kanwal Fatima, Maria Rizvi, Furqan K. Hashmi, "Clinically Significant Predisposing Factors and Potential Hazards of Drugs in Congestive Heart Failure Patients in Pakistan." 16<sup>th</sup> International Pharmacy Conference and Exhibition, Lahore, Pakistan, 28<sup>th</sup> April to 1<sup>st</sup> May 2011.
- Ayesha Khalid, Marriam Azhar, Ammar Rizvi, Faizah Sulaiman, Amjad Hussain, Atif Raza, Furqan K. Hashmi, "Current Treatment Practices of Rheumatoid Arthritis—Health Assessment and Patient Evaluation". 16<sup>th</sup> International Pharmacy Conference and Exhibition, Lahore, Pakistan, 28<sup>th</sup> April to 1<sup>st</sup> May 2011.
- Huma Jaffri, Furqan K. Hashmi, "Attitude of General Practitioner's Towards Psychotropic Drugs Prescribing in General Diseases and Shortcomings of Concomitant Drug Prescribing". 16<sup>th</sup> International Pharmacy Conference and Exhibition, Lahore, Pakistan, 28<sup>th</sup> April to 1<sup>st</sup> May 2011.
- Furqan K. Hashmi, Uzma Saleem, Bashir Ahmad, Khalid Hussain, Nadeem Irfan Bukhari, Muhammad Islam. "The Propagation of WM-68 Hybridoma Cell-line in Different Media Conditions". The 23<sup>rd</sup> Federation of Asian Pharmaceutical Associations Congress, Taipei, Taiwan, 4-8 November 2010.
- Pervaiz Akhtar Shah: Ist National Seminar On Use of Animals in Science- Ethical & Practical Considerations at University College of Pharmacy University of the Punjab Lahore on 3-4 January 2011.
- Pervaiz Akhtar Shah: Professional Competency Enhancement program for teacher PCEPT Part 1 UVAS-2010
- Prevaiz Akhtar Shah: 16<sup>th</sup> International Pharmacy Comferency and Exhibition PPA-2011

- Abida Latif: 1st National Seminar On Use of Animals in Science- Ethical & Practical Considerations at University College of Pharmacy University of the Punjab Lahore on 3-4 January 2011.
- Abida Latif attended Two days National Seminar/Workshop on “Environmental Toxicology and Health” held on 8-9 March, 2011 organized by Department of Pharmacognosy & Toxicology, University of Veterinary Sciences, Lahore and acted as Chairman, Scientific Session.
- Abida Latif attended 16<sup>th</sup> International Pharmacy Conference & Exhibition on “Your Health & Pharmacist”, held from 28<sup>th</sup> April to 1<sup>st</sup> May, 2011 organized by Pakistan Pharmacist Association at Pearl Continental Hotel, Lahore and acted as Chairman in all Scientific Sessions
- Abida Latif attended Two days International Conference “Multidisciplinary Approach in Medication Usage” held on 12-14<sup>th</sup> February, 2010, Jinnah Hospital Pharmacy Practices, Allama Iqbal Medical College, Auditorium, Lahore and participated in group discussion.
- **Workshops, Conferences etc. held at the Department/Institute/Centre/College.**
  - A national seminar was held at University College of Pharmacy, University of the Punjab entitled “Use of Animals in Science, Ethical & Practical Considerations from January 3 to January 4, 2011.
- **Invited lecturers delivered outside the Department/Institute/Centre/College**
  - Faculty members have delivered lecturers/training to various departments/institutes and organization on various areas of Pharmacy.
- **Research Journals**
  - Pakistan Journal of Pharmacy, a biannual journal. The journal is online as well.

### Research Collaboration

- **Indigenous**
  - Khalid Hussain. Post graduate Medical Institute, Sheikh Zayed Hospital, Lahore Pakistan
  - Nadeem Irfan Bukhari. Department of Pharmacology, University of the Veterinary and Animals Sciences, Lahore
- **Foreign linkages.**
  - Nadeem Irfan Bukhari. Study of the mechanism of particle size reduction. School of Pharmacy, De Montfort University, UK
  - Khalid Hussain. School of Pharmaceutical Sciences, University Sains Malaysia, Penang Malaysia
  - Nadeem Irfan Bukhari. Public response to common ailments. University of Otago, New Zealand

## FACULTY OF SCIENCES

### DEPARTMENT OF GEOGRAPHY

- **Publications**
  - Sabir, M. (2011) “The State, Media, Religion and Emerging Challenges in Pakistan” Vol. 26, No.1, January-June PU, Journal of South Asian Studies

- Taimur-ul-Hassan, Munawar Sabir (2011) "Civil Society-Democracy Nexus in Pakistan" Vol. 26, No. 2, January-June PU, Journal of South Asian Studies
- Sajjid.S.H, Blond N, Clappier A Raza A, Shirazi, S.A and Shakrullah K (2010): "The preliminary study of urbanization, fossil fuels consumptions and CO<sub>2</sub> emission in Karachi" *African Journal of Biotechnology* Vol. 9(13), 29 March, 2010.
- Sajjid.S.H, Shirazi, S.A, Khan M.A and Raza A(2010): "Urbanization effects on temperature trends of Lahore during 1950-2007" *International Journal of Climate Change Strategies and Management* Vol.1 Issue-3
- **Conferences, Seminars and Workshops, etc.:**
  - A workshop on "Disaster Risk Management" Organized by the Department in collaboration with the National Institute of Disaster Management (NIDM) and with UNDP, April 11-12, 2011.
  - The faculty of Department attended "Pakistan Urban Forum 2011" Organized by the Urban Unit, P & D Department, Govt.of the Punjab, Lahore, March 1-5, 2011.
- **Research Journals**  
Geographical Review was regular in its publication till 2007 but unfortunately since then journal could not be published. The new editorial board of PGR is determined to get it recognized by HEC and to publish it regularly. The efforts are underway in this regard.

#### Research Collaboration

- **Funding grants for R&D**  
University of the Punjab

#### DEPARTMENT OF MATHEMATICS

- **R&D-An Overview**  
Department of Mathematics organized a series of departmental seminars from October 2010 - September 2011. Prof. Dr. Shahid S. Siddiqi, Prof. Dr. Muhammad Sharif, Dr. Malik Zawwar Hussain, Dr. Muhammad Aslam Malik and Dr. Ghazala Akram presented papers in different National and International conference.
- **Publications**
  - Shahid S. Siddiqi and Kashif Rehan, Subdivision Schemes for Geometric Modelling
  - International Journal of Computer Mathematics, Vol. 88(4), (2011), pp. 851-863
  - Shahid S. Siddiqi, Ghazala Akram and Ammara Kanwal *Solutions of Fifth Order Singularly Perturbed Boundary Value Problems Using Non- Polynomial Spline Technique* European Journal of Scientific Research, Vol. 56 Issue 3 (2011), pp. 415-425.
  - M. Sharif and Saira Waheed, Re-scaling of Energy in the Stringy Charged Black Hole Solutions using Approximate Symmetries: Canadian J. Phys. 88(2010)833-839 (Canada).



- M. Sharif and A. Jawad, Energy Contents of a Class of Regular Black Hole Solutions in Teleparallel Gravity: *Mod. Phys. Lett. A* 25(2010)3241-3250 (Singapore).
- M. Sharif and H.R. Kausar, *Effects of  $f(R)$  Dark Energy on Dissipative Anisotropic Collapsing Fluid*: *Mod. Phys. Lett. A* 25(2010)3299-3311 (Singapore).
- M. Sharif and U. Sheikh, *Cold Plasma Wave Analysis in Magneto-Rotational Fluids*: *Astrophys. Space Sci.* 330(2010)317-328 (Germany).
- M. Sharif and M. Zubair *Dynamics of Bianchi I Universe with Magnetized Anisotropic Dark Energy*., *Astrophys. Space Sci.* 330(2010)399-405 (Germany).
- M. Sharif and Saira Waheed, *Energy of Bardeen Model using Approximate Symmetry Method*: *Phys. Scr.* 83(2011)015014 (UK).
- M. Sharif and Aisha Siddiqa, *Dynamics of Charged Plane Symmetric Gravitational Collapse*: *Gen. Relativ. Grav.* 43(2011)73-91 (Germany).
- M. Sharif and Sundas Fatima *Charged Cylindrical Collapse of Anisotropic Fluid*., *Gen. Relativ. Grav.* 43(2011)127-142 (Germany).
- M. Sharif and Noureen Mukhtar *Plasma Wave Properties of the Schwarzschild Magnetosphere in a Veselago Medium*., *Astrophys. Space Sci.* 331(2011)151-162 (Germany).
- M. Sharif and A. Jawad, *Energy Contents of Some Well-Known Solutions in Teleparallel Gravity*: *Astrophys. Space Sci.* 331(2011)257-263 (Germany)
- M. Sharif and H.R. Kausar *Gravitational Perfect Fluid Collapse in  $f(R)$  Gravity*., *Astrophys. Space Sci.* 331(2011)281-288 (Germany).
- M. Sharif and A. Jawad, *Energy Contents of Some Rotating Spacetimes in Teleparallel Gravity*: *Astrophys. Space Sci.* 331(2011)321-329 (Germany).
- M. Sharif and H.R. Kausar, *Anisotropic Fluid and Bianchi Type III Model in  $f(R)$  Gravity*: *Phys. Lett. B* 697(2011)1-6 (Netherlands).
- M. Sharif and H.R. Kausar, *Non-vacuum Solutions of Bianchi Type VI<sub>0</sub> Universe in  $f(R)$  Gravity*: *Astrophys. Space Sci.* 332(2011)463-471 (Germany).
- M. Sharif and G. Abbas, *Gravitational Collapse: Expanding and Collapsing Regions*: *Gen. Relativ. Grav.* 43(2011)1179-1188 (Germany).
- M. Sharif and Noureen Mukhtar *Hot Plasma Waves Surrounding the Schwarzschild Event Horizon in a Veselago Medium*., *Astrophys. Space Sci.* 333(2011)187-202 (Germany).
- M. Sharif and H.R. Kausar, *Dust Static Spherically Symmetric Solution in  $f(R)$  Gravity*: *J. Phys. Soc. Jpn.* 80(2011)044004 (Japan).
- M. Sharif and Farida Khanum, *Kaluza-Klein Cosmology with Varying  $G$  and  $\Lambda$* : *Astrophys. Space Sci.* 334(2011)209-214 (Germany)

- M. Sharif and Rizwana Kausar *Effects of  $f(R)$  Model on the Dynamical Instability of Expansionfree Gravitational Collapse*; JCAP 07(2011)022 (Italy).
- M. Sharif and Shamaila Rani  *$F(T)$  Models within Bianchi Type I Universe*; Mod. Phys. Lett. A26 (2011)1657-1671 (Singapore).
- M. Sharif and G. Abbas, *Phantom Accretion by Five Dimensional Charged Black Hole*: Mod. Phys. Lett. A26 (2011)1731-1736 (Singapore).
- M. Sharif and G. Abbas, *Phantom Accretion onto the Schwarzschild de Sitter Black Hole*: Chin. Phys. Lett. 28(2011)090402 (China).
- M. Sharif and G. Abbas *Dynamics of Non-adiabatic Charged Cylindrical Gravitational Collapse*; Astrophys. Space Sci. 335(2011)515-521 (Germany).
- M. Sharif and G. Abbas *Charged Perfect Fluid Cylindrical Gravitational Collapse*; J. Phys. Soc. Jpn. 80(2011)104002 (Japan).
- M. Sharif, *The Pseudo-Newtonian Force and Potential of the Stringy Black Holes*: Rom. J. Phys. 56(2011)1035 (Romania).
- M. Sharif and Farida Khanum, *Kaluza-Klein Cosmology with Modified Holographic Dark Energy*: Gen. Relativ. Gravit. 43(2011)2885-2894 (Germany).
- M. Sharif and Ifra Noureen *Dispersion Modes of Hot Plasma for Schwarzschild de-Sitter Horizon in a Veselago Medium*; Can. J. Phys. 89(2011)991-1002 (Canada).
- M. Sharif and Wajihah Javed, *Thermodynamics of Bardeen Black Hole in Noncommutative Space*: Can. J. Phys. 89(2011)1027-1033 (Canada).
- M. Sharif and H.R. Kausar *Expansionfree Fluid Evolution and Skripkin Model in  $f(R)$  Theory*; Int. J. Mod. Phys. D20(2011) 2239-2252 (Singapore).
- Hussain, M.Z. & Maria Hussain (2011),  $C^1$  positively preserving scattered data interpolation using rational Bernstein-Bezier triangular patch, Journal of Applied Mathematics and Computing, Vol. 35(1-2), 281-293
- Sarfraz, M., Hussain, M.Z. Tahira, S.S. & Rabia (2011), Data Visualization using shape preserving  $C^2$  rational spline, Proc. IEEE 15<sup>th</sup> International Conference on Information Visualization, July 13-15, London, UK, 528-533.
- Hussain, M.Z., Sarfraz M. & Shakeel, A (2011), Shape preserving surface for the visualization of positive and convex data using rational bi-quadratic splines, International Journal of Computer Application, Vol 27 (10), 12-20.
- Hussain, M.Z., Sarfraz, M., Madiha A. S. & Misbah, A. (2011), Rational bi-cubic functions preserving 3D positive data, Proc. IEEE 8<sup>th</sup> International Conference on Computer Graphics, Imaging and Visualization, August 16-19, Singapore, 47-52.

- Hussain, M.Z. Sarfraz, M. & Tahira, S.S. (2011), Shape preserving rational cubic spline for positive and convex data, Egyptian informatics Journals, Vol. 12, 231-236.
- Tahira S.S. Sarfraz, M. & Hussain, M.Z.(2011), Shape Preserving Constrained data visualization using rational functions, Journal of Prime Research in Mathematics, Vol. 7, 35-51.
- Misbah, A. Irfan, E & Hussain, M.Z. (2011) Detecting corner for 3D objects, International Journal of Computer Vision and Image Processing, Vol. 1(4), 58-67.
- Hussain, M.Z. & Saima B. (2011), Shape preserving surface data visualization using rational bi-cubic functions, Journal of Numerical Mathematics, Vol. 19(4), 267-307.
- M. Aslam Malik, and M. Asim Zafar, Real Quadratic Irrational Numbers and Modular Group Action, southeast Asian bulletin of Mathematics Vol. 35 (3) 2011, 439-455
- M. Aslam Malik, and M. Riaz, G-subsets G-orbits of an Invariant subset  $Q^*(\sqrt{mk^2})$  of  $Q(\sqrt{m})$  under the action of the Modular Group  $PSL(2, Z)$  PUJM, Vol. 43, 2011, 75-84
- M. Aslam Malik and M. Khalid Mahmood, Some Invariant subsets of  $Q^* Q^*(\sqrt{n})$  under the action of  $PSL(2, Z)$  International Mathematical Forum Vol. 6, 2011, NO. 32, 1557-1565.
- M. Touqeer and M. Aslam Malik, Intuitionistic fuzzy BCI-positive implicative ideals in BCI-algebra, International Mathematical Forum Vol. 6, 2011, no. 47, 2317-2334.
- M. Touqeer, and M. Aslam Malik, Some Results on Intuitionistic Fuzzy BCI-(Positive Implicative, Commutative) ideals in BCI- Algebras International Mathematical Forum Vol, 2011, No. 47 2335-2347.
- Shahid S. Siddiqi, Ghazala Akram and Ammara Kanwal, Solutions of Fifth Order Singularly Perturbed Boundary Value Problems Using Non- Polynomial Spline Technique, European Journal of Scientific Research, Vol. 56 Issue 3 (2011), pp. 415-425.
- Ghazala Akram and Hamood Ur Rehman, Solution of First Order Singularly Perturbed Initial Value Problem in Reproducing Kernel Hilbert Space, European Journal of Scientific Research, Vol. 53 No. 4 pp. 516-523, 2011
- Ghazala Akram and Hamood Ur Rehman, Solution of Fifth Order Boundary Value Problems in Reproducing Kernel Space, Middle East Journal of Scientific Research, Vol. 10, Issue 2 pp. 191-195, 2011
- **Conferences, Seminars and Workshops, etc.**
  - Prof. Dr. Shahid S. Siddiqi delivered a talk as Invited Speaker, titled Binary 4Point Approximating Subdivision Scheme, 5<sup>th</sup> World Conference on 21st Century Mathematics 2011 held at Abdus Salam School of Mathematical Sciences, GC University, Lahore, February 9-13, 2011.
  - Prof. Dr. Shahid S. Siddiqi delivered a talk as Invited Speaker, titled Subdivision Schemes for Curve and Surface Designing at Centre for Advanced Studies in Pure & Applied Mathematics CASPAM, Bahauddin Zakariya University, Multan, December 12, 2011.

- Prof. Dr. Muhammad Sharif attended a conference, Twelfth National Symposium on Frontiers in Physics held at GC University
- Lahore, February 02-04, 2011.
- Prof. Dr. Muhammad Sharif attended, III Italian-Pakistani Workshop on Relativistic Astrophysics, Department of Physics, University of Salento, Lecce-Italy, June 20-22, 2011.
- *Prof. Dr. Muhammad Sharif delivered the seminar, Modified Theories of Gravity* (Institute of Mathematics, University of Aberdeen, Aberdeen Scotland, UK, June 9, 2011).
- *Prof. Dr. Muhammad Sharif delivered the seminar, Phantom Accretion onto a Class of Black Holes* (3rd Italian-Pakistani Workshop, Department of Physics, University of Salento, Lecce-Italy, June 21, 2011).
- Prof. Dr. Malik Zawwar Hussain attended a conference, Data modeling using rational cubic functions, School of Mathematical Sciences, University Stains Malaysia, July 23, 2011
- Prof. Dr. Malik Zawwar Hussain Worked as member of Organizing Committee in World Conference of 21<sup>st</sup> Century Mathematics, Lahore, Pakistan February 9-13, 2011.
- Prof. Dr. Malik Zawwar Hussain Worked as member, Program and Reviewing Committee, International Conference of Graphical Models and Imaging GMAI, July 12-15, 2011, London.
- Dr. Muhammad Aslam Malik participated in 5<sup>th</sup> World Conference on 21<sup>th</sup> Century Mathematics 2011, Government College University, Lahore.
- Dr. Muhammad Aslam Malik participated and presented research paper in 12<sup>th</sup> International Pure Mathematics Conference held at Quaid-e-Azam University, Islamabad on August, 2011.
- Miss Wajiha Javed , Ph.D Scholar participated in Lecture Series on Cosmology during November 23-27, 2010, Department of Mathematics, University of the Punjab, Lahore
- Miss Wajiha Javed, Ph.D. Scholar participated in the 12<sup>th</sup> National Symposium on Frontiers in Physics, Government College University, Lahore, 9-12 February, 2011.
- Miss Wajiha Javed, Ph.D Scholar participated in 5<sup>th</sup> World Conference on 21<sup>th</sup> Century Mathematics 2011, Government College University, Lahore.
- Miss Wajiha Javed, Ph.D Scholar participated in the Conference on Recent Advances in Mathematics Methods, models & Applications, Lahore University of Management Sciences, 16-17 April, 2011.
- Miss Wajiha Javed, Ph.D Scholar participated in the Conference on Recent Advances in Mathematics Methods, Models & Applications, Lahore University of Management Sciences, 16-17 April, 2011.
- All Faculty members and M.Phil./MS and Ph.D scholars participate in the Seminar Series.
- Weekly Departmental Seminar Series are held at Department of Mathematics University of the Punjab, Lahore.
- Each of them deliver lectures on each Wednesday on the topics their latest research.

- **Research Journals**

Punjab University Journal of Mathematics (PUJM, Category X)

**Research Collaboration**

- **Foreign Linkages**

- Department of Mathematics, University of the Punjab, Lahore-Pakistan and School of Mathematical Sciences, University of Sians, Malaysia has signed memorandum of Understanding (MOU) for research collaboration.
- School of Engineering, Manufacturing and Mechanical Engineering, University of Birmingham, UK.

- **Funding grants for R&D**

- HEC grant scholarships to some of our Ph.D. Scholars.

**DEPARTMENT OF PHYSICS**

- **R&D-An Overview**

Research activities in the Department are going on in various areas including experimental and theoretical Physics in collaboration with other national institutions/ Organizations namely PINSTECH, INMOL & Shaukat Khanum Hospital, SUPARCO, Govt. College University, CSSP, Department of Meteorology and PCSIR. The main fields of research in theoretical Physics are: Quantum Field Theory, Conformal Field Theory, Condensed Matter Physics, Plasma and Nonlinear Physics. On the other hand, the experiment research includes Material Science, Solid State Physics, Nuclear Physics, Nuclear Medicine, Physics of Semiconductor Devices, Atmospheric Physics, Environmental Pollution & Climatology, and Quantum Wires / Quantum Dots (Nanotechnology). Thirty three (33) research papers have been published in National and Internal Research Journals by the faculty members in the last academic year and many are submitted. A research project is in progress which will definitely be helpful for further publications.

- **Publications:**

- S. Ali *et.al* (2011): First principles study of structural, electronic and magnetic properties of Mg<sub>1-x</sub>MnxTe alloys, Journal of Alloys and Compounds vol.529 (2.145).
- S. Ali *et.al* (2011): First principles study of half-metallic ferromagnetism in Cr-doped CdTe, Journal of Physics and Chemistry of Solids vol.72 (1.38)
- Rai, M.G., Iqba, M.A., Yongbing, X., Gordon, W.I., Wen, Z., (2011): Influence of Rare Earth Ho<sup>3+</sup> Doping on Structural, Microstructure and Magnetic Properties of ZnO Bulk and Thin Film Systems, Chinese Journal of Chemical Physics vol.24 (0.642)
- Rai, M.G., Iqba, M.A., Xu, Y.B., Will, I.G., Huang, Z.C.,(2011): Study of Sm-doped ZnO samples sintered in a nitrogen atmosphere and deposited on n-Si(1 0 0) by evaporation technique, Journal of Magnetism and Magnetic Materials vol.323 (1.689)

- Hassan, M., Usman Saleem, (2011): Darboux transformation and multi-soliton solutions of principal chiral and WZW models, *Modern Physics Letters A*, 26, (0.990)
- Hassan, M., Usman Saleem, Bushra Haider (2011): Binary Darboux transformation and quasideterminant solutions of the chiral field, *Journal of Nonlinear Mathematical Physics*, 18, 02,299(0.447)
- Hassan, M., (2011): Binary Darboux transformation of supersymmetric chiral field model *Journal of nonlinear Mathematical Physics*, 18,04,577(0.447)
- Ali, R., Zamir, B., (2011) Wave propagation in parallel-plate waveguides filled with nonlinear left-handed Material, *Chinese Physics B*, Vol.20,No.1,014102 (1.63).
- Ali, R., Sheikh, N., (2011) Coupled waves in the periodic composite magnetic-semiconducting media, *Progress in electromagnetic research M.*, Vol.18,73-88 (3.745).
- Arshad, M.N., Khan, I.U., Zia-ur-Rehman, M., Ahmad, S.A. and Rafique, H. M., (2011) Methyl 4-hydroxy-2-methoxycarbonylmethyl-1,1-dioxo-1,2-dihydro-1 $\lambda^6$ ,2-benzothiazine-3-carboxylate. *Acta Cryst. E*, 67, o2527.
- Arshad, M.N., Khan, I.U., Holman, K.T., Asiri, A.M. and H.M. Rafique (2011), N-(2-Bromophenyl)-4-methyl-N-(4-methylphenylsulfonyl) benzenesulfonamide, *Acta Cryst. E*, 67, o2356
- Arshad, M.N., Khan, I.U., Zia-ur-Rehman, M., Rafique, H. M. and Holman, K.T. (2011) , K Travis Holman, Methyl 4-hydroxy-2-isopropyl-1,1-dioxo-2H-1,2-benzothiazine-3-carboxylate, *Acta Cryst. E*, 67, o1823-4.
- Arshad, M.N., Khan, I.U., Rafique, H. M., Asiri, A.M and Shafiq, M. (2011), 2-Chloro-4-(2-iodobenzene-sulfonamido)-benzoic acid, *Acta Cryst. E*, 67, o1327.
- Khan, M.H., Khan, I.U., Arshad, M.N., Rafique, H. M. (2011) Structures of Benzenesulfonylamino-3-(4-benzenesulfonyloxyphenyl)-propionic acid and 2-(toluene-4-sulfonylamino)-3-[4-(toluene-4-sulfonyloxy)-phenyl]-propionic acid: Variations in L-tyrosine Backbone Conformation, Intramolecular Aromatic  $\pi$ - $\pi$  Stacking and Short C-H...O Interactions, *Crystals*, 1, 69(2011).
- Rafique, H. M., Flavell, W.R., Thomas, A.G., Syres, K.L., Barilo, S.N., Shiryayev, S.V., Bychkov, G.L., Holland, D.M.P., Malins, A.E.R., Miller, G., Dhanak, V.R. (2011) Comparison of the electronic structure of  $\text{LnBaCo}_2\text{O}_{5+\delta}$  (Ln = Gd, Dy; Ln-112) and  $\text{LnBaCo}_4\text{O}_7$  (Ln = Yb; Ln-114) single-crystal surfaces using resonant photoemission, *Journal of Electron Spectroscopy and Related Phenomena*, 184, 227 (2011).
- Ali, M.Z., (2011): Properties of the angular gap in one dimensional periodic structures containing left-handed metamaterials: *Optica Application Vol. 41*.(358).
- Bashir, A., Gillin, W.P., Georakopoulos, S., Shakunov, M., Bakklar, M.A., Stingelin, N., Bradley, D.D.C., Anthopoulos, T.D., (2011) Structural and Electrical Characterization of ZnO Films Grown

by Spray Pyrolysis and Their Application in Thin- Film Transistors: Advanced. Functional. Materials Vol.21, (8.5)

- Bashir, M., Kempf, F., (2011) Advanced biometric pen system for recording and analyzing handwriting: Journal of Signal Processing Systems Vol.10, (0.607)
- Saleem, U., Das, A., (2011) Binary Darboux transformation and quasideterminant solutions of the chiral field: Journal of Nonlinear Mathematical Physics Vol 18 (299-321).
- Saleem, U., Hassan, M., (2011) Darboux Transformation and multi-soliton solutions of Two-boson Hierarchy: Modern Physics Letters A 26(625-636)
- U.Saleem *et.al* (2011) Darboux transformation and multi-soliton solutions of principal chiral and WZW models: Modern Physics Letters A 26(73-85)
- Hassan, M., Saleem, U., Haider, B., (2011) Binary Darboux transformation and quasideterminant solutions of the chiral field,. Journal of Nonlinear Mathematical Physics.Vol18 (299-321)
- Haider, B., Hassan, M., (2011) Binary Darboux transformation of supersymmetric chiral field model, Journal of Nonlinear Mathematical Physics.18,04,557(0.447)
- Hassan, M.(Jr), Springholz, G., Lechner, R.T., Grosiss, H., Kirchsclager, R., Bauer, G., (2011) Molecular beam epitaxy of single phase GeMnTe with high ferromagnetic transition temperature, Journal of Nonlinear Mathematical Physics.submitted Journal of crystal Growth Vol 323(1.737)
- Hassan, M.(Jr), Springholz, G., Lechner, R.T., Grosiss, H., Kirchsclager, R., Bauer, G., (2011) Molecular beam epitaxy of single phase GeMnTe with high ferromagnetic transition temperature, Journal of Nonlinear Mathematical Physics.submitted Journal of crystal Growth Vol 323(1.737)
- A. Javed *et.al* (2011) "Numerical study of the effective magnetocrystalline anisotropy and magnetostriction in polycrystalline FeGa films" J. Appl. Phys. 110 (2011) 043902.
- A. Javed *et.al* (2011), "A comparative study of the microstructural and magnetic properties of  $\langle 110 \rangle$  textured thin polycrystalline  $\text{Fe}_{100-x}\text{Ga}_x$  ( $10 \leq x \leq 35$ ) films" Appl. Surf. Sci. 257 (2011) 5977-5983.
- A. Javed *et.al* (2011), "Effect of growth parameters on the structure and magnetic properties of thin polycrystalline Fe films fabricated on Si(100) substrates" Appl. Surf. Sci. 257 (2011) 5586-5590.
- A. Javed *et.al* (2011), "Structural and Magnetic Ordering in Fe-Ga Thin Films Examined by Mössbauer Spectrometry" Acta Physica Polonica A 119 (2011) 21-23.
- R. Shehzadi *et.al* (2011) (Zeus Collaboration) "Measurement of Beauty production in Deep Inelastic scattering at HERA using decays into electrons", European Physical Journal C (Particles and Fields), Vol. 71, No 2, 1573, (3.248).
- M.Riaz, *et.al* (2011) "Photoconductivity of interfaces between oxide band insulators hosting a 2-dimensional electron gas: the case of NdGaO<sub>3</sub>/SrTiO<sub>3</sub> Physical Review B (Rapid Communications) Submitted for publication

- N.A. .Noor, S. Ali, A. Shaukat, W. Tahir, A.H. Reshak, (2011): First principles study of structural, electronic and magnetic properties of Mg<sub>1-x</sub>MnxTe alloys, Journal of Alloys and Compounds vol.529 (2.145).
- N.A.Noor S. Ali, Shaukat, (2011): First principles study of half-metallic ferromagnetism in Cr-doped CdTe, Journal of Physics and Chemistry of Solids vol.72 (1.38)

- **Research Journals**

The following journals are received regularly & free of cost:

- Scientific American
- Nature Physics
- Cern Courier
- Korean Physics Society
- Nuclear Science
- Nuclear Engineering & Technology
- Scientific Research published by University of the Punjab

**Research Collaboration**

- **Indigenous**

- HEC, PU, LUMS

- **Foreign Linkages**

Department of Radiation Medicine, University of Kentucky, USA, Southside Regional Medical Centre, Petersburg, VA, USA and Department of Electrical Engineering and Computer Science, Michigan State University, USA.

**DEPARTMENT OF SPACE SCIENCE**

- **R&D-An Overview**

The advances in the field of Space Science, which comprise the disciplines like Remote Sensing, Satellite Communications, Meteorology, Space Environment, Meteorology and Astronomy & Astrophysics play a vital role in the development of a country. The students of B.S (Hons) do their research projects in their final semesters in these emerging fields. Projects: (i) Completed

- **Conferences, Seminars and Workshops, etc.**

- Syeda Adila Batool, Muhammad Nawaz Chaudhry, Irfan Ashraf. "Spatial Management Plan for MSW of University of the Punjab Lahore, Pakistan" Paper presented at 26th International Conference 27-31st March, 2011 Philadelphia, USA.
- Mr. Jahanzeb Qureshi, Mr. Asim Daud and Mr. Khalid Mahmood attended a training workshop on "Disaster risk management (11-12) April, 2011 organized by National disaster management authority and dept. of Geography, University of the Punjab, Lahore.



## CENTRE OF EXCELLENCE IN SOLID STATE PHYSICS

The Centre of Excellence in Solid State Physics is primarily a research institute, and as such offers research facilities (theoretical and experimental) in various sub-disciplines. There are a number of research laboratories housing state-of-the art computers, analytical equipment and fabrication facilities. These facilities are open to all public sector universities for their M.Phil. and Ph.D. students.

### Research project sponsored by national and international agencies

Researchers/ sponsoring agency	Research project/duration	Financial Support (million rupees)	Main goals
Prof. Dr. S. Naseem/ Higher Education Commission	Establishment of Experimental Facilities Research Facilities for Fabrication and Characterization of Functional Nano-ceramics at COE in Solid State Physics	Rs. 38.533 million	To establish experimental research facilities for nano-ceramics research

### • Publications

- Ranjha NM, Khan H and Naseem S. (2010) Encapsulation and characterization of controlled release flurbiprofen loaded microspheres using beeswax as an encapsulating agent. J. Mater. Sci. – Materials in Medicine. 21: 1621
- Ranjha NM, Ayub G, Naseem S & Ansari T. (2010) Preparation and characterization of hybrid pH-sensitive hydrogels of chitosan-co-acrylic acid for controlled release of verapamil. J. Mater. Sci. – Materials in Medicine. 21: 2805
- Anjum S, Rafique MS, Khaleeq-ur-Rahman M, Siraj K, Usma A, Latif H, Bhatti KA, Hussain S and Naseem S. (2010) Magnetic and optical properties of amorphous NdFeCo thin films by pulsed laser deposition technique. Vacuum. 85: 126
- Siraj K, Khaleeq-ur-Rahman M, Rafique MS, Munawar MZ, Naseem S and Riaz S. (2011) Pulsed laser deposition and characterization of multilayer metal-carbon thin films. Applied Surface Science. 257: 6445
- Kayani ZN, Riaz S and Naseem S. (2011) Preparation of BiFeO<sub>3</sub> films by Sol-Gel technique and their characterization. Sci. Int. 23: 255
- Anjum S, Tahir HM, Hussain K, Khaleeq-ur-Rahman M, Rafique MS and Naseem S. (2011) Structural and magnetic properties of cadmium substituted Ni-Al ferrites. Physica B. 406: 2555
- Riaz S, Naseem S and Xu YB. (2011) Room temperature ferromagnetism in sol-gel deposited un-doped ZnO films. J. Sol. Gel. Sci. Technol. 59:584
- Nasim F, Ali A, Bhatti AS and Naseem S. (2011) Temperature dependent tuning of the flat band voltages of TiO<sub>2</sub>/Si interfaces. J. Appl. Phys. 110: 114517
- Khalid M, Riaz S and Naseem S. (2011) Modelling and simulations of 1kV/5A normally-off 4H-SiC VJFET. IEEE International Multitopic Conference (INMIC), Karachi, Pakistan, December 22 – 24

- Safeen A, Safeen K, Riaz S and Naseem S. (2011) Structural, Magnetic and Optical Properties of Undoped Co-Evaporated ZnO Thin Films. Presented at University of Peshawar, Peshawar
- Afaq A and Ahmad I. (2011) Classification of partially reflecting surfaces using Photo-detached electron spectrum. International Journal of Quantum Chemistry. 111: 4067
- Haneef M, Ahmad I, Afaq A and Rahman A. (2011) Investigation of spherical effects in the photodetached electron-spectra. J. Phys. B - At. Mol. Opt. Phys. 44: 195004
- Rehman A, Ahmad I, Afaq A, Haneef M. (2011) Interferences in the photodetached-electron spectra from a linear tetraatomic negative ion. Chin. Phys. Lett. 28: 063301
- Rehman A, Ahmad I, Afaq A, Haneef M, Zhao HJ. (2011) Investigation of a linear tetra-atomic negative ion by photodetached-electron spectra. Chin. Phys. Lett. 28: 083301
- Murtaza G, Ahmad I, Amin B, Afaq A, Maqbool M, Maqsood J, Khan I and Zahid M. (2011) Investigation of structural and optoelectronic properties of BaThO<sub>3</sub>. Optical Materials. 33: 553
- Murtaza G, Ahmad I, Amin B, Afaq A, Ghafoor F, Benamrani A. (2011) Linear and non-linear optical response of Mg<sub>x</sub>Zn<sub>1-x</sub>O: A Density Functional study. Physica B: Condensed Matter. 406: 2632
- Murtaza G, Sadique G, Rahnamaye Aliabad HA, Khalid MN, Naeem S, Afaq A, Amin B, Ahmad I. (2011) First principle study of cubic perovskites: AgTF<sub>3</sub> (T=Mg, Zn). Physica B: Condensed Matter. 406: 4584
- Murtaza G, Ahmad I, Maqbool M, Rahnamaye Aliabad HA, Afaq A. (2011) Structural and Optoelectronic Properties of Cubic CsPbF<sub>3</sub> for Novel Applications. Chin. Phys. Lett. 28: 117803
- Tahir BA, Saeed A, Ahmed A, Iqbal SMZ, Ahmed R, Ashiq MGB, Abdullah HY, and Abdul Rahman R. (2011) Effect of Sensor Gauge Length on Strain Sensitivity of Fiber Bragg Grating System. Chinese Journal of Physics. 49: 1035
- Saleem M, Siddiqi SA, Atiq S, Anwar MS, Hussain I, Alam S. (2011) Carrier-mediated ferromagnetic enhancement in Al-doped ZnMnO dilute magnetic semiconductors. Materials Characterization. 62: 1102
- Saleem M, Siddiqi SA, Atiq S, Ramay SM, and Naseem S. (2011) Effect of thermal treatment on structural, electrical and magnetic properties of sol-gel synthesized Zn<sub>0.95</sub>Ni<sub>0.05</sub>O nanocrystallites. Pakistan Institute of Physics International Conference (PIPIC-2011), University of Engineering and Technology (UET) Lahore, Pakistan, March 28-30.
- Atiq S, Siddiqi SA, Saleem M and Ramay SM. (2011) Enhanced Magnetic Moment of Epitaxial γ'-Fe<sub>4</sub>N Films at Low Temperature. The 15<sup>th</sup> International Symposium on the Physics of Semiconductors and its Applications-IPSA-2011. Jeju, South Korea, July 5-8.
- Saleem M, Siddiqi SA, Atiq S and Naseem S. (2011) Structural and magnetic studies of Ni doped ZnO synthesized with auto-combustion and co-precipitation techniques. The 15<sup>th</sup> International

Symposium on the Physics of Semiconductors and its Applications-ISPSPA-2011. Jeju, South Korea, July 5-8.

- Hussain SS. (2011) Influence of Annealing Treatment at 650°C on Near Infrared Photoluminescence of Er Doped AlN Thin Films with Columnar and Nanograinular Morphologies. 36<sup>th</sup> INSC International Nathiagali Summer College, 27th June-4th July, Pakistan.
- Hussain SS. (2011) Influence of Er Concentration on Near Infrared and Visible Photoluminescence of Er-doped AlN Thin Films. PIP International Conference–2011, 28-31 March, 2011, Lahore Pakistan.
- Hussain SS. (2011) Time-resolved Spectroscopy Er Doped AlN Thin Films with Columnar and Nanograinular Morphologies Grown by PVD Magnetron Sputtering. 2<sup>nd</sup> International Conference on Semiconductor Materials and Nano-Devices (ICSMAND-2011), 10-12 October 2011, Bahawalpur, Pakistan.
- Khalid M and Naseem S. (2011) Optimization of Electrical Characteristics of Pt/SiC Schottky Barrier Diode using TCAD tools. PIP International Conference–2011, 28-31 March, 2011, Lahore Pakistan.
- Saleem M. Siddiqi SA, Atiq S, Ramay SM and Naseem S. (2011) Effect of thermal treatment on structural, electrical and magnetic properties of sol-gel synthesized  $Zn_{0.95}Ni_{0.05}O$  nanocrystallites. PIP International Conference–2011, 28-31 March, 2011, Lahore Pakistan.

- **Book**

- “Interferences in the photo-detachment of negative ion systems: Two-center model and theoretical imaging method” Verlag (2010) –by- Afaq Ahmed

**Research Collaboration:**

At National level

- University of Engineering & Technology, Lahore.
- Islamia University, Bahawalpur
- Lahore College for Women University, Lahore.
- Quaid-i-Azam University, Islamabad
- Bahauddin Zakariya University, Multan
- COMSATS Institute of Information Technology

At International level

- Chinese Academy of Sciences, China
- University of York, UK
- University of Hull, UK
- University of Paisley, UK

**CENTRE FOR HIGH ENERGY PHYSICS**○ **Publications**

Research Papers/Articles published during the period 1 Oct 2010 to 30 Sep 2011

Sr. #	Author	Research Paper
1	Haris Rashid	1 Study of $\chi_{cJ}$ Radiative Decays into a vector meson (BES Collaboration), Phys.Rev.D, 83, 112005. June 10, 2011
		2 Study of $a_0(980)$ - $f_0(980)$ mixing (BES Collaboration), Phys.Rev.D, 83, 032003. Feb 03, 2011
		3 Confirmation of the X(1835) and observation of the resonances X(2120) and X(2370) in $j/\psi \rightarrow \gamma\pi^+\pi^-\eta'$ (BES Collaboration), Phys.Rev.Lett, 106, 072002 Feb 16, 2011
		4 Measurement of the Matrix Element for the Decay $\eta' \rightarrow \eta\pi^+\pi^-$ (BES Collaboration), Phys.Rev. D, 83, 012003, Jan 18, 2011
		5 First Observation of the Decays $\chi_{cJ} \rightarrow \pi^0\pi^0\pi^0\pi^0$ (BES Collaboration), Phys.Rev.D, 83, 012006. Jan 18, 2011
		6 "Search for CP/P violation process pseudoscalar decays into $\pi\pi$ " Phys. Rev. D Vol:84 pp: 032006. Aug 11, 2011
		7 "Observation of $\chi_{c1}$ decays into vector meson pairs $\phi\phi$ , $\omega\omega$ and $\omega\phi$ " Phys. Rev. Lett. Vol:107 pp: 092001. Aug 22, 2011
		8 "Observation of $\chi_{cJ}$ decaying into the $p\bar{p}K^+K^-$ final state", BESIII Collaboration, Phys. Rev. D (USA), 83, 112009. June 27, 2011
		9 "Evidence for $\psi'$ decays into $\gamma\pi^0$ and $\gamma\eta$ ", BESIII Collaboration, Phy. Rev. Lett. (USA) 105, 261801 Dec 20, 2010
2.	Bilal Masud	1 Dynamical Effects of QCD in $qq^{2-2}$ Systems, Eur.Phys. J.A. 47:33
3.	Munawar Iqbal	1 Optimal Welding Parametes with 10 KeV Point Source Electron Gun, VACUUM, 85(6):
		2 Electrostatic Focusing of Directly Heated linear Filament Gun Using EGUN, Nuclear Instruments and Methods in Physics Research Section A, 641(1):
		3 Electron Beam Technology-Some Recent Developments, World Scientific, (2010), 285-289
		4 Laser Induced Forward Transfer (LIFT) of Materials using 40-ps Pulses – Experimental and Quantitative Modilization Study. Journal of Laser Micro Nano engineering, V:6, (2), 151-157
		5 Optical Analysis of Germanium Carbide Thin Film Deposited by Reactive Pulsed Laser Ablation, Journal of Laser Micro/Nanoengineering, 5(3), December, (2010): 204-208.

		6	Laser Induced Forward Transfer (LIFT) of Materials using 40-ps Pulses – Experimental and Quantitative Modelisation Study, Journal of Laser Micro/Nanoengineering, Vol. 6, No.2, September (2011): 151-157
4.	Qadeer Afzal Malik	1	Study of $\chi_{cJ}$ Radiative Decays into a vector meson (BES Collaboration), Phys.Rev.D, 83, 112005. June 10, 2011
		2	Study of $a_0(980)$ - $f_0(980)$ mixing (BES Collaboration), Phys.Rev.D, 83, 032003. Feb 03, 2011
		3	Confirmation of the X(1835) and observation of the resonances X(2120) and X(2370) in $j/\psi \rightarrow \gamma\pi^+\pi^-\eta'$ (BES Collaboration), Phys.Rev.Lett, 106, 072002 Feb 16, 2011
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		6	"Search for CP/P violation process pseudoscalar decays into pipi" Phys. Rev. D Vol:84 pp: 032006. Aug 11, 2011
		7	"Observation of $\chi_{c1}$ decays into vector meson pairs phi phi, omega omega and omega phi" Phys. Rev. Lett. Vol:107 pp: 092001. Aug 22, 2011
		8	"Observation of $\chi_{cJ}$ decaying into the p pbar K+K- final state", BESIII Collaboration, Phys. Rev. D (USA), 83, 112009. June 27, 2011
		9	"Evidence for $\psi'$ decays into $\gamma\pi^0$ and $\gamma\eta$ ", BESIII Collaboration, Phys. Rev. Lett. (USA) 105, 261801 Dec 20, 2010
5.	Abrar A. Zafar	1	Study of $\chi_{cJ}$ Radiative Decays into a vector meson (BES Collaboration), Phys.Rev.D, 83, 112005. June 10, 2011
		2	Study of $a_0(980)$ - $f_0(980)$ mixing (BES Collaboration), Phys.Rev.D, 83, 032003. Feb 03, 2011
		3	Confirmation of the X(1835) and observation of the resonances X(2120) and X(2370) in $j/\psi \rightarrow \gamma\pi^+\pi^-\eta'$ (BES Collaboration), Phys.Rev.Lett, 106, 072002 Feb 16, 2011
		4	Measurement of the Matrix Element for the Decay $\eta' \rightarrow \eta\pi^+\pi^-$ (BES Collaboration), Phys.Rev. D, 83, 012003, Jan 18, 2011
		5	First Observation of the Decays $\chi_{cJ} \rightarrow \pi^0\pi^0\pi^0\pi^0$ (BES Collaboration), Phys.Rev.D, 83, 012006. Jan 18, 2011
		6	"Search for CP/P violation process pseudoscalar decays into pipi" Phys. Rev. D Vol:84 pp: 032006. Aug 11, 2011
		7	"Observation of $\chi_{c1}$ decays into vector meson pairs phi phi, omega omega and omega phi" Phys. Rev. Lett. Vol:107 pp: 092001. Aug 22, 2011

		8	"Observation of $\chi_{cJ}$ decaying into the p pbar K+K- final state", BESIII Collaboration, Phys. Rev. D (USA), 83, 112009. June 27, 2011
		9	"Evidence for $\psi'$ decays into $\gamma\pi^0$ and $\gamma\eta$ ", BESIII Collaboration, Phy. Rev. Lett. (USA) 105, 261801 Dec 20, 2010
6.	Talab Hussain.	1	Study of $\chi_{cJ}$ Radiative Decays into a vector meson (BES Collaboration), Phys.Rev.D, 83, 112005. June 10, 2011
		2	Study of $a_0(980)$ - $f_0(980)$ mixing (BES Collaboration), Phys.Rev.D, 83, 032003. Feb 03, 2011
		3	Confirmation of the X(1835) and observation of the resonances X(2120) and X(2370) in $j/\psi \rightarrow \gamma\pi^+\pi^-\eta'$ (BES Collaboration), Phys.Rev.Lett, 106, 072002 Feb 16, 2011
		4	Measurement of the Matrix Element for the Decay $\eta' \rightarrow \eta\pi^+\pi^-$ (BES Collaboration), Phys.Rev. D, 83, 012003, Jan 18, 2011
		5	First Observation of the Decays $\chi_{cJ} \rightarrow \pi^0\pi^0\pi^0\pi^0$ (BES Collaboration), Phys.Rev.D, 83, 012006. Jan 18, 2011
		6	"Search for CP/P violation process pseudoscalar decays into $\pi\pi$ " Phys. Rev. D Vol:84 pp: 032006. Aug 11, 2011
		7	"Observation of $\chi_{c1}$ decays into vector meson pairs $\phi\phi$ , $\omega\omega$ and $\omega\phi$ " Phys. Rev. Lett. Vol:107 pp: 092001. Aug 22, 2011
		8	"Observation of $\chi_{cJ}$ decaying into the p pbar K+K- final state", BESIII Collaboration, Phys. Rev. D (USA), 83, 112009. June 27, 2011
		9	"Evidence for $\psi'$ decays into $\gamma\pi^0$ and $\gamma\eta$ ", BESIII Collaboration, Phy. Rev. Lett. (USA) 105, 261801 Dec 20, 2010
7.	M. Ayub Faridi	1	Optimal Welding Parameters with 10KeV Pint Source Electron GUN. VACUUM Volume 85, Issue 6, 11 January 2011, Pages 654–656
8.	Faisal Akram	1	Hadronic Absorption Cross-Section of $B_c$ , Phys. Rev.C, 84

- **Conferences, Seminars and Workshops**

- Dr. Bilal Masud attended Winter meeting on particles and Fields December 29-30, 2010, National Centre for Physics, Islamabad.
- Dr. Bilal Masud organized a lecture at CHEP by Dr. Adnan Bashir, Universidad Michoacana, Morelia, Mexico, on January 11, 2011.
- Dr. Munawar Iqbal did an oral presentation at International Symposium on Vacuum Science and Technology (ISVT-2010) National Centre for Physics, Islamabad, November 2-6, 2010.
- Dr. Munawar Iqbal, Dr. Ayub Faridi and Mr. Shahid Sattar participated in International Scientific Spring, (ISS-2011) March 1-4, 2011, National Centre for Physics, Islamabad.

- Dr. Munawar Iqbal delivered an invited talk entitled *High Energy Thermionic Electron Beam Emission: Generation, Design and Application* at 4<sup>th</sup> International Conference on Modern Trends in Physics Research, December 12-16, 2010 Sharmul Sheikh, Egypt. Dr. Ayub Faridi also presented a paper in it.
- Dr. Munawar Iqbal did an oral presentation entitled *High Energy Thermionic Electron Beam for Material Surface Modification* at 19<sup>th</sup> International Conference on Composites and Engineering (ICCE-19), August 24-30, 2011, Shanghai, China.
- Mr. Shahid Sattar participated in 36<sup>th</sup> International Nathigali Summer College (2011) on Physics and Contemporary needs, National Centre for Physics, Islamabad.
- Dr. Qadeer Afzal Malik attended summer meeting of BESIII collaboration at Nanjang, China, in June 2011.
- Dr. Qadeer Afzal Malik performed shift duties at BESIII at IHEP, Beijing, China, May-June 2011.

### Research Collaboration

- **Foreign Linkages**

- Beijing Spectrometer III (BESIII) Collaboration: CHEP faculty members: Prof. Dr. Haris Rashid, Dr. Abrar Ahmed Zafar, Dr. Qadeer Afzal Malik and Dr. Talab Hussain are the BESIII members. They continued performing collaborative research in this period.
- Dr. Bilal Masud continued collaborative research with the following researchers abroad:
  - 1-Dr. Eric Swanson, Pittsburg University, USA.
  - 2-Dr. Sadataka Furui, School of Science and Engineering, Teikyo University, Utsunomiya, Japan.
  - 3-Dr. Adnan Bashir, Universidad Michoacana, Morelia, Mexico.

### CENTRE FOR INTEGRATED MOUNTAIN RESEARCH (CIMR)

- **Publications**

- Khan, K.; Naeem, Muhammad 2010 "Evaluation of Geo Hydro Chemical Ions in Kunhar River at Naran and Talhata Bridge (Ghari Habib Ullah), NW Himalayas, Pakistan" Submitted and accepted, Journal of the Chemical Society of Pakistan, H.E.J. Research Institute of Karachi, University of Karachi-75270,
- Khan, K.; Nilofar 2010 "Impacts of sectarian clashes and terrorism on tourism sector in Gilgit Baltistan, Pakistan in the last decades-Threats to future sustainable tourism Submitted to Journal of Tourism Management, Ref. no. JTMA-D-10-00584 <http://epsupport.elsevier.com>
- Khan M. S., Adil A., Khan Khalida (2011 "Assessment of Environmental Degradation of Kalar Kahar Lake, Salt Range, Pakistan due to Anthropogenic Activities and its Remedial Measures" 2011 Paper accepted in International Conference on Environmental Science and Development, ICESD, Mumbai, India. Jan. 7-9, 2011, and published in Conference proceeding, IEEE Xplore,

and indexed by Ei Compendex and Thomson ISI., IEEE Catalog Number: CFP1115M-PRT, ISBN: 978-1-4244-9235-0

- Nilofar, Khalil Ahmed, Rachael Louise Alexandra Jack, Shahida Hasnain, and Khan Khalida, 2010 "DNA testing and GPS positioning of Snow leopard (*Panthera uncia*) genetic material in the Khunjerab National Park (KNP), Northern Areas, Pakistan" Springer, Conservation Genetics
- Khan, K.; The Murree Hill Station, Pakistan; A Prey of Severe Landslide Hazards Published, Pakistan" submitted to Journal of Environmental Science-Elsevier
- Khan, K.; Nilofar, Kamran Asif, Afzal Khan, 2011 "Impacts of Integrated Watershed Management on the livelihood of Communities; A case study of Environmental Recovery Program in collaboration with UNDP in Earth quake affected Areas of NWFP and AJK submitted to Journal of Environmental Science-Elsevier
- "DNA Testing and GPS Positioning of Snow leopard (*Panthera Uncia*) Genetic Material in the Khunjerab National Park (KNP), Northern Areas, Pakistan" (Dr Khalida Khan and Miss Nilofar) submitted to Pakistan Journal of Zoology).
- Khan, K.; Amjad A, Rabia F. CHAPTER PROPOSAL (STATUS: ACCEPTED) 2010. Title: - Appraisal of Land Degradation & Digital Image Processing Techniques, BOOK EDITOR: Dr. E. O. Ekundayo Alberta, Canada" Environmental Monitoring", ISBN 979-953-307-295-0. <http://www.intechweb.org/booksprocess/index/chapter/53438>
- Rabia F., Amreen Z, Adress K., Khan Khalida (2011) "Oncogenic Potential of HPV and its relation to cervical cancer", in Virology .Journal.
- Khan Khalida , Nilofar and Amjad Almas, (2011) "Impacts of Terrorism, sectarian and regional Clashes on Tourism sector and natural resource management in Gilgit Baltistan in last one decade–Threat to Future Sustainable Development", Taylor & Francis, Journal of Sustainable Tourism.
- Khan, K.; Ch Ashraf, Rabia Faridi (2011) " Climate Change Effects on Hunza Lake and Geomorphologic Status of Hunza River Basin, Gilgit-Baltistan, Pakistan, Proceedings "14th World Lake Conference: Lakes, Rivers, Groundwater and Coastal Areas; Understanding Linkages", Austin, Texas, USA, 31st Oct to Nov, 4th, 2011 co-organized by International Lake Environment Committee (ILEC) & THE River Systems Institute , Texas State University, USA
- Khan, K.; M. Naeem, 2011, "Source determination and ecological effects of particulate matter, Zone-1, Punjab Pakistan" accepted for presentation and publication in impact factor journal by Manuscript number 2030, ECAR 2012 - First International Conference on Environmental Challenges in Arid Regions by the Center of Excellence in Environmental Studies (CEES) at King Abdul-Aziz University, Jeddah, Saudi Arabia.
- Khan M. S., Adil A., Khan Khalida (2011) "Assessment of Environmental Degradation of Kalar Kahar Lake, Salt Range, Pakistan due to Anthropogenic Activities and its Remedial Measures"



2011 Paper accepted in International Conference on Environmental Science and Development, ICESD, Mumbai, India. Jan. 7-9, 2011, and published in Conference proceeding, IEEE Xplore, and indexed by Ei Compendia and Thomson ISI., IEEE Catalog Number: CFP1115M-PRT, ISBN: 978-1-4244-9235-0

- Khan, K.; 2011Abstract WLF2-2011-0720 accepted and published “ titled Preliminary understandings of a Attabad-Landslide hazard and its corresponding Hunza
- River Watershed District Hunza-Nagar, Northern Areas of Pakistan” in the Second World Landslide forum Oct. 2011 at Rome, Italy

- **Conferences, Seminars and Workshops, etc.**

- Dr. Khalida Khan participated International expedition “Hunza Valley Glaciers, Gilgit-Baltistan, HKH Region, Pakistan” one week duration from 2nd June to 8th June, 2011, organized by Meteorological Department Head Office, Islamabad
- Dr. Khalida Khan participated and Presented on Climate Change Effects on Hunza Lake and Geomorphologic Status of Hunza River Basin, Gilgit-Baltistan, Pakistan, in the “14th World Lake Conference: Lakes, Rivers, Groundwater and Coastal Areas; Understanding Linkages” Austin, Texas, USA, 31st Oct to Nov, 4th, 2011
- Dr. Khalida Khan participated, United Nation Women seminar on “N Entity for Gender Equality and the Empowerment of Women” on 7th July, 2011 at Marriot Hotel, Islamabad
- Dr. Khalida Khan participated SARRAC Workshop on “Science and Technology Issues on Climate Change “ 21-22 March, 2011 at Islamabad organized by Ministry of Science and Technology & Pakistan Meteorological Department
- Dr. Khalida Khan participated National Workshop on “Stakeholder Consultation for Preparation of Pakistan’s National Commission to The United Nations Framework Convention on Climate Change (UNFCCC) ” at Pakistan Academy of Science, Islamabad from 37th to 28th July 2011
- Dr. Khalida Khan participated and contributed in National Dialogue on Pakistan Water Management in the Context of Climate Change at WAPDA House, Lahore-Pakistan on 14th December, 2011

## **Research Journals**

### **Research Collaboration**

- **Indigenous**

- Water and power Development Authority (WAPDA), Lahore
- Federal Environmental Management Unit WAPDA
- Pakistan Space and Upper Atmospheric Research Commission (SUPARCO)
- Federal Environmental Protection Agency
- Punjab Environmental Protection Agency
- Pakistan Agriculture Research Council (PARC), Islamabad

- National Agriculture Research Council (NARC), Islamabad
- Pakistan Council for Research in Water Resource, (PCRWR), Islamabad
- Centre for Research in Water Resource, (CRWR), Lahore
- Pakistan Council for Scientific & Industrial Research (PCSIR), Lahore
- World Wide fund for Nature (WWF), Lahore
- Regional Meteorological Centre, Lahore
- Pakistan Meteorological Department, Government of Pakistan, Islamabad
- National Flood Forecasting Bureau, Lahore
- Space and Upper Atmospheric Research (SUPARCO), Islamabad,
- Pakistan Space and Upper Atmosphere Research Commission (SUPARCO), Karachi
- Space and Upper Atmospheric Research (SUPARCO), Lahore
- Irrigation & Power Department, WAPDA
- SCARP Monitoring Organization, WAPDA
- **Foreign Linkages**
  - United Nation Educational, Scientific & Cultural Organization (UNESCO) UNESCO Chair in Community Education Mountain Conservation and Watershed Management
  - International Centre for Integrated Mountain Development (ICIMOD), Nepal
  - The Mountain Institute (TMI), Washington DC, USA.
  - Texas State University, Texas, USA
  - River Lakes Institute, Texas, USA
  - SOKA University, Tokyo, Japan
  - Mississauga, .U of T, Canada

## **INSTITUTE OF CHEMISTRY**

- **Research and Development:**

Institute of Chemistry is one of the most active institute of University of the Punjab regarding its contribution toward research and development. The faculty members of the institute are actively involved in the research and development and present their work at various international and national conferences, seminars and workshops.

Institute of Chemistry have also established research collaborations and linkages with the following organizations.

- PCSIR, Ferozpur Road, Lahore.
- HEJ, Karachi.
- PINSTECH, Islamabad.
- NIBJI, Faisalabad.
- ANMOL, Lahore.

## INSTITUTE OF GEOLOGY

- **R & D an Overview**

Institute of Geology is one of the earliest departments of the Punjab University, providing the trained indigenous workforce equipped with strong academic background in natural resources exploration and related issues. Over the years, the Institute of Geology has evolved to hold a unique position in the country in geologic education. Bachelor of Science degree being offered at the Institute of Geology blends theory, observation, laboratory studies and integration of basic sciences with special emphasis on fieldwork. While M.Phil in Applied Geology is a professional career oriented program, having diversified fields of specialization addressing major areas of geosciences, enabling the students to take up specialized professional career as geologists in industry and to be prepared to step forward to higher education in a specific field of geology.

During the academic year 2010-2011, 02 faculty members have been working on nationally funded projects, 04 faculty members have been working on research projects funded by University and 08 PhD scholars are working on the diversified projects.

- **Projects Completed**

During the report period following research projects have been carried out and completed by the faculty members at the Institute.

Sr. No.	Projects Title	Investigator	Amount (Rs. Million)	Sponsoring Agency	Duration (years)
1.	Development of An Integrated Advanced Water Purification System	Nasir Ahmad	2.0	EPA, Govt. of Punjab	02
2.	Mineralogy, petrology and Industrial Evaluation of of Sakesar limestone from Eastern Salt Range, Jhelum District, Pakistan.	Akhtar Ali Saleemi	0.2	University of the Punjab	01
3.	Biostratigraphy of the Upper Paleocene Lockhart Limestone of Hazara Area, Northern Pakistan.	Shahid Jamil Sameeni	0.15	-do-	01
4.	Economic Geology, Hangu Formation of the Salt Range and Abbottabad, area.	Syed Mahmood Ali Shah	0.125	-do-	01
5.	Microfacies and Environment of Deposition of Early Cambrian Khewra Sandstone, Salt Range, Pakistan	Naveed Ahsan	0.125	-do-	01

6.	Sedimentology of the Chor Gali and Kamli Formation with Special emphasis on Eocene-Miocene boundary from Khewra to Kalar Kahar Area, Central Salt Range, Pakistan	Shahid Ghaziq	0.125	-do-	01
7.	Biostratigraphy and carbonate Microfacies analysis of the Lockhart Limestone, Chhangla Gali Section, Hazara Area, Northern Pakistan.	Abdur Rauf Nizami	0.125	-do-	01
8.	Petrology of Mansehra Granitic Complex, Hazara Area, Northwestern Himalaya, Pakistan	Mustansar Naeem	0.125	-do-	01

**Newly Launched**

Sr. No.	Projects Title	Investigator	Amount (Rs. Million)	Sponsoring Agency	Duration (years)
1.	Application of Advanced Oxidation Processes (AOPs) to Bleach Textile Substrate.	Nasir Ahmad	0.25	University of the Punjab, Lahore	01
2.	Biostratigraphy of Chorgali Formation, Potwar Area, Northern Pakistan.	Shahid Jamil Sameeni	0.2	-do-	01
3.	Petrology and Economic Geology of the Hangu Formation of the Unexplored Areas in the Salt Range and Hazara Areas, Pakistan.	Syed Mahmood Ali Shah	0.15	-do-	01
4.	Sedimentology of the Early Eocene Nammal Formation, Central Salt Range, Pakistan.	Shahid Ghazi	0.15	-do-	01

- **Publications**

- Shah, F.R., Ahmad, N. Peralta-Videa, J.R. and Masood, K.R. (2011). Response of *Eucalyptus Camaldulensis* to Exogenous Application of Cadmium and Chromium, *Pakistan Journal of Botany*, Vol. 43 No. 01, pp. 181-189 (IF: 0.947).
- Mashiatullah, A., Chaudhary, M.Z., Ahmad, N., Qureshi, R.M., Javed, T., Ghaffar, A. and Khan, M.S. (2011). Metal Pollution Assessment in Sediments of Karachi Coast, Pakistan, *The Nucleus*, Vol. 48 No. 03, pp. 223-230 (HEC Recog, Z-Cat.).

- Mashiatullah, A., Chaudhary, M.Z., Qureshi, R.M., Ahmad, N. Javed, T., Fazil, M. and Khan, M.S. (2011). Stable Isotopic Techniques to Address Marine Pollution Karachi Coast as a Case Study, *The Nucleus*, Vol. 48 No. 02, pp. 143-148 (HEC Recog. Z-cat.).
- Ahmad, S.R. and Lakhan, V.C. (2011). Time Series Modeling of Data on Coastline Advance and Retreat, *Journal of Coastal Research*, Vol. 27, No. 06, pp. 1094-1102 (IF: 1.366).
- Parizanganeh, A., Lakhan, V.C. and Ahmad, S.R. (2011). Modeling Categorical Data to Identify Factors Influencing Concern for the Natural Environment in Iran, *Journal of Environmental Management*, Vol. 92, pp. 2835-2843 (IF: 2.367).
- Ahmad, S.R. and Lakhan, V.C. (2011). GIS-Based Analysis and Modeling of Coastline Advance and Retreat, *Marine Geodesy*, Accepted, (IF: 1.053)
- Khan, M.S., Ahmad, I., Ahmad, S.R. and Qadri, M.A. (2011). Slope Stability analysis in Hard Rocks and Prediction of Landslide along Khewra Choha Saidden Shah Road, Salt Range, *Pakistan, Pakistan Journal of Science*, Vol. 63, No. 04, pp. 232-235 (HEC Recog. Y-Cat.).
- Ghazi, S. and Mountney, N. (2011). Petrography and Provenance of the Early Permian Fluvial Warchha Sandstone, Salt Range, Pakistan, *Journal of Sedimentology*, Vol. 233, pp. 88-110 (IF: 1.685)
- Jamil, N., Munawar, M.A., Anwar, J., Ahsan, N. and Shafique, U. (2011). Removal of toxic dichlorophenol from water by sorption with chemically activated carbon of almond shells – A green approach, *Journal of the Chemical Society of Pakistan*, vol. 33(5), pp. 640-645 (IF: 0.194).
- **Research Journals**
  - Institute of Geology publishes an annual research journal “The Geological Bulletin of the Punjab University” up-coming vol. 48 is under process.

### Research Collaboration

- **Indigenous**
  - MoU for collaborative research with department of Geological Engineering, University of Engineering & Technology, Lahore
  - Research collaboration with Pakistan Association of Petroleum Geologists (PAPG).
  - Research collaboration with Oil & Gas Training Institute (OGTI) and Oil & Gas Development Corporation (OGDCL), Islamabad.
  - Research Collaboration with Pakistan Petroleum Limited (PPL), Karachi

### Foreign Linkages

- Linkages with Seismic Micro Technology Inc. Katy Freeway, Houston Texas, USA.
- Hydrological Forecast and Warning Department, Swedish Meteorological and Hydrological Institute, Sweden.
- M/S Thies, Germany

### Funding Grants for R&D

- Following faculty members of the Institute of Geology got funding from Pakistan Science Foundation (PSF) against the following research projects.

Sr. No.	Projects Title	Investigator	Amount (Rs. Million)	Sponsoring Agency
1.	Sedimentology of Petroleum bearing carbonate rocks of Paleocene age Kohat, Potowar area of Upper Indus Basin.	Nazir Ahmad	0.7	Pakistan Science Foundation (PSF)
2.	Petrology, Mineralogy, Geochemistry and Economic Geology of the Hangu Formation of the Salt Range, Pakistan	Syed Mahmood Ali Shah	0.959	-do-
3.	Sedimentological Studies of the Lower Eocene Sakesar Limestone Salt Range Pakistan	Shahid Ghazi	0.535	-do-

### COLLEGE OF EARTH & ENVIRONMENTAL SCIENCES

#### • R&D-An Overview

The projects in CEES are mainly based on removal of heavy metals and toxic organic compounds from waste water and textile effluents though bio sorption and some projects were based on core areas of Environmental Sciences, i.e. Environmental Management System, biomedical waste, Solid Waste Management, water pollution and water sustainability. The research was based on practical firsthand knowledge of the particular industries/sites/hospitals. Results gave an overview of the shortcoming/positive environmental impacts. Recommendations were given to improve the shortfalls. Other projects are based on Genetic and Molecular knowledge of the organisms involved in Environmental Management. Newly launched projects basic tool of research areas is the environmental friendly relationship of microorganisms i.e. Bacteria Fungi and Algae on our environment, and involving molecular and genetic studies.

#### • Projects:

- (i) Completed                      **40**
- (ii) Newly launched              **20**

#### • Publications

- Ahmad, Z., M. Hafeez, Iftikhar Ahmad, Hydrology of mountainous areas in the upper Indus Basin, Northern Pakistan with the perspective of climate change, " (2011) Environmental Monitoring and Assessment DOI 10.1007/s10661-011-2337-7 (Journal) HEC Recognized:Yes (Impact factor = 1.436)

- Iqbal, M.A., Zaib, S., Vaqas, M., Imran, M. and Nawaz M. Chaudhary "Accumulation of Heavy Metals in the Agricultural Soils Close to the Industrial Drains / Areas" (2011) Asian Journal of Chemistry Vol:23 pp:913-916 (Journal)
- Hussain, N., Rahman, S., Nawaz M. Chaudhary, Zaheer, M. and Sherazi, N. "Evaluation of Heavy Metals in Blood Samples of Both Male and Female of Different age groups from Urban Areas of Faisalabad" (2011) Asian Journal of Chemistry Vol:23 pp:1-4 (Journal)
- Hassan, A., Amjad, I., Chaudhry, M.N., and Baloch, I. "Isolation and Identification of Probiotic Strains from Different Commercial Products of Lahore, Pakistan" (2010) Journal of Clinical Microbiology Vol:48 pp:xxxx- (Journal)
- Stefan Heuberger, Bernard Celerier, Jean-Pierre Burg, Nawaz M. Chaudhary, H. Dawood, S. Hussain "Paleostress regimes from brittle structures of the Karakoram-Kohistan Suture Zone and surrounding areas of NW Pakistan. " (2010) Journal of Asian Earth Sciences Vol:38 pp:307-335 (Journal)
- Karim, S., Chaudhry, M.N., Ahmed, K., and Batool, A. "Impacts of Solid Waste Leachate on Groundwater and Surface Water Quality" (2010) J.Chem.Coc.Pak Vol:32 pp:606-612 (Journal)
- Ammara Hassan, I. Amjad, M. Nawaz Chaudhry, & Iftiqar baloch "Isolation and Identification of Probiotic strains from different Commercial Products of Lahore, Pakistan" (2010) Journal of Clinical Microbiology Vol:48 pp:xxxx-xxxx (Journal)
- Nadia Jamil, Naveed Ahsan, Munawar Ali Munawar, Jamil Anwar and Umer Shafique Removal of Toxic Dichlorophenol from Water by Sorption with Chemically Activated Carbon of Almond Shells - A Green Approach: Journal of chemical society of Pakistan, Vol 33 No 5, 640-45 Impact factor: 0.194, 2011
- Shafique, U., Aamir Ijaz, M.Salman, Waheed uz Zaman, Nadia Jamil, Rabia Rehman and Amna Javaid Removal of arsenic from water using pine leaves, Journal of the Taiwan Institute of Chemical Engineers. Online copy Impact factor: 1.26.2011
- Anwar, J., Umer Shafique, Waheed, Zaib un Nisa, Munawar Ali Munawar, Nadia Jamil, M. Salman, Amara Dar, Rabia, Rehman, Jawwad Saif, Humaira Gul, Removal of chromium on polyalthia longifolia biomass, International journal of phytoremediation vol 13, 410-20 Impact Factor: 1.936 2011
- Shafique, U., Jamil Anwar Waheed uz-Zaman, Rabia Rehman Muhammad Salman Amara Dar, Nadia Jamil Forced migration of soluble and suspended materials by freezing front in aqueous systems online Copy Journal of Hydro-Environmental Research, 2011
- Mariyam Zameer International Publication "Biochemical Screening of different local fungi for their comparative antibacterial" IJAVMS 2011

## Research Collaboration

- **Indigenous**

- Research collaboration indigenous with W.W.F and Apna Arsh Pakistan NGO

- **Foreign Linkages**

Prof. Dr. J.P. Burg

ETH-Zentrum Strukturgeologie,

Leonhardstrasse, 19/LEB, CH-8092, Zurich, Switzerland,

Tel. +41 446326027 & +41 446326027

Telefax: +41 446321030

e-mail: jpb@erdw.ethz.ch

Jean\_Pierre.burg@erdw.ethz.ch

### Funding grants for R&D

for Indigenous is Rs. 60,000/-

## PUNJAB UNIVERSITY COLLEGE OF INFORMATION & TECHNOLOGY

- **R&D-An Overview**

In order to promote the research culture and activities, a research advisory committee has been constituted, which is responsible for setting up guidelines pertaining to MPhil and PhD degree programs.

Furthermore, research labs in the following areas have been established:

- Computer Vision
- Robotics
- Parallel and Distributed Computing
- Open Source Software Development

The above mentioned labs are being used for conducting research, by the graduate students.

### Projects:

(i) Completed

Sr. #	Researcher/ Sponsoring Agency	Research Project with duration	Financial Support (million rupees)	Main Goals
1	Syed Mansoor Sarwar (Principal Investigator), Dr. Asim Karim (Co-PI), Jamal Abdl Nasir / Sponsored by HEC Islamabad	Data Warehousing Virtualization Framework for Enhance Business Intelligence (2008-2010)	Rs 2.68 Million	Completed



2	Fakhar Lodhi (Principal Investigator), Naveed Malik (Co-PI), and Syed Mansoor Sarwar (Co-PI) / Sponsored by National ICT R&D Fund Research Grant	Integrating Open Source Software Development in the Software Engineering Curriculum (2008-2010)	Rs. 35.0 Million (PUCIT share is about Rs 11.00 Million)	Completed
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- **Conferences, Seminars and Workshops, etc.**

- M. Kamran Malik, Aasim Ali and Shahid Siddiq, "Behavior Of Word 'Kaa' In Urdu Language", In proceedings of IEEE 2010 International Conference on Asian Language Processing 2010, Harbin China, 28-30 December, accepted for presentation & publication (URL: <http://www.colips.org/conference/ialp2010/acceptedpapers.html>)
- Shahid Siddiq, Sarmad Hussain, Aasim Ali, M. Kamran Malik and Wajid Ali,, "Urdu Noun phrase chunking: Hybrid approach", In proceedings of IEEE 2010 International Conference on Asian Language Processing 2010, Harbin China, 28-30 December, accepted for presentation & publication (URL: <http://www.colips.org/conference/ialp2010/acceptedpapers.html>)
- Aasim Ali, Sarmad Hussain, M. Kamran Malik and Shahid Siddiq, "Study of Noun Phrase in Urdu", In proceedings of Conference on Language and Technology, Society of Natural Language Processing Pakistan, Islamabad Pakistan, 22-24 October 2010, accepted for presentation & Publication. (URL: <http://www.snlp.org.pk/clt10/index.htm>)
- Z. Nawaz, M. Nadeem, H. v. Someren, K.L.M. Bertels, "A parallel FPGA design of the Smith-Waterman traceback", proceedings of International Conference on Field-Programmable Technology 2010, Beijing, China, December 2010.
- Farrah Farooq, Dr. Syed Mansoor Sarwar, "Real-time Data warehousing for Business Intelligence", In Proceedings of the 7th International Conference on Frontiers of Information Technology
- Jaffry, S.W., and Treur, J, "Modelling Trust for Communicating Agents: Agent-Based and Population-Based Perspectives". In: Jedrzejowicz, P., Nguyen, N.T., Hoang, K. (eds.), Proceedings of the Third International Conference on Computational Collective Intelligence, (ICCCI'11), Gdynia, Poland, Lecture Notes in Artificial Intelligence, Springer Verlag, 2011, pp. 366-377. [BEST PAPER AWARD].
- Hoogendoorn, M., Jaffry, S.W., Maanen, P.P. van, and Treur, J, "Modeling and Validation of Biased Human Trust". In: Boissier, O., et al. (eds.), Proceedings of the 11th IEEE/WIC/ACM International Conference on Intelligent Agent Technology, (IAT'11), Lyon, France, IEEE Computer Society Press, 2011, to appear.
- Hoogendoorn, M., Jaffry, S.W., and Maanen, P.-P. van, "Validation and Verification of Agent Models for Trust: Independent compared to Relative Trust". Proceedings of the 5th IFIP WG 11.11 International Conference on Trust Management. (TM'11), Copenhagen, Denmark, June 29th - July 1st, 2011. Springer Verlag, 2011, pp. 35-50.

- M. Shahid Farid, Hassan Khan, Arif Mahmood,, “FUZZY IMAGES”, in 3rd International Conference on Machine Vision (IEEE ICMV 2010), Hong Kong, China, December 28-30, 2010.

#### **Workshops and Conferences attended**

- Jaffry, S.W, Creativity: Meaning, Mechanisms, Models, September 12<sup>th</sup> – 16<sup>th</sup>, 2011 at the Lorentz Center, Leiden, The Netherlands.
- Jaffry, S.W, Summer School on Data Mining, August 29<sup>th</sup> – September 1<sup>st</sup>, 2011 at Department of Knowledge Engineering, Maastricht University, Maastricht, The Netherlands.
- Jaffry, S.W, International Summer School on Intelligent Agent Technology and Web Intelligence, August 26<sup>th</sup> – 27<sup>th</sup>, 2011, Campus de la Doua, Lyon, France.
- Jaffry, S.W, The School for Information and Knowledge Systems (SIKS) on “Learning, Reasoning and Information Retrieval”, June 7<sup>th</sup> – 10<sup>th</sup>, 2011 at the LandgoedHuize Bergen, Vught, The Netherlands.
- Jaffry, S.W, The School for Information and Knowledge Systems (SIKS), “Advanced Course on Agent Based Simulation”, February 21<sup>st</sup> – 22<sup>nd</sup>, 2011 at the Conference CenterWoudschoten, Zeist, The Netherlands.
- Jaffry, S.W, 3<sup>rd</sup>International Workshop, “HART - Human-Agent-Robot Teamwork”, December 13<sup>th</sup> – 17<sup>th</sup>, 2010 at the Lorentz Center, Leiden, The Netherlands.
- Jaffry, S.W, Seminar on “Design Science methodology: Principles and Practice”, October 15<sup>th</sup>, 2010 at Conference CenterHoog Brabant, Utrecht, The Netherlands.

#### **• Publications**

- S. Madani, S. Khattak, T. Jadoon, S. Sarwar, “Wireless Ad-hoc Networks”, IEEE Industrial Electronics Society, Industrial Electronics Handbook, 2nd Edition, CRC Press, Taylor and Francis Group, ISBN: 978-1439802816, 2011.
- M. Akram , “Interval-valued fuzzy graph”. In Computers and Mathematics with Applications (ISI Journal)
- M. Akram, “Interval-valued (alpha, beta)- fuzzy K-algebras”. In Applied Soft Computing (ISI Journal)
- M. Akram, “Fuzzy K-ideals of K-algebras”.
- M. Akram, “Characterization of Automorphic Loops”.
- Farrah Farooq, “Real- Time Data Warehousing for Operational Business Intelligence”.
- Bosse, T., Both, F., Hoogendoorn, M., Jaffry, S.W., Lambalgen, R. van, Oorburg, R., Sharpanskykh, R., Treur, J., and Vos, M. de, Design and Validation of a Model for a Human's Functional State and Performance. In: International Journal of Modeling, Simulation, and Scientific Computing (IJMSSC), vol. 2, no. 4, World Scientific Publishing, 2011, pp. 413-443.

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## COLLEGE OF STATISTICAL AND ACTUARIAL SCIENCES

### • R&D-An Overview (5 – 10 lines)

Research and Development is the integral part of the curricula of all our academic programs.

#### Projects:

- Completed: 3-Years 'Psychological, Psychosocial Concerns and Quality of Life of Breast Cancer Survivors in Pakistan' funded by HEC, Supervisor, Prof. Dr. Ghausia Masood Gilani, Co-Supervisor, Prof. Dr. Shahid Kamal, worth Rs.4.896 million

### • Publications:

- Kamal, S. (2010). "Estimation of Population Mean in Two-Phase Sampling" Middle East Journal of Scientific Research (ISI Indexed Journal), VI, No.2 , 198-200.

- Kamal, S., (2010). "An Assessment of Quality of Life Among Breast Cancer Survivors in Punjab Using Ordinal Regression" Proceedings of Journal of American Statistical Association (JASA), USA, 2010.
- Ahmed, M., Gilani, G.M. and Kamal, S. (2010). "Ridge Regression Model for Near Collinear Factors of Infant Mortality Rate in Punjab Province of Pakistan: Evidence From Multiple Indicator Cluster Survey 2003-04" Proceedings of the 3rd International Conference on Statistical Sciences, pp 192-205, 2010.
- Tariq, S., and Kamal, S. (2010). "A Comparative Study of Similarities & Differences Among ANOVA & ANCOVA on Agricultural Data-Set" Proceedings of the 3rd International Conference on Statistical Sciences, pp 339-345, 2010.
- Kamal, S. and Sharif, S. (2010). "Comparison between different Main approaches of Penalized Spline Smoothing" Proceedings of the 3rd International Conference on Statistical Sciences, pp 376-387, 2010.
- Kamal, S. and Ilyas, M. (2010). "Principal Component and Common Factor Loadings: A Comparison" Proceedings of the 3rd International Conference on Statistical Sciences, pp 388-391, 2010.
- Ahmad, A. and Akhter, A.S. (2010). "Estimation of the Scale and Location Parameters Based upon the Upper Records Values of Rayleigh Distribution from Type II Singly and Doubly Censored Data" Proceedings of the 3rd International Conference on Statistical Sciences, pp 99-114, 2010.
- Akhter, A.S. and Hirai, A.S. (2010). "Approximate Linear Estimates of the Parameters of Extreme Value Distribution Type I using ordered observations" Proceedings of the 3rd International Conference on Statistical Sciences, pp 301-309, 2010.
- Rashid, Z. and Akhter, A.S. (2010). "Estimation Accuracy of Exponential Distribution Parameters" Proceedings of the 3rd International Conference on Statistical Sciences, pp 360-375, 2010.
- Riaz, A., Akhter, A.S. and Memon, A.Z. (2010). "On A Cheria Family of Gamma Distributions" Proceedings of the 3rd International Conference on Statistical Sciences, pp 346-350, 2010.
- Gilani, G.M. (2011). "A Clinical Audit of Mortality and its Major Causes in Children from Birth to 24 Months of Age in the Gowal Mandi Area Lahore – Pakistan" Annals, Vol 17. No. 2 Apr. - Jun. 2011.
- Gilani, G.M. (2010). "Assessment of Quality of Life of Diabetic Patients" Proceedings of 3rd National Conference on 'Emerging Trends in Diabetes' – 2010 (SIMS, Lahore), 2010.
- Kanwal, S., Shaharyar, Gilani, G.M., Masood, M. and Akbar, N. (2010). "Breast cancer survival results according to stage: How encouraging the results are?" Proceedings of the 3rd International Conference on Statistical Sciences, pp 89-92, 2010.

- Ahmed, M. and Gilani, G.M. (2010). "Comparing Ridge Regression (RR), Principal Component Regression (PCR) and Partial Least Square Regression (PLSR) methods to tackle the multicollinearity problem" Proceedings of the 3rd International Conference on Statistical Sciences, pp 310-329, 2010.
- Ameen, M., Dar, I.S. and Adeel, Y. (2010). "The impact of cell phone on the academic performance of students of University of the Punjab" Proceedings of the 3rd International Conference on Statistical Sciences, pp 351-359, 2010.
- Arif, S. and Ilyas, M. (2010). "Managing delivery of technology related services for student satisfaction" Proceedings of the 3rd International Conference on Statistical Sciences, pp 160-170, 2010.
- Rashid, M.A. and Akhter, A.S. (2011). "Estimation Accuracy of Exponential Distribution Parameters" Pakistan Journal of Statistics and Operation Research, VII, No.2, 217-32.
- Chand, Sohail. and Kamal, S. (2011). "Variable Selection by Lasso-Type Methods" Pakistan Journal of Statistics and Operation Research, VII, No.3 (SP), 451-64.
- **Conferences, Seminars and Workshops, etc.**
  - In November 2010 an international conference on 'Statistical Sciences' was successfully organized;
  - Various workshops were arranged for the students of M.Sc. Actuarial Sciences, M.Sc. Statistics and MIOM during the year 2010-2011.
- **Research Journals**
  - Regularly publishing a quarterly research journal
  - 'Pakistan Journal of Statistics and Operation Research' since 2005

### **Research Collaboration**

- **Indigenous**
  - State Bank of Pakistan, HEC, FBS
- **Foreign Linkages**
  - Department of Clinical Immunology
  - Goteborg University, Sweden

### **CENTER FOR UNDERGRADUATE STUDIES**

- Center has produced more than 20 research articles of good impact those were published in journals of national and international repute. Book chapters (for international books) were also published.

- Projects completed**

Name of Researcher	Sponsoring Agency	Financial Support	Research Area
Najam ul Sehar	University of the Punjab	1,50,000	Botany
Umer Shafique	University of the Punjab	1,25,000	Chemistry
Sadaf Aslam	University of the Punjab	1,25,000	Zoology
Humaira Tariq	University of the Punjab	1,25,000	English
Amara Dar	University of the Punjab	1,25,000	Chemistry
Arooj Naseer	University of the Punjab	1,25,000	Chemistry

- Newly launched**

Name of Researcher	Sponsoring Agency	Financial Support	Research Area
Najam ul Sehar	University of the Punjab	1,50,000	Botany
Umer Shafique	University of the Punjab	1,25,000	Chemistry
Sadaf Aslam	University of the Punjab	1,25,000	Zoology
Bushra Nisar Khan	University of the Punjab	1,25,000	Zoology
Humaira Tariq	University of the Punjab	1,25,000	English
Madeeha Batool	University of the Punjab	1,25,000	Chemistry

**Publications (articles)**

Author	Title	Journal	Volume	Page
Madeeha Batool	Comparison of the Photochemistry of Organometallic N-Heterocyclic Carbene and Phosphine Complexes	Chemical Communications	47	11225-11227
Najam ul Sehar	New records of Poaceous rusts from Pakistan	Mycotaxon	118	237-244
Najam ul Sehar	Genus Uromyces (Link) Unger (Basidiomycota, Pucciniales) from Leepa valley, Azad Jammu & Kashmir (AJ & K) Pakistan	African Journal of Biotechnology	10	16480-16483
Najam ul Sehar	Some additions to the Uredinales of Azad Jammu and Kashmir (AJ & K), Pakistan	Pakistan Journal of Botany	43	1373-1379
Najam ul Sehar	Puccinia species new to Azad Jammu & Kashmir, Pakistan	Mycotaxon	116	175-182
Najam ul Sehar	New records of Uredinales from Fairy Meadows, Pakistan	Mycotaxon	115	203-213
Umer Shafique	A rapid, economical, and eco-friendly method to recycle terephthalic acid from waste poly (ethylene terephthalate) bottles	International Journal of Polymeric Materials	60	1147-1151
Umer Shafique	Removal of heavy metals by adsorption on Pleurotus ostreatus	Biomass & Bioenergy	35	1675-1682
Umer Shafique	Comparative study of brilliant green dye adsorption from water by radish peels, jamun stem and coal	Electronic Journal of Environmental, Agricultural and Food Chemistry	10	2531-2543

Amara Dar & Umer Shafique	Removal of chromium on Polyalthia longifolia leaves biomass	International Journal of Phytoremediation	13	410-420
Amara Dar & Umer Shafique	Novel methods to determine sulfide in aqueous samples by quantification of lead sulfide spots	Journal of Sulfur Chemistry	32	151-157
Amara Dar & Umer Shafique	A rapid method for measurement of nickel and chromium at trace level in aqueous samples	Journal of the Mexican Chemical Society	55	213-216
Umer Shafique	Assessment of concentration of Lead, Cadmium, Chromium and Selenium in blood serum of Cancer and Diabetic patients of Pakistan	Journal of the Chemical Society of Pakistan	33	869-873
Umer Shafique	Removal of alizarin red S dye from aqueous media by using alumina as an adsorbent	Journal of the Chemical Society of Pakistan	33	228-232
Umer Shafique	Synthesis, characterization and anti bacterial activity of some enamines and their complexes with Ni(II) and Sb(III)	Journal of the Chemical Society of Pakistan	33	426-432
Umer Shafique	Influence of operating conditions on the removal of brilliant vital red dye from aqueous media from biosorption using rice husk	Journal of the Chemical Society of Pakistan	33	515-521
Umer Shafique	Removal of murexide (dye) from aqueous media using rice husk as an adsorbent	Journal of the Chemical Society of Pakistan	33	598-603
Umer Shafique	Removal of toxic dichlorophenol from water by sorption with chemically activated carbon of almond shells – a green approach	Journal of the Chemical Society of Pakistan	33	640-645
Umer Shafique	Determination of trace metals by voltamperometry in zebra mussel ( <i>Dreissena polymorpha</i> ) employed as environmental bio-indicator	Green Chemistry Letters and Reviews	4	261-267
Umer Shafique	Adsorption modeling for removal of alizarin yellow using untreated and treated charcoal	Turkish Journal of Engineering and Environmental Sciences	35	1-8
Asim Zafar	Real Quadratic Irrational Numbers and Modular Group Action	Southeast Asian Bulletin of Mathematics	35	439-445

- **Publications (books & chapters)**

<b>Author</b>	<b>Title</b>	<b>Publisher</b>	<b>Country</b>
Umer Shafique	Treatment of Chromium Polluted Water Through Biosorption - An Environment Friendly Approach (Chap – 7) in Chromium: Environmental, Medical and Materials Studies	Nova Science Publishers Inc., New York	United States
Umer Shafique	Hazardous Metals: Sources, Toxicity, and Control (Chap – 4) in Hazardous Materials: Types, Risks, and Control	Nova Science Publishers Inc., New York	United States
Umer Shafique	Bananas – A Concise Account Series: Agriculture Issues and Policies	Nova Science Publishers Inc., New York	United States