RESEARCH AND DEVELOPMENT

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

- Conferences, Seminars and Workshops, etc.
  - Workshop on Creative Writing by Rizwan Akthar, Departmental Ph.D Scholar in Essex, October 11th, 2010, Department of English Language & Literature, University of the Punjab, Lahore.
  - Seminar on Fulbright Scholarship Requisites by Mehreen Noon, October 21st, 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, sponsor by Directorate of Research & Development, University of the Punjab, Lahore, Grant Rs. 1,50,000, duration approximately one year.

- **Conferences, Seminars and Workshops, etc.**
  - Conference: “*Traduire pour découvrir ou neutraliser*” held on 8th 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:**

**DEPARTMENT OF LITRARY HISTORY**

- **Publications**

- **Conferences, Seminars and Workshops etc:**
  - Iqbal and Akbar Allahbadi, (Iqbal Memorial Lecture – delivered at Undergraduate Center, PU, Lahore. April 2011)
DEPARTMENT OF PHILOSOPHY

• Publications
  o Kh. Muhammad 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

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

• Research Journals

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.
  o 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.
  o 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**
  o Sher Muhammad Garewal, *Mountbatten’s Viceroyalty and the Creation of Pakistan*

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

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

• **Conferences & Seminars Organized**
  o 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.
  o 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
  o 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.
  o 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***
  o Two issues of the bi-annual research journal, ‘*Pakistan Vision*’, were published during the period under review.
  o *Pakistan Vision*, Vol. 12, No. 1, July 2011
  o *Pakistan Vision*, Vol. 11, No. 2, December 2010

**Pakistan Vision, Vol. 12, No. 1, July 2011**
  o M. Abid / Q. Abid, The Simla Conference: A futile attempt to bypass Pakistan Scheme
  o 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 exhibition of the Contemporary Art Works by 17th of Pakistan’s most talented Artists at the Omani Society for Fine Arts, Muscat, Oman 2010.
  - 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, Royaat Gallery, Lahore 2011.
  - Rahat Naveed Masud exhibition of Women Artists of Pakistan, National Gallery, Islamabad 2010.
  - Shaukat Mahmood pietra-Dura, from Italy with love, Heritage, Issue 10, 2011.


Ali Azmat “1947, the year we were born ”Art Expo, Malaysia” 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 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 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 2010.
• 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 4th July, 2011.
  • Seminar in honour of Prof. Anna Molka Ahmad on 7th 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 6th May, 2011.
  • 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 28th 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 29th of March, 2011 at the Research Centre, College of Art & Design, University of the Punjab, Lahore.
o 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.

o 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


o 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)


**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.
o One Day Training on Legal Requirements of a New Business, 22\textsuperscript{nd} March, 2011, was jointly organized by University of the Punjab, Gujranwala Campus and SMEDA.

o One Day Seminar on Role of Intellectual Property for establishing New Business Ventures, 25\textsuperscript{th} May, 2011, was jointly organized by University of the Punjab, Gujranwala Campus and IPO.

o 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.

o Mr. Rizwan Qaiser Danish presented a paper at Global Business & Social Science Research Conference. June 20-21, 2011, Radisson Blue Hotel, Beijing, China.

o Mr. Rizwan Qaiser Danish presented a paper at International Conference on Innovation, Management and Services. ICIMS 2011, 16-18 September, 2011, Singapore: IEDRC

o Mr. Rizwan Qaiser Danish presented a paper at The 8\textsuperscript{th} International Post Graduate Research Colloquium, Behavioral Science Research Institute, Srinakharinwirot University, Bangkok, Thailand, September 22-23, 2011.

o 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
  o Umbreen Javaid, Chairperson, Punjab University funded project on “Pakistan’s Security and effects of Terrorism and Counter Terrorism”, (2010 – 2011).
  o Iram Khalid, Associate Professor, Punjab University funded project on “Insurgency: Counter insurgency: a case of SWAT – Pakistan. (2010-2011).
  o 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
  o Umbreen Javaid, Punjab University funded project “political of Religious Extremism and Terrorism in Pakistan” (2011-2012).
  o Iram Khalid, Punjab University funded project on Socio-religious frangmentation: A case of Pakistan”. (2011-2012)

• Publications
• 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
- 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.
- 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, 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; June 2011.
- **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**


- **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**


**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 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. "Relational Corporate Social Responsibility: Developing an Understanding on Confucius and Islamic Perspective” 1st World Congress on Islamic Public Relations Practice, 5th-8th December 2011, Kuala 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
- 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, Isalm 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 Mahmod 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


- Conferences, Seminars and Workshops, etc.
  - The 7th Forum for Korea-Middle East Cooperation. Consolidating Arab-Korea Partnership in the 21st Century. Centre for International cooperation & strategy, Republic of Korea. Held at Konrad Cairo.Egypt. Invited to interact with Korean scholars and exploring the venue of research on subjects of mutual interest. 30 November 1st December 2010
  - 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


**FACULTY OF COMMERCE**

**HAILEY COLLEGE OF BANKING AND FINANCE**

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

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

• Conferences and Workshops Attended by HCBF 2010-2011
 o FAST Business Plan Competition 2010
 o Lahore Chambers of Commerce (LCCI) Business Walk

Eurasia international model United Nations conferences in Germany 2011

HAILEY COLLEGE OF COMMERCE
• Publication
 o 206 Research Publications of HCC Faculty Members in 2010-11.

• Conferences, Seminars
 o 07 Seminars and Workshop National and International attended the by HCC faculty members

Research Journal
 o Hailey College Published Annual Journal Al-Iqtisad

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

DEPARTMENT OF ECONOMICS
• Publications


o 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.


- **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**

- **Books Published**

- **Conferences / Seminars / Workshops**
  Organized by the Department:
  o 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.
  o One day workshop on “Managing References Electronically: EndNote Software” on 19th 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.
  o 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.
  o 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.
  o 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.
  o A workshop on “Personal Knowledge Management for Enhancing Professional Productivity conducted by Dr. Abdus Sattar Chaudhry on 29th January, 2011.
o 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.

o 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

o 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


o Chaired 3 days NTS Committee meeting on LIS held in Islamabad on Jan. 1, 2011

o 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.

o Participated as resource persons in the ‘New Faculty Orientation Program 2011, organized by the IAS, Human Resources Development Center on 8th July, 2011.

o 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.

o 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.

o Resource person and Organizer of the workshop on “Developing Academic Librarians as Knowledge Workers” held at the Department in July 26-28, 2011.

o Resource person and Organizer of the workshop on “Managing References Electronically: EndNote software” held at the Department on July 19, 2011.

o 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.

o 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.

o Delivered a lecture at a seminar on the “Status of librarianship in the United States” organized by Pakistan Library Association, Lahore, March. 26, 2011
o 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.


o A presentation at the Punjab Education Foundation on “Initiating Information Literacy as Part of School Education” on June 8, 2011.

o Participated in a panel discussion organized by PTV, Lahore on the issues of libraries in Pakistan.


o Dr. Khalid Mahmood participated in “iConference,“ Seattle, USA, Feb. 8-11, 2011.

o 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.

o 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.

o Dr. Khalid Mahmood resource person in the workshop on “Managing References Electronically: EndNote software” organized by the Department on July 19, 2011.

o 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.

o Dr. Khalid Mahmood resource person in the workshop on “PakLAG KOHA with DSpace” organized by Pakistan Library Automation Group, Islamabad, Jun. 27-29, 2011.

o 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.

o 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.

o 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.

o 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.
o 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.

o 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.

o 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: 77th IFLA Conference 13-18 August 2011, San Juan, Puerto Rico.

o 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.”

o 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.

o Dr. Nosheen organized a workshop on “Managing References Electronically: EndNote software” held at the Department on July 19, 2011.

o 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.


- Research Journals
  *Pakistan Journal of Library and Information Science, HEC recognized annual journal*

- Funding Grants for R&D
  o 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).

  o 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).

  o 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: 77th 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
- Nasira Jabeen National Speaker on Gender Equity & Governance in Pakistan Governance Institutes Network International, Islamabad International Conference (16th - 18th 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

INSTITUTE OF BUSINESS ADMINISTRATION

• Publications
- 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


- **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 2nd 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.
o 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.

o 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.

o Prof. Dr. Muhammad Ehsan Malik, Director-IBA attended AMDISA’S 54th Executive Board meeting being Executive Board Member held at Nepal Administrative Staff College, Katmandu, Nepal on 15 May, 2011.

o Prof. Dr. Muhammad Ehsan Malik, Director-IBA attended the 11th 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.

o 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.

o 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.

o Prof. Dr. Muhammad Ehsan Malik, Director-IBA participated in the 2nd Asia’s Best B-School Awards ceremony presented by CMO Asia and received the "Innovation Leadership Award" at Suntec, Singapore on 22nd July 2011.

o 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.

o 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.

o IBA arranged a seminar in collaboration with Coca Cola on "KO Graduate Training Program" on June 28, 2011 at IBA.
Research Publications

Research Papers:

- 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 “Relationship Between Demographic Characteristics and Burnout among Public Sector University Teachers of Lahore”


o 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
  o Aamir Sarwar “Work Stress and family Imbalance: in Financial Sector of Pakistan” VDM, Germany, pages 250.
  o Aamir Sarwar, Impact of Employee Empowerment: on Employees Job Satisfaction and Commitment with the organization. LAP, Germany, pages 236.
  o Shamaila Gull, Co-Author Farah Saleem, Negative Reciprocity and association Between Organizational Deviance and Organizational Ethics, VDM, Germany, pages 307.
  o Farheen Batool Zaidi, Co-Author Sidrah Anwar, Employee Empowerment on the Service Quality, VDM, Verlag Dr. Mullery, Germany, pages 97.
  o 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:
  o The research papers of faculty members have been published in various journals. They have also presented their papers at international conferences.

- Publications:
Conferences, Seminars and Workshops, etc.:

- Dr. Humara Bano, participated in 3rd International Conference on “Education in Pakistan: Issues, Challenges & Reforms” on 21 October, 2010.
- Dr. Humara Bano, participated in 3rd 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, 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, 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 21st 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 3rd 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 2nd 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 21st 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 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. 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 3rd International Conference on “Education in Pakistan: Issues, Challenges & Reforms” on 21 October, 2010.


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

- Muhammad Shahid Farooq, Role of Learning Styles in the Quality of Learning at Different Levels. Informatica Economica, 15, 28-45
o Muhammad Shahid Farooq, Perceptions of Prospective Teachers about Factors Influencing Classroom Management. *Journal of Quality and Technology Management*. 7(1), 23-38


o 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.


• 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
• Ashi & Hashmi, A. & N. A. Bhatti, Impact of Technology on Business Schools: Perceptions of Faculty & Management. *Research & Reflections in Education, 5*(2), 128-143
• Bhatti,N. Raza, S.A; Hashmi,M. A. Ashi; Sheikh, F. M., Efficiency and Market Power in Pakistan Diary 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, & Farha 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
- 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

**Conferences, Seminars and Workshops**

- Prof. Dr. Mumtaz Akhter Participated in “3rd 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 3rd 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.
o Prof. Dr. Mumtaz Akhter Participated in “American Reciprocal Programme Pakistani Educational Leadership (PEL) Project on March 4, 2011 at Islamabad.

o 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.

o Prof. Dr. Mumtaz Akhter Participated in 1st International Conference on Exploring Leadership and Learning Theories in Asia” held at Universiti Saina Malaysia (USM), Penange, Malaysia from 15-17 February, 2011.

o Prof. Dr. Rizwan Akram Rana Participated & presented paper in 1st International Conference on Exploring Leadership and Learning Theories in Asia” held at Universiti Saina Malaysia (USM), Penange, Malaysia from 15-17 February, 2011.

o 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.

o 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.

o 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.


o 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.

o 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.
o 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.

o 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.

o 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.

o Prof. Dr. Hafiz Muhammad Iqbal participated & paper on "Madrassa Reforms in Pakistan" in 3rd International Conference on Education in Pakistan: Issues, Challenges and Reforms at University of the Punjab, Lahore, October 21-23, 2010.

o Dr. M. Athar Hussain participated and presented paper titled “Reforming ELT Syllabus in Modern Pedagogical Context” in 3rd International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.

o Dr. Nasir Mahmood participated and presented paper titled “Relationship of Socio-Economic factors to English language learning among secondary school students” in 3rd International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.

o Prof. Dr. Hafiz Muhammad Iqbal & Shafiqur Rehman participated and presented paper titled “Evaluating the achieved objectives: performance of grade 4 students in mathematics” in 3rd International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.

o 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 3rd International Conference on Education in Pakistan Issues, Challenges and Reforms at University of the Punjab, Lahore from 21-23 October, 2010.

o Rizwan Akram Rana, Asim Nazir & Afshan Mumtaz participated and presented paper titled “Exploring students’ beliefs about physics and learning physics in higher education” in 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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.


• Conferences Organized by IER
  o 3rd 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
  o Bulletin of Education and Research (BER), Institute of Education and Research, University of the Punjab Lahore Volume 33. No. 1, 2011.
  o 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

<table>
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<tr>
<th>Principal Investigator</th>
<th>Title of Research Project</th>
<th>Sponsoring</th>
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<tr>
<td>Prof. Dr. Zahoor-ul-Hassan Rizvi</td>
<td>Mitigation of Internal corrosion in Natural Gas Transmission Line due to bacteria, CO2, H2S and moisture</td>
<td>SNGPL – Pakistan</td>
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  Newly Launched

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<th>Project Title</th>
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<th>Approved Date</th>
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<td>Catalytic Hydrodechlorination of Chlorophenols</td>
<td>Higher Education Commission</td>
<td>Rs. 992,585/-</td>
<td>24-05-2011</td>
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<tr>
<td>Development and Characterization of Promoted Iron Catalysts for Fischer Tropsch Synthesis to Study Gas to Liquid Technology</td>
<td>Higher Education Commission</td>
<td>Rs. 3,754,153/-</td>
<td>01-10-2010</td>
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<td>Fast Pyrolysis of Agricultural Residues for the production of Bio Oil /Liquid Fuel</td>
<td>Higher Education Commission</td>
<td>Rs.2088786/-</td>
<td>14-12-2010</td>
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<td>Punjab University</td>
<td>Rs. 1.360 million</td>
<td>07-02-2011</td>
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<tr>
<td>Biogas Techno-economic feasibility for the production of 5 MMCFD Biogas Plant</td>
<td>SNGPL</td>
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</tr>
</tbody>
</table>
• Publications
  o 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.
  o A. Muhammad, A. Shafeeq, Z. H. Rizvi, A. Ijaz and M. I. Abdul Mutalib, Experimental solubility of CO2 and CH4 in imidazolium based ionic liquid; [C6mim][BF4] at high pressures, 2nd International Conference on Chemical, Biological and Environmental Engineering (ICBEE 2010), Egypt, 02-04 Nov., 2010.
  o 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.
  o 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

Books

- Conferences, Seminars and Workshops etc.
  - Two days “4th Symposium on Engineering Sciences” has been arranged by ICET at Punjab University held on 1st – 2nd 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
- 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.

• Conferences, Seminars and Workshops, etc.
- 3rd 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\textsuperscript{th} 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\textsuperscript{th} meeting of QEC’s under the QAA, HEC on 25\textsuperscript{th} to 26\textsuperscript{th} April, 2011 at HEC regional centre, Peshawar attended by Director IQTM.
- 16\textsuperscript{th} meeting of QEC’s under the QAA, HEC on 15\textsuperscript{th} to 16\textsuperscript{th} 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\textsuperscript{nd} Workshop on Research Management 12\textsuperscript{th} November, 2010
  - Two workshops on Research Management were conducted on 27\textsuperscript{th} July, 2010 & 12\textsuperscript{th} November, 2010, respectively and 3\textsuperscript{rd} 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\textsuperscript{th} 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\textsuperscript{th} 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.
  
  o “Catalytic Hydrodechlorination of Chlorophenols” 2011
  o “Detoxification of Industrial Sludge using Aquatic Plants and Indigenous Microbes” 2011

**DEPARTMENT OF TEXTILE ENGINEERING & TECHNOLOGY**

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

  o Workshop conducted on “Enhancing Quality and Productivity through Testing” on 9-10th March, 2011 in collaboration with Institute of Textile and Industrial Sciences (UMT) and Textile Testing International

  o 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 28-29th March, 2011.

  o Analytical Methods Developed for Phthalate In Textile Products. A Joint work with Textile Testing International (Duration Six Months).

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

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

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<td>Murad Habib</td>
<td>The design and implementation of a single-Phase Off-Grid Inverter 1000w.</td>
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<td>Abid, K. and F., Rahman,</td>
<td>Optical polarization detection by a lateral p-i-n photodiode with integrated metal grating.Submitted to Applied physics B. (Preliminary through)</td>
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| [C10] | “Design and Implementation of a Neural Network Based Controller for Mobile Robot
<p>| [C14] | &quot;Design and Development of Microcontroller Based Autonomous Peg Placement Robot,&quot; Proc. 3rd IEEE International Conference on Computer Science and Information Technology, Chengdu China, July 9-11, 2010 (Online Available @ IEEEXplore). |
| [C17] | &quot;Design and Development of an Autonomous Ball Potting Robot for NERC Contest,&quot; Proc. 2nd IEEE International Conference on Advance Computer Control, Shenyang, |</p>
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<td>Research and Development</td>
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<td><strong>Conferences, Seminars and Workshops etc.</strong></td>
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<td>o Two days workshop had been conducted on &quot;Non Destructive Evaluation of Weldments &amp; their Remedies&quot; by Metallurgy &amp; Materials Engineering Department, University of the Punjab Lahore dated 13-14th December 2010.</td>
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<td>o Two days &quot;4th Symposium on Engineering Sciences&quot; has been arranged by CEET in collaboration with ICET in Punjab University held on 1st – 2nd March 2011.</td>
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<td>o Conducted two days course on “ASME codes, Section VIII-division-1” by Metallurgy &amp; Materials Engineering Department, University of the Punjab Lahore dated 2-3rd April 2011.</td>
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<td><strong>Research Journals</strong></td>
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<td>o 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.</td>
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<td><strong>Research Collaboration</strong></td>
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<td><strong>Indigenous</strong></td>
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<td>o 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 &amp; Technology (UET) Lahore etc.</td>
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<td>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.</td>
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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 permeganate
- 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
Research and Development

Newly Launched Research Projects

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

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 3rd-5th July 2012.

FACULTY OF LAW
UNIVERSITY LAW COLLEGE
• Conferences, Seminars and Workshops, etc.
  o Seminar on Right to Education: Legal Implications Pakistan (A brief session in context of Eighteenth Amendment) February 23, 2011.
  o Workshops: The Law College students attended the Death Penalty Defence Workshop in Punjab Bar Council on 13th – 14th 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. 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 Tornicroft and Dr. Tine Van Bortel, Institute of Psychiatry, King's College London.
  - 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

Research and Development


Conferences, Seminars and Workshops, etc.

o 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.

o Prof. Dr. Rukhsana Kausar, Presented a paper on Moral Values and Forgiveness in Children studying in Private vs. Publics schools in Pakistan. Presented at the 12th European Congress of Psychology, Istanbul, Turkey, 4-8 July, 2011.

o Prof. Dr. Rukhsana Kausar, Presented a paper on Psychological Morbidity in Women Presenting with Vaginal Discharge in Pakistan. Presented at the 12th 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 3rd Clinical Psychology Conference, Dhaka, Bangladesh, 27-28 October, 2011.
- Prof. Dr. Rukhsana Kausar, Presented a paper on Maladjustment in Children with Somatization Disorder. 13th Conference of Pakistan Psychological Association, Lahore, 18-19 November, 2011.
- Prof. Dr. Rukhsana Kausar, Attended 10th 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, 10th 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”, 3rd 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, 3rd 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, 13th Conference of Pakistan Psychological Association, Lahore, 18-19 November, 2011.
- Prof. Dr. Rukhsana Kausar, Invited Lecture on “writing Research Thesis” at Psychology Department, MAO post graduate college, Lahore, 26 April, 2011.
o 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.

o 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.

o Prof. Dr. Rukhsana Kausar, Conducted a two day Faculty Development workshop on "Basic Statistics using SPSS", Karakorum International University Gilgit, 3-4 July, 2011.

o 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, 14-17th June, 2011.

o Prof. Dr. Rukhsana Kausar, Conducted 2nd TOT workshop on Test Item Construction Techniques organized by HEC and NTS, Pakistan, HEC regional Centre, Karachi, 11-14th July, 2011.

o Prof. Dr. Rukhsana Kausar, Attended a workshop on “Management of Autism Spectrum Disorders” by Prof. Dr. Jill Taylor, 22nd February, 2011, at Department of Applied Psychology, University of the Punjab, Lahore.

o 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.

o Prof. Dr. Rukhsana Kausar, Attended 10th 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, Attended a two day workshop on Art as therapy for trauma victims by Dr. Frances Anderson, USA, Applied Psychology Department, University of the Punjab, 21-22nd 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, 28-30th 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, 19-22nd February, 2011.

Prof. Dr. Rukhsana Kausar, Organized two days workshop on Neuro-Linguistic 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. 19th 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. 1st National Psychiatric Conference. P.C, Lahore, Pakistan.


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,

o 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.


o Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Tariq S. (2011). Internet Addiction and Academic Achievement Female University Students. 8th International Neuropsycon on Psychiatric Updates & Media/Public Awareness. Avari Hotel, Lahore, Pakistan.


o Prof. Dr. Yasmin N. Farooqi, Farooqi, Y. N., & Rasul, F. (2011). Sex Differences in Perceived Quality of Life of Patients of OCD. 1st International Conference on Emerging Trends in Psychology. Department of Psychology, G.C University, Lahore, Pakistan.

o 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. (2011). One Day Workshop on Turnitin Anti-Plagiarism Software. Punjab University Library, 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, International Neuropsycon on psychiatric updates & media / public awareness “Optimizing Psychiatric Care and Rehabilitation for Victims of Psychotrauma”15th to 17th April, 2011, Avari hotel Lahore. 7


MS Rafia Rafique, 10th National Child Rights Conference (5th -7th December, 2010), The Children’s Hospital Lahore. Organized by Childs Rights and Abuse Committee Pakistan Pediatric Association.

MS Rafia Rafique, 3rd International Conference on “Statistical Sciences” (25th -27th November, 2010), University of the Punjab, Lahore.

MS Rafia Rafique, National Conference on Research in Psychology: Indigenous and Cultural Perspective. (14th 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” (12th November, 2010), Research office, University of the Punjab, Lahore.

MS Rafia Rafique, Workshop on “Art as Therapy for Trauma Victims”. (20th -21st October, 2010), Department of Applied Psychology, University of the Punjab.


Ms. Shazia Khalid, Paper Presented; “Relationship between emotional intelligence and organizational commitment of employees working in service oriented organizations” 13th –16th 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 49th 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, 30th May to 1st June, 2011

MS Afifa Anjum, International Neuropsycon 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, 22nd 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, 30th May to 1st June 2011

MS Afifa Anjum, Attended International Neuropsycon 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, 29th -30th 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, 11th May, 2011
- MS Omama Tariq, Attended a workshop on ” Management of Autism Spectrum Disorders” by Prof. Dr. Jill Taylor, Dean, Faculty of Social Sciences, Karakaram International University, 22nd February, 2011, at Department of Applied Psychology, University of the Punjab.
- 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 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 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, 23rd 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, 21-22nd 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 Tornicroft 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

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**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:**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Principal investigator</th>
<th>Title of the project</th>
<th>Duration</th>
<th>Amount in Rs.</th>
<th>Sponsored by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Firdaus-e-Bareen</td>
<td>Role of plants and</td>
<td>7-7- 2008 - 2011</td>
<td>3,796,380/-</td>
<td>Higher</td>
</tr>
</tbody>
</table>
### Research and Development

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Principal investigator</th>
<th>Title of the project</th>
<th>Duration</th>
<th>Amount in Rs.</th>
<th>Sponsored by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Firdaus-e-Bareen</td>
<td>associated resistant fungi in metal uptake from tannery sludge and solid waste.</td>
<td>(completed) 2011</td>
<td>250,000/-</td>
<td>University of the Punjab, Lahore</td>
</tr>
<tr>
<td>2.</td>
<td>Firdaus-e-Bareen</td>
<td>Role of some growth promotors in enhancement of metal uptake and stress alleviation in selected plants grown in tannery waste contaminated soil.</td>
<td>(completed) 2011</td>
<td>2,760,230/-</td>
<td>Higher Education Commission (HEC), Pakistan</td>
</tr>
<tr>
<td>3.</td>
<td>A.N. Khalid</td>
<td>Diversity of Micromycetes in different polluted water samples and their role in detoxification</td>
<td>(completed) 2011</td>
<td>1,50,000/-</td>
<td>University of the Punjab, Lahore</td>
</tr>
<tr>
<td>4.</td>
<td>Humera Afrasiab</td>
<td>&quot;Effects of 2, 4-D (2, 4-Dichlorophenoxyacetic acid) and TIBA (2,3,5-Triiodobenzoic acid) on calllogenesis and regeneration from different explants of Rice (Oryza sativa L) cultivars IRRI9 and Bas-386&quot;</td>
<td>(completed) 2011</td>
<td>1,50,000/-</td>
<td>University of the Punjab, Lahore</td>
</tr>
<tr>
<td>5.</td>
<td>Farkhanda Jabeen</td>
<td>Antibacterial activities of selected plants extracts against Pesticides degrading bacteria</td>
<td>(completed) 2011</td>
<td>2,306,000/-</td>
<td>Pakistan Science Foundation (PSF)</td>
</tr>
<tr>
<td>6.</td>
<td>Ambreen Ahmed</td>
<td>Enterobacter sp.: impact on the growth of Brassica oleracea.</td>
<td>(completed) 2011</td>
<td>1,00,000/-</td>
<td>University of the Punjab, Lahore</td>
</tr>
</tbody>
</table>

### (ii) Newly launched

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


Conferences, Seminars and Workshops, etc.

- Prof. Dr. Khan Rass Masood, Chaired a session attended 2nd International Conference of plant ____ held in Jan 2011 at GCU, Lahore.
- Prof. Dr. Firdaus-e-Bareen attended the 2nd 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 2nd 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. 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 Seminar on “Dengue fever” (21st Sep, 2011) organized by Department of Microbiology and Molecular Genetics at MMG, PU.
- Ms. Ambreen Ahmed attended Seminar on “Biological Role of Mycotoxins” (17th Mar, 2011) organized by Department of Microbiology and Molecular Genetics at MMG, PU.
- Ms. Ambreen Ahmed attended Seminar on “Proteomic in Biomedical Sciences” (18th March, 2011) organized by Department of Microbiology and Molecular Genetics at MMG, PU.
- Ms. Ambreen Ahmed attended Seminar on “Granulomatous diseases of Nose” (26th September, 2011) organized by Department of Microbiology and Molecular Genetics at MMG, PU.
Ms. Ambreen Ahmed attended workshop on “Biosaft” by Sure Bio Diagnostics on 4th 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)**

<table>
<thead>
<tr>
<th>Researcher/sponsoring Agency</th>
<th>Title</th>
<th>Financial Support (million rupees)</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muhammad Akhtar/ University of the Punjab</td>
<td>Studies on the fossil mammals of the Soan Formation 1 year (2010-2011)</td>
<td>0.2</td>
<td>Studies on the fossil mammals of the Soan Formation</td>
</tr>
<tr>
<td>Tanveer Akhtar/ University of the Punjab</td>
<td>Malaria: Molecular Basis of Drug Resistance in Pakistan Scenario</td>
<td>0.2</td>
<td>To identify drug resistant genes.</td>
</tr>
<tr>
<td>Syed Shahid Ali/ University of the Punjab</td>
<td>Toxicity and resistance pattern in various populations of stored grain pest, <em>Trogoderma ganarium</em> against a pyrethroid insecticide, “deltamethrin”.</td>
<td>0.2</td>
<td>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.</td>
</tr>
<tr>
<td>Javed Iqbal Qazi/ University of the Punjab</td>
<td>Isolation and termite biocontrol potential of chitinase producing bacteria.</td>
<td>0.2</td>
<td>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.</td>
</tr>
<tr>
<td>Mohammad Shafiq Ahmed/ University of the Punjab</td>
<td>Toxicological Effects Caused by Some Heavy Metals in Fishes from River Ravi at Baloki Headworks.</td>
<td>0.15</td>
<td>To identify toxic effects on growth in fishes</td>
</tr>
<tr>
<td>Zafar Iqbal / University of the Punjab</td>
<td>Study on some aspects of biology of freshwater fish gold fish (<em>Carassicus auratus</em>) and prevalence of disease in some ornamental fish</td>
<td>0.15</td>
<td>Studies on disease and biology of gold fish.</td>
</tr>
<tr>
<td>Nabila Roohi / University of the Punjab</td>
<td>Identification and prognostic significance of malignancy associated biomarker/s in patients with Hodgkin’s and non Hodgkin’s Lymphoma.</td>
<td>0.125</td>
<td>To identify biomarkers of Lymphoma for its early diagnosis.</td>
</tr>
<tr>
<td>Najma Shaheen / University of the Punjab</td>
<td>Identification of bacterial isolates from contact lenses or lens cases, their antibiotic resistance profile and responses to selected antimicrobials.</td>
<td>0.125</td>
<td>To study the antibiotic resistance in bacteria isolated from contact lenses.</td>
</tr>
</tbody>
</table>
(ii) Newly launched (during 2011)

<table>
<thead>
<tr>
<th>Researcher/sponsoring Agency</th>
<th>Title</th>
<th>Financial Support (million rupees)</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanveer Akhtar/University of the Punjab</td>
<td>Genetic studies of Leukemia in Pakistan population.</td>
<td>0.25</td>
<td>To identify gene variation in Leukemia.</td>
</tr>
<tr>
<td>Syed Shahid Ali/University of the Punjab</td>
<td>Screening, identification and characterization of cellulolytic bacteria from the local bacterial isolates.</td>
<td>0.25</td>
<td>To search for the local bacterial isolates and enzymes, which can be used to upgrade the cellulotic waste to high quality products.</td>
</tr>
<tr>
<td>Javed Iqbal Qazi/University of the Punjab</td>
<td>Cultivation of $H_2$-yielding bacteria in food wastes</td>
<td>0.25</td>
<td>To provide biohydrogen, a clean, environmentally compatible and future fuel, from food wastes in economically feasible way.</td>
</tr>
<tr>
<td>Zafar Iqbal / University of the Punjab</td>
<td>Fungal infections in some freshwater fishes.</td>
<td>0.2</td>
<td>To investigate fungal infections in some ornamental fishes.</td>
</tr>
<tr>
<td>Nabila Roohi / University of the Punjab</td>
<td>Identification and prognostic significance of protein biomarkers associated with breast cancer in women</td>
<td>0.15</td>
<td>To identify bro markers of breast cancer.</td>
</tr>
<tr>
<td>Abida Butt/University of the Punjab</td>
<td>Effect of size and density of prey on the web structure of <em>Neoscona theisi</em> (Araneae : Arancidae)</td>
<td>0.15</td>
<td>To check plasticity in the web structure of <em>N. theisi</em>.</td>
</tr>
<tr>
<td>Azmat Jadoon / University of the Punjab</td>
<td>Effect of Neem (<em>Azadirachta indica</em>) to DMBA induced mammary gland tumor in female rats.</td>
<td>0.15</td>
<td>To see the protective effect of <em>Azadirachta indica</em> (Neem) on mammary gland tumor and determine Therapeutic effect of <em>Azadirachta indica</em> (Neem) on mammary gland tumor.</td>
</tr>
<tr>
<td>Najma Shaheen / University of the Punjab</td>
<td>Molecular characterization of bacterial isolates from contract lens solution and antimicrobial efficacy of commercial lens solution.</td>
<td>0.15</td>
<td>Isolation of pathogenic base from lens solution.</td>
</tr>
<tr>
<td>Nadeem Sheikh / University of the Punjab</td>
<td>Diet induced obesity and inflation studies in rats. Impact on liver functionality.</td>
<td>0.15</td>
<td>Liver function under high fat diet.</td>
</tr>
</tbody>
</table>
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 percentage consumption of H. indicola (Wasmann) on extracts from 5 plant species. |

**Publications**


o Bano, A.S., and Qazi, J.I., 2011. Soil buried Mild Steel Corrosion by Bacillus cereus-SNB4 and its Inhibition by Bacillus thuringiensis-SN8. *Pakistan J. Zool.* 43(3): 555-562. (IF 0.2)


o Farasat, T., Cheema, A.M. and Khan, M.N. (2011). Serum fasting insulin and insulin resistance are associated with low T₃/T₄ ratio in euthyroid Pakistani subjects. 8th Annual World Congress on Insulin Resistance, Diabetes and Cardiovascular Diseases (WCIRDC), Los Angeles CA, USA,


Malik I., Naz N., Sheikh N., Khan S., Moriconi F., Blaschke M., and Ramadori G; Comparison of changes in the gene expression of transferrin receptor-1 and other iron regulatory proteins in the rat liver and brain during acute-phase-response. (Accepted in Cell and Tissue research) [Impact factor 2.308]

Manzoor F., Chaudhary M., SHEIKH N., and Khan I.A. 2010. Diversity and proportion of termite species in garden trees and wheat crop in district Bhakkar, Pakistan. (Accepted PJZ) [Impact factor 0.18]

Sheikh N., Naz N. and QureshiA.W. Impact of the workplace environment on the hematology and serology of the steel industry workers. (Accepted in HealthMed) [Impact factor 0.20].


- Conferences, Seminars and Workshops, etc.

  All the faculty members actively participated and presented paper/poster 31st Pakistan Congress of Zoology held at Azad Jammu and Kashmir University, Muzaffarabad April 19-21, 2011.

  Department of Zoology has conducted a seminar on “1st 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.


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


- 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 31st International Symposium, 26th to 29th 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**

- 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.

- 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 15th March, 2011.
  - Centre for Clinical Psychology organized a three day workshop from 18th – 20th 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 10th January 2011.
  - Dr. Aamira SaleemRao, Consultant Clinical Psychologist (UK) conducted a workshop on “Use of Reflective Practice in Forming Hypothesis in Therapy” on 26th April, 2011.
  - Dr. Mahmooda Aftab conducted three day workshop on “Drug Addiction and Its Psychological Rehabilitation” from 10th May, 17th May and 24th May, 2011.
  - Ms. Najma Tauheed, conducted workshop on “Gestalt Therapy” on Tuesday 7th, 14th & 21st June, 2011.
Centre for Clinical Psychology organized a walk to celebrate International Mental Health Day on Tuesday 19th 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 2nd 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

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

Research Papers


- Ijaz B, Ahmad W, Javed FT, Gull S, Hassan S. *Revised cutoff values of ALT and HBV DNA level can better differentiate HBeAg(-) chronic inactive HBV patients from active carriers.* Virol J. 2011 Feb 27;8:86.


Butt AM, Khan IB, Hussain M, Idrees M, Lu J, Tong Y. Role of post translational modifications and novel crosstalk between phosphorylation and O-beta-GlcNAc modifications in human claudin-1, -3 and -4. Molecular Biology Reports.2011; (Accepted)


**Books Published:**


**Book Chapter**


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


**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
  - 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
  o 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).
  o Arshad Javaid, (2011-12), entitled “Biological Control of Charcoal Rot of Mungbean by Trichoderma and Sisymbrium Irio” by University of the Punjab Lahore.
  o Shakil Ahmed, entitled “Management of root rot of Arachis hypogaea L. in rainfed areas of Punjab”, funded by HEC.
  o Shakil Ahmed, entitled “Biological Treatment of pulp and paper industrial effluent by white rot fungi” funded by the University of the Punjab.
  o 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.
  o Uzma Bashir, 2011-2012. Morphological and Molecular characterization of economically important fungal species. Funded by academic research, University of the Punjab, Lahore, Pakistan.

• Publications


**Books Published:**


**Articles Published in Urdu:**


Book Published:


**Books/Monographs**

Javaid, A. (2010). Beneficial Microorganisms for Mungbean Production: Effect on crop growth, yield, nodulation and nutrition. VDM Verlag Dr. Muller, Germany.


Iqbal, D. and Javaid, A. (2011). Management of Southern Blight of Bell Pepper: Constituents of *Corpus didymus* as natural fungicides. VDM Verlag Dr. Muller, Germany.


Book Chapters


**Book published:**


**Book**


**Book published:**


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


Anwar, S.A., McKenry, M.V. and Ahmad, H.A. (2011). Nematode and fungal communities associated with mango decline of southern Punjab. 50th Annual meeting of the Society of Nematologists at Corvallis, Oregon, USA, on July


### Seminars Delivered


- Dr. Ahmad Ali Shahid, Assistant Professor, 2nd 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.
Dr. Shakil Ahmed, Assistant Professor, One day Training workshop on 12th 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 8th 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 12th 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 27th 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 14th 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 1st 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 2nd 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 2nd 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 2nd 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 1st 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 12th 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 2nd 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.

**Attended & Participated**

- October 2010 - The 1st 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 12th 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 2nd 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. 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. Zakaullah, 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.
o 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/-)

o Arshad Javaid, (2011-12), “Lumsum Research Grant” by University of the Punjab Lahore (Grant Rs.769,000/-)

o Shakil Ahmed, entitled “Management of root rot of *Arachis hypogaea L.* in rainfed areas of Punjab”, funded by HEC. (Grant Rs.1.500 million)

o 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/-)

o 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/-)

o 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**

<table>
<thead>
<tr>
<th>Researcher/ sponsoring agency</th>
<th>Research project with duration</th>
<th>Financial support</th>
<th>Main goals (proposed/achieved)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mahjabeen Saleem, University of the Punjab</td>
<td>Molecular Cloning and Expression of Xylanase Gene from <em>Bacillus sp.</em> in <em>E. coli.</em></td>
<td>Rs. 0.1 Million</td>
<td>Cloning and expression of xylanase gene and study of its applications in paper industry</td>
</tr>
<tr>
<td>Amtul Jamil Sami, World Wild Life Fund</td>
<td>Comparative Studies on the Phylogenetic analysis of Indus Dolphin &amp; Gangies Dolphin</td>
<td>Rs. 0.2 Million</td>
<td>Study of evolutionary and phylogenetic analysis of indigeneous Dolphens.</td>
</tr>
<tr>
<td>Researcher Name</td>
<td>Project Description</td>
<td>Budget</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------</td>
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<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Amtul Jamil Sami HEC</td>
<td>Molecular Basis of Action of Neem Derived Compounds as Bio-pesticides</td>
<td>Rs. 1.95 Million</td>
<td>Study the role of Neem derived compounds as Biopesticides.</td>
</tr>
<tr>
<td>Saima Sadaf TWAS</td>
<td>Recombinant production of biopharmaceutical using a prokaryotic expression system</td>
<td>$12,000 USD</td>
<td>Cloning, expression, partial characterization and biological activity assessment of an important biopharmaceutical.</td>
</tr>
<tr>
<td>Saima Sadaf HEC</td>
<td>Free circulating molecular markers for cancer diagnosis and prognosis</td>
<td>Rs.4.19 Million</td>
<td>Analysis of DNA/RNA based markers for early diagnosis of cancer</td>
</tr>
<tr>
<td>Saba Irshad University of the Punjab</td>
<td>Linkage studies of Microcephaly in Pakistani kindred</td>
<td>Rs. 0.1 Million</td>
<td>Genetic and linkage based studies of children suffering from microcephaly.</td>
</tr>
<tr>
<td>Zahoor Qadir Samra University of the Punjab</td>
<td>Anti-cancer Drug Delivery through Magnetic Nanoparticles</td>
<td>Rs. 0.1 Million</td>
<td>Preparation of nano-based magnetic particles for effective delivery of anti-cancer drugs.</td>
</tr>
<tr>
<td>Mamoona Naz University of the Punjab</td>
<td>The role of estrogen-metabolizing genes CYP17 and Catechol-o-methyltransferase in association risk of epithelial ovarian cancer</td>
<td>Rs. 0.1 Million</td>
<td>Study of the role/association of CYP17 mutation and polymorphism with ovarian cancer.</td>
</tr>
<tr>
<td>Shahbaz Aslam University of the Punjab</td>
<td>Use of laccases in textile industry</td>
<td>Rs. 0.1 Million</td>
<td>Study the applications of fungal laccases in textile industry</td>
</tr>
<tr>
<td>Iram Gull University of the Punjab</td>
<td>Expression of Human INF-α2-b in E. coli for Therapeutic Purposes</td>
<td>Rs. 0.1 Million</td>
<td>In house production of human interferon α2 for the treatment of Hepatitis.</td>
</tr>
<tr>
<td>Afshan Iqbal University of the Punjab</td>
<td>Cloning and Expression of Human Tumor Necrosis Factor in Escherichia coli.</td>
<td>Rs. 0.1 Million</td>
<td>Cloning and expression analysis of human TNF in E.coli.</td>
</tr>
<tr>
<td>Beenish Kashif University of the Punjab</td>
<td>Enhanced production and purification of L-glutamate from bacterial strains</td>
<td>Rs. 0.1 Million</td>
<td>Production of L-glutamate and its purification.</td>
</tr>
<tr>
<td>Ferhana Hussain University of the Punjab</td>
<td>Over expression of human erythropoietin gene</td>
<td>Rs. 0.1 Million</td>
<td>Expression of human erythropoietin gene through recombinant DNA technology.</td>
</tr>
</tbody>
</table>
(ii) Newly launched

<table>
<thead>
<tr>
<th>Researcher/sponsoring agency</th>
<th>Research project with duration</th>
<th>Financial support</th>
<th>Main goals (proposed/achieved)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mahjabeen Saleem, University of the Punjab</td>
<td>Potential of bacterial strains for bioremediation of pulp and paper industry effluents</td>
<td>Rs. 0.15 Million</td>
<td>To check the ability of biological treatment process for decolourization of industrial effluents</td>
</tr>
<tr>
<td>Amtul Jamil Sami, University of the Punjab</td>
<td>human eye lens of Local population.</td>
<td>Rs. 0.15 Million</td>
<td></td>
</tr>
<tr>
<td>Amtul Jamil Sami, HEC</td>
<td>Molecular Basis of Action of Neem (Azadirachta Indica) derived compounds as Bio-pesticides.</td>
<td>Rs. 2.262 Million</td>
<td></td>
</tr>
<tr>
<td>Saima Sadaf, PAS</td>
<td>Production of recombinant cytokine of therapeutic importance</td>
<td>Rs.1.98 Million</td>
<td>Production of granulocyte colony stimulating factor for neutropenia treatment</td>
</tr>
</tbody>
</table>
| Saba Irshad, University of the Punjab | Characterization of BCR-ABL in CML patients of Pakistan | Rs. 0.15 Million | • To characterize all possible BCR-ABL Fusion Transcripts by using RT PCR  
• To check frequency of those fusion transcript in CML patients of Pakistan  
• To check the presence of a typical fusion transcripts other than b2a2, b3a2, in CML patients of Pakistan |
| Zahoor Qadir Samra, University of the Punjab | Surface Layer Proteins as Nano carrier for Therapy and Diagnosis Duration: 1 Year | Rs. 0.125 Million | • Isolation and characterization of S-layer protein from bacteria  
• Identification by gold-conjugated antibody and microscopy  
• Conjugation of anti-cancer drug with S-layer protein. |
<table>
<thead>
<tr>
<th>Name</th>
<th>Project Description</th>
<th>Budget</th>
<th>Duration</th>
<th>Objective(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mamoona Naz</td>
<td>Identification of a high risk haplotype for the dystrobrevin binding protein-1 (DTNBP-1) gene and interleukin-12B in schizophrenia as genetic markers Duration: 1 Year</td>
<td>Rs. 0.125 Million</td>
<td>1 Year</td>
<td>Role of diagnostic strategy in treatment of schizophrenia</td>
</tr>
<tr>
<td>Iram Gull</td>
<td>Determination of uric acid levels by uric acid test strips Duration: 1 Year</td>
<td>Rs 0.125 Million</td>
<td>1 Year</td>
<td>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. Development of low cost disposable paper based uric acid test strips.</td>
</tr>
<tr>
<td>M. Shahbaz Aslam</td>
<td>Fungal laccases for paper pulp bleaching Duration: 1 Year</td>
<td>Rs. 0.125 Million</td>
<td>1 Year</td>
<td>Replacing conventional and polluting chlorine based delignification procedures by enzyme based methods. Providing milder and cleaner strategy for pre-treatments of wood pulp with lignolytic enzymes.</td>
</tr>
<tr>
<td>Afshan Iqbal</td>
<td>Isolation, Characterization and immobilization of extracellular alpha amylase from mutant Bacillus Subtilis Duration: 1 Year</td>
<td>Rs. 0.125 Million</td>
<td>1 Year</td>
<td>Development of mutant Bacillus subtilis Enzyme estimation Purification and characterization of the enzyme Enzyme Immobilization Immobilized enzyme assay</td>
</tr>
<tr>
<td>Beenish Kashif Hashmi</td>
<td>Studies on antioxidant enzyme activities at different ripening stages of fruits and vegetables. Duration: 1 Year</td>
<td>Rs. 0.125 Million</td>
<td>1 Year</td>
<td>Sampling of plant material (available fruits and vegetables) Preparation of enzyme extract</td>
</tr>
</tbody>
</table>
• Estimation of total protein content
• Estimation of antioxidant enzyme activity
• Isolation and purification of the highest activity antioxidant enzyme
• Characterization of the purified antioxidant enzyme

### Publications


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.


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 9th 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 10th 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 9th Shaukat Khanum Memorial Cancer Symposium, Lahore, 26-28th November, 2010.

Dr. Saba Irshad attended the conferences poster presentation in 31st Pakistan congress of Zoology (International), University of Azad Jammu & Kashmir, Muzaffarabad, 19th April-21st 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 attended on “Computational Resources for Protein Modeling” at Institute of Biochemistry and Biotechnology, Lahore, 14-19th 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 9th February 2011.

Dr. Saba Irshad Certificate of Participation in 1st CME Based Seminar on Medical Laboratory Technology “Molecular Biology & Laboratory Medicine”, February 10th, 2011, at KEMU, Lahore, Pakistan.

Dr. Saba Irshad Certificate of Participation in Two day workshop “Academic Writing for Research” Held on 27th & 28th 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 2ND workshop on “Young Researchers Skills Development” organized by NAYS on dated 7th 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
  o 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)
  o 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

<table>
<thead>
<tr>
<th>S.No</th>
<th>Researcher/ Sponsoring Agency</th>
<th>Research project with duration</th>
<th>Financial support</th>
<th>Main goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Javed Iqbal/ Pak-US Collaborations</td>
<td>Enhance the sugarcane production in Pakistan by Modern Breeding Technology</td>
<td>US$.71610.00</td>
<td>To look into molecular markers for resistant and susceptible gene analogues for main sugarcane diseases.</td>
</tr>
<tr>
<td></td>
<td>Higher Education Commission</td>
<td>Strengthening of the School of Biological Sciences</td>
<td>Rs. 377.328 million</td>
<td>Infrastructure development of SBS</td>
</tr>
<tr>
<td>2</td>
<td>M. Waheed Akhtar Higher Education Commission Ministry of Sciences and Technology.</td>
<td>Study of protein biomarkers for early detection of pathological states.</td>
<td>Rs. 31.642 million</td>
<td>To characterize protein biomarkers specific in different cancers and relate their levels with state of the disease. (Under progress)</td>
</tr>
<tr>
<td></td>
<td>Production of Bioenergy from plant biomass (a collaborative project with major share of the School of Biological Sciences Lab.)</td>
<td>Rs. 260.329 Million (129.52 million Punjab University component share)</td>
<td>Develop biotechnology for the production of ethanol from plants biomass (under progress).</td>
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<tr>
<td></td>
<td>Government of Pakistan</td>
<td>Preparation of application of growth hormones injectables (part of the project “Strengthening of School of Biological Sciences)</td>
<td>Total amount 377.328 million (40 million share component)</td>
<td></td>
</tr>
<tr>
<td>Institution / Project</td>
<td>Description</td>
<td>Funding</td>
<td></td>
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<tr>
<td>Pakistan Academy of Sciences</td>
<td>Production of recombinant cytokine of therapeutic importance</td>
<td>Rs.1.982 million</td>
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<td>Higher Education Commission</td>
<td>Free circulating molecular markers in cancer diagnosis of tuberculosis using amultiplex microbead immunoassay</td>
<td>Rs.4.198 million</td>
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<tr>
<td>EMRO (WHO) Switzerland</td>
<td>Validation study of a rapid and reliable diagnosis of tuberculosis using amultiplex microbead immunoassay.</td>
<td>US$.12,729.27</td>
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<tr>
<td>Pak-US S&amp;T Cooperation</td>
<td>Rapid detection of infection and drug resistance in tuberculosis patients by multiplex analysis</td>
<td>US$.262,342.00</td>
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<tr>
<td>University of California Davis, USA</td>
<td>Bioremediation of chromium and arsenic from industrial waste waters</td>
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<tr>
<td>Shahida Hasnain</td>
<td>Plant growth hormones from bacterial and cyanobacterial origin and its impact in tissue culture</td>
<td></td>
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<tr>
<td>Naeem Rashid</td>
<td>Cloning, sequencing and expression of gene and biochemical characterization of starch hydrolyzing enzyme pullulanase from hyperthermophilic archaeon <em>Pyrococcus calidifontis</em>.</td>
<td>Rs. 3,261,635/-</td>
<td></td>
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<tr>
<td>Muhammad Saleem Haider</td>
<td>Novel approach to generate, wide spectrum resistance to all cotton begomoviruses infecting cotton and other cultivated crops</td>
<td>Rs.28.1 million</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 6 | Sadaf Naz  
Higher Education Commission of Pakistan | Molecular characterization of dystonia and wolfram syndrome in Pakistan (3 years) | Rs.4,198,896.00 |
<table>
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</thead>
<tbody>
<tr>
<td></td>
<td>Fogarty International Centre and National Institute on Deafness and other Communication Disorders, National Institute of Health, USA</td>
<td>Genetic basis of moderate to severe hearing loss in Pakistan.</td>
<td>$.270,000.00</td>
</tr>
</tbody>
</table>

**Publications**

**Research Articles**


**Books**
• 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


• Conferences, Seminars and Workshops, etc.

  • Prof. Dr. Javed Iqbal, Attended 2nd 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, 30th Pakistan Congress of Zoology, University of Agriculture, Faisalabad, March 2-4, 2010,

  • Prof Dr A.R.Shakoori, 31st 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 3rd 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 14th 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, 10th 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, 3rd International Symposium on Molecular Medicine and Drug Research, Karachi University, Pakistan, Jan. 3-6, 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 olaraceae ex-plants” in 6th 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 “2nd International Conference of Plant Scientists & 11th 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
o Prof Dr Shahida Hasnain, Organized seminar on “Nanotechnology” by Dr Patrice Marche (Inserm, France) in Department of Microbiology and Molecular Genetics, March 7, 2011

o 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”

o Prof Dr Shahida Hasnain, Attended National Conference on “Setting Standards for 21st Century Pakistan” Islamabad May 26, 2011 organized by HEC, participated in Exhibition on behalf of Punjab University

o 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”

o 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”.

o Prof Dr Shahida Hasnain, Patron one day workshop on “Fluorescent Microscopy” organized by Department of Microbiology and Molecular Genetics, September 24, 2011

o Prof Dr Shahida Hasnain, Patron one day workshop on “Immunofluorescent Techniques” organized by Department of Microbiology and Molecular Genetics, October 20, 2011

o Prof Dr Shahida Hasnain, Participated and presented lecture entitled “Auxin synthesis and root colonization by two rhizospheric unicellular cyanobacteria” in The 6th Asian Pacific Phycological Forum “Algae, The Future Resources” organized by Society of Phycology October 9-14, 2011, Yeosu, Korea

o Prof Dr Shahida Hasnain, Attended International Symposium on “Tuberculosis – Epidemiology, Diagnostics and Treatments” organized by School of Biological Sciences, Punjab University, November 3, 2011.

o 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**

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.

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 DIFRACTOMETER, HPLC, Gas Chromatograph, Food and Beverage Analyzer, CHNS Analyzer, Keithley Semiconductor Characterization System, Precision Impedance Analyzer, Automatic Weather Station.

FACULTY OF MEDICINE & DENTISTRY
SHAIIKH 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
  o 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
  o Syed Saeed-ul-Hassan. Phytochemical investigations of Chenopodium Album Funded by University of the Punjab, Lahore.
  o Khalid Hussain. Pharmacological activities of extracts of Daucus carota L. Funded by University of the Punjab, Lahore.

• Newly launched
  o Syed Saeed-ul-Hassan. Antioxidant activity of Balota Limbata Funded by University of the Punjab, Lahore.

• Publications
- Sabiha Karim. Effect of cinnamon extract on blood glucose level and lipid profile in alloxan induced diabetic rats.. Pakistan Journal of Physiology, 20117 (1).
- Prof. Dr. Mobasher Ahmad Butt. Antidiabetic Activity of Method Extract of Blumeadacrea. Asain.J.Chem. 23, 12, 5403-5306(2011) India
o Prof. Dr. Mobasher Ahmad Butt. Study on Cyt-P-450 dependent Retinoic Acid Metabolizing Sci Pharm 79, 921935 (2011) Austria.

o Prof. Dr. Mobasher Ahmad Butt. Hepato & Nepho protective activity of S. Buck Thorn. Lat. Am.J. Pharm.30 (a): M80-4- (2011)


- Syed Saeedul Hassan, Muhammad Khalil ur Rehman, UzmaNiaz, Muhammad Usman Bhatti. Acacia catechu – A Review Pak. J. Pharm. 24(1&2), 2011
- Anjum Naeem,Yasser Hussain,Bashir Ahmad,Muhammad Tahir Aziz,Mansoor Ahmad,Hassan Hameed ( Shaukat Khanum Memorial Cancer Hospital and Research Centre, Lahore, Pakistan. “A prospective study of cefepime versus ticarcilline/clavulanate as empirical treatment of febrile neutropenia in lymphoma patients" JPMA 61:18-21 (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
• **Conferences, Seminars and Workshops, etc.**
  o Prof. Dr. Syed Saeed ul Hassan attended Two days International Conference “Multidisciplinary Approach in Medication Usage” held on 12-14th February, 2010, Jinnah Hospital Pharmacy Practices, Allama Iqbal Medical College, Auditorium, Lahore and participated in group discussion.
  o Prof. Dr. Syed Saeed ul Hassan attended Two days International Seminar “Opportunities – Challenges for Pharmaceutical Care Practice at Community Pharmacy in Pakistan” held on 24-25th February, 2010 organized by Department of Pharmacy, Lahore College for Women University, Lahore and acted as Chairman in Scientific Session.
  o 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 31st May, 2010 organized by Institute of Pharmaceutical Sciences of the University of Veterinary and Animal Sciences at Conference Hall UVAS, Lahore.
  o Prof. Dr. Syed Saeed ul Hassan attended One Day Seminar on “Angiogenesis in Cancer Research” on 7th 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.
  o Prof. Dr. Syed Saeed ul Hassan attended One Day Seminar on “The Quality Assurance of Pharmaceuticals” on 23rd October, 2010 organized by Pakistan Pharmacist Association at Pakistan Pharmacist Association House, 488-G, Johar Town, Lahore.
  o 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.
  o Sabiha Karim attended Three days Conference on “Curriculum Development” from 28th February to 2nd 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.
  o 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.
  o Prof. Dr. Syed Saeed ul Hassan attended One Day Seminar on “Recent Trends in Stroke Research” held on 10th 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 16th International Pharmacy Conference & Exhibition on “Your Health & Pharmacist”, held from 28th April to 1st 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. 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 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 3rd & 4th 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 24th to 25th 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 7th June 2010. Organized by University College of Pharmacy.

Dr. Sabiha Karim participated in Seminar on quality assurance on Pharmaceuticals held on 23rd October 2010. Organized by PPA (Pakistan Pharmaceutical Association).

Dr. Sabiha Karim participated in Seminar & workshop on Environmental Toxicology & Health held on 8th & 9th 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.


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. 16th International Pharmacy Conference and Exhibition 2011, April 28 to May 1, 2011, Lahore, Pakistan.


- Misbah Sultana attended three days international conference on “Multidisciplinary Approach in Medication Usage”, held on 12th to 14th February, 2010 at IMC Auditorium, Jinnah Hospital Pharmacy Practices.
- Misbah Sultana attended four days “HRDC New Faculty Orientation Program 2010”, held on 5-8th 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 16th International Pharmacy Conference & Exhibition on “Your Health and Pharmacist” held on 28th April to 1st May, 2011 organized by Pakistan Pharmacist Association at Pearl Continent Hotel, Lahore.
- 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 8th 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 16th International Pharmacy conference & Exhibition at PC Lahore on 28 April to 1st May 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.” 16th International Pharmacy Conference and Exhibition, Lahore, Pakistan, 28th April to 1st 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”.16th International Pharmacy Conference and Exhibition, Lahore, Pakistan, 28th April to 1st May 2011.


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

Pervaiz Akhtar Shah: 16th International Pharmacy Conference 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 16th International Pharmacy Conference & Exhibition on “Your Health & Pharmacist”, held from 28th April to 1st 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 12-14th 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 Otego, New Zealand

FACULTY OF SCIENCES
DEPARTMENT OF GEOGRAPHY

- Publications


- 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


- 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 $\mathbb{Q}^\ast(\sqrt{m+2})$ of $\mathbb{Q}(\sqrt{m})$ 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 $\mathbb{Q}^\ast(\sqrt{m})$ under the action of PSL (2,Z) International Mathematical Forum Vol. 6, 201, NO. 32, 1557-1565.

**Conferences, Seminars and Workshops, etc.**
- Prof. Dr. Shahid S. Siddiqi delivered a talk as Invited Speaker, titled Binary 4Point Approximating Subdivision Scheme, 5th World Conference on 21stCentury Mathematics 2011held 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.
o Prof. Dr. Muhammad Sharif attended a conference, Twelfth National Symposium on Frontiers in Physics held at GC University
  Lahore, February 02-04, 2011.

o Prof. Dr. Muhammad Sharif attended, III Italian-Pakistani Workshop on Relativistic Astrophysics, Department of Physics, University of Salento, Lecce-Italy, June 20-22, 2011.

o **Prof. Dr. Muhammad Sharif delivered the seminar, Modified Theories of Gravity** (Institute of Mathematics, University of Aberdeen, Aberdeen Scotland, UK, June 9, 2011).

o **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).

o Prof. Dr. Malik Zawwar Hussain attended a conference, Data modeling using rational cubic functions, School of Mathematical Sciences, University Stains Malaysia, July 23, 2011

o Prof. Dr. Malik Zawwar Hussain Worked as member of Organizing Committee in World Conference of 21st Century Mathematics, Lahore, Pakistan February 9-13, 2011.


o Dr. Muhammad Aslam Malik participated in 5th World Conference on 21th Century Mathematics 2011, Government College University, Lahore.

o Dr. Muhammad Aslam Malik participated and presented research paper in 12th International Pure Mathematics Conference held at Quaid-e-Azam University, Islamabad on August, 2011.

o 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

o Miss Wajiha Javed, Ph.D Scholar participated in the 12th National Symposium on Frontiers in Physics, Government College University, Lahore, 9-12 February, 2011.

o Miss Wajiha Javed, Ph.D Scholar participated in 5th World Conference on 21th Century Mathematics 2011, Government College University, Lahore.

o 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.

o 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.

o All Faculty members and M.Phil./MS and Ph.D scholars participate in the Seminar Series.

o Weekly Departmental Seminar Series are held at Department of Mathematics University of the Punjab, Lahore.

o 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**
  
  o 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.
  
  o School of Engineering, Manufacturing and Mechanical Engineering, University of Birmingham, UK.

• **Funding grants for R&D**
  
  o 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:**
  
  
  
  o Rai, M.G., Iqba, M.A., Yongbing, X., Gordon, W.I., Wen, Z., (2011): Influence of Rare Earth Ho$^{3+}$ Doping on Structural, Microstructure and Magnetic Properties of ZnO Bulk and Thin Film Systems, Chinese Journal of Chemical Physics vol.24 (0.642)
  
  o 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, 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)
by Spray Pyrolysis and Their Application in Thin-Film Transistors: Advanced. Functional.
Materials Vol.21, (8.5)


- **Research Journals**
  The following journals are received regularly & free of cost:
  - Scientific American
  - Nature Physics
  - Cern Courier
  - Korian 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.**
    - 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

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

• Publications

  o 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


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 Zn0.95Ni0.05O nanocrystallites. Pakistan Institute of Physics International Conference (PIPIC-2011), University of Engineering and Technology (UET) Lahore, Pakistan, March 28-30.


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 15th International


- Book

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

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Author</th>
<th>Research Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>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</td>
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<td></td>
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<td>4. Measurement of the Matrix Element for the Decay $\eta' \rightarrow \eta\pi^+\pi^-$ (BES Collaboration), Phys.Rev. D, 83, 012003, Jan 18, 2011</td>
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<td>5. First Observation of the Decays $\chi_c J \rightarrow \pi^+\pi^0\pi^0\pi^0$ (BES Collaboration), Phys.Rev.D, 83, 012006. Jan 18, 2011</td>
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<td></td>
<td></td>
<td>9. &quot;Evidence for $\psi'$ decays into $\gamma\pi^0$ and $\gamma\eta$&quot;, BESIII Collaboration, Phy. Rev. Lett. (USA) 105, 261801 Dec 20, 2010</td>
</tr>
</tbody>
</table>

2. Bilal Masud

3. Munawar Iqbal
<p>| | | |</p>
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<td></td>
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<td>2. Study of $a_0(980)$-$f_0(980)$ mixing (BES Collaboration), Phys.Rev.D, 83, 032003. Feb 03, 2011</td>
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<td>Research and Development</td>
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<td>8.</td>
<td>Talab Hussain.</td>
<td></td>
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<tr>
<td>9.</td>
<td>M. Ayub Faridi</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Study of ( a_0(980) )-( f_0(980) ) mixing (BES Collaboration), Phys.Rev.D, 83, 032003. Feb 03, 2011</td>
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<td>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</td>
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<tr>
<td>4</td>
<td>Measurement of the Matrix Element for the Decay ( \eta^* \rightarrow \eta \pi^+ \pi^- ) (BES Collaboration), Phys.Rev. D, 83, 012003, Jan 18, 2011</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>First Observation of the Decays ( \chi_{c1} \rightarrow \pi^0 \pi^0 \pi^0 \pi^0 ) (BES Collaboration), Phys.Rev.D, 83, 012006. Jan 18, 2011</td>
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<td>“Evidence for ( \psi' ) decays into ( \gamma \pi^0 ) and ( \gamma \eta^* ), BESIII Collaboration, Phy. Rev. Lett. (USA) 105, 261801 Dec 20, 2010</td>
<td></td>
</tr>
</tbody>
</table>

- **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 did an oral presentation entitled *High Energy Thermionic Electron Beam for Material Surface Modification* at 19th International Conference on Composites and Engineering (ICCE-19), August 24-30, 2011, Shanghai, China.

Mr. Shahid Sattar participated in 36th 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. Sadatata 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,

- 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.; 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.

- 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, 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.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Projects Title</th>
<th>Investigator</th>
<th>Amount (Rs. Million)</th>
<th>Sponsoring Agency</th>
<th>Duration (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Development of An Integrated Advanced Water Purification System</td>
<td>Nasir Ahmad</td>
<td>2.0</td>
<td>EPA, Govt. of Punjab</td>
<td>02</td>
</tr>
<tr>
<td>2.</td>
<td>Mineralogy, petrology and Industrial Evaluation of Sakesar limestone from Eastern Salt Range, Jhelum District, Pakistan.</td>
<td>Akhtar Ali Saleemi</td>
<td>0.2</td>
<td>University of the Punjab</td>
<td>01</td>
</tr>
<tr>
<td>3.</td>
<td>Biostratigraphy of the Upper Paleocene Lockhart Limestone of Hazara Area, Northern Pakistan.</td>
<td>Shahid Jamil Sameeni</td>
<td>0.15</td>
<td>-do-</td>
<td>01</td>
</tr>
<tr>
<td>5.</td>
<td>Microfacies and Environment of Deposition of Early Cambrian Khewra Sandstone, Salt Range, Pakistan</td>
<td>Naveed Ahsan</td>
<td>0.125</td>
<td>-do-</td>
<td>01</td>
</tr>
</tbody>
</table>
6. **Application of Advanced Oxidation Processes (AOPs) to Bleach Textile Substrate.**
   - Investigator: Nasir Ahmad
   - Amount (Rs. Million): 0.25
   - Sponsoring Agency: University of the Punjab, Lahore
   - Duration (years): 01

7. **Biostratigraphy and carbonate Microfacies analysis of the Chorgali Gali Section, Charkha, Kalar Kahar Area, Northern Pakistan.**
   - Investigator: Shahid Jamil Sameeni
   - Amount (Rs. Million): 0.2
   - Sponsoring Agency: -do-
   - Duration (years): 01

8. **Petrology and Economic Geology of the Hangu Formation of the Unexplored Areas in the Salt Range and Hazara Areas, Pakistan.**
   - Investigator: Syed Mahmood Ali Shah
   - Amount (Rs. Million): 0.15
   - Sponsoring Agency: -do-
   - Duration (years): 01

### Publications

- **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.

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

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 lunched 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)


o 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

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Researcher/ Sponsoring Agency</th>
<th>Research Project with duration</th>
<th>Financial Support (million rupees)</th>
<th>Main Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Syed Mansoor Sarwar (Principal Investigator), Dr. Asim Karim (Co-PI), Jamal Abdl Nasir / Sponsored by HEC Islamabad</td>
<td>Data Warehousing Virtualization Framework for Enhance Business Intelligence (2008-2010)</td>
<td>Rs 2.68 Million</td>
<td>Completed</td>
</tr>
<tr>
<td>2</td>
<td>Fakhar Lodhi (Principal Investigator), Naveed Malik (Co-PI), and Syed Mansoor Sarwar (Co-PI) / Sponsored by National ICT R&amp;D Fund Research Grant</td>
<td>Integrating Open Source Software Development in the Software Engineering Curriculum (2008-2010)</td>
<td>Rs. 35.0 Million (PUCIT share is about Rs 11.00 Million)</td>
<td>Completed</td>
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</tbody>
</table>

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

**Workshops and Conferences attended**
- Jaffry, S.W, Summer School on Data Mining, August 29th – September 1st, 2011 at Department of Knowledge Engineering, Maastricht University, Maastricht, The Netherlands.

**Publications**
- 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”.

M. Kamran Malik, Improving Generator in machine translation by separating syntactic & morphological process.


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:


- Conferences, Seminars and Workshops, etc.
  o In November 2010 an international conference on ‘Statistical Sciences’ was successfully organized;
  o Various workshops were arranged for the students of M.Sc. Actuarial Sciences, M.Sc. Statistics and MIOM during the year 2010-2011.

- Research Journals
  o Regularly publishing a quarterly research journal
  o ‘Pakistan Journal of Statistics and Operation Research’ since 2005

Research Collaboration

- Indigenous
  o State Bank of Pakistan, HEC, FBS

- Foreign Linkages
  o Department of Clinical Immunology
  o Goteborg University, Sweden

CENTER FOR UNDERGRADUATE STUDIES

  o 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

<table>
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<tr>
<th>Name of Researcher</th>
<th>Sponsoring Agency</th>
<th>Financial Support</th>
<th>Research Area</th>
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<td>Najam ul Sehar</td>
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<td>Umer Shafique</td>
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<td>Amara Dar</td>
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<td>Arooj Naseer</td>
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Newly launched

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<td>Madeeha Batool</td>
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Publications (articles)

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<tr>
<td>Madeeha Batool</td>
<td>Comparison of the Photochemistry of Organometallic N-Heterocyclic Carbene and Phosphine Complexes</td>
<td>Chemical Communications</td>
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<td>Najam ul Sehar</td>
<td>New records of Poaceous rusts from Pakistan</td>
<td>Mycotaxon</td>
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<td>Umer Shafique</td>
<td>A rapid, economical, and eco-friendly method to recycle terephthalic acid from waste poly (ethylene terphthalate) bottles</td>
<td>International Journal of Polymeric Materials</td>
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<td>Umer Shafique</td>
<td>Removal of heavy metals by adsorption on Pleurotus ostreatus</td>
<td>Biomass &amp; Bioenergy</td>
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<td>Comparative study of brilliant green dye adsorption from water by radish peels, jamun stem and coal</td>
<td>Electronic Journal of Environmental, Agricultural and Food Chemistry</td>
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<td>Amara Dar &amp; Umer Shafique</td>
<td>Novel methods to determine sulfide in aqueous samples by quantification of lead sulfide spots</td>
<td>Journal of Sulfur Chemistry</td>
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<td>Amara Dar &amp; Umer Shafique</td>
<td>A rapid method for measurement of nickel and chromium at trace level in aqueous samples</td>
<td>Journal of the Mexican Chemical Society</td>
<td>55</td>
<td>213-216</td>
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<td>Umer Shafique</td>
<td>Assessment of concentration of Lead, Cadmium, Chromium and Selenium in blood serum of Cancer and Diabetic patients of Pakistan</td>
<td>Journal of the Chemical Society of Pakistan</td>
<td>33</td>
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<td>Umer Shafique</td>
<td>Removal of alizarin red S dye from aqueous media by using alumina as an adsorbent</td>
<td>Journal of the Chemical Society of Pakistan</td>
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<td>Synthesis, characterization and antibacterial activity of some enaminoles and their complexes with Ni(II) and Sb(III)</td>
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<td>Influence of operating conditions on the removal of brilliant vital red dye from aqueous media from biosorption using rice husk</td>
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<td>Removal of toxic dichlorophenol from water by sorption with chemically activated carbon of almond shells – a green approach</td>
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<td>Umer Shafique</td>
<td>Determination of trace metals by voltamperometry in zebra mussel (Dreissena polymorpha) employed as environmental bio-indicator</td>
<td>Green Chemistry Letters and Reviews</td>
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<td>Umer Shafique</td>
<td>Adsorption modeling for removal of alizarin yellow using untreated and treated charcoal</td>
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<td>Asim Zafar</td>
<td>Real Quadratic Irrational Numbers and Modular Group Action</td>
<td>Southeast Asian Bulletin of Mathematics</td>
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### Publications (books & chapters)

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