

CURRICULM VITAE



Name: Dr. Shahid Munir
Father's Name: Muhammad Munir
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Residential Address: 20-Ayesha street, Abdali Chowk, Islampura, Lahore
Marital Status: Married
C.N.I.C. No. 35202-4529141-1
Passport No. AH0721411
Present positions:
i) **Director**, Centre for Coal Technology, University of the Punjab Lahore, Pakistan.
ii) **Professor**, Institute of Chemical Engineering & Technology, University of the Punjab Lahore, Pakistan.
PhD research topic: Co-combustion of Biomass with Coal
Supervisor: Prof. Bernard. M. Gibbs
Co-Supervisor: Dr. W. Nimmo

Qualification:

<u>Examination</u>	<u>Division</u>	<u>Year</u>	<u>Institution</u>
B.Sc. (Engg.) Chemical Engineering	Ist	1993	Institute of chemical Engineering & Technology, University of the Punjab, Lahore.
MBA (Marketing)	Ist	2003	Institute of Business Administration, University of the Punjab, Lahore.
M.Sc (Engg.) Chemical Engineering	Ist	2007	Institute of chemical Engineering & Technology, University of the Punjab, Lahore.
PhD		2010	Energy and Resources Research Institute, School of Process, Environmental and Materials Engineering, University of Leeds, UK

Positions held/Experience:

Director, Centre for Coal Technology, University of the Punjab, Lahore	2-12-2011 to date
Professor of Chemical Process Technology Institute of Chemical Engineering & Technology, University of the Punjab, Lahore, Pakistan.	13.10.2011 to date
Assistant Professor, Chemical Engineering Institute of Chemical Engineering & Technology, University of the Punjab, Lahore, Pakistan.	14.01.2003 – 12.10.2011
Production Manager Service Industries, G.T. Road, Gujrat, Pakistan.	01.08.2002 to 13.01.2003
Deputy General Manager PICO, Sheikhpura, Pakistan.	15-04-2002 to 31-07-2002
Deputy Manager Production EMCO Industries Ltd. Lahore, Pakistan.	11-06.1998 to 14-4-2002
Assistant Manager Marketing IAC, Lahore, Pakistan.	1-12-1997 to 10-06-1998
Assistant Manager Production EMCO Industries Ltd. Lahore, Pakistan.	01-05-1994 to 22-10-1997

RESEARCH PUBLICATIONS

1. **Usman Rafaqat, Javed Akhtar, Naseer-ud-Din Sheikh, Shahid Munir (Accepted)** Cleaning of Dukki (Baluchistan) Coal by Oil Agglomeration. International Journal of Oil, Gas and Technology.
2. **S. Munir, K. Shahzad, S. Aslam, M. Mukhtar, J. Akhtar**, “Parametric Study of Coal Gasification Under Bubbling Fluidized Bed Conditions” in proceeding of Ist International Young Engineers Convention (FIYEC-IYEC-2014) organized by the Pakistan Engineering Council at University of Engineering & Technology (UET) held on April 18, 2014.

3. **S. Munir, Sana Mushtaq, Shumaila Azam, J. Akhtar, N. Sheikh, K. Shahzad** “Up-gradation of Duki Coal by Agglomeration with Xylene”. in proceeding of Ist International Young Engineers Convention (FIYEC-IYEC-2014) organized by the Pakistan Engineering Council at University of Engineering & Technology (UET) held on April 18, 2014.
4. **Shahzad.K, Kanwal.S, Nawaz.S, Sheikh.N, Munir.S, (2014)**. Effects of moisture and Coal blending on HGI of Pakistani Coal. International Journal of Coal Preparation and Utilization,34(1),1-9.
5. **Ashraf.I, Kanwal.S, Shahzad.K, Sheikh.N,Munir.S, (2013 Submitted)**. Upgradation of Pakistani Coal by Heavy Media Separation. International Journal of Mineral Processing.
6. **Imran Ashraf, Sumaira Kanwal, M. Khurram Shahzad, N. Sheikh, S. Munir,(2012)**. Upgradation of Dandot Coal by Heavy Media Separation. In *Proceedings of International conference on Engineering Sciences, ICES 2012, 28-29 February,Lahore*
7. **Munir.S ,W. Nimmo, B.M. Gibbs,(2012)**. Pakistani Sugarcane bagasse as potential secondary fuel for NO_x reburning in large scale coal combustion systems in proceeding of UK-Pakistan Coal Conference (UK-PK2012),3-5th July , 2012, Leeds, UK.
8. **Munir.S, (2012)**. Energy Crisis in Pakistan and its Solution in proceedings of UK-Pakistan Coal Conference (UK-PK2012),3-5th July , 2012, Leeds, UK.
9. **Munir, S.; Nimmo, W.; Gibbs, B.M., (2011)**. The Effect of air staged, co-combustion of pulverised coal and biomass blends on NO_x emissions and combustion efficiency. Fuel 90 (2011) 126–135.
10. **Munir.S, NOx Emission Control using Biomass as Reburn Fuel , 4th Symposium on Engineering Sciences 1st March 2011, ICET, University of the Punjab, Lahore.**

11. **Munir, S.; Nimmo, W.; Gibbs, B. M.,** (2010). Sheameal and Cotton Stalk as potential fuels for co-combustion with coal. *Bioresource Technology*, 101 (19). 7614–7623.
12. **Munir, S.; Nimmo, W.; Gibbs, B.M.,** (2010). Co-combustion of Agricultural Residues with Coal: Turning Waste into Energy. *Energy & Fuels*, 24 (3), 2146-2153.
13. **Daood, S.S.; Munir, S.; Nimmo, W.; Gibbs, B.M.,** (2010). Char oxidation study of sugar cane bagasse, cotton Stalk and Pakistani Coal under 1% and 3% oxygen concentrations. *Biomass and Bioenergy*. 34 (3), 263-271.
14. **Munir, S.,** (2010). A review on Biomass-Coal Co-combustion: current state of knowledge. *Proceedings of Pakistan Academy of Sciences*. 47(4), 265-287.
15. **Munir, S.; Nimmo, W.; Gibbs, B.M.,** (2010). Air and Fuel Staged Co-combustion of Coal with Biomass in Power Station Boilers. *Journal of Quality and Technology Management. Volume VI, Issue II, Dec, 2010, pg. 81-111.*
16. **Munir, S.; Nimmo, W.; Gibbs, B.M.,** (2010). Biomass as potential Reburn Fuel in Coal-fired Boilers. *Journal of Quality and Technology Management. Volume VI, Issue II, Dec, 2010, pg. 43-79.*
17. **Munir, S.; Nimmo, W.; Gibbs, B.M.,** (2010). Potential Slagging and Fouling Problems associated with Biomass-Coal blends in Coal-fired Boilers. *Journal of Pakistan Institute of Chemical Engineers. Vol.38, 1-26.*
18. **Munir, S.; Daood, S.S; Cunliffe, A.M.; Nimmo,W.; Gibbs, B.M.,** (2009) Thermal Analysis and Devolatilization Kinetics of Cotton Stalk, sugar cane bagasse, and shea meal under nitrogen and air atmospheres. *Bioresource Technology*, 100 (3), 1413-1418.
19. **Munir, S.; Akhtar, N.A.; Nimmo, W.; Gibbs, B.M.,** (2009). NO_x formation during combustion process and in-furnace control technologies. *Journal of Pakistan Institute of Chemical Engineers*, 37, 13-21.

20. **Munir, S.; Nimmo, W.; Gibbs, B.M.,** (2009) Air and Fuel staged Co-combustion of Biomass with Coal. In *Proceedings of the 10th International conference on Energy for a Clean Environment*, 7-9 July Lisbon
21. **Munir,S., Daood,S.S., Rizvi, Z.H., Butt, M.A.,** (2009). Development of an Inclined Plate Extractor-Separator for Immiscible Liquids. *Energies*, 2, 957-975.
22. **Munir.S ,W. Nimmo, B.M. Gibbs,(2008).** Biomass Co-firing, Worksoop on perspectives on Co-Combustion, Preceding the 7th European Conference on Coal Research and It's Applications, The University of Cardiff, UK, 3rd-5th September 2008.
23. **Daood,S.S., Munir,S., Akhtar,N.A., Butt,M.A.,** (2007). Effect of operating parameters on extraction in sieve plated pulsed column. *Proceedings of Pakistan Academy of Sciences*, 44(3), 189-195.

PARTICIPATED IN CONFERENCES / SEMINARS / SYMPOSIUM / WORKSHOPS (NATIONAL AND INTERNATINOAL LEVEL)

INTERNATINOAL LEVEL

1. Participated in Panel Discussions in 10th International Conference for Oil, Gas & Energy Industry organized by POGEE at Expo Centre, Lahore on 29-05-2014.
2. S. Munir, K. Shahzad, S. Aslam, M. Mukhtar, J. Akhtar, "Parametric Study of Coal Gasification Under Bubbling Fluidized Bed Conditions" in proceeding of Ist International Young Engineers Convention (FIYEC-IYEC-2014) organized by the Pakistan Engineering Council at University of Engineering & Technology (UET) held on April 18, 2014.
3. S. Munir, Sana Mushtaq, Shumaila Azam, J. Akhtar, N. Sheikh, K. Shahzad "Up-gradation of Duki Coal by Agglomeration with Xylene". in proceeding of Ist International Young Engineers Convention (FIYEC-IYEC-2014) organized by the Pakistan Engineering Council at University of Engineering & Technology (UET) held on April 18, 2014.
4. International Conference on "Renewable Energy Technologies in Pakistan" organized by the Faculty of Agriculture and Technology, University of Agriculture, Faisalabad and University of Kassel, Germany on October, 2013.

5. International Conference on “Energy Production by Natural Resources” June 05, 2013 in Saudi Arabia.
6. Presented a key note address and a research paper in UK-Pakistan Coal Conference 3rd-5th July 2012, Leeds, UK
7. International Conference on Engineering Sciences Lahore,28-29 Feb,2012 presented paper on “Up-gradation of Dandot Coal by Heavy Media Separation”
8. Third International Conference on “Assessing Quality in Higher Education”, UNESCO-HEC-Punjab University, Lahore, December 6-8, 2010.
9. Summer conference: A Low Carbon Future, 24th June, 2010. Doctoral Training Center, Low Carbon Technologies, University of Leeds, UK
10. Rowena Ball seminar on Clean Combustion: The challenge and the clean coal quest: thermokinetic principles and methods for capturing and sequestering carbon dioxide."9th June 2010.Energy and Resources Research Institute, University of Leeds, UK.
11. 10th International conference on Energy for a Clean Environment, 7-9 July 2009, Lisbon Portugal. (Presented a paper: Air and Fuel staged Co-combustion of Biomass with Coal.)
12. Workshop on Technology Challenge for a Sustainable Future, 16 Dec 2008. School of Process, Environmental& Materials Engineering, University of Leeds, UK. (Presented poster: Air and Fuel Staged co-combustion of Biomass with Coal.
13. Workshop on Perspectives on co-combustion preceding the 7th European Conference on Coal Research and it’s Applications, The University of Cardiff, 3rd –5th September 2008.
14. Oxy-Fuel Combustion: Opportunities and Challenges, One day IOP symposium on 7th May 2008, University of Leeds, UK.
15. Second International Conference on “Assessing Quality in Higher Education”, HEC-UMT-Punjab University, December 1-2, 2008.
16. First International Conference on “Assessing Quality in Higher Education”, UNESCO-HEC-Punjab University, Pearl Continental Hotel, Lahore, December 11-13, 2006.

NATIONAL LEVEL

1. First National Conference on Chemical Engineering Congress, April 2003, Lahore, Pakistan.

2. First International Conference on “Assessing Quality in Higher Education”, UNESCO-HEC-Punjab University, Pearl Continental Hotel, Lahore, December 11-13, 2006.
3. Workshop on Research & Development Needs in Pulp & Paper Industry by National Core Group in Chemistry, Higher Education Commission of Pakistan held on September, 20, 2006 at the Institute of Chemical Engineering & Technology, University of the Punjab, Lahore.
4. Workshop on Research & Development Needs in Textile Processing by National Core Group in Chemistry, Higher Education Commission of Pakistan held on March, 28, 2006 at the Institute of Chemical Engineering & Technology, University of the Punjab, Lahore.
5. Second International Conference on “Assessing Quality in Higher Education”, HEC-UMT-Punjab University, December 1-2, 2008.
6. Oxy-Fuel Combustion: Opportunities and Challenges, One day IOP symposium on 7th May 2008, University of Leeds, UK.
7. 10th International conference on Energy for a Clean Environment, 7-9 July 2009, Lisbon Portugal. (Presented a paper: Air and Fuel staged Co-combustion of Biomass with Coal.)
8. Workshop on Technology Challenge for a Sustainable Future, 16 Dec 2008. School of Process, Environmental& Materials Engineering, University of Leeds, UK. (Presented poster: Air and Fuel Staged co-combustion of Biomass with Coal.
9. Workshop on Perspectives on co-combustion preceding the 7th European Conference on Coal Research and it’s Applications, The University of Cardiff, 3rd –5th September 2008.
10. Summer conference: A Low Carbon Future, 24th June, 2010. Doctrol Training Center, Low Carbon Technologies, University of Leeds, UK
11. Rowena Ball seminar on Clean Combustion: The charXive challenge and the clean coal quest: thermokinetic principles and methods for capturing and sequestering carbon dioxide."9th June 2010.Energy and Resources Research Institute, University of Leeds, UK.
12. Third International Conference on “Assessing Quality in Higher Education”, UNESCO-HEC-Punjab University, Lahore, December 6-8, 2010.
13. 4rth Symposium on Engineering Sciences. 1st March 2011. Institute of Chemical Engineering& Technology, University of the Punjab, Lahore.
14. National Conference on Electric Power Deficit held by the Institution of Electrical & Electronics Engineers Pakistan (IEEEP) in collaboration with UET Lahore on October 29, 2011.

15. International Conference on Engineering Sciences Lahore, 28-29 Feb, 2012 (presented paper on Upgradation of Dandot Coal by Heavy Media Separation)
16. Presented a key note address and a research paper in UK-Pakistan Coal Conference 3rd-5th July 2012, Leeds, UK.
17. Presented key note address in 1st Innovation youth Workshop, 2012, 11th-12 August, University of the Punjab.
18. International Conference on “Energy Production by Natural Resources” June 05, 2013 in Saudi Arabia.
19. National Conference on “Bioclean Coal Technologies” in the National Institute for Biotechnology and Genetic Engineering, Industrial Biotechnology Division (NIBGE) on 07-08-2012.
20. Seminar on “Energy Crisis and Its Solutions” on June 13, 2012 at the University of the Punjab, Q. A. Campus, Lahore.
21. Seminar on “Technologies for Capitalizing local coal for industry in the Lahore Chamber of Commerce and Industry on 04-09-2013.
22. Seminar on “Future of Research in Pakistan” on May 18, 2013 at Higher Education Commission (HEC), Islamabad.
23. National Consultation Conference of 1000 + Stakeholders on Pakistan Vision 2025 and 11th 5 year Plan 2013-2018 organized by the Ministry of Planning, Development and Reforms, Government of Pakistan held on 22-11-2013 at Jinnah Convention Centre, Islamabad.
24. 5th Symposium on Engineering Sciences (Chair Technical Session), organized by Prof. Dr. Mahmood Saleem, Institute of Chemical Engineering & Technology, University of the Punjab, Lahore held on 02-04-2014.
25. Present a Key Note Address on “Energy Crisis and Its Solution through Coal” in the Seminar regarding “Current Engineering Issues” organized by the College of Emerging & Emerging Technology (CEET), Institute of Chemical Engg. & Technology, University of the Punjab and Pakistan Institute of Metallurgical Engineering (PIME) held on 10-04-2014.
26. S. Munir, K. Shahzad, S. Aslam, M. Mukhtar, J. Akhtar, “Parametric Study of Coal Gasification Under Bubbling Fluidized Bed Conditions” in proceeding of Ist International Young Engineers Convention (FIYEC-IYEC-2014) organized by the Pakistan Engineering Council at University of Engineering & Technology (UET) held on April 18, 2014.
27. S. Munir, Sana Mushtaq, Shumaila Azam, J. Akhtar, N. Sheikh, K. Shahzad “Up-gradation of Duki Coal by Agglomeration with Xylene”. in proceeding of Ist International Young Engineers Convention (FIYEC-IYEC-2014) organized by the Pakistan Engineering Council at University of Engineering & Technology (UET) held on April 18, 2014.

28. Seminar on “Tackling Energy Crisis Through Coal” organized by All Pakistan Textile Processing Mills Associates (APTMA) at Serena Hotel, Faisalabad on 03-04-2013.
29. Seminar on “Utilization of Local Coal for Electricity Production Its Social Implication at Social and Cultural Studies University of the Punjab, Lahore on 31-04-2013.
30. National Conference on “Energy Crisis and Role of Coal in its Solution organized by Youth Parliament of Pakistan at Federation of All Pakistan Chamber of Commerce & Industry (FPCCI), Regional Office, Lahore on 20-04-2013.
31. National Energy Conference on “Energy Crisis and its Solution” organized by the Jang Group of Newspaper and National Energy Forum Pakistan at Pearl Continental Hotel, Lahore on October, 2013.
32. Participated in EU Trade Event on December, 2013 at Lahore.
33. Conference on Leaping Towards Self Sufficiency in Energy-Expediting the Development of Thar Coal and Power Project at Karachi on 25-01-2014.
34. Seminar on “Technologies for Green Energy” organized by the Lahore Chamber of Commerce & Industry (LCCI) and Institute of Research Promotion (IRP) at Jinnah Auditorium, Lahore on 27-06-2013.
35. International Conference on “Renewable Energy Technologies in Pakistan” organized by the Faculty of Agriculture and Technology, University of Agriculture, Faisalabad and University of Kassel, Germany on October, 2013.

Power Projects

Working as Member of the Panel of Experts (POE) to review and approve Coal-Fired Power Projects for Punjab Power Development Board and Punjab Power Development Company, Government of the Punjab.

1. M/s Electro Power Generation Pvt. Ltd. 50 MW Coal Based Power Plant at Kalar Kahar, Distt. Chakwal.
2. M/s Saba Power Generation Company Pvt. Ltd. 50 MW Coal Based Power Plant at Kattha Sugal, Distt. Khushab.
3. M/s Noble Power Generation Company Pvt. Ltd. 50 MW Coal Based Power Plant at Mauza Dharabi, Tehsil Tala Gang, Distt. Chakwal.
4. M/s Malakwal Power Pvt. Ltd. 50 MW Coal Based Power Plant at Vareena Distt. Mandi Bahuddin.

5. Punjab Power Development Company, Government of the Punjab
110 MW Coal Based Power Plant near Industrial Estates, Sundar,
Lahore.
6. Punjab Power Development Company, Government of the Punjab
110 MW Coal Based Power Plant near M-3 Industrial City, Faisalabad.
7. Punjab Power Development Company, Government of the Punjab
and SEPCOIII-China 660x2 MW Coal Based Power Plant at Sahiwal
District, Punjab.

Book Published

Published book titled “Co-combustion of Coal with Biomass: Energy for a Clean Environment” **Publisher:** VDM Verlag Dr. Müller, **ISBN-13:** 978-3639327984

Research Supervision

Supervised and Supervising various thesis of the Post-graduate, MS TQM students and B.Sc. (Engg.).

Post Graduate Supervision

SR. NO.	TITLE OF THESIS
M. Phil	
1	Implementation of TQM in Pakistani Manufacturing Companies, an empirical investigation
2	Development of Training Program for pharmaceutical sales personnel in the light of TQM needs
3	Role of Govt./Public sector to enhance exports from Pakistan
4	Methods of designing territories in pharmaceutical
5	Use of innovative tools in marketing strategies
6	How to chose an appropriate leadership style
7	Managing Sales force in marketing contact
M. Sc. Coal Technology	
8	Cleaning of Lakhra Coal by Agglomeration using diesel oil
9	Up gradation of Khushab Coal by heavy media separation
10	Effect of pH on Floatability of Chamalang Coal using Anionic and Nonionic Collectors

11	Cleaning of Dukki (Balouchistan) coal by oil agglomeration process.
12	Effects of coals blending on HGI (Hardgrove grindability index)
13	Study on compressive strength of test blocks made of blends of cement, fly ash and sand.
14	Effect of coal rank on hardgrove grindability index (HGI) values .
15	Study of thermal behaviour of indigenous and imported coals using thermogravimetric (TGA).

B.Sc. Engineering Supervision (Equal to Master)

SR. NO.	TITLE OF THESIS
i.	A plant design report on production of 300 MT/Day industrial alcohol from molasses using flocculent yeast & TBR
ii.	A plant design report on the production of 1400 MT/year of acetone via dehydrogenation of isopropyl alcohol.
iii.	A plant design report on the production of 200,000 MT/year vinyl chloride from ethylene.
iv.	Design project on the production of sheet glass by float glass method.
v.	A plant design report on the production of BTX from 150 MT per day of plant formate (Fractionation section)
vi.	A project design report on production of 10 Tons per day of formic acid from hydrolysis of methyl formate.
vii.	A plant design report on the production of 1000 tons per day of urea from CO ₂ & NH ₃ By total recycle process.
viii.	Plant design report on the production of 1400 MT/year of ethylenediamine from ethylenedichloride
ix.	A plant design report on the production of Mono-ethylene Glycol 200 T/Day.
x.	A plant design report on production of 6,00,000 Tons/yr of purified terephthalic acid.
xi.	A plant design report on Hydrotreating of naphtha
xii.	Manufacturing of self indicating silica Gel
xiii.	A Process Report on the Production of Biogas
xiv.	A process report on TGA & DSC of a random sample of Polyurethane

xv.	A plant design project on production of 52-38 TPD of Synthesis gas via gasification of 30 TPD of coal
xvi.	A plant design report on the production of 250 MT/day bio-ethanol through fermentation of molasses
xvii.	A process report on burning behavior of coal and biomass in air and inert atmosphere
xviii.	A plant design project on production of 800 MTPD of Ammonia from Thar Coal
xix.	A design project report on production of Synthetic Gas from 50 Tons/Hour of Thar Coal using the Kopper-Totzek Gasifier
xx.	A plant design project on the production of 3500 MTPD Urea by advance cost and Energy saving 21 (Aces21) process
xxi.	A Process Report on the production of Biodiesel from Waste Vegetable Oil.
xxii.	A Process Report on Synthesis of Alkyd Resin
xxiii.	A project Report on the production of Styrene from ethyl benzene.
xxiv.	A Project Report on the production of 50 T/day of Power Alcohol from Molasses
xxv.	A Project Report on the production of PTA from P-xylene
xxvi.	Desulfurization of Chamalang Coal by chemical oxidation using KMnO ₄ pH9.3.
xxvii.	A Process Report on Thermal Analysis of Biomass
xxviii.	A Plant Design Project on Production of Syn Gas from 50 KW FBDB Gasifier.
xxix.	A Plant Design Project on Production of 75 TPH steam Generated by Coal Fired Circulating Fluidized Boiler.
xxx.	A plant Design Project on the production of Syngas from Coal using 50 KW Lurgi Gasifier.
xxxi.	Preparation of Urea Formaldehyde Resin

List of Articles published in various newspapers and Magazines:

Sr. No.	Title	Newspaper/Magazine	Date of Publication
1	“Thar Coal” “Daway Aur Haqeeqat”	Daily Jang	04-09-2012
2	“Thar Coal; the Game Changer”	Daily The Nation	03-09-2012

3	“Thar Kay Koilay Say Bijli Kaisay Paida Ki Ja Sakti Hai”	Daily Ausaf Sunday Special Edition	20-09-2012
4	“Tawanai Ka Buhran Aur Us Ka Hal”	Daily Jhang Sunday Magazine	16-09-2012
5	“Tackling the Energy Crisis”	Daily The Nation	02-07-2013
6	“Thar Kay Koilay Say Bijli Ki Paidawar”	Daily Nawa-i-Waqt Magazine	02-07-2013
7	“The Energy Crisis and the Strategy to resolve it”	Daily The News	28-07-2013
8	“Sab Say Bara Challenge Sasti Bijli”	Daily Pakistan Magazine (Zindagi)	04-08-2013
9	“21 Century Coal”	The Nation	01-03-2014
10	“Koilay Ka Mohool Doost Istimal Pakistan Ko Tawanai Buhran Say Nikaal Sakta Hai”	Daily Jang Sunday Magazine	18-05-2014

SNGPL Gas Project Coordination

1. Energy Efficiency in small to medium size industry through improvement in Design of Industrial Gas Burner.
2. Calculation of Gas Meters
3. Estimation Modelling for calculation of volumetric impact of above ground / underground Leakages taking into consideration of SNGPL. Field conditions.
4. Designing of a Model Recuperator / Heat Economizer which is to be installed on the stocks of Furnace to recover heat by preheating combustion air.
5. Implement in Design of Industrial Gas Burners.
6. Development of method to avoid high velocity solid particles in order to enhance the life of filters.
7. Carried out a Research Project to compare the results of the test with the analysis report of Dr. John Smart (Consulting Engineer).
8. Carried out Research Project on the Provision of Technical Specification, supplier’s details & mechanism of ISO Kinetic Kit to SNGPL.
9. Carried out Elaboration of the Rout/Path/Process/Mechanism of Solid Particles especially Clay and quartz detected in gas pipeline.
10. Carried out a Research Project to the optimum amount of inhibitor to be injected for protection of gas pipeline transmitting gas with high amount of Sulphur Content to Engro Power.

11. Carried out Pre-Feasibility of 5MM CFD Biogas Plants program for SNGPL.

Academic Responsibilities:

I am working as Professor, Institute of Chemical Engineering & Technology, University of the Punjab, Lahore, Pakistan.

As Professor my duties include to deliver lectures and practical demonstrations in the following subjects:

- i. Instrumentation and Process Control to final year students
- ii. Heat and Mass Transfer Operations to third year students
- iii. Chemical Process Technology to second year students
- iv. Chemical Reaction Engineering to 6th semester students
- v. Fluid and Particle Mechanics to third semester students
Production and Operations Management to Final Prof students
- vi. Industrial Management and Process Economics to final prof students

Professional Training Courses

- Level 2 Award in Health & Safety in the Workplace by Chartered Institute of Environmental Health, 14 August 2007, at University of Leeds, UK.
- Safety Induction Course on 7th August 2007 by School of Process, Environmental and Materials Engineering, University of Leeds, UK.
- Workshop on “Research & Development Needs in Textile Processing” by Higher Education Commission, March 28, 2006 at Punjab University, Lahore.
- Workshop on “Research & Development Needs in Pulp & Paper Industry” by Higher Education Commission, September 20, 2006 at Punjab University, Lahore.
- Quality Management System ISO 9001: 2000 conducted by Institute of Chemical Engineering & Technology, University of the Punjab, Lahore for four weeks from 24.05.2004 to 24.06.2004.
- Student counselling and essentials of job hunting for career planning conducted by Institute of Chemical Engineering & Technology, University of the Punjab, Lahore in April, 2004.
- Human Resource Development (Orientation Program) conducted by Institute of Administrative Sciences, University of the Punjab, Lahore in July, 2003.

- Hydraulic Controls conducted by Staff Training Institute, Lahore in May, 2001.
- Human Resource Development conducted by Employers Federation of Pakistan in October, 1999.
- CNC Milling, Programming & Operation, conducted by Skill Development Council, Lahore in July, 1997.
- The Principles and applications of statistical process control techniques, conducted by Keith Ackers Associates in July, 1997.
- Internal Quality auditing ISO 9000, conducted by Pakistan Institute of Quality control in August, 1997.
- Quality Management and ISO 9000 System, conducted by Emmay Associates for eight weeks in March, 1996.
- Internal Quality Auditing, theories and practices conducted by Keith Ackers Associates in November, 1996.

Member Statutory Bodies of the University of Punjab, Lahore, Pakistan:

- Member of the Incentive Award Committee on Research Publication constituted by the Worthy Vice Chancellor since 21-05-2012.
- Chairman of the House Allotment Committee for non-teaching staff constituted by the Worthy Vice Chancellor since 16-07-2012.
- Member of the Equivalence Committee constituted by the Worthy Vice Chancellor since June, 2012.
- Member of the Appellate Committee constituted by the Worthy Vice Chancellor July, 2012.
- Member of the Adhoc Committee constituted by the worthy Vice-Chancellor to discharge the functions of the Board of Studies in Quality and Technology Management(9/10/2004 to 2006)
- Member of the departmental purchase committee for the Institute of Chemical Engg. & Technology constituted by the Worthy Vice Chancellor since 12-06-2012.
- Member of the Committee constituted by the Worthy Vice Chancellor for appointment of Research Scholars/Lecturers on contract basis at the Institute of Chemical Engineering & Technology since 26-06-2012.
- Member of the Doctoral Programme Committee for the Institute of Chemical Engineering & Technology.

- Member Board of Studies for Institute of Chemical Engineering & Technology.
- Student advisor, Institute of Chemical Engineering and Technology(6/9/2006 to10/07/2007)
- Member of the Finance Committee constituted for the commencement of Ist International Conference on Quality in Higher Education. (23/1/2007 to 13/12/2006)
- Member of the Committee, constituted for the revision of Syllabi and Courses for B.Sc. (Engg.) Chemical Engineering. (2005)
- Co-ordinator, B.Sc. (Engg.) Chemical Engineering Final year class(6/6/2005 to 10/7/2007)
- Member of the Committee constituted to SNE for the year 2005-2006.
- Member of the Committee constituted for the preparation of Prospectus of the Institute of Chemical Engineering & Technology, University of the Punjab, Lahore for the year 2005-2006.
- Incharge Examinations, Institute of Chemical Engineering &Technology, Dec 2010 to date
- Incharge Admissions for BSc Engineering degree courses for Faculty of Engineering, University of the Punjab for session 2011-2012.

Distinction:

- Working as technical expert for the evaluation of feasibility studies of Coal – Fired Power Plants in Punjab with Punjab power development board.
- Member of the Organizing Committee for UK-Pakistan Coal Conference, 3rd-5th July 2012 at University of Leeds UK,
- Published book titled “Co-combustion of Coal with Biomass: Energy for a Clean Environment” **Publisher:** VDM Verlag Dr. Müller, **ISBN-13:** 978-3639327984
- Won a grant of Rs. 178 million for the expansion and up gradation of Centre for Coal Technology from Planning Commission of Pakistan in 2014.
- Co-Investigator in Research Project on Co-Combustion of Pakistani Coal with Biomass under International Strategic Partnership in Research and Education (**INSPIRE**) Program funded by British Council and HEC Pakistan. University of Leeds and University of Sheffield are partners from UK.
- Co-Investigator for ICET and SNGPL Research Project under MOU

- Won Best Paper presenter award in 4th Symposium on Engineering Sciences held on 1st March 2011 at the Institute of Chemical Engineering & Technology, University of the Punjab, Lahore
- Won two GOLD medals by obtaining first position in MSc Chemical Engineering Punjab University 2007.
- Acted as Coordinator for International Conference on Engineering Sciences 28-29 Feb,2012, Lahore
- Won HEC overseas Scholarship for PhD in Chemical Engineering in Austria, 2006
- Won HEC Overseas Scholarship for PhD in Chemical Engineering under faculty Development Program, 2007.
- Won HEC Overseas Scholarship for PhD in Quality Management under faculty Development Program, 2007.
- Won PETRONAS Scholarship for PhD in Malaysia, 2007.
- Outstanding Performance Award from Punjab University, 2005.
- First position in the subject Mathematics and statistics for Management in MBA, 2003, Punjab University Lahore
- First position in the subject Export Marketing in MBA, 2003, Punjab University Lahore
- Merit Scholarship in BSc Chemical Engineering University of the Punjab 1987.
- Won 4th Prize in Innovation to Innovation Summit in the year 2014.
- Won Quaid-e-Azam and Shahbaz Shareef Gold Medal from Tehreek-e-Istehkam-e-Pakistan Council, Pakistan for meritorious services in the field of Coal Technology at National Auditorium, Lahore on 09 February, 2014.
- Won Sitara-e-Pakistan Gold Medal from Tehreek-e-Istehkam-e-Pakistan Council, Pakistan for best performance at National Auditorium, Lahore on May 01, 2014.
