

SHAGUFTA ISHTIAQUE

Department of Chemical Engineering, University of Karachi.

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EDUCATION:

- PhD (Chemical Engineering,2014), University of Karachi, Pakistan.
- Masters (Chemical Engineering, 2010), NED Engineering University, Pakistan.
- Masters in Business Administration, (MBA, M.I.S,2002), A.I.O.U, Pakistan.
- B.E (Chemical Engineering,1990), M.U.E.T., Pakistan.

PROFESSIONAL POSITIONS:

- April 2011–Till to date
Asst. Professor, In charge Department of Chemical Engineering, U.O.K.
- Feb. 2006 – April 2011
Lecturer, Department of Chemical Engineering, U.O.K
- February 2004 – February 2006
Director, Aqua Link Ltd, Pakistan
- Jan 2005–December 2005
Visiting Faculty, Federal Urdu University Karachi.
- Jan. 2002 – Jan. 2004
Lecturer, Paramount Colleges Wah Cantt.
- May 2001-January 2002
Project Implementer, Computer Research (Pvt.) Ltd.
- January 1995 – Jan.1998
Application Engineer, Orient Water Service (Pvt.) Ltd, Pakistan.
- May 1990 -May 1994
Assistant Manager Chemical Process, National Fibers Ltd, Pakistan

PROFESSIONAL MEMBERSHIPS:

- Registered Professional Engineer, Pakistan Engineering Council (PEC).
- Associate Member “The Pakistan Institute of Chemical Engineers”. Pakistan
- Vice President Chemical Engineers Society (M.U.E.T, 2014 – to date)
- Royal Member , “Institute of Engineers, Pakistan”(IEP)
- Secretary, “Rotary Club Mid City Karachi”, Pakistan.
- Corporate member, “International Waste Working Group” IWWP

PROFESSIONAL ACTIVITIES

April 2011 - Present

Asst .Professor - In Charge Department of, Chemical Engineering U.O.K.

- Successfully managed reaccreditation of Chemical Engineering department by PEC consecutively since 2011. Currently, 2014, PEC gave accreditation for two years showing steady progress of Department.
- Established 11 state of art Laboratories funded by PPL. All laboratories are equipped with latest process instruments.
- Developed Lab manuals for Instrumentation and Control, Thermodynamics, Fuels and combustion, mass transfer, Heat Transfer, Fluid Mechanics, Particulate Technology, Applied Chemistry, Chemical reaction Engineering and Mechanical workshop.
- Developed curriculum for Chemical Engineering as per guide line of H.E.C and Pakistan Engineering Council (PEC).
- Taught subjects Chemical Engineering, Thermodynamic, Instrumentation and Control, Project Management, Maintenance Engineering & Safety.
- Supervised and guided final year B.E students on different design projects .
- Developed state of art Laboratories funded by PPL Ltd. Pakistan.
- Organized technical workshop and seminars for students and faculty members.
- Developed industrial linkage program.
- Conducted research on solid waste management, use of natural antioxidants in food packaging, Process control, Health and safety etc

Feb. 2006 – April 2011

Lecturer, Department of, Chemical Engineering U.O.K

- Taught Chemical Engineering courses like thermodynamic, Industrial management , process control & instrumentation etc
- Organized technical workshops for student of Chemical Engineering Department.
- Worked as a student advisor on academic advisory.
- Involved in design experiments for thermodynamic ,process control, Fuel and Combustion labs to meet requirements of PEC.

February 2004 – February 2006

Director, Aqua Link (Pvt.) Ltd, Pakistan

- Established consultancy and design firm to support industry on waste water treatment R.O plants and energy conservation.
- Provided consultancy services to prepare feasibility report for R.O plants. Clients included leading textile industries.
- Installed and commissioned R.O plant in various organization.

Jan 2005–December 2005
Visiting Faculty, Federal Urdu University Karachi.

Taught following courses to MBA students.

- Principles of Management
- Production Management
- Marketing Management

Jan. 2002 – Jan. 2004
Lecturer, Paramount Colleges Wah Cantt

Taught following courses to MBA students.

- Principles of Management
- Production Management
- Marketing Management

May 2001-January 2002
Project Implementer, Computer Research (Pvt.) Ltd.

- Worked on customized software like oracle financial/SAP.
- Planning & monitoring of project using MS project2000 software.
- Prepared business flow diagram using Visio and other tools.
- Implemented ERP software in different organizations.

January 1995 – Jan.1998
Application Engineer, Orient Water Service (Pvt.) Ltd, Pakistan

- Prepared water treatment proposal using software provided by Drew Ameroid for boiler water treatment, RO water etc.
- Supervised service Engineers.

May 1990 -May 1994
Assistant Manager Chemical Process, National Fibers Ltd, Pakistan

- Worked as process engineer in the Polymer Plant .
- Worked on several projects eg power factor improvement, condensate recovery, utilization of Flash steam, replacement of old steam traps, polymer recovery plant, Data logging system for batch monitoring and generation of real time production reports of polymer plant etc.
- Planned, designed, implemented & monitored various energy conservation project, achieved 7 to 10%.reduction in Electricity / gas bills of the organization.
- Boiler and Furnace tuned-up by ENERCON after which increased efficiency.
- Worked with Foreign experts during the installation and commissioning of Polymer Waste recovery Plant.

INTERNATIONAL SEMINARS & TRAININGS:

- International Symposium on Energy from Biomass and waste held in Venice, Italy 17-20 Nov.2014. Presentation on solid waste management in Karachi. Used decision support software tool in assessment of practices in Solid waste Management.
- First International Engineers Convention (IYEC-2014), held in Punjab University. Participated in 03 days workshop on “Outcome Based Learning & Assessment.
- International Symposium 2010, held at Mehran Engineering University on “Sustainable water management in developing Countries” .
- Three weeks training on Polyester spinning process held at Reiter Textile & automatic in Germany and Switzerland - 1994.

NATIONAL SEMINARS & TRAININGS:

- Participated in workshop "CPD FRAMEWORK FOR PROFESSIONAL DEVELOPMENT OF ENGINEERS" (2014) organized by IEP.
- Participated in “CPD Framework for professional Development of Engineers”(0.5 CPD credit point) at Pakistan steel held on August 20, 2013.
- Attended one day professional course on “How to write a Technical Research Paper” held on August 29, 2013 at Usman Institute of Technology, Karachi.
- Completed 40 credit hrs course on Business English Program from IBA in 2011.
- Participated in National Symposium on “Health Safety and Industrial Hazard” organized by Institute of Engineers (IEP) in 2011.
- Participated in workshop on “Renewable energy” organized by NED Engineering University in 2011.
- Participated in National Workshop on Occupational Health and Safety organized by the IEP in 2011.
- Presented Paper on “HSE Improves Productivity and Company Image” in 8th National Seminar on” Occupational Health, Safety and Environment” organized by IEP in 2011.
- Presented Paper in the international symposium organized by ENERSON and presented paper based on “success story of energy conservation projects at National Fibers Ltd. in 1999.

- Participated in Web page design course organized by Computer Department of University of Karachi in 2006.
- 12 weeks Professional training course held under ministry of production for young Engineers in PEROMAN held in 1991.

ORGANIZATION OF SIMINARS AND TRAINING COUSES

- Organized technical workshop on the role of Female Engineers of Pakistan at IEP, Karachi on 8th March 2014.
- Organized one day seminar on Energy Crises and Solution held at U.O.K. Guest Speaker former Senator & Chairperson PEC, Engr. Rukhsana Zuberi, Chief Guest VC U.O.K..
- Participation of Chemical Engineering Department as Exhibitor in Chemical & Dye Exhibition 2013.
- Organized one day seminar on Crude Oil Distillation, Lecture by Engr. Faraz Ahmed (G.M Byco Refinery) on 19th April 2011.
- Organized one day seminar on LNG Development, Lecture by Engr. Yousuf Iqbal, Sr. Process Engineer Huyndai 9th February 2012.
- Organized one day seminar on Project Management Tools by Engr. Aslam Mirza, Director PMP on 25th May 2011.
- Organized one day seminar on Process Design (Hysys) Mr. Ahsan Ahmed , from U.K, 10th March 2011.
- Organized one day seminar on “Manufacturing of Polyester” by Engr. Ch. Anees Ahmed, G.M Novatex Pvt Ltd. 2012.
- Organized one day seminar on “Career making in Chemical Process Industries “by Junaid Imam, Plant Manager Colgate Palmolive Pvt Ltd. 2013
- Organized one day seminar on “Use of Membrane Technology “ by Prof. Dr. Wasi Z. Khan, Chairman, Chemical Engineering Department’ Nazar Bayev University of Kazakhstan.

SUBJECT EXPERT IN SELECTION BOARD & EXTERNAL EXAMINER

- Participated as an Expert in 93rd Adjourned meeting of the Selection Board held in Mehran Engineering University Jamshoro, 2014.
- External Examiner for Mehran Engineering University and Dawood Engineering University.

- Member of board of studies department of Petroleum Technology, U.O.K.

TV Talk Shows:

Participated as subject expert in following T.V talk shows.

- **Business Plus**, Tariq Khan Show on Returning Pakistanis (2011)
- **Business Plus**, Tariq Khan Show on Energy Security Plan for Pakistan. (2012)
- **Business Plus**, Tariq Khan Show on Food Safety (2012)

RESEARCH PUBLICATIONS:

1. Ibrahim Mustafa, **Shagufta Ishteyaque.**, X.Y. XU and N.B Wood “Turbulence Modeling in Sensed Caotid Arteries Using CFD” ,Yumbo Journal of engineering and science, Vol 2, ISSN 1658-5321,Vol 2 ,(2011).
2. **Shagufta Ishtiaque**, Nasir Khan, Muhammad A. Siddiqui, Rahmanullah Siddiqi and Shahina Nazl, Antioxidant Potential of the extracts, Fractions and oils derived from oilseeds, vol 2, ISSN 2076-3921(2013).
3. Rahmanullah Siddiqi, Shahina Naz, Syed Asad Sayeed, **Shagufta Ishteyaque**, Muhammad Samee Haider, Omer Mukhtar Tarar & Khalid Jamil, Antioxidant Potential of the Polyphenolics in Grewia asiatica, Eugenia Jambolana and Carissa Carandas, Vol 3, ISSN 1916-9752,(2013).
4. Noorullah Soomro, Naveed Mengal, **Shagufta**, “Remedial measure of health and safety in Ginning Industry of Pakistan”, Sindh University Research Journal (Science Series), Vol 46(2)185-188. ISSN 1813-1743 (2014)
5. W. Khan, V. Inglezakis, S. Ishtiaque and K. Moustakas “Use of Decision Support Software Tool in assessment of practices in solid waste management in Karachi” in an International Symposium on Energy from Biomass and waste held in Venice, Italy 17-20 Nov.,2014 (Proceeding in Press).
6. N. Soomro, N. Mengal, and **Shagufta** , “Influence of contaminated cotton on yarn manufacturing”, Sindh University Research Journal (Science Series), (HEC Category: X), Vol. 47, ISSN 1813-1743. (2015) (Accepted and in Press).
7. **Shagufta**, N.Soomro,” Saw Gin Speed on the Quality of Cotton”, Sindh Univ. Research . Journal . Vol.47 (1), ISSN 1813-1743. (2015) (Accepted and in Press)..
8. Iqbal, T., Yasin, S., Zafar, M., Zahid, **Shagufta Ishtiaque.**, and Briscoe, B. “Nanoindentation Response of Scratched Surfaces. Tribology Transactions”, ISSN 1040-2004. (2015) (Accepted and in Press).

9. **Shagufta Ishtiaque**, Shahina Naz , Noorullah Soomro, Kehkashan Khan and Jawwad Ahmed, Antioxidant Activity and Total Phenolics Contents of Extracts from *Murraya Koenigii* (Curry Leaves), *Laurus Nobilis* (Bay Leaves), and *Camellia Sinensis* (Tea), Quaid-e-Awam University Research Journal ,HEC "Z" Category, ISSN: 1605-8607. (2015) (Accepted and in Press).
10. **Shagufta Ishtiaque**, Shahina Naz, Rahmanullah Siddiqi, Jawad Ahmed and Suriaya Jabeen, “Antioxidant Activity and Phenolics Contents of Methanolic extract of Ajwain, Mustard Fenugreek and Poppy Seed” Recent Innovations on Chemical Engineering, ISSN 2405-5212. (2015) (Accepted and in Press)
11. **Shagufta Ishtiaque**, Shahina Naz, Rahmanullah Siddiqi, Syed Umer Abdullah, Kehkashan Khan, Jawad Ahmed, Muhammad Badaruddin, “Antioxidant Activities of Extracts From *Terminalia catappa*, *Carrisa carandas*, and *Opuntia ficus indica* fruits”, Recent Innovations on Chemical Engineering, ISSN 2405-5212. (2015) (Accepted and in Press).

References:

Available on request