Dr. MUHAMMAD SARFRAZ AKRAM

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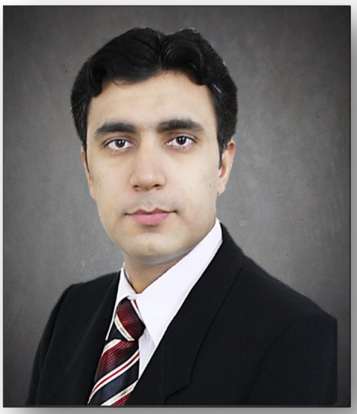

Academic Qualification

Ph.D *Chemical Engineering* 2018
M.B.A *Marketing* 2010
M.Sc. *Chemical Engineering* 2009
B.Sc. *Chemical Engineering* 2006
University of the Punjab, Lahore, Pakistan.

Academic Experience

Assistant Professor since February 2019
Center for Coal Technology
University of the Punjab, Lahore.

Assistant Professor of chemical engineering April 2015 – January 2019
Department of Chemical Engineering
COMSATS University Islamabad, Lahore.

Lecturer of chemical engineering February 2014 – April 2015
Department of Chemical Engineering
University of Gujrat, Gujrat.

Lecturer of chemical engineering March 2009 – February 2014
Institute of Chemical Engineering & Technology
University of the Punjab, Lahore.

Research Scholar September 2007 – March 2009
Institute of Chemical Engineering & Technology
University of the Punjab, Lahore.

Journal Publication

1. A. Basit, **M.S. Akram**, M. Saleem, J.A. Awan, J. Jaubert; Characterization and Kinetic Modeling of the Pyrolysis of Sugar Cane Trash, International Journal of Energy, Environment, and Economics, vol. 28, no. 1, pp. 43-56, 2017.
2. S.Y. Khawaja, M.R. Usman, M. Nasif, **M.S. Akram**, W. Afzal, N.A. Akhtar; Mass Transfer Efficiency of a Tall and Low Plate Free Area Liquid Pulsed Sieve-Plate Extraction Column, International Journal of Industrial Chemistry, Vol: 8, Issue: 4, pp. 397–410, 2017 (*DOI: 10.1007/s40090-017-0129-9*).
3. S. Zubair, M.R. Muhammad, **M.S. Akram**, K. Shehzad, A. Waheed; Interfacial tension for various organic-water systems and study of the effect of solute concentration and temperature, Journal of Chemical & Engineering Data, vol. 62 (4), pp 1198 – 1203, 2017 (*DOI: 10.1021/acs.jced.6b00703*).
4. M. Ahmad, A. Amin, **M.S. Akram**, Abdullah, M.R. Usman; Characterization and rheological behavior of various Pakistani crude oils, Brazilian Journal of Petroleum and Gas, vol. 9, no. 3, pp. 85-94, 2015 (*DOI:10.5419/bjpg2015-0009*).
5. **M.S. Akram**, D. Munir, M.R. Usman; Associative adsorption kinetics: a novel kinetic model for the dehydrogenation of methylcyclohexane, Progress in Reaction Kinetics and Mechanism, vol. 39, no. 4, pp. 404-417, 2014 (*DOI:10.3184/146867814X14120122636502*).
6. S.Y. Khawaja, M.R. Usman, S. Khan, W. Afzal, **M.S. Akram**, R.U. Khan, N.A. Akhtar; On the factors influencing the hydrodynamic performance of a pulsed sieve-plate extraction column: dispersed phase holdup, Journal of Faculty of Engineering & Technology, vol. 18, pp. 1–11, 2011.

Conferences

1. **M.S. Akram** and M.R. Usman; Simulation of a Hydrogen Fueled Mobile Power Plant Based on a Sustainable Organic Hydride, 10th International Conference on Thermal Engineering: Theory and Application, February 26-28, 2017 Muscat, Oman.
2. **M.S. Akram**, R. Aslam, M.R. Usman; A Comparative Study of Kinetic Rate Models for the Dehydrogenation Reaction of Methylcyclohexane, 6th Symposium on Engineering Sciences, December 21 & 22, 2016, Lahore, Pakistan.
3. **M.S. Akram** and M.R. Usman; Development of Mesoporous Alumina Based Catalysts for the Dehydrogenation of Methylcyclohexane, International Conference on Engineering Sciences, 2nd & 3rd December 2015, Lahore, Pakistan.
4. Sana Ullah, Muhammad Ahmad, Mudasar Mahmood, **M.S. Akram**, Muhammad R. Usman; Rheological Behavior of Selected Pakistani Crudes, 2nd International Conference on Petroleum and Petrochemical Engineering, January 10-11, 2015, Dubai, UAE.
5. B. Haider, R. Aslam, M. R. Usman, W. Afzal, **M.S. Akram**, R.U. Khan, M. Saleem; Densities and volumetric properties of various pure and mixed solvents, International Conference on Engineering Sciences, 28th & 29th February 2012, Lahore, Pakistan.
6. H. Rashid, **M.S. Akram**, and B. Haider; Removal of Cr, Zn, and Cu from simulated electroplating industry wastewater using electro-coagulation, poster presentation, 4th Symposium on Engineering Sciences, 1st March 2011, Lahore, Pakistan.
7. **M.S. Akram**, A. Rehman, A. Chughtai; The co-current down-flow contactor reactor: a promising technique for pollution abatement, **(best poster presenter award)**, poster presentation, 3rd Symposium on Engineering Sciences, 10th March 2010, Lahore, Pakistan.
8. **M.S. Akram**, B. Haider, W. Afzal; Thermophysical behavior of some industrially important associating fluids: thermal expansion coefficients, poster presentation, 3rd Symposium on Engineering Sciences, 10th March 2010, Lahore, Pakistan.
9. B. Haider, **M.S. Akram**; Comparison of coagulation and electro-coagulation for the removal of reactive dyes from textile waste, poster presentation, 3rd Symposium on Engineering Sciences, 10th March 2010, Lahore, Pakistan.

Reviewer for Journal

Asia-Pacific Journal of Chemical Engineering
Petroleum Science and Technology
Journal of the Pakistan Institute of Chemical Engineers

Taught Courses/Supervision

Fuels and energy (3 credit hour, theory)
Stoichiometry and combustion calculations (3 credit hour, theory)
Size reduction and classification of coal (3 credit hour, theory)
Heat transfer (3 credit hour, theory)
Mass transfer (3 credit hour, theory)
Environmental engineering (3 credit hour, theory)
Separation processes (3 credit hour, laboratory)
Supervision of graduate/postgraduate projects in the areas of dehydrogenation, biodiesel production, plant simulation, wastewater treatment, hydrodechlorination, reaction and absorption studies in co-current down-flow contactor, and thermophysical properties measurement.

Awards

- Research grant of worth Rs. 0.125 million in 2011, 2012 and 2014 from University of the Punjab, Lahore.
- Best poster award: Symposium on engineering sciences, 10th March 2010, Lahore.