1. Name: **Dr. Muhammad Rashid Usman**

2. Education:

- PhD Chemical Engineering and Analytical Science, The University of Manchester, Manchester, United Kingdom, December 2010.
- MSc Chemical Engineering, University of the Punjab, Lahore, November 2001.
- BSc Chemical Engineering (Gold Medal), University of the Punjab, Lahore, December 1999.

3. Academic experience

- Assistant Professor, Department of Petroleum and Chemical Engineering, Sultan Qaboos University, Muscat, Oman since September 2016
- Associate Professor, Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan, December 2013 to September 2016
- Assistant Professor, Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan, March 2005 to December 2013
- *Lecturer*, Institute of Chemical Engineering and Technology, University of the Punjab, Lahore, Pakistan, January 2000 to March 2005

4. **Non-academic experience -** None

5. **Certifications or professional registrations –** None

6. Current membership in professional organizations:

- Member (Senior) American Institute of Chemical Engineering
- Member Pakistan Institute of Chemical Engineering

7. **Honors and awards**

- Best Presentation Award at 9th International Conference on Environmental Science and Technology, June 20–22, 2018, Prague, Czech Republic
- Gold Medal in BSc Chemical Engineering

8. Service activities (within and outside of the institution)

Committees

- PCED Curriculum and Accreditation Committee
- PCED Strategic Planning and Development Committee
- PCED Book and Library Coordinator
- College Textbooks Committee

Reviewer

 Chemical Communications, Chemical Engineering Communications, Separation Science and Technology, Chemical Engineering Research and Design, Chemical Product and Process Modeling, and Petroleum Science and Technology

Consultancy: None

9. Briefly list the most important publications and presentations from the past five years – title, co-authors if any, where published and/or presented, date of publication or presentation

- <u>Book</u>: Short Handbook of Mathematical Formulas for Chemical Engineers, CreateSpace, 2017. <u>Book</u>: Comprehensive Dictionary of Chemical Engineering, Lulu Publishing, 2015.
- <u>Journal Article</u>: Munir, D.; Irfan, M.F.; Usman, M.R. Hydrocracking of Virgin and Waste Plastics: A Detailed Review. *Renew. Sustain. Energy Rev.* 90, 490–515, 2018.
- <u>Journal Article</u>: Munir, D.; Usman, M.R. 2018. Catalytic Hydropyrolysis of a Model Municipal Waste Plastic Mixture over Composite USY/SBA-16 Catalysts. *J. Ana. Appl. Pyrolysis* 135, 44–53, 2018.
- <u>Journal Article</u>: Irfan, M.F.; Usman, M.R.; Rashid, A. 2018. A Detailed Study of Heterogeneous, Homogeneous and Nucleation Models for Dissolution of Waste Concrete Sample for Mineral Carbonation. *Energy* 158, 580–591.
- <u>Journal Article</u>: Chawla, M.; Rafiq, S.; Jamil, F.; Usman, M.R.; Khurram, S.; Ghauri, M.; Muhammad, N.; Muhtaseb, A.H.; Aslam, M. 2018. Hydrocarbons Fuel Upgradation in the Presence of Modified Bi-functional Catalyst. *J. Clean. Prod.* 198, 683–692.
- <u>Journal Article</u>: 2017. Munir, D.; Abdullah; Piepenbreier, F.; Usman, M.R.Hydrocracking of a Plastic Mixture over Various Micro-Mesoporous Composite Zeolites. *Powder Tech.* 316, 542–550.
- Mateen, A.; AlOtaibi, F. M.; Usman, M.R. 2018. Environmentally Friendly Fuel by n-Heptane Isomerization: Kinetics of Catalyst Deactivation. Int. J. Chem. Eng. Appl. Accepted for the
- Publication.
- <u>Conference Presentation</u>: Environmentally Friendly Fuel by n-Heptane Isomerization: Kinetics of Catalyst Deactivation. 9th International Conference on Environmental Science and Technology, June 20–22, 2018, Prague, Czech Republic.
- <u>Conference Presentation</u>: Simulation of a Hydrogen Fueled Mobile Power Plant Based on a Sustainable Organic Hydride. 10th International Conference on Thermal Engineering: Theory and Applications, February 26–28, 2017, Muscat, Oman.

10. Briefly list the most recent professional development activities Workshape for Developing Teaching Skills

Workshops for Developing Teaching Skills

- Creating Significant Learning through Integrated Course Design, Conducted by Dr. Stewart Ross (September 10, 2018)
- Critical Thinking Skills for the 21st Century, Conducted by Prof. Nikos Mourtous (May 16, 2017), Sultan Qaboos University, Muscat, Oman
- Creating Significant Learning Experiences: Designing Courses for Significant Learning, Conducted by Dr. Stewart Ross (February 13, 2017), Sultan Qaboos University, Muscat, Oman

Industrial Visits

- Barka II Desalination and Power Plant (Oct, 2018) Fahud Oil Fields (Oct, 2017)
- Oman-India Fertilizer Company (April, 2017)
- Oman Oil Refineries and Petroleum Industries Company (Sep, 2017)

Research Grants

 Internal Grant, Sultan Qaboos University (30-Jan-2018), Catalytic and Hydrocracking of Waste Plastics to High Quality Liquid Fuels, Equivalent to US \$10650 (as Principal Investigator)