

MUHAMMAD MUQEET, PhD



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DOB: June 11, 1987



H No. 1022/A, near Bilal masjid, Usmanabad, Hyderabad

PROFESSIONAL PROFILE

- Dr. Muhammad Muqeet is working as an Assistant Professor at Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology. He is a multi-disciplinary professional having expertise in the Chemical Engineering, Environmental Engineering and Material Sciences. He has more than 4-years of professional experience in different organizations. The passion for research-oriented engineering entrepreneurship motivated him to pursue higher education, as he achieved a master's degree in Environmental Engineering.
- He earned a doctorate degree in Environmental Engineering from U.S.-Pakistan Center for Advanced Studies in Water, Mehran University of Engineering and Technology, Jamshoro, Pakistan. The core theme of his research was to investigate the aesthetical properties of functionalized nanofiber membranes by utilizing different instrumental techniques.
- Dynamic, result-oriented and multidimensional personality knows process designing and operations along with management and communication skills. Trained for utilization of hi-tech equipments for analysis of nanomaterials and water quality analysis.

ACADEMIC QUALIFICATION

- **U.S.-Pakistan Center for Advanced Studies in Water, Pakistan/The University of Utah, USA (joint program)**
PhD – Environmental Engineering
PhD thesis title: Development of functionalized cellulose nanofiber membranes for water desalination
- **NED University of Engineering and Technology, Karachi, Pakistan**
MEM - Environmental Engineering
- **Dawood University of Engineering & Technology, Karachi, Pakistan**
BE – Chemical Engineering

PROFESSIONAL EXPERIENCE

Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology, Pakistan

Assistant Professor

January 2020 – to-date

Rafhan Maize Products Company Limited

Shift Engineer (Chemical)

April 2012 – Sep 2015

Responsibilities/Accomplishments:

- Supervision during erection and installation of processing plants, and storage tanks.
- Hydraulic testing of storage tanks, ion exchange columns, single and triple effect evaporator and heat exchangers and condensers.
- Commissioning of high RPM centrifuge machines.
- Hot, cold, electrical and confined space work permits implementation.
- Ensure all compliance including trainings of HSE & develop review and implement operation and emergency handling procedures.
- Training of staff, commissioning report formation and operating procedure development.
- Safety Data Sheet (SDS) training.

Pak Oasis Industries Private Limited

Trainee Chemical Engineer

March 2011 – March 2012

PROFESSIONAL TRAININGS

- Attended course (CVEEN 7920, Environmental Processes) through student exchange program fall-semester 2016 (University of Utah, United States of America)
- Attended course (Environmental Engineering Entrepreneurship) under mentorship of IBA, Karachi (2016)
- Attended 3-days training on awareness, implementation and auditing: Integrated management system based on ISO 9001:2008; ISO 14001:2004; and OHSAS 18001:2007 Standards, TUV Austria Bureau of Inspection and Certification Pvt. Ltd.

CORE STRENGTHS & ENABLING SKILLS

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|-----------------------------------|--------------------------|-------------------|
| ▪ Engineering Entrepreneurship | ▪ Electrospinning | ▪ IC-HPLC |
| ▪ Electron and optical microscopy | ▪ X-ray Diffractometries | ▪ Tensile testing |
| ▪ Thermogravimetric Analysis | ▪ Zeta-potential | ▪ BET analysis |
| ▪ Water quality analysis | ▪ IR Spectroscopy | ▪ HSE compliance |

DISTINCTIONS

1. Fully funded scholarship for PhD by USAID through Higher Education Commission, Pakistan
2. **Team lead**, 3rd cohort startup (**Indus Power Tech**) at International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, Pakistan

LANGUAGES

English: Excellent in reading, writing, speaking, and listening
Urdu (Mother tongue): Excellent in reading, writing, speaking, and listening

INVITED TALKS

1. Invited by **Tehran University of Medical Sciences, Tehran, Iran**. The talk was delivered under the title "Idea transformation into reality". (2019)
2. Invited by the **Society of Water Managers, Pakistan at U.S.-Pakistan Center for Advanced Studies in Water**. The talk was delivered under the title "Nanofiber research: A pursuit of engineering entrepreneurship". (2017)

COMPUTER SKILLS

- MS-office
- Origin pro 9.0
- ChemDraw Ultra 12.0

MISCELLANEOUS

- Active member of **United Nation** volunteer program
- Registered engineer of **Pakistan Engineering Council** ([CHEM/8851](#))
- Active member of **National Youth Assembly** Pakistan
- Professional expert at **Society of Water Managers**, Pakistan
- Associate member of **American Membrane Technology Association**

PERSONAL INFORMATION

Marital Status: Married
Hobbies: Sufi music, Social gatherings, Cricket
Nationality: Pakistani
Passport No.: AB0378252
CNIC No.: 41303-2442825-1

LIST OF SELECTED PUBLICATIONS

1. Bilal M., Ali Z., Soomro U., **Muqees M.**, Ahmed Z., Adsorption of Indigo Carmine dye onto the surface-modified adsorbent prepared from municipal waste and simulation using deep neural network, *Journal of Hazardous Materials*, **(2020)**, (IF: 9.038)
2. **Muqees M.**, Halima N.B., Mahar R. B., Gadhi, T. A., Insight into cellulose-based-nanomaterials: A pursuit of environmental remedies, *International Journal of Biological Macromolecules*, **(2020)** (IF: 5.162)
3. **Muqees M.**, Qureshi, U. A., Mahar R. B., Khatri Z. Ahmed F. Kim I. S., Ionic cross-linking of cellulose nanofibers: an approach to enhance mechanical stability for dynamic adsorption." *Environmental Science and Pollution Research* **26.28 (2019)**: 28842-28851. (IF: 3.056)
4. **Muqees M.**, Khalique A., Qureshi, U. A., Mahar R. B., Khatri Z. Ahmed F., Brohi K M., Aqueous hardness removal by anionic functionalized electrospun cellulose nanofibers. *Cellulose* **(2018)**. 25(10), pp 5985-5997. (IF: 4.210)

5. **Muqeet M.**, Malik H., Mahar R. B., Khatri Z., Ahmed F., Carlson K., Cationization of cellulose nanofibers for the removal of sulfate ions from aqueous solutions, *Industrial and Engineering Chemistry Research* (2017), 56 (47), pp 14078–14088. (IF: 3.573)
6. Malik, H., Qureshi, U. A., **Muqeet, M.**, Mahar R. B., Khatri Z. Ahmed F., Removal of lead from aqueous solution using polyacrylonitrile/magnetite nanofibers. *Environmental Science and Pollution Research*, (2017), pp 1-8. (IF: 3.056)
7. Panhwar S., Mahar R.B., Abro A.A., Ijaz M.W., Solangi G.S., **Muqeet M.**, Health and Safety Assessment in Lakhra Coal Mines and Its Mitigation Measures, *Iranian Journal of Health, Safety & Environment*, (2016), 4(3), pp 775-780.
8. Abro A.A., Rundong L., Shah F., Mahar R.B., Ijaz M. W., Panhwar S., **Muqeet M.**, Predictive Modeling of Biogas Production from Anaerobic Digestion of Mixed Kitchen Waste at Mesophilic Temperature, *International Journal of Waste Resources*, (2016), 6 (3), pp 230-234.

CONFERENCE ORAL PRESENTATIONS

1. **Muqeet M.**, Mahar R. B., Khatri Z., Adsorption-based-filtration: An approach to remove inorganic pollutants from water, *Third International Conference on Materials Science and Nanotechnology (MSNANO-2019)*, Government College University, Faisalabad. **Best poster award**
2. **Muqeet M.**, Mahar R. B., Khatri Z., Adsorption-based-filtration-An approach to remove inorganic pollutants from water, *5th International Conference on Energy, Environment and Sustainable Development (EESD-2018)*, Mehran University of Engineering and Technology, Jamshoro.
3. **Muqeet M.**, Mahar R. B., Khatri Z., Adsorption-based-filtration-An approach to remove inorganic pollutants from water. *International Symposium on Advances in Metallurgy and Materials 2018 (ISAMM-2018)* organized by Pakistan Institute of Engineering and Applied Sciences, Islamabad
4. **Muqeet M.**, Khaliq A., Qureshi U. A., Mahar R. B., Khatri Z., Ahmed F., Anionic behavior of cellulose nanofiber membrane for aqueous hardness removal, *Second International Conference on Material Science Nanotechnology (MSNANO-2018)*, Government College University, Faisalabad. **Best poster award**
5. **Muqeet M.**, Mahar R. B., Khatri Z., Ahmed F., Qureshi U. A., Khaliq A., an efficient adsorbent for the removal of hardness causing agents (Ca²⁺ and Mg²⁺) from water. *International Conference on Green and Sustainable Chemical Sciences (ICGSCS-2018)*, Dawood University of Engineering and Technology, Karachi.
6. **Muqeet M.**, Mahar R. B., Khatri Z., Adsorption-based-filtration-An approach to remove inorganic pollutants from water. *2nd Young researchers' National Conference on Water and Environment (NCWE-2018)* organized by U.S.-Pakistan Center for Advanced Studies in Water, Mehran University of Engineering and Technology, Jamshoro
7. **Muqeet M.**, Malik H., Mahar R. B., Khatri Z. Ahmed F. Carlson K., Adsorption properties of cationized cellulose nanofibers for anions removal, *First National Young Researcher Conference (NYRC-2017)*, Mehran University of Engineering and Technology, Jamshoro. **Best oral presentation award**

BOOK CHAPTER

1. **Muqeet, M.**, Gadhi, T. A., Mahar, R. B., & Bonelli, B. (2020). Advanced nanomaterials for ultrafiltration membranes application, *Nanomaterials for the Detection and Removal of Wastewater Pollutants* (pp. 145-160). Elsevier.