

MUHAMMAD YASEEN, PH.D.

HEC Approved Supervisor

Pakistan Academy of Sciences Gold Medal for
“Best Researcher in Chemical Sciences” 2023.



Email: myyousafzai@gmail.com, myyousafzai@uop.edu.pk

Field of Specialization - Chemical and Environmental Engineering, and Materials Chemistry

Research Interests: Novel Catalysts for the desulfurization and denitrogenation of Fossil Fuels, g-C₃N₄ based materials and Ionic Liquids for fuel oils processing, Applications of Metal Organic Frameworks for pollution control, Synthesis and applications of Mixed Matrix Membranes for wastewater treatment, preparation of advanced modified asphalt for construction industry.

Researcher ID: <http://www.researcherid.com/rid/G-2044-2014>

- **Member of the Academic Council, University of Peshawar, (22-04-2016 to 10-05-2022)**

Education	Post-Doctorate, (Chemical Engineering), 2017-2019 School of Chemistry and Chemical Engineering, Guangxi University, Nanning, China
	Post-Doctorate (Chemical/Environmental Engineering), 2011-2012 Institute of Process Engineering (IPE), Chinese Academy of Sciences, Beijing, China
	Ph.D. (Chemical Engineering and Technology), 2007-2011 Beijing University of Chemical Technology, Beijing, China
	Master (M.Sc.) (Fuel Chemistry), 2002-2003 Institute of Chemical Sciences (ICS), University of Peshawar, Pakistan
	Graduation (B.Sc.) (Chemistry, Zoology, Geography), 2000-2001 Govt. Post graduate College, Mardan, University of Peshawar, KP, Pakistan
	Bachelor of Education (B.Ed.), 2005 Allama Iqbal Open University, Islamabad, Pakistan
Teaching/ Professional Experience	1. Associate Professor, Institute of Chemical Sciences, University of Peshawar, Pakistan. 11-05-2022 to 10-03-2025. 2. Post-doctorate Fellow, School of Chemistry and Chemical Engineering, Guangxi University, Nanning, China. 16-06-2017 to 25-05-2019. 3. Assistant Professor, Institute of Chemical Sciences, University of Peshawar, Pakistan. 17-09-2012 to 10-05-2022. 4. Post-doctorate Fellow, Institute of Process Engineering, Chinese Academy of Sciences, (IPE- CAS), Beijing, China. 01-12-2011 to 30-08-2012. 5. Assistant Professor, (Interim placement of fresh Ph.Ds) Higher Education Commission of Pakistan, Institute of Chemical Sciences, University of Peshawar, Pakistan. 09-08-2011 to 30-03-2012.
Research Publications	<u>Accumulative Impact factor: 1806 (as of May 2026)</u> Google Scholar Citations: 11600, h-Index 61, i10 index 228 https://scholar.google.com/citations?hl=en-US&user=Y5543KUAAAAJ

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2. **Muhammad Yaseen**, Li Chunxi* “*Dibenzothiophene hydrodesulfurization using in situ generated hydrogen over Pd promoted alumina based catalysts*” Fuel Processing Technology – 92, 3, (2011), 624–630. DOI: <https://doi.org/10.1016/j.fuproc.2010.11.021>
3. Sidra Khan Orakzai, Sidra Subhan, Ata Ur Rahman, Fazle Subhan, Kifayatullah Khan, **Muhammad Yaseen*** “*Designing MnO₂-g-C₃N₄/hydroxyapatite-NaOCl catalyst oxidant system for the enhanced oxidative desulfurization of transportation fuel oils*” FUEL – 403, (2025), 136135. DOI: <https://doi.org/10.1016/j.fuel.2025.136135>
4. Tong He, Shu-Jun Chen, Xi-Hui Diao, **Yaseen Muhammad**, Chao Chen, Hao Wang, Chuan-Song Qi, Wei Li “*Turn-on fluorescent sensors based on post-modified Zr-MOF for enantioselective recognition of phenylalanine*” Journal of Solid State Chemistry – 341, (2025), 125090. DOI: <https://doi.org/10.1016/j.jssc.2024.125090>
5. Ashfaq¹, Sidra Subhan¹, Ata Ur Rahman, Bashir Ahmad, Kifayatullah Khan, Fazle Subhan, Waqas Ahmad* & **Muhammad Yaseen*** “*Nickel impregnated graphene oxide catalyst for the desulfurization of transportation fuels using NaClO/H₂O₂ oxidants*” Petroleum Science and Technology – 43, 3, (2025), 263-283. DOI: <https://doi.org/10.1080/10916466.2023.2292252>
6. Zhen Liu, Sobia Aslam, Fazle Subhan, Zifeng Yan, **Muhammad Yaseen**, Afaq Nazir “*Zinc oxide nanoparticles constructed in 3D confined spaces of TOK for oxidative desulfurization of fuels*” Separation and Purification Technology – 364, 2, (2025), 132490. DOI: <https://doi.org/10.1016/j.seppur.2025.132490>
7. Sobia Aslam, Zhen Liu, Fazle Subhan, Muhammad Umair Khan, Zifeng Yan, **Muhammad Yaseen** “*Manganese dioxide (MnO₂) nanoparticles constructed in MIL-101 cages for catalytic oxidative desulfurization of fuel*” Separation and Purification Technology – 369, (2025), 133156. DOI: <https://doi.org/10.1016/j.seppur.2025.133156>
8. Muhammad Younas, Kifayatullah Khan, Maria Ze, **Muhammad Yaseen**, Noor Samad Shah, Hassan Alshemmari, Yasar N. Kavil, Saeed Saad Alelyani, Mohamed Hussien, Sidra Zeb, Di Du “*A global review on perfluoroalkyl acids (PFAAs) in the riverine systems: Environmental behaviours and risks implications*” Science of the Total Environment – 964, (2025), 178596. DOI: <https://doi.org/10.1016/j.scitotenv.2025.178596>
9. Kifayatullah Khan, Muhammad Younas, **Muhammad Yaseen**, Hassan Sher, Afsheen Maryam, Sobhy M. Ibrahim, Adnan Adnan, Ahmad Ali, Muhammad Fawad, Akhtar Zeb Khan, Nasrullah Khan, Izaz Ali Shah “*Heavy metals pollution in riverine sediments: Distribution, source, and environmental implications*” Environmental Monitoring and Assessment – (2025), 197, 225. DOI: <https://doi.org/10.1007/s10661-025-13623-4>
10. Sobia Aslam, Zhen Liu, Fazle Subhan, Zifeng Yan, **Muhammad Yaseen**, Muhammad Ikram “*Molybdenum oxide nanoparticles constructed in 3D confined spaces as highly active catalysts for fast oxidative desulfurization of fuel oil*” Inorganic Chemistry Communications – (2025), 178, 2, 114621. DOI: <https://doi.org/10.1016/j.inoche.2025.114621>

11. Taj Muhammad, Waqas Ahmad, Imtiaz Ahmad, **Muhammad Yaseen**, Tahir Ahmad “Investigating the optimization of activation parameters and comparative mechanical strength of the waste brick dust-based geopolymer cement” International Journal of Geotechnical Engineering – 19, 06, (2025), 441-456. DOI: <https://doi.org/10.1080/19386362.2025.2492104>
12. Sobia Aslam, Zhen Liu, Fazle Subhan, Muhammad Umair Khan, Zifeng Yan, Muhammad Yaseen “Manganese dioxide (MnO₂) nanoparticles constructed in MIL-101 cages for catalytic oxidative desulfurization of fuel” Separation and Purification Technology – (2025), 133156. DOI: <https://doi.org/10.1016/j.seppur.2025.133156>
13. Kifayatullah Khan, Muhammad Sajawal Khan, Muhammad Younas, **Muhammad Yaseen**, Abdullah G. Al-Sehemi, Yasar N. Kavil, Chao Su, Niaz Ali, Afsheen Maryam, Ruoyu Liang “Pathways and risk analysis of arsenic and heavy metal pollution in riverine water: Application of multivariate statistics and USEPA-recommended risk assessment models” Journal of Contaminant Hydrology – (2024), 104483. DOI: <https://doi.org/10.1016/j.jconhyd.2024.104483>
14. Muhammad Salman, Ata Ur Rahman, Muhammad Usman Farooq, Muhammad Shakir, Fazle Subhan, Fazli Akram, Kifayatullah Khan, Muhammad Ullah & **Muhammad Yaseen*** “Advances in the Applications of Mixed Matrix Membranes for Desulfurization of Transportation Fuels” Separation and Purification Reviews – 53, 4, (2024), 448-474. DOI: <https://doi.org/10.1080/15422119.2024.2322425>
15. Lei Wang, Zehui Hu, Chenchen Deng, Yu Wang, Guoxian Ma, Meng Sun[&], Yincun Lv, **Muhammad Yaseen***, Shuzhen Li* “Phosphomolybdic Acid Clusters and Carbon Nitride Coloaded on NH₂-N-rGO for Photocatalytic Oxidation Desulfurization” Journal of Environmental Chemical Engineering – 12, 1, (2024), 111707. DOI: <https://doi.org/10.1016/j.jece.2023.111707>
16. Chenchen Deng, Zehui Hu, Shuzhen Li, Yu Wang, Guoxian Ma, Meng Sun,[&] **Muhammad Yaseen***, Lei Wang* “Designing flower-like La-Bi₂WO₆/Ni@N-rGO composite for the photocatalytic oxidation coupled in-suit hydrogenation desulfurization of diesel oil” Fuel – 358, (2024), 130283. DOI: <https://doi.org/10.1016/j.fuel.2023.130283>
17. Ling Yang, Wenjie Luo, **Yassen Muhammad**, Fanyu Meng, Jiashun Li, Zhenxia Zhao, Jing Li* “Surface modification of bagasse fibers based on polyphenol- induced self-supplied lignin for the creation of composite SBS-modified asphalt” Industrial Crops and Products – 208, (2024), 117835. DOI: <https://doi.org/10.1016/j.indcrop.2023.117835>
18. Zhiyi Pan*, Yongzhong Zhan, **Muhammad Yaseen**, Pei Kang Shen* “Self-supported Fe, Mn-co-doped NiCo₂Se₄ nanorods on nickel foam for enhanced electrocatalytic performance in wide pH range” International Journal of Hydrogen Energy – 68, (2024), 265-273. DOI: <https://doi.org/10.1016/j.ijhydene.2024.03.098>
19. Waqas Ahmad*, Muhammad Salman, Imtiaz Ahmad, **Muhammad Yaseen** “Process for Desulfurization and Demineralization of low rank Coal using Oxidation Assisted Froth Floatation Technique” Chemical Engineering Research and Design – 205, (2024), 301-311. DOI: <https://doi.org/10.1016/j.cherd.2024.03.020>
20. Xiang-Yue Qi, Hui-Feng Xie, Xiang Li, **Yaseen Muhammad**, Chao Chen, Hao Wang*, Chuan-Song Qi, Wei Li, Ye Hong* “Fabrication of an anionic layered metal-organic framework for the

- efficient removal of Sr²⁺*” Journal of Molecular Structure – 1299, **(2024)**, 137220. DOI: <https://doi.org/10.1016/j.molstruc.2023.137220>
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 24. Sobia Aslam*, Fazle Subhan*, Zifeng Yan, **Muhammad Yaseen** “*Facile fabrication of confined spaces with molybdenum atoms for fast oxidative desulfurization of fuel oil*” Separation and Purification Technology – 244, **(2024)**, 127301. DOI: <https://doi.org/10.1016/j.seppur.2024.127301>
 25. Tong He, Xiu-Zhen Li, Xi-Hui Diao, **Yaseen Muhammad**, Chao Chen, Hao Wang*, Wei Li, Chuan-Song Qi* “*Fabrication of dual-emission guest@MOF-808 films for self-calibrating temperature sensing*” Inorganic Chemistry Communication – 170, 02, **(2024)**, 113342. DOI: <https://doi.org/10.1016/j.inoche.2024.113342>
 26. Quanru Man, Fuwei Sun, Zhengsheng Zhang, **Yaseen Muhammad**, Yucheng Wang, Yintong Lin, Liqin Zhou, Zhenxia Zhao, Zhongxing Zhao* “*Construction of plasmonic Z-scheme PGDY@MIL(Fe/Cu) photocatalyst via pore-confined growth of nanoelliptical-shaped graphdiyne for efficient photo-Fenton degradation of dinotefuran*” Separation and Purification Technology – 349, **(2024)**, 127915. DOI: <https://doi.org/10.1016/j.seppur.2024.127915>
 27. Kifayatullah Khan, Muhammad Younas, Jafar Ali, Noor Samad Shah, Yasar N. Kavil, Mohammed A. Assiri, Xianghui Cao, Hassan Sher, Afsheen Maryam, Yunqiao Zhou, **Muhammad Yaseen**, Li Xu “*Population exposure to emerging perfluoroalkyl acids (PFAAs) via drinking water resources: Application of multivariate statistics and risk assessment models*” Marine Pollution Bulletin – 203, **(2024)**, 116415. DOI: <https://doi.org/10.1016/j.marpolbul.2024.116415>
 28. Waqas Ahmad, Imtiaz Ahmad, **Muhammad Yaseen**, Taj Muhammad* “*Integrated Oxidative-Adsorptive Desulfurization of Model and Real Fuel oils Over Zn impregnated Hydroxyapatite-Activated Carbon (Zn/HA-AC) Composite*” Journal of Sulfur Chemistry – 45, 02, **(2024)**, 217-238. DOI: <https://doi.org/10.1080/17415993.2023.2264439>
 29. Shencheng Fan, Hao Tu, **Yaseen Muhammad**, Denghui Ren, Fang Lai, Qingzhao Yang, Zhenxia Zhao, Jing Li “*Resource Utilization of Emulsion Evaporation Modified Aluminum Industrial Refractory Waste in the Preparation of Composite Modified Asphalt*” Journal of Applied Polymer Science – 141, 42, **(2024)**, e56092. DOI: <https://doi.org/10.1002/app.56092>
 30. Xiang-Yue Qi, Xiu-Zhen Li, Xi-Hui Diao, **Yaseen Muhammad**, Chao Chen, Hao Wang*, Chuan-Song Qi, Wei Li*, Ye Hong* “*Synthesis of an anionic 2D→3D interpenetration metal-organic*

- framework for efficient removal of Sr²⁺*” *Inorganica Chimica Acta* – 569, (2024), 122128. DOI: <https://doi.org/10.1016/j.ica.2024.122128>
31. Tong He, Huan Gao, Xi Hui Diao, **Yaseen Muhammad**, Chao Chen, Hao Wang*, Chuan Song Qi, Wei Li, Na Liu*, Yun-Wu Li* “*Ratiometric visualization fluorescence temperature sensing based on dual-lanthanide metal-organic framework*” *Journal of Molecular Structure* – 1316, (2024), 139071. DOI: <https://doi.org/10.1016/j.molstruc.2024.139071>
 32. Jun-Ying Li; Xi-hui Diao; **Yaseen Muhammad**; Chao Chen; Hao Wang*, Wei Li*; Jun-Xuan Li; Chuan-Song Qi, “*A europium(III) metal-organic framework as effective fluorescence sensor for detection of ofloxacin antibiotic*” *Polyhedron* – 258, (2024), 117048. DOI: <https://doi.org/10.1016/j.poly.2024.117048>
 33. Shu-Jun Chen; Tong He; Xi-Hui Diao; **Yaseen Muhammad**; Na Liu*; Chao Chen; Hao Wang*, Wei Li, Chuan-Song Qi* “*Fabrication of two 3D Ln-MOFs as highly sensitive luminescent sensors for Fe³⁺ and Cr³⁺ ions*” *Journal of Solid State Chemistry* – 339, (2024), 124988. DOI: <https://doi.org/10.1016/j.jssc.2024.124988>
 34. Xiu-Zhen Li, Xi-Hui Diao, Jun-Jiang Yan, Na Liu*, **Yaseen Muhammad**, Chao Chen, Hao Wang*, Chuan-Song Qi, Wei Li* “*Fabrication of lanthanide complexes in metal- organic frameworks as self-calibrating temperature sensor*” *Journal of Solid State Chemistry* – 340, (2024), 124990. DOI: <https://doi.org/10.1016/j.jssc.2024.124990>
 35. **Muhammad Yaseen***, Sidra Subhan, Muhammad Usman Farooq, Kifayatullah Khan, Waqas Ahmad, Humaira Seema, Rafia Naz, Fazle Subhan “*Deep Desulfurization of Real Fuel Oils over Tin Impregnated Graphene Oxide-Hydrogen Peroxide and Formic Acid Catalyst-Oxidant System*” *Journal of Sulfur Chemistry* – 44(2), (2023) 201-216. DOI: <https://doi.org/10.1080/17415993.2022.2131429>
 36. Waqas Ahmad, Atiq Ur Rahman, Imtiaz Ahmad, Sidra Subhan, **Muhammad Yaseen*** “*Preparation of Fe₂O₃, NiO₂, and ZnO supported montmorillonite clay for oxidative desulfurization of transportation fuels in O₂/CH₃COOH oxidation system*” *Petroleum Science and Technology* – 42, 12, (2023), 1292-1311. DOI: <https://doi.org/10.1080/10916466.2022.2092503>
 37. Lei Wang, Chenchen Deng, Yincun Lv, Yu Wang, Guoxian Ma, Yingying Ma[&], **Muhammad Yaseen***, Shuzhen Li* “*Designing oxygen vacancy rich mesoporous CeO₂ nanorods with co-doped Cd and Ni for synergistic oxidative-hydrogenation desulfurization of fuels oils*” *Fuel Processing Technology* – 250, (2023), 107899. DOI: <https://doi.org/10.1016/j.fuproc.2023.107899>
 38. Lei Wang* Yincun Lv, Chenchen Deng, Yingying Ma, Shuzhen Li, **Muhammad Yaseen*** “*Designing Al-SiO₂ nanospheres with co-doped Ce/Cd for the removal of 4,6-dimethyldibenzothiophene of fuel oil*” *Journal of Alloys and Compounds* – 968, (2023), 171989. DOI: <https://doi.org/10.1016/j.jallcom.2023.171989>
 39. Shanliang Jiang, Changhao Li, **Yaseen Mahammad**, Ying Tang, Ruimeng Wang, Junjie Li, Jing Li, Zhongxing Zhao, Zhenxia Zhao* “*Solvent-induced fabrication of Cu/MnO_x nanosheets with abundant oxygen vacancies for efficient and long-lasting photothermal catalytic degradation of humid toluene vapor*” *Applied Catalysis B – Environmental* – 328, (2023), 122509. DOI: <https://doi.org/10.1016/j.apcatb.2023.122509>

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41. Jingyu Bao, Hanzhuo Zhang, **Yaseen Muhammad**, Huijun Wei, Ruimeng Wang, Ge Fang, Zhongxing Zhao and Zhenxia Zhao* “Oriented Anchoring of NCQD on Citric Acid Defective Cluster of NH₂-MIL-88B(Fe) for the Efficient Removal of Tetracycline via Photo-Fenton Catalysis” Chemical Engineering Journal – 456, (2023), 141063. DOI: <https://doi.org/10.1016/j.cej.2022.141063>
42. Liqin Zhou, Hui He, Mengying Tao, **Muhammad Yaseen**, Wenxue Gong, Qing Liu, Zhenxia Zhao, Zhongxing Zhao* “Chloroplast-inspired microenvironment engineering of inverse opal structured IO-TiO₂/Chl/IL for highly efficient CO₂ photolytic reduction to CH₄” Chemical Engineering Journal – 464, (2023), 142685. DOI: <https://doi.org/10.1016/j.cej.2023.142685>
43. Ruimeng Wang, Xinqi Luan, **Muhammad Yaseen**, Jingyu Bao, Jing Li, Zhongxing Zhao and Zhenxia Zhao* “Swellable array strategy based on designed flexible double hypercross-linked polymers for synergistic adsorption of toluene and formaldehyde” Environmental Science & Technology – 57, 16, (2023), 6682-6694. DOI: <https://doi.org/10.1021/acs.est.3c00565>
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45. Mateen Ahmad, Sobia Aslam, Fazle Subhan*, Liu Zhen*, Zifeng Yan, **Muhammad Yaseen**, Muhammad Ikram “Sn-doped nanoconfinements of SBA-15 for oxidative desulfurization: kinetics and thermodynamics” Fuel – 346, (2023), 128372. DOI: <https://doi.org/10.1016/j.fuel.2023.128372>
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48. Jinhu Yun, Yan Liang*, **Yaseen Muhammad**, Fei Liu, Yawen Dong, and Shuangfei Wang “Influence of Biochar Incorporation on the Collector Surface Properties and the Transport of Silver Nanoparticles in Porous Media” Journal of Environmental Management – 328, (2023), 116943. DOI: <https://doi.org/10.1016/j.jenvman.2022.116943>
49. Sobia Aslam, Fazle Subhan*, Zhen Liu*, Zifeng Yan, Abrar Ahmad, Afaq Nazir, Ayesha Siddiqua, **Muhammad Yaseen** “Magnetic Fe₃O₄@MIL-100(Fe) core-shells decorated with gold nanoparticles for enhanced catalytic reduction of 4-nitrophenol and degradation of azo dye” Colloids and Surfaces A: Physicochemical and Engineering Aspects – 660, (2023), 130904. DOI: <https://doi.org/10.1016/j.colsurfa.2022.130904>

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52. Lu He, Denghui Ren, **Yaseen Muhammad**, Fang Lai, Ruinan Pei, Zhenxia Zhao, Qingzhao Yang, Jing Li* “*Investigating the adhesion and rheological properties of metal organic framework incorporated PET fiber/SBS modified asphalt 3 composite*” Polymer Composites – 44, 11, (2023), 7907-7924. DOI: <https://doi.org/10.1002/pc.27675>
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56. Lu He, Shencheng Fan, **Yaseen Muhammad**, Yao Cheng, Zhenxia Zhao, Jing Li* “*Designing electrostatic synergistic nanohybrid interface layer in polyester fiber for asphalt binder modification*” Journal of Applied Polymer Science– 140, 32, (2023), e54265. DOI: <https://doi.org/10.1002/app.54265>
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 7. Muhammad Ullah, Sidra Subhan, Muhammad Shakir, Ata Ur Rahman, **Muhammad Yaseen*** “*Tribological Applications/Lubricant Additives Applications of Nanofibers and Their Composites*” Polymeric Nanofibers and Their Composites: Recent Advances and Applications (ISBN: 978-0-443-14128-7) Elsevier – Chapter 13, (2025), 325-356. DOI: <https://doi.org/10.1016/B978-0-443-14128-7.00013-4>
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 15. Wizra Khan, Ata Ur Rahman, **Muhammad Yaseen*** “*Scenarios of Green Hydrogen of the World*” Industrial Scale Production and Applications of Green Hydrogen: Opportunities and Challenges - Scrivener Publishing (eISBN:9781394356706) – Chapter 12, (2025), 299-236. DOI: <https://doi.org/10.1002/9781394356706.ch12>
 16. Muhammad Salman, Muhammad Usman Farooq, Fazle Subhan, Kifayatullah Khan, **Muhammad Yaseen*** “*Nanomolecular membranes for water filtration*” Molecular Self-Assemblies: Advanced Materials for Environmental and Sensing Applications – Taylor & Francis **Under review.**
 17. Sana Ullah, Ata Ur Rahman, Sidra Khan Orakzai, Fazle Subhan, Kifayatullah Khan, **Muhammad Yaseen*** “*Nanomolecular Membranes for Heavy Metals Removal*” Molecular Self-Assemblies: Advanced Materials for Environmental and Sensing Applications – Taylor & Francis **Under review.**
 18. Sidra Subhan, Ayesha Khan, Ata Ur Rahman, **Muhammad Yaseen*** “*Heavy Metal Ions Detection Through Molecular Self-Assemblies*” Molecular Self-Assemblies: Advanced Materials for Environmental and Sensing Applications – Taylor & Francis **Under review.**
 19. Sidra Subhan, Ayesha Khan, **Muhammad Yaseen*** “*Toxicity/Risk Assessment of Nanomaterials When Used in Water Remediation*” Molecular Self-Assemblies: Advanced Materials for Environmental and Sensing Applications – Taylor & Francis **Under review.**
 20. Ayesha Gul, Sana Ullah, Ata Ur Rahman, Fazle Subhan, Kifayatullah Khan, **Muhammad Yaseen*** “*Photocatalytic synthesis of environmentally friendly hydrogen peroxide (H₂O₂) oxidant*” Photocatalytic Oxidation: Techniques, Innovations, and Applications for the Environment - Jenny Stanford Publishing – **Under review.**
 21. Sana Ullah, Fazle Subhan, Kifayatullah Khan, **Muhammad Yaseen*** “*Developments in Photocatalytic Systems for Deodorizing air Pollutants*” Photocatalytic Oxidation: Techniques, Innovations, and Applications for the Environment - Jenny Stanford Publishing – **Under review.**
 22. Sidra Subhan, **Muhammad Yaseen*** “*Hybrid membranes for multifunctional applications*” Advanced Functional Membranes: Materials and Applications - Wiley-Scrivener Publisher – **Under review.**

	23. Sidra Subhan, Salman Khan, Muhammad Yaseen* “ <i>MXene based advanced membranes and their applications</i> ” Advanced Functional Membranes: Materials and Applications - Wiley-Scrivener Publisher – Under review.	
Reviewership of International journals	1. Journal of Materials Chemistry A 2. Nanoscale 3. Environmental Science: Nano 4. Nanoscale Advances 5. Chemical Engineering Journal 6. Energy Conversion and Management 7. Fuel 8. Journal of Hazardous Materials 9. Industrial & Engineering Chemistry Research 10. Energy & Fuels 11. Chemical Engineering and Technology 12. Separation and Purification Technology 13. Construction and Building Materials 14. Fuel Communications	15. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 16. International Journal of Hydrogen Energy 17. New Journal of Chemistry 18. Journal of Renewable and sustainable Energy 19. Colloids and Surfaces A: Physicochemical and Engineering Aspects 20. Canadian Journal of Chemical Engineering 21. Green Chemistry and Environment 22. Journal of Surfactants and detergents 23. Chinese Journal of Chemical Engineering 24. Journal of the Electrochemical Society 25. Chemical Engineering Communication
Conferences, Workshops and Trainings	1. Oral Presentation on “ <i>Catalytic Hydrodesulfurization of Dibenzothiophene Coupled with Ionic Liquids over Low Pd Incorporated Co-Mo@Al₂O₃ and Ni-Mo@Al₂O₃ Catalysts at Mild Operating Conditions</i> ” ICCCE 2018:20th International Conference on Chemistry and Chemical Engineering , 12-13 July, 2018, Stockholm, Sweden. 2. Oral presentation “ <i>Highly Efficient and Fast Oxidative Desulfurization of Dibenzothiophene at Room Temperature Over Mn loaded Co- Mo/Al₂O₃ and Ni-Mo/Al₂O₃ Catalysts Using NaClO as Oxidant</i> ” 7th CAS-TWAS symposium on Green Technology (GT2018) , July 22-25, 2018 Beijing, China. 3. Oral presentation on “ <i>Oxidative Desulfurization of Dibenzothiophene over Mn promoted Co-Mo/Al₂O₃ and Ni-Mo/Al₂O₃ Catalysts Using Hydrogen Peroxide and Imidazolium acetate based Ionic Liquids</i> ” 2017 CAS-TWAS symposium on Green Chemistry and Technology for Sustainable Development , September 4-6, 2017, Beijing, China. 4. Presentations on “ Writing Quality Manuscript ” at the Center for Human Resource and Career Development, University of Peshawar, 24 th February, 2016. 5. Oral Presentation on “ <i>Oxidative Desulfurization of Fuel Oils over Fe Promoted Co-Mo/Al₂O₃ and Ni-Mo/Al₂O₃ Supported Catalysts using Hydrogen Peroxide and Formic Acid as Oxidant</i> ” 27th National and 15th International Chemistry Conference, Department of Chemistry, University of Malakand, Pakistan , August 22-25, 2016. 6. 5 Days Indigenous on Campus Training (IOT) on “ Writing Skills ” at Center for Human Resource and Career Development (CHRCDD), University of Peshawar, April 24– May 05, 2015.	

	7. Training on “ Finance and Audit ” at CHRCD, University of Peshawar, February 10-18, 2015. 8. Workshop on “ Writing Scientific Papers and Publications – Showcasing the Scientific Talent to the World ” at COMSAT Institute of Information Technology (CIIT), Islamabad, 03-04 June 2014. 9. “ NASIC workshop on Modern Spectroscopic Techniques and their applications in structure determination ” HEJ, University of Karachi, December 01-03, 2014. 10. Workshop on “ Project Management ” at CHRCD, University of Peshawar, October 28-31, 2013. 11. “ TWAS-ROESEAP Symposium on Frontier in Chemical Engineering ” Beijing, China, July 27-31, 2012. 12. Poster presentation “ 6th International Conference on Environmental Catalysis (ICEC6) ”, Beijing, China, September 12-15, 2010.		
Students Supervised	BS	MS	Ph.D.
	10	19	05
Courses Taught	<u>MS/Ph.D. Courses taught</u>		
	- Atmospheric chemistry (CHEM-732) (2013) - Molecular Spectroscopy (CHEM-772) (2014) - Instrumental Methods of Chemical Analysis (CHEM-792) (2014) - Characterization of fossil fuels by advanced instrumental techniques.	- Environmental Chemistry - Coal Conversion Technologies and alternative Sources of Fuel - Scientific Writing (CHEM – 757) (2015, 2017). - Petrochemicals	
Research Projects completed	- Startup Project Under IPFP Scheme of HEC titling “<i>Hydrodesulfurization of Fuel Oil over Noble Metal Promoted Catalysts Via In-situ Hydrogen Generated by reforming reaction</i>” completed worth RS 0.5 M (July 2020). - NRPU Project titling “<i>Application of Room Temperature Ionic Liquids in Low temperature and pressure Hydrodesulfurization of Model and real fuel oils</i>” Worth PKR: 5.2 M, Project No: 36, (HEC, 2014-2021). - Research Project funded by Guangxi University, Nanning, China, titled “<i>Comparative study on different catalyst-oxidant systems for the oxidative desulfurization and denitrogenation of the fuel oil</i>” worth: PKR: 1 M, (January 2020-Dec 2021), Project No: 2019K008.		
Awards and Honors	“Cultural exchange scholarship” for PhD mutually offered by the Governments of Pakistan and Peoples Republic of China.		
Language Skills	English: Excellent in writing, reading, listening and speaking. Chinese: Excellent command over written, spoken and communication skills Urdu: Excellent in reading, writing and speaking		

Computer and Engineering Skills	macOS Sequoia 15.4, MS office 2024, Endnote 21, Origin 2021, ChemBio Office, Photoshop. Full command over the operation of GC, GC-MS, HPLC, BET surface area analyzer, SEM-EDX, XRD, and High Temperature and Pressure autoclave reactors.
References	1. Prof. Zhenxia Zhao, School of Chemistry and Chemical Engineering, Guangxi University, Nanning, China. Email: zhaozhenxia@gxu.edu.cn Phone: +86-13978630131 2. Dr. Ata Ur Rahman Assistant Professor, Institute of Chemical Sciences, University of Peshawar, 25120, KP, Pakistan. Phone: +92-91-9216652 E-mail: atasafi@uop.edu.pk 3. Dr. Kifayatullah Khan Associate Professor, Department of Environmental and Conservation Sciences, University of Swat, Swat, 19120, Pakistan. Email: drkhan@uswat.edu.pk Phone: (Cell) +92-3456438564 (Office): +92-94-6920872