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| **Name** | Faheem Nawaz | | |
| **Designation** | Assistant Professor | | |
| **Department** | Environmental Science | | |
| **Faculty** | Faculty of Life Sciences & Informatics | | |
| **E-mail address** | Official | faheem.nawaz@buitms.edu.pk | |
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**Qualification**

| Year | Degree/Certificate | Name of the Institute/ University | Field of study |
|---|---|---|---|
| 2016 | PhD | Institute of Process Engineering, University of Chinese Academy of Sciences (IPE-UCAS), Beijing, China | Environmental Engineering |
| 2006 | MSc | Hazara University Mansehra | Chemistry |
| 2003 | Graduation | University of Peshawar | Biological Sciences |

**Publications in HEC Recognized journals**

| S. No | Title of Paper | Name of Journal | National/ International | Publication date |
|---|---|---|---|---|
| 1. | A novel process for recycling and resynthesizing LiNi1/3Co1/3Mn1/3O2 from the cathode scraps intended for lithium-ion batteries | Waste Management | International | 2014, 34, 1715-1724. **(IF = 5.43)** |
| 2. | Catalytic ozonation of 4-nitrophenol over a mesoporous α-MnO2 with resistance to leaching | Catalysis Today | International | 2015, 258, 595601. **(IF = 4.8)** |
| 3. | The active crystalline polymorph of manganese dioxides for 4-nitrophenol degradation in catalytic ozonation | IWA Nano & Water Regional | International | 2015 |
| 4. | A closed-loop process for recycling LiNi1/3 Co1/3 Mn1/3 O2 from the cathode scraps of lithium-ion batteries: Process optimization and kinetics analysis | Separation and Purification Technology | International | 2015, 150, 186-195. **(IF = 5.11)** |
| 5. | Insights into the mechanism of phenolic mixture degradation by catalytic ozonation with mesoporous Fe3O4/MnO2 composite | RSC Advances | International | 2016, 6, 29674-29684. (**IF = 3.32**) |

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| 6. | The influence of the substituent on the phenol oxidation rate and reactive species in cubic MnO2 catalytic ozonation | Catalysis Science & Technology | International | 2016, 6, 7875-7884. (**IF = 5.77**) |
| 7. | Super synergy between photocatalysis and ozonation using bulk g-C3N4 as catalyst: A potential sunlight/O3/g-C3N4 method for efficient water decontamination | Applied Catalysis B: Environmental | International | 2016, 181, 420-428. (**IF = 14.3**) |
| 8. | Dramatic coupling of visible light with ozone on honeycomb-like porous gC3N4towards superior oxidation of water pollutants | Applied Catalysis B: Environmental | International | 2016, 183, 417-425. (**IF = 14.3**) |
| 9. | Disparate roles of doped metal ions in promoting surface oxidation of TiO2 photo catalysis | Journal of Photochemistry & Photobiology A: Chemistry | International | 2016, 315, 59-66. **(IF = 3.3)** |
| 10. | Superoxide radical-mediated photocatalytic oxidation of phenolic compounds over Ag+/TiO2: Influence of electron donating and withdrawing substituents | Journal of Hazardous Materials | International | 2016, 304, 126-133. **(IF = 7.7)** |
| 11. | MnOx 基材料催化臭氧氧化酚类混合物的活性物种及机理研究 | Institute of Process Engineering Journal | International | 2016 |
| 12. | Selection of active phase of MnO2 for catalytic ozonation of 4-Nitro phenol | Chemosphere | International | 2017, 168, 1457-1466. (**IF = 4.43**) |
| 13. | Adsorptive removal of Cd2+ from aqueous solutions by a highly stable covalent triazine-based framework | New Journal of Chemistry | International | 2018,42, 10234-10242 (**IF = 3.01**) |
| 14. | Investigation of raw materials for cement industry of Upper Hunza, Gilgit-Baltistan, Pakistan. | IOP Publishing. | International | 2018 , 414, 1, p. 012012) |
| 15. | Formation of Mn3O4@$MnO_2$ amoeba shape catalyst for enhanced Catalytic ozonation of fused ring phenols | RSC Advances | International | 2019 Under review |
| 16. | Parametric Investigation of Enzyme Zymose on Ethanol Production | Journal of Applied and Emerging Sciences | National | 2019 Under review |
| 17. | Removal of phenol from industrial wastewater using surfactants modified Mn3O4 nanoparticles. | New Journal of Chemistry | International | 2019 Under review |
| **Paper Presented** | | | | |
| S. No | Title of Paper | Name of Conference | National/ International | Date |
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| **Books Authored/ Edited** | | | |
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| S. No | Name of book | Publisher | ISBN |
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| **Work Experience** | | | | |
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| S. No | From (year) | To (year) | Name of the Institution/ Organization | Position held |
| 1. | 2017 | To-Date | BUITEMS | Assistant Professor |
| 2. | 2007 | 2012 | Pakistan Council of Research in Water Resources (PCRWR), ISLAMABAD | Scientific Officer |

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| **Area of specialization** | Water and wastewater treatment technologies, drinking water quality parameters and the determination of residual pesticides, especially Persistent Organic Pollutants (POPs)/OCPs in surface water bodies. Specialize at assessing and enhancing the quality of water supply system. |
| **Research Interest** | • Environmental Analysis and Toxicology<br>• Environmental catalysis process and atmospheric pollution control technology<br>• Membrane filtration, fabrication of GO membrane, coagulation |
| **Future Research Plans** | |
| **Expertise** | • Advance oxidation process for wastewater treatment.<br>• Water Quality related research particularly residual POPs/OCPs. PCBs, PBDEs.<br>• Water Hygiene and Sanitation (WASH.<br>• Monitoring & Evaluation.<br>• Chemical analysis involving: instrumental techniques and chemical instrumentation, chromatographic separations, solvent extractions, qualitative, quantitative and structural spectroscopy, classical wet analysis, microscopy and electrochemical techniques. Design, experimental development and implementation of chemical analysis procedures and program. |
| **HEC Approved supervisor** | Yes |
| **If Yes, provide HEC URL** | *e.g.* http:// sc.hec.gov.pk/aphds/submit.asp?supid=29558 |
| **Research grants/ Projects** | • **As Principal Investigator**: "Dual nonmetals doped carbon foam photocatalyst; activity in different degradation system and reaction pathway" Pakistan Higher Education Commission, Start-Up Research Grant Program. **(Accepted)**. |

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| | • **As Principal Investigator**: “Influence of EDTA for efficient Hydroxyl radical’s production in ozonation of oxalic acid at low pH” Office of Research Innovation and Commercialization (ORIC) working under Pakistan Higher Education Commission. (**Accepted**). |
| **Additional Information** | |
| https://scholar.google.com/citations?user=VOCaZIwAAAAJ&hl=en&oi=ao<br>https://www.researchgate.net/profile/Faheem_Nawaz3 | |