Musharib Khan

Assistant Professor

Institute of Environmental Sciences & Engineering

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About

Dr. Musharib Khan is working as Assistant Professor in the Institute of Environmental Sciences & Engineering. Dr. Musharib Khan has a PhD in Environmental Engineering. Dr. Musharib Khan has published 24 research articles & conference papers having a citation count of 1626, carried out 3 projects and filed 0 intellectual property.

Qualifications

PhD in Environmental Engineering 2016 - 2020
Hong Kong University of Science and Technology , Hong Kong

MPhil in Environmental Engineering 2014 - 2016
Hong Kong University of Science and Technology , Hong Kong

MSc in Environmental Engineering 2011 - 2013
BZU, Multan , Pakistan

BSc in Environmental Engineering 2007 - 2011
BZU, Multan , Pakistan

Experience

Assistant Professor 2022- Present
Institute of Environmental Sciences & Engineering

Assistant Professor 2021 - 2022
Institute of Environmental Sciences & Engineering

Research Assistant 2019 - 2019
Hong Kong University of Science and Technology , Clear Water bay Road, Kowloon, Hong Kong

Visiting Lecturer 2011 - 2014
Bahauddin Zakariya University Multan , Bosan Road Multan, Pubjab, Pakistan

Awards

Gold Medal in MSc 2013

Gold Medal in BSc 2011

Professional Memberships

PEC Since 2012

Research Projects

National Projects

Sustainable Agricultural Residue Management Options for Smog Reduction 2025

Funding Agency: Pakistan Institute of Development Economics (PIDE)

Amount: PKR 1,744,820.00

Status: Approved_inprocess

Production and Testing of a Cleaner Waste-derived Solid Fuel for Industrial Applications 2024

Funding Agency: Pakistan Engineering Council (PEC)

Amount: PKR 100,000.00

Status: Approved_inprocess

Comprehensive baseline assessment and sustainable pathways for solid waste management: integrating perspectives, practices and environmental impact 2024

Funding Agency: Pakistan Institute of Development Economics (PIDE)

Amount: PKR 2,500,000.00

Status: Approved_inprocess

International Projects

Research Articles

Two-dimensional MXene and molybdenum disulphide for the removal of hexavalent chromium from water: A comparative study 2024

Asma Maqsood Abbasi Waqas Qamar Zaman Hassan Anwer Fahad Azad Xizi Long Waheed Miran Musharib Khan

Desalination and Water Treatment, Volume 320, Article Number 100693

Impact Factor: 1.000 | **Quartile:** 4 | **Citations:** 3

DOI: doi.org/10.1016/j.dwt.2024.100693

Pearson Correlation Analysis Between Carbon Dioxide Emissions and Socioeconomic Factors Across Nations' Income Groups 2023

Yuting Qin Min Yee Chin Zheng Xuan Hoy Musharib Khan Kok Sin Woon Chew Tin Lee

Chemical Engineering Transactions, Volume 106, Pages 181-186

Impact Factor: N/A | **Citations:** 6

DOI: 10.3303/CET23106031

Performance and cost-benefit analysis of anaerobic moving bed biofilm reactor for pretreatment of textile wastewater 2023

Hafiz Muhammad Aamir Shahzad Sher Jamal Khan Musharib Khan Harald Schönberger Frank-Andreas Weber

Korean Journal of Chemical Engineering, Pages 1-12

Impact Factor: 3.146 | **Quartile:** 3 | **Citations:** 8

DOI: 10.1007/s11814-022-1334-6

An integrated multi-objective optimisation framework for municipal solid waste management and emissions trading scheme 2023

Jun Keat Ooi Zheng Xuan Hoy Md Uzzal Hossain Zhen Zhang Musharib Khan Kok Sin Woon

Clean Technologies and Environmental Policy, Pages 1-15

Impact Factor: 4.700 | **Quartile:** 2 | **Citations:** 7

DOI: 10.1007/s10098-023-02494-3

Facilitating peroxymonosulfate activation for effective antibiotics degradation from drinking water by photoelectrocatalytic system using MoS2 embedded carbon substrate 2023

Musharib Khan Zexiao Zheng Zuyao Zhang Ka Chun James Wong Cheuk Wai Lung Juhua He Ashutosh Kumar Irene M. C. Lo

Chemical Engineering Journal, Volume 452, Part 4, Article Number 139591

Impact Factor: 16.744 | **Quartile:** 1 | **Citations:** 26

DOI: 10.1016/j.cej.2022.139591

Lanthanum carbonate nanoparticles confined within anion exchange resin for phosphate removal from river water: Batch and fixed-bed column study 2022

Kendric AaronTee Mohammad A. H. Badsha Musharib Khan Ka Chun James Wong Irene M. C. Lo

Process Safety and Environmental Protection, Volume 159, Pages 640-651

Impact Factor: 6.158 | **Quartile:** 1 | **Citations:** 26

DOI: https://doi.org/10.1016/j.psep.2022.01.008

Role of surface functional groups of hydrogels in metal adsorption: From performance to mechanism 2021

Mohammad A.H. Badsha Musharib Khan Baile Wu Ashutosh Kumar Irene M.C. Lo

Journal of Hazardous Materials, Volume 408, Article Number 124463

Impact Factor: 10.588 | **Quartile:** 1 | **Citations:** 136

DOI: 10.1016/j.jhazmat.2020.124463

Critical review of photocatalytic disinfection of bacteria: from noble metals- and carbon nanomaterials-TiO2 composites to challenges of water characteristics and strategic solutions 2021

Juhua He Ashutosh Kumar Musharib Khan Irene M. C. Lo

Science of The Total Environment, Volume 758, Article Number 143953

Impact Factor: 7.963 | **Quartile:** 1 | **Citations:** 123

DOI: 10.1016/j.scitotenv.2020.143953

Visible–light–driven magnetically recyclable terephthalic acid functionalized g−C3N4/TiO2 heterojunction nanophotocatalyst for enhanced degradation of PPCPs 2020

Ashutosh Kumar Musharib Khan Juhua He Irene M. C. Lo

Applied Catalysis B: Environmental, Volume 270, Article Number 118898

Impact Factor: 19.503 | **Quartile:** 1 | **Citations:** 122

DOI: 10.1016/j.apcatb.2020.118898

Elucidating the predominant role of crystal disorders in hierarchical photocatalysts governing their charge carrier separation and associated activity in photocatalytic water treatment 2020

Musharib Khan Ashutosh Kumar Juhua He Irene M. C. Lo

Journal of Colloid and Interface Science, Volume 573, Pages 336-347

Impact Factor: 8.128 | **Quartile:** 1 | **Citations:** 9

DOI: 10.1016/j.jcis.2020.04.020

Recent developments and challenges in practical application of visible–light–driven TiO2–based heterojunctions for PPCP degradation: A critical review 2020

Ashutosh Kumar Musharib Khan Juhua He Irene M. C. Lo

Water Research, Volume 170, Article Number 115356

Impact Factor: 11.236 | **Quartile:** 1 | **Citations:** 230

DOI: 10.1016/j.watres.2019.115356

Unravelling mechanistic reasons for differences in performance of different Ti- and Bi-based magnetic photocatalysts in photocatalytic degradation of PPCPs 2019

Musharib Khan Christopher S. L. Fung Ashutosh Kumar Juhua He Irene M. C. Lo

Science of The Total Environment, Volume 686, Pages 878-887

Impact Factor: 6.551 | **Quartile:** 1 | **Citations:** 34

DOI: 10.1016/j.scitotenv.2019.05.340

Visible-light-driven photocatalytic removal of PPCPs using magnetically separable bismuth oxybromo-iodide solid solutions: Mechanisms, pathways, and reusability in real sewage 2019

Christopher S. L. Fung Musharib Khan Ashutosh Kumar Irene M. C. Lo

Separation and Purification Technology, Volume 216, Pages 102-114

Impact Factor: 5.774 | **Quartile:** 1 | **Citations:** 48

DOI: 10.1016/j.seppur.2019.01.077

Visible-light-driven N-TiO2@SiO2@Fe3O4 magnetic nanophotocatalysts: Synthesis, characterization, and photocatalytic degradation of PPCPs 2019

Ashutosh Kumar Musharib Khan Liping Fang Irene M. C. Lo

Journal of Hazardous Materials, Volume 370, Pages 108-116

Impact Factor: 9.038 | **Quartile:** 1 | **Citations:** 122

DOI: 10.1016/j.jhazmat.2017.07.048

Magnetically separable BiOBr/Fe3O4@SiO2 for visible-light-driven photocatalytic degradation of ibuprofen: Mechanistic investigation and prototype development 2019

Musharib Khan Christopher S. L. Fung Ashutosh Kumar Irene M. C. Lo

Journal of Hazardous Materials, Volume 365, Pages 733-743

Impact Factor: 9.038 | **Quartile:** 1 | **Citations:** 73

DOI: 10.1016/j.jhazmat.2018.11.053

Development of g-C3N4/TiO2/Fe3O4@SiO2 heterojunction via sol-gel route: A magnetically recyclable direct contact Z-scheme nanophotocatalyst for enhanced photocatalytic removal of ibuprofen from real sewage effluent under visible light 2018

Ashutosh Kumar Musharib Khan Xiangkang Zeng Irene M. C. Lo

Chemical Engineering Journal, Volume 353, Pages 645-656

Impact Factor: 8.355 | **Quartile:** 1 | **Citations:** 141

DOI: 10.1016/j.cej.2018.07.153

High charge transfer response of g-C3N4/Ag/AgCl/BiVO4 microstructure for the selective photocatalytic reduction of CO2 to CH4 under alkali activation 2018

Rayees Ahmad Rather Musharib Khan Irene M. C. Lo

Journal of Catalysis, Volume 366, Pages 28-36

Impact Factor: 7.723 | **Quartile:** 1 | **Citations:** 82

DOI: 10.1016/j.jcat.2018.07.027

Removal of ionizable aromatic pollutants from contaminated water using nano γ-Fe2O3 based magnetic cationic hydrogel: Sorptive performance, magnetic separation and reusability 2017

Musharib Khan Irene M. C. Lo

Journal of Hazardous Materials, Volume 322, Part A, Pages 195-204

Impact Factor: 6.434 | **Quartile:** 1 | **Citations:** 84

DOI: 10.1016/j.jhazmat.2016.01.051

Application of Magnetic Hydrogel for Anionic Pollutants Removal from Wastewater with Adsorbent Regeneration and Reuse 2017

Baile Wu Dickson Y. S. Yan Musharib Khan Zhen Zhang Irene M. C. Lo

Journal of Hazardous, Toxic, and Radioactive Waste, Volume 21, Issue 1, Pages 1-9

Impact Factor: N/A | **Citations:** 23

DOI: 10.1061/(ASCE)HZ.2153-5515.0000325

A holistic review of hydrogel applications in the adsorptive removal of aqueous pollutants: Recent progress, challenges, and perspectives 2016

Musharib Khan Irene M. C. Lo

Water Research, Volume 106, Pages 259-271

Impact Factor: 6.942 | **Quartile:** 1 | **Citations:** 301

DOI: 10.1016/j.watres.2016.10.008

Role of Secondary Sludge in the Removal of Phytosterols during Secondary Wastewater Treatment 2015

Zahid Mahmood Khan Eric R. Hall Musharib Khan

Journal of Environmental Engineering, Volume 141, Issue 5, Pages 1-9

Impact Factor: 1.125 | **Quartile:** 3 | **Citations:** 3

DOI: 10.1061/(ASCE)EE.1943-7870.0000908

Conference Proceedings

Comprehensive Assessment of Conventional Practices and Sustainable Pathways for Solid Waste Management: Integrating Perspectives, Practices and Environmental Impact 2025

SHOAIB MUHAMMAD TAIMUR MAZHAR SHEIKH Musharib Khan

5th RASTA-PIDE CONFERENCE, res.country(177,)

Citations: N/A

DOI: Nil

Environmental Life Cycle Assessment of Plastic Waste Management Options 2025

Sumair Gomez Musharib Khan

1st International Conference on Climate Change Environment and Sustainability (I3CES), res.country(177,)

Citations: N/A

DOI: https://sites.uol.edu.pk/i3ces/index

Editorial Activities

Proceeding of Pakistan Academy of Sciences 2025
Reviewed Papers for Journals
Impact Factor: N/A

Environmental Monitoring and Assessment 2025
Reviewed Papers for Journals
Impact Factor: 2.9

2024
Reviewed Papers for Journals
Impact Factor: N/A

2024
Reviewed Papers for Journals
Impact Factor: N/A

International Journal of Environmental Science and Technology 2024
Reviewed Papers for Journals
Impact Factor: 3

Chemical Engineering Journal 2024
Reviewed Papers for Journals
Impact Factor: 13.3

Energy 2024
Reviewed Papers for Journals
Impact Factor: 8.9

Sustainability 2022
Reviewed Papers for Journals
Impact Factor: 3.889

Environmental Science and Ecotechnology 2022
Reviewed Papers for Journals
Impact Factor: 9.371

International Journal of Environmental Science and Technology 2022
Reviewed Papers for Journals
Impact Factor: 3.519

Water 2022
Reviewed Papers for Journals
Impact Factor: 3.530

Catalysts 2022
Reviewed Papers for Journals
Impact Factor: 4.501

Chemical Engineering Journal 2022
Reviewed Papers for Journals
Impact Factor: 16.744

Journal of Marine Science and Engineering 2022
Reviewed Papers for Journals
Impact Factor: 2.744

2021
Reviewed Papers for Journals
Impact Factor: 11.236