Waqas Qamar Zaman

Assistant Professor

Institute of Environmental Sciences & Engineering

Email: drwaqas@iese.nust.edu.pk
Contact: 519085435
LinkedIn: https://www.linkedin.com/in/waqas-qamar-zaman-8200408a/

About

Dr. Waqas Qamar Zaman is working as Assistant Professor in the Institute of Environmental Sciences & Engineering. Dr. Waqas Qamar Zaman has a PhD in Environmental Engineering. Dr. Waqas Qamar Zaman has published 35 research articles & conference papers having a citation count of 837, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Environmental Engineering 2015 - 2019
East China University of Science and Technology , China

MS in Chemical Engineering 2010 - 2013
UET Lahore , Pakistan

BS in Chemical Engineering 2003 - 2007
UET Lahore , Pakistan

Post Grad Diploma in Pre Engineering 2000 - 2002
American University in Dubai , United Arab Emirates

Matric (SSC) in Science 1998 - 2000
Hamdan Bin Mohammed e-University , United Arab Emirates

Experience

Assistant Professor 2023- Present
Institute of Environmental Sciences & Engineering

Assistant Professor 2019 - 2023
Institute of Environmental Sciences & Engineering

Lecturer 2010 - 2015
University of Gujrat , Jalapur Jattan Road Gujrat

Awards

Outstanding Postgraduate 2019
Outstanding graduate of year 2019

Professional Memberships

PEC Since 2007

Research Articles

De Novo synthesis of selenium-doped CeO2@Fe3O4 nanoparticles for improving secondary metabolite biosynthesis in Carthamus tinctorius cell suspension culture 2025

Kamran Ashraf Zebo Liu Qamar uz Zaman MUHAMMAD ARSHAD Waqas Qamar Zaman Ali Shan Junxiog Yu Touseef ur Rehman Yingping Zhuang Meijin Guo Ali Mohsin

Chemical Engineering Journal, Volume:505, Article Number: 159705, Pages:15

Impact Factor: 13.4 | **Quartile:** 1

DOI: https://doi.org/10.1016/j.cej.2025.159705

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

Synthesis of CaCO3 supported nano zero-valent iron-nickel nanocomposite (nZVI-Ni@CaCO3) and its application for trichloroethylene removal in persulfate activated system 2024

Ali Shan Ayesha Idrees waqas qamar zaman Ali mohsin Zain Abbas Florian J. Stadler Shuguang Lyu
Environmental Research, Volume:245, Article Number: 118050

Impact Factor: 8.3 | **Quartile:** 1 | **Citations:** 13
DOI: 10.1016/j.envres.2023.118050

Optimized electrocatalytic degradation of ciprofloxacin using Co3O4 coated stainless steel electrodes 2024

Muhammad Usman Saleem Muhammad Jawad Fahad Azad Muhammad Asif Nawaz Waqas Qamar Zaman Waheed Miran
Colloids and Surfaces A: Physicochemical and Engineering Aspects, Volume 681, Article Number 132738

Impact Factor: 5.2 | **Quartile:** 2 | **Citations:** 6
DOI: 10.1016/j.colsurfa.2023.132738

Performance comparison of a photosynthetic and mechanically aerated microbial fuel cell for wastewater treatment and bioenergy generation using different anolytes 2023

Zia Ullah Waqas Qamar Zaman Zeshan Sheikh Muhammad Zeeshan Ali Khan Waheed Miran Jiansheng Li Muhammad Abdul Nasir Khan Shanza Shabbir
Journal of Water Process Engineering, Volume 56, Article Number 104358

Impact Factor: 7.0 | **Quartile:** 1 | **Citations:** 6
DOI: 10.1016/j.jwpe.2023.104358

Nonthermal plasma catalysis using ferrites as an efficient catalyst for toluene degradation 2023

Khurram Shahzad Ayub Zain Abbas Waqas Qamar Zaman Shoaib Rauf Muazzam Arshad Meesam Ali Waheed Miran Umair Mushtaq Haroon Khalid Ji Yang
Research on Chemical Intermediates, Volume 49, Pages 2399-2415

Impact Factor: 3.134 | **Quartile:** 3 | **Citations:** 2
DOI: 10.1007/s11164-023-05010-w

Enhanced toluene degradation using Co3O4 nanorods in post plasma catalysis 2023

Zain Abbas Khurram Shahzad Ayub Waqas Qamar Zaman Ali Shan Ayesha Idrees Mureed Abbas Muhammad Umair Mushtaq Saqlain Abbas Limei Cao Ji Yang
Research on Chemical Intermediates, Pages 1-11

Impact Factor: 3.134 | **Quartile:** 3 | **Citations:** 2
DOI: 10.1007/s11164-023-05025-3

Feasibility Study of Anaerobic Baffled Reactor Coupled with Anaerobic Filter Followed by Membrane Filtration for Wastewater Treatment 2023

Aamir Khan Sher Jamal Khan Waheed Miran Waqas Qamar Zaman Alia Aslam Hafiz Muhammad Aamir Shahzad
Membranes, Volume 13(1), Article Number 79

Impact Factor: 4.562 | **Quartile:** 1 | **Citations:** 6
DOI: https://doi.org/10.3390/membranes13010079

Efficient toluene oxidation by post plasma catalysis over hollow Co3O4 nanospheres 2022

Zain Abbas Khurram Shahzad Ayub Waqas Qamar Zaman Ali Shan Ayesha Idrees Haroon Khalid Muhammad Umair Mushtaq Saqlain Abbas Limei Cao Yang Ji
Research on Chemical Intermediates, Pages 1-14

Impact Factor: 3.134 | **Quartile:** 3 | **Citations:** 3
DOI: 10.1007/s11164-022-04930-3

Efficient post-plasma catalytic degradation of toluene via series of Co–Cu/TiO2 catalysts 2022

Waqas Qamar Zaman Waheed Miran Meesam Ali Zain Abbas Umair Mushtaq Asif Shahzad Ji Yang Khurram Shahzad Ayub
Research on Chemical Intermediates, Pages 1-22

Impact Factor: 3.134 | **Quartile:** 3 | **Citations:** 13
DOI: 10.1007/s11164-022-04805-7

Urchin-like magnetic microspheres for cancer therapy through synergistic effect of mechanical force, photothermal and photodynamic effects 2022

Kai Wu Ali Mohsin Waqas Qamar Zaman Zefei Zhang Wenyan Guan Maoquan Chu Yingping Zhuang Meijin Guo
Journal of Nanobiotechnology, Volume 20, Issue 1, Article Number 224

Impact Factor: 9.429 | **Quartile:** 1 | **Citations:** 22
DOI: 10.1186/s12951-022-01411-y

Woven-fiber microfiltration coupled with anaerobic forward osmosis membrane bioreactor treating textile wastewater: Use of fertilizer draw solutes for direct fertigation 2022

Kamran Manzoor Sher Jamal Khan Aamir Khan Hassam Abbasi Waqas Qamar Zaman

Biochemical Engineering Journal, Volume 181, Article Number 108385

Impact Factor: 3.978 | **Quartile:** 2 | **Citations:** 12

DOI: 10.1016/j.bej.2022.108385

Efficient catalytic degradation of trichloroethylene in persulfate system by Ca-Fe2O3 and Cu-Fe2O3 nanoparticles: Mechanistic insights 2022

Ayesha Idrees Ali Shan Waqas Qamar Zaman Ali Mohsin Zain Abbas Tanvir Shahzad Atif Shakeel Shuguang Lyu

Journal of Environmental Chemical Engineering, Volume 10, Issue 2, Article Number 107196

Impact Factor: 5.909 | **Quartile:** 1 | **Citations:** 15

DOI: 10.1016/j.jece.2022.107196

Kinetically modelled approach of xanthan production using different carbon sources: A study on molecular weight and rheological properties of xanthan 2021

Ali Mohsin Kanagat Akbota Akyliyaevna Waqas Qamar Zaman Muhammad Hammad Hussain Muhammad Zubair Mohsin Sarah al Rashed Xin Tian Xiwei Tian Kistaubayeva Aida Muhammad Tariq Muhammad Salman Haider Imran Mahmood Khan Sobia Niazi Yingping Zhuang Meijin Guo

International Journal of Biological Macromolecules, Volume 193, Pages 1226-1236

Impact Factor: 6.953 | **Quartile:** 1 | **Citations:** 16

DOI: 10.1016/j.ijbiomac.2021.10.163

Removal of levofloxacin from aqueous solution by green synthesized magnetite (Fe3O4) nanoparticles using Moringa olifera: Kinetics and reaction mechanism analysis 2021

Sikandar Altaf Rabeea Zafar Waqas Qamar Zaman Shakil Ahmad KHURRAM YAQOOB Asad Syed Asim Jahangir Khan Muhammad Bilal Muhammad Arshad

Ecotoxicology and Environmental Safety, Volume 226, Article Number 112826

Impact Factor: 6.291 | **Quartile:** 1 | **Citations:** 82

DOI: 10.1016/j.ecoenv.2021.112826

Advances in sustainable approaches utilizing orange peel waste to produce highly value-added bioproducts 2021

Ali Mohsin Muhammad Hammad Hussain Waqas Qamar Zaman Muhammad Zubair Mohsin Junhong Zhang Zebo Liu Xiwei Tian Salim Ur Rehman Imran Mahmood Khan Sobia Niazi Yingping Zhuang Meijin Guo

Critical Reviews in Biotechnology, Pages 1-21

Impact Factor: 8.429 | **Quartile:** 1 | **Citations:** 50

DOI: 10.1080/07388551.2021.2002805

Enhancement in reactivity via sulfidation of FeNi@BC for efficient removal of trichloroethylene: Insight mechanism and the role of reactive oxygen species 2021

Ali Shan Ayesha Idrees Waqas Qamar Zaman Zain Abbas Usmann Farooq Meesam Ali Rumin Yang Guilu Zeng Muhammad Danish Xiagong Gu Shuguang Lyu

Science of the total environment, Volume 794, Article Number 148674

Impact Factor: 7.963 | **Quartile:** 1 | **Citations:** 16

DOI: 10.1016/j.scitotenv.2021.148674

Influence of preparation method on copper ferrite characteristics for the efficient degradation of trichloroethylene in persulfate activated system 2021

Ayesha Idrees Ali Shan Muhammad Danish Waqas Qamar Zaman Ali Mohsin Zain Abbas Jingyao Huang Tanvir Shahzad Yong Sun Zhiqiang Xu Shuguang Lyu

Journal of Environmental Chemical Engineering, Volume 9, Issue 5, Article Number 106044

Impact Factor: 5.909 | **Quartile:** 1 | **Citations:** 13

DOI: https://doi.org/10.1016/j.jece.2021.106044

Development of a novel noninvasive quantitative method to monitor Siraitia grosvenorii cell growth and browning degree using an integrated computer-aided vision technology and machine learning 2021

Xiaofeng Zhu Ali Mohsin Waqas Qamar Zaman Zebo Liu Zejian Wang Zhihong Yu Xiwei Tian Yingping Zhuang Meijin Guo Ju Chu

Biotechnology and Bioengineering, Volume 118, Issue 10, Pages 4092-4104

Impact Factor: 4.53 | **Quartile:** 2 | **Citations:** 8

DOI: 10.1002/bit.27886

Rationally optimized generation of integrated Escherichia coli with stable and high yield lycopene biosynthesis from heterologous mevalonate (MVA) and lycopene expression pathways 2021

Muhammad Hammad Hussain Qi Hong Waqas Qamar Zaman Ali Mohsin Yanlong Wei Ning Zhang Hongqing Fang Zejian Wang Haifeng Hang Yingping Zhuang Meijin Guo

Synthetic and Systems Biotechnology, Volume 6, Issue 2, Page 85-94

Impact Factor: 4.781 | **Quartile:** 1 | **Citations:** 28

DOI: 10.1016/j.synbio.2021.04.001

Catalytic nonthermal plasma using efficient cobalt oxide catalyst for complete mineralization of toluene 2021

Zain Abbas Waqas Qamar Zaman Muhammad Danish Ali Shan Chenlong Ma Khuram Shahzad Ayub Muhammad Tariq Qicheng Shen Limei Cao Ji Yang

Research on Chemical Intermediates, Volume 47, Issue 6, Page 2407-2420

Impact Factor: 2.914 | **Quartile:** 3 | **Citations:** 6

DOI: 10.1007/s11164-021-04406-w

Synthesis of nZVI-Ni@BC composite as a stable catalyst to activate persulfate: Trichloroethylene degradation and insight mechanism 2021

Ali Shan Ayesha Idrees Waqas Qamar Zaman Zain Abbas Meesam Ali Muhammad Saif Ur Rehman Sabir Hussain Muhammad Danish Xiaogang Gu Shuguang Lyu

Journal of Environmental Chemical Engineering, Volume 9, Issue 1, Article Number 104808

Impact Factor: 7.968 | **Quartile:** 1 | **Citations:** 97

DOI: 10.1016/j.jece.2020.104808

Xanthan-Curdlan nexus for synthesizing edible food packaging films 2020

Waqas Qamar Zaman Ali Mohsin Meijin Guo Waheed Ahmed Imran Mehmood Khan Sobia Niazi Abdur Rehman Haifeng Hang Yinping Zhuang

International Journal of Biological Macromolecules, Volume 162, Pages 43-49

Impact Factor: 6.953 | **Quartile:** 1 | **Citations:** 65

DOI: 10.1016/j.ijbiomac.2020.06.008

Lanthanides Regulated Amorphization-Crystallization of IrO2 for Outstanding OER Performance 2020

Chenglong Ma Wei Sun Waqas Qamar Zaman Zhenhua Zhou Hao Zhang Qicheng Shen Limei Cao Ji Yang

ACS Applied Materials and Interfaces , Volume 12, Issue 31, Pages 34980-34989

Impact Factor: 9.229 | **Quartile:** 1 | **Citations:** 64

DOI: 10.1021/acsami.0c08969

Boosted up stability and activity of oxygen vacancy enriched RuO2/MoO3 mixed oxide composite for oxygen evolution reaction 2020

Muhammad Tariq Yiyi Wu Chenglong Ma Meesam Ali Zain Abbas Khurrum Shahzad Ayub Jiacheng Zhou Gehui Wang Limei Cao Ji Yang Waqas Qamar Zaman

International Journal of Hydrogen Energy, Volume 45, Issue 35, Pages 17287-17298

Impact Factor: 5.816 | **Quartile:** 2 | **Citations:** 42

DOI: 10.1016/j.ijhydene.2020.04.101

Cerium Surface Engineered Iridium Oxides for Enhanced Oxygen Evolution Reaction Activity and Stability 2020

Waqas Qamar Zaman Wei Sun Chenglong Ma Jianjun Liao Chengjun Ge Ji yang

ACS Applied Energy Materials , Volume 3, No.5, Pages 4432–4440

Impact Factor: 6.024 | **Quartile:** 2 | **Citations:** 19

DOI: 10.1021/acsaem.0c00139

Influential role of elemental migration in composite iron-zeolite catalyst for aromatics synthesis from syngas 2020

Waqas Qamar Zaman Minzhe Li Muhammad Asif Nawaz GuiYao Song Dianhua Liu

Industrial & Engineering Chemistry Research, Volume 59, No.19, Pages 9043-9054

Impact Factor: 3.764 | **Quartile:** 2 | **Citations:** 39

DOI: 10.1021/acs.iecr.0c01282

Efficient removal of trichloroethylene in surfactant amended solution by nano Fe0-Nickel bimetallic composite activated sodium persulfate process 2020

Waqas Qamar Zaman Ali Shan Usman Farooq Shuguang Lyu Zain Abbas Meesam Ali Ayesha Idrees Ping Tang Ming Li Yong Sun Qian Sui

Chemical Engineering Journal, Volume 386, Article Number 123995

Impact Factor: 13.273 | **Quartile:** 1 | **Citations:** 55

DOI: 10.1016/j.cej.2019.123995

Bimetallic Doped RuO2 with Manganese and Iron as Electrocatalysts for Favorable Oxygen Evolution Reaction Performance 2020

Waqas Qamar Zaman Yiyi Wu Muhammad Tariq Wei Sun Zhenhua Zhou Ji yang

ACS Omega , Volume 5, No.13, Pages 7342–7347

Impact Factor: 3.512 | **Quartile:** 2 | **Citations:** 34

DOI: 10.1021/acsomega.9b04237

Facile synthesis of IrO2 nanoparticles decorated @ WO3 as mixed oxide composite for outperformed oxygen evolution reaction 2019

Waqas Qamar Zaman Muhammad Tariq Yiyi Wu Azeem Nabi Zain Abbas Waheed Iqbal Wei Sun Zhang Hao Zhen Hua Zhou Limei Cao Ji Yang

International Journal of Hydrogen Energy, Volume 44, Issue 59, Pages 31082-31093

Impact Factor: 4.939 | **Quartile:** 2 | **Citations:** 35

DOI: 10.1016/j.ijhydene.2019.10.013

Conference Proceedings

Growth response of wheat and rice to application of Phosphorus based nanocoated-fertilizer 2024

Farwah Yasin Sadia Manzoor Muhammad Arshad Waqas Qamar Zaman

16th International Conference on Sustainable Energy & Environmental Protection SEEP 2024, res.country(12,)

Citations: N/A

DOI: https://seepconference.com/

Book Chapters

Antibacterial Properties of Two-Dimensional Nanomaterials 2023

Elishba Noor Usman Liaqat Waqas Qamar Zaman Sabir Hussain Asif Shahzad Kashif Rasool Zaeem Bin Babar Waheed Miran

In: *Book on Two-Dimensional Materials for Environmental Applications*, 1st Edition, Chapter 5, Pages 137-160

Citations: 3

DOI: 10.1007/978-3-031-28756-5_5