

Zaeem Bin Babar

Assistant Professor

Institute of Environmental Sciences & Engineering

Email: zbabar@iese.nust.edu.pk

Contact:

LinkedIn: <https://www.linkedin.com/in/zaeem-babar-35860b2a/?originalSubdomain=pk>



About

Dr. Zaeem Bin Babar is working as Assistant Professor in the Institute of Environmental Sciences & Engineering. Dr. Zaeem Bin Babar has a PhD in Environmental Engineering. Dr. Zaeem Bin Babar has published 26 research articles & conference papers having a citation count of 320, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Environmental Engineering Kyungpook National University , South Korea	2014 - 2018
MSc in Chemical Engineering American University of Sharjah , United Arab Emirates	2011 - 2013
BSc in Chemical Engineering UET Lahore , Pakistan	2005 - 2009

Experience

Assistant Professor Institute of Environmental Sciences & Engineering	2023- Present
Assistant Professor Institute of Environmental Sciences & Engineering	2022 - 2023
Assistant Professor Institute of Environmental Sciences & Engineering	2022 - 2022
Assistant Professor Institute of Energy & Environmental Engineering, University of the Punjab , Institute of Energy & Environmental Engineering, University of the Punjab, Lahore	2020 - 2022
Post-Doctoral Researcher Department of Environmental Engineering, Kyungpook National University , Department of Environmental Engineering, Kyungpook National University, South Korea	2018 - 2019
Graduate Teaching Assistant Department of Chemical Engineering, American University of Sharjah , Department of Chemical Engineering, American University of Sharjah, UAE	2011 - 2013
Shift Manager (Training) Oxidation Plant, LOTTE Chemical Pakistan, Karachi , Oxidation Plant, LOTTE Chemical Pakistan, Karachi, Pakistan	2009 - 2011

Research Articles

Investigation on the Beneficiation of Fluorite-ore using a mixture of Oleic acid and Palmitic acid via Froth Flotation <i>Aiman Fatima Syed Sheraz Dawood Shafia Inaam Zaeem Bin Babar Ashfaq Ahmed Muhammad Zafar Tahir Maqsood Qaisrani Abdul Razzaq Muhammad Usman Rashid Sunhyung Kim Young-Kwon Park</i> <i>Environmental Engineering Research</i> , Volume 28(3), Article Number 220123 Impact Factor: 3.932 Quartile: 2 Citations: 1 DOI: https://doi.org/10.4491/eer.2022.123	2023
Competitive Removal of Antimony and Humic Acid by Ferric Chloride: Optimization of Coagulation Process Using Response Surface Methodology <i>Muhammad Ali Inam Rizwan Khan Kang Hoon Lee Zaeem Bin Babar Ick Tae Yeom</i> <i>Water</i> , Volume 15(9), Article Number 1676 Impact Factor: 3.530 Quartile: 2 Citations: 5 DOI: https://doi.org/10.3390/w15091676	2023

- Recent advancements in engineered biopolymeric-nanohybrids: A greener approach for adsorptive-remediation of noxious metals from aqueous matrices** 2022
Komal Rizwan Zaeem Bin Babar Shahid Munir Ali Arshad Abdul Rauf
Environmental Research, Volume 215, Part 3, Article Number 114398
Impact Factor: 8.431 | **Quartile:** 1 | **Citations:** 25
DOI: <https://doi.org/10.1016/j.envres.2022.114398>
- Remote sensing of aerosols due to biomass burning over Kanpur, Sao-Paulo, Ilorin and Canberra** 2022
Salman Tariq Zia ul Haq Hasan Nawaz Usman Mehmood Zaeem Bin Babar
Journal of Atmospheric Chemistry, Pages 1-52
Impact Factor: 3.360 | **Quartile:** 3 | **Citations:** 8
DOI: <https://doi.org/10.1007/s10874-022-09444-1>
- A comparative study of thermal and combustion kinetics for raw and bio-chars of eucalyptus wood and bark** 2022
Zaeem Bin Babar Iqra Aziz Rizwan Haider Mahmood Saleem Shahid Munir Hamed Sattar
Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, Volume 44(2), Pages 3313-3329
Impact Factor: 3.447 | **Quartile:** 2 | **Citations:** 5
DOI: <https://doi.org/10.1080/15567036.2022.2062490>
- Integrated energy planning and modeling (IEPM) for sustainable electricity generation in Pakistan: Challenges and limitations** 2022
Sana Bashir Sumaira Kanwal Hassan Zeb Zaeem Bin Babar Asma Majeed
Energy Exploration and Exploitation, Pages 1-31
Impact Factor: 2.139 | **Quartile:** 4 | **Citations:** 7
DOI: <https://doi.org/10.1177/01445987221105098>
- Determination of Volatility Parameters of Secondary Organic Aerosol Components via Thermal Analysis** 2022
Fawad Ashraf Zaeem Bin Babar Jun-Hyun Park Pham Duy Quang Dao Chan Sik Cho Ho-Jin Lim
Atmosphere, Volume 13, Issue 5, Article Number 709
Impact Factor: 2.686 | **Quartile:** 3 | **Citations:** 4
DOI: <https://doi.org/10.3390/atmos13050709>
- Study of bleaching of old newsprint recycled paper: Reproduction of newspaper material** 2021
Hassan Zeb Muhammad Asif Hussain Iftikhar Ahmed Muhammad Sarfraz Akram Bilal Haider Rizwan Haider Zaeem Bin Babar Rana Mujahid Saleem Abuzar Ahsan Iqra Aziz Muhammad Arif
Materials Research Express, Volume 8, Issue 8, Article Number 085305
Impact Factor: 1.620 | **Quartile:** 4 | **Citations:** 6
DOI: <https://doi.org/10.1088/2053-1591/ac1ca9>
- Exploring Volatility Properties of Discrete Secondary Organic Aerosol Constituents of α -Pinene and Polycyclic Aromatic Hydrocarbons** 2020
Zaeem Bin Babar Fawad Ashraf Jun-Hyun Park Pham Duy Quang Dao Chan Sik Cho Ho-Jin Lim
ACS Earth and Space Chemistry, Volume 4(12), Pages 2299-2311
Impact Factor: 3.475 | **Quartile:** 2 | **Citations:** 4
DOI: <https://dx.doi.org/10.1021/acsearthspacechem.0c00210>
- Volatility parameters of secondary organic aerosol components determined using a thermal denuder** 2020
Zaeem Bin Babar Fawad Ashraf Jun-Hyun Park Ho-Jin Lim
Atmospheric Environment, Volume 226, Article Number 117405
Impact Factor: 4.798 | **Quartile:** 1 | **Citations:** 13
DOI: <https://doi.org/10.1016/j.atmosenv.2020.117405>
- Liquid-liquid phase separation in secondary organic aerosol particles produced from α -pinene ozonolysis and α -pinene photooxidation with/without ammonia** 2019
Zaeem Bin Babar Suhan Ham Jae Bong Lee Ho-Jin Lim Mijung Song
Atmospheric Chemistry and Physics, Volume 19(14), Pages 9321-9331
Impact Factor: 5.414 | **Quartile:** 1 | **Citations:** 17
DOI: <https://doi.org/10.5194/acp-19-9321-2019>
- Effects of NO_x on the molecular composition of secondary organic aerosol formed by the ozonolysis and photooxidation of α -pinene** 2017
Zaeem Bin Babar Jun-Hyun Park Sun Jong Baek Hyun Sik Kim Ho-Jin Lim
Atmospheric Environment, Volume 166, Page 263-275

Impact Factor: 3.708 | **Quartile:** 1 | **Citations:** 25
DOI: <http://dx.doi.org/10.1016/j.atmosenv.2017.07.022>

Influence of NH₃ on secondary organic aerosols from the ozonolysis and photooxidation of α -pinene in a flow reactor

2017

Zaeem Bin Babar Jun-Hyun Park Ho-Jin Lim
Atmospheric Environment, Volume 164, Pages 71-84
Impact Factor: 3.708 | **Quartile:** 1 | **Citations:** 55
DOI: <http://dx.doi.org/10.1016/j.atmosenv.2017.05.034>

Elevated production of NH₄NO₃ from the photochemical processing of vehicle exhaust: Implications for air quality in the Seoul Metropolitan Region

2017

Michael F. Link Jounghwa Kim Gyutae Park Taehyoung Lee Taehyun Park Zaeem Bin Babar Kijae Sung Pilho Kim Seokwon Kang Jeong Soo Kim Yongjoo Choi Jihawn Son Ho-Jin Lim Delphine K. Farmer
Atmospheric Environment, Volume 156, Pages 95-101
Impact Factor: 3.708 | **Quartile:** 1 | **Citations:** 62
DOI: <http://dx.doi.org/10.1016/j.atmosenv.2017.02.031>

Characterization of a smog chamber for studying formation and physicochemical properties of secondary organic aerosol

2016

Zaeem Bin Babar Jun-Hyun Park Jia Kang Ho-Jin Lim
Aerosol and Air Quality Research, Volume 16, Issue 12, Pages 3102-3113
Impact Factor: 2.606 | **Quartile:** 2 | **Citations:** 28
DOI: 10.4209/aaqr.2015.10.0580

Removal of Lead (II) Ions from Aqueous Solution Using Eggplant Peels Activated Charcoal

2015

Zaeem Bin Babar Taleb H. Ibrahim Mustafa I. Khamis
Separation Science and Technology, Volume 50(1), Pages 91-98
Impact Factor: 1.083 | **Quartile:** 3 | **Citations:** 11
DOI: 10.1080/01496395.2014.948558

Management and control of air emissions from electronic industries

2014

Zaeem Bin Babar Zarook Shareefdeen
Clean Technologies and Environmental Policy, Volume 16, Pages 69-77
Impact Factor: 1.934 | **Quartile:** 2 | **Citations:** 22
DOI: <https://doi.org/10.1007/s10098-013-0594-6>

Conference Proceedings

- Exploring The Potential of Secondary Particulate Formation from The Photochemical Degradation of Amines Employed for Co2 Capture** 2021
Zaeem Bin Babar Hamed Sattar Rizwan Haider Hassan Zeb Azam Saeed Abdul Razzak Aimen Fatima
Advances in Chemical Engineering and Science (ICACES-2021), res.country(177,)
Citations: N/A
DOI: Not Applicable
- Investigation Of Kinetic and Thermodynamic Parameter of Sapodilla Leaves Pyrolysis by using Coats Redfern Method** 2021
Zaeem Bin Babar Muhammad Asif Muhammad A. Hussain Asif N. Tabish Hamed Sattar Muhammad K. Khan Rana Mujahid Asim Riaz Hassan Zeb
International Conference on Energy, Water and Environment – ICEWE-2021, res.country(177,)
Citations: N/A
DOI: Not Applicable
- Investigating So2, Nox, Co2 And Particulate Emissions from Pulverized Combustion of Coal Blends using Drop Tube Furnace** 2021
Zaeem Bin Babar Shaukat Abbas Muhammad Asif Hussain Azam Saeed Muhammad Kashif Khan Hassan Zeb
International Conference on Energy, Water and Environment – ICEWE-2021, res.country(177,)
Citations: N/A
DOI: Not Applicable
- Optimizing Design and Process Parameters to Improve Thermal Efficiency of Domestic Gas Stove Burners** 2021
Zaeem Bin Babar Ali Waqas Rana Mujahid Aimen Fatima Muhammad Sarfraz Akram Rizwan Haider Hamed Sattar Hassan Zeb
International Conference on Energy Water and Environment ICEWE-2021, res.country(177,)
Citations: N/A
DOI: not applicable

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
- Organic-Inorganic Nanohybrids in Fuel Cell Applications** 2022
Abdul Rauf Mashhood Urfi Zaeem Bin Babar Shahid Iqbal Komal Rizwan
In: *Hybrid Nanomaterials Biomedical, Environmental and Energy Applications*, 1st Edition, Chapter 20, Pages 445-459
Citations: N/A
DOI: 10.1007/978-981-19-4538-0_20
- Organic-Inorganic Nanohybrids for the Removal of Environmental Pollutants** 2022
Zaeem Bin Babar Ariha Sahi Abdul Rauf Hamed Sattar Komal Rizwan
In: *Hybrid Nanomaterials: Biomedical, Environmental and Energy Applications*, 1st Edition, Chapter 13, Pages 277-309
Citations: 2
DOI: https://doi.org/10.1007/978-981-19-4538-0_13
- Application of Organic-Inorganic Nanohybrids in Wastewater Treatment** 2022
Azka Abdur Rehman Zaeem Bin Babar Shahid Munir Mashhood Urfi Sumaira Kanwal Muhammad Naeem Ashraf Komal Rizwan
In: *Book on Hybrid Nanomaterials: Biomedical, Environmental and Energy Applications*, 1st Edition, Chapter 12, Pages 247-275
Citations: 14
DOI: 10.1007/978-981-19-4538-0_12
- Conventional and Emerging Practices in Hazardous Waste Management** 2022
Zaeem Bin Babar Rizwan Haider Hamed Sattar
In: *Book on Hazardous Waste Management*, 1 Edition, Chapter 3, Pages 57-93
Citations: 3
DOI: https://doi.org/10.1007/978-3-030-95262-4_3

Editorial Activities

International Journal of Environmental Research and Public Health Reviewed Papers for Journals Impact Factor: 4.614	2022
Sustainability Reviewed Papers for Journals Impact Factor: 3.889	2022
Energies Reviewed Papers for Journals Impact Factor: 3.252	2022
Atmosphere Reviewed Papers for Journals Impact Factor: 3.110	2022
Applied Sciences-Basel Reviewed Papers for Journals Impact Factor: 2.838	2022
Atmosphere Reviewed Papers for Journals Impact Factor: 3.110	2022
Atmosphere Reviewed Papers for Journals Impact Factor: 3.110	2022
Energies Reviewed Papers for Journals Impact Factor: 3.252	2022
Atmosphere Reviewed Papers for Journals Impact Factor: 3.110	2022
Atmosphere Reviewed Papers for Journals Impact Factor: 3.110	2022
Atmosphere Reviewed Papers for Journals Impact Factor: 3.110	2022