Dr. Nouman Ahmad

Assistant Professor

School of Chemical & Materials Engineering

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Contact:

About

Dr. Dr. Nouman Ahmad is working as Assistant Professor in the School of Chemical & Materials Engineering. Dr. Dr. Nouman Ahmad has a PhD in Computational fluid dynamics. Dr. Dr. Nouman Ahmad has published 19 research articles & conference papers having a citation count of 272, carried out 1 projects and filed 0 intellectual property.

Qualifications

PhD in Computational fluid dynamics 2014 - 2019

University of the Chinese Academy of Sciences , China

MS in Chemical Engineering 2011 - 2014

Beijing University of Chemical Technology , China

BS in Chemical Engineering 2005 - 2010

University of the Punjab , Pakistan

Experience

Assistant Professor 2025- Present

School of Chemical & Materials Engineering

Assistant Professor 2024 - 2024

School of Chemical & Materials Engineering

Assistant Professor 2021 - 2024

School of Chemical & Materials Engineering

Assistant Professor 2019 - 2021

Xian Jiaotong University , Xian, China

Industry Projects

National Projects

Lab scale production of Zeolite 4A from indigenous coal fly-ash obtained from Coal-fired Power plant 2022

Client: Industry

Amount: PKR 2,500,000.00

Status: Approved_inprocess

International Projects

Research Articles

Carbon Dioxide Adsorption by Amine-Functionalized Silicalite-1 Zeolite: Impact of Amination on Surface Properties and Adsorption Efficiency 2024

Abdullah Umair Ameen Shahid Nabeel Ahmad Dr. Nouman Ahmad Dalaver Hussain Anjum

Case Studies in Chemical and Environmental Engineering, Volume 10, Article Number 101028

Impact Factor: N/A | **Citations:** 4

DOI: https://doi.org/10.1016/j.cscee.2024.101028

CFD modeling of CO2 capture in a non-isothermal circulating fluidized bed riser using K2CO3 solid sorbent 2024

Amolwan Sornvichai Muhammad Adnan Nouman Ahmad Ratchanon Piemjaiswang Pornpote Piumsomboon Benjapon Chalermsinsuwan

Journal of Environmental Chemical Engineering, Volume 12, Issue 6, Article Number 114247

Impact Factor: 7.400 | **Quartile:** 1 | **Citations:** 1

DOI: doi.org/10.1016/j.jece.2024.114247

Sensitivity analysis of a dense discrete phase model for 3D simulations of a Tapered fluidized bed 2024

Muhammad Adnan Nouman Ahmad Pornpote Piumsomboon Benjapon Chalermsinsuwan

Particuology , Volume:94, Page:59-83

Impact Factor: 4.1 | **Quartile:** 2

DOI: 10.1016/j.partic.2024.07.019

Integrative CFD and AI/ML-based modeling for enhanced alkaline water electrolysis cell performance for hydrogen production 2024

Abdullah Sirat Sher Ahmad Iftikhar Ahmad Nouman Ahmad Muhammad Ahsan

International Journal of Hydrogen Energy, Volume 83, Pages 1120-1131

Impact Factor: 8.100 | **Quartile:** 1 | **Citations:** 5

DOI: https://doi.org/10.1016/j.ijhydene.2024.08.184

NH3-SCR over Fe/SSZ-13 catalyst prepared by modification of natural chabazite 2024

Ameen Shahid Nabeel Ahmad Dr. Nouman Ahmad Sher Ahmed

Case Studies in Chemical and Environmental Engineering, Volume 10 , Article Number 100842

Impact Factor: N/A

DOI: https://doi.org/10.1016/j.cscee.2024.100842

Coarse-graining dense discrete phase model for modeling particle dynamics in a 3D tapered fluidized bed coater: Analysis of different drag models 2024

Nouman Ahmad Muhammad Adnan Pornpote Piumsomboon Benjapon Chalermsinsuwan

Journal of Food Engineering, Volume 365, Article Number 111831

Impact Factor: 5.5 | **Quartile:** 1 | **Citations:** 7

DOI: https://doi.org/10.1016/j.jfoodeng.2023.111831

Aging prediction in single based propellants using hybrid strategy of machine learning and genetic algorithm 2024

Faizan Khalid Muhammad Nouman Aslam Khan Muhammad Abdaal Ghani Nouman Ahmad Abdullah Khurram Sattar

Chemometrics and Intelligent Laboratory Systems, Volume 245, Article Number 105058

Impact Factor: 3.9 | **Quartile:** 1 | **Citations:** 7

DOI: https://doi.org/10.1016/j.chemolab.2023.105058

Effect of zinc oxide and zinc oxide nanoparticles coating on urea diffusion and its release kinetics for design and development of slow-release fertilizer: an experimental and numerical investigation 2023

Bilal Beig Muhammad Bilal Khan Niazi Baseer Ullah Ahmed Nadeem Gondal Zaib Jahan Munir Zia Nouman Ahmad

Journal of Coatings Technology and Research, Pages 1-15

Impact Factor: 2.3 | **Quartile:** 3 | **Citations:** 10

DOI: https://doi.org/10.1007/s11998-023-00810-6

Wood as a green and sustainable alternative for environmentally friendly & flexible electronic devices 2023

Nouman Ahmed Hizbullah Malik Muhammad Bilal Khan Niazi Waheed Miran Ahmed M. Tawfeek Zaib Jahan Emadeldin M. Kamel Muhammad Saeed Akhtar

Chemosphere , Volume 336, Article Number 139213

Impact Factor: 8.8 | **Quartile:** 1 | **Citations:** 10

DOI: 10.1016/j.chemosphere.2023.139213

Numerical investigation for the suitable choice of bubble diameter correlation for EMMS/bubbling drag model 2022

Nouman Ahmad Jianqiang Deng Muhammad Adnan

Chinese Journal of Chemical Engineering, Volume 47, Pages 254-270

Impact Factor: 3.898 | **Quartile:** 2 | **Citations:** 5

DOI: https://doi.org/10.1016/j.cjche.2021.10.006

Validation and sensitivity analysis of an Eulerian-Eulerian two-fluid model (TFM) for 3D simulations of a tapered fluidized bed 2022

Muhammad Adnan Jie Sun Nouman Ahmad Jin Jia Wei

Powder Technology , Volume 396, Pages 490-518

Impact Factor: 5.640 | **Quartile:** 1 | **Citations:** 34

DOI: 10.1016/j.powtec.2021.08.057

Comparative CFD modeling of a bubbling bed using a Eulerian–Eulerian two-fluid model (TFM) and a Eulerian-Lagrangian dense discrete phase model (DDPM) 2021

Muhammad Adnan Jie Sun Nouman Ahmad Jin Jia Wei

Powder Technology , Volume 383, Pages 418-442

Impact Factor: 5.640 | **Quartile:** 1 | **Citations:** 66

DOI: https://doi.org/10.1016/j.powtec.2021.01.063

Verification and validation of the DDPM-EMMS model for numerical simulations of bubbling, turbulent and circulating fluidized beds 2021

Muhammad Adnan Jie Sun Nouman Ahmad Jin Jia Wei

Powder Technology , Volume 379, Pages 69-88

Impact Factor: 5.640 | **Quartile:** 1 | **Citations:** 24

DOI: https://doi.org/10.1016/j.powtec.2020.10.041

Multiscale modeling of bubbling fluidized bed reactors using a hybrid Eulerian-Lagrangian dense discrete phase approach 2020

Muhammad Adnan Jie Sun Nouman Ahmad Jin Jia Wei

Powder Technology , Volume 376, Pages 296-319

Impact Factor: 5.134 | **Quartile:** 1 | **Citations:** 13

DOI: https://doi.org/10.1016/j.powtec.2020.07.111

Hydrodynamics in commercial-scale internally circulating fluidized beds with different central downcomer outlets 2020

Zhenliang Meng Mengxi Liu Nouman Ahmad Wei Wang Chunxi Lu

Particuology , Volume 51, Pages 120-131

Impact Factor: 3.067 | **Quartile:** 2 | **Citations:** 3

DOI: https://doi.org/10.1016/j.partic.2019.09.007

Energy-minimization multiscale based mesoscale modeling and applications in gas-fluidized catalytic reactors 2019

Bona Lu Niu Yan Feiguo Chen Nouman Ahmad Wang Wei Jinghai Li

Reviews in Chemical Engineering, Volume 35, No. 8, Pages 879-915

Impact Factor: 5.315 | **Quartile:** 1 | **Citations:** 34

DOI: https://doi.org/10.1515/revce-2017-0023

Extending the EMMS-bubbling model to fluidization of binary particle mixture: Parameter analysis and model validation 2019

Nouman Ahmad Ying Tong Bona Lu Wei Wang

Chemical Engineering Science , Volume 200, Pages 257-267

Impact Factor: 3.871 | **Quartile:** 1 | **Citations:** 24

DOI: https://doi.org/10.1016/j.ces.2019.02.016

Extending the EMMS/bubbling model to fluidization of binary particle mixture: Formulation and steady-state validation 2019

Nouman Ahmad Yujie Tian Bona Lu Kun Hong Haifeng Wang Wei Wang

Chinese Journal of Chemical Engineering, Volume 27, Issue 1, Pages 54-62

Impact Factor: 2.627 | **Quartile:** 2 | **Citations:** 17

DOI: https://doi.org/10.1016/j.cjche.2018.04.011

Ru55 nanoparticles catalyze the dissociation of H2O monomer and dimer to produce hydrogen: A comparative DFT study 2016

Ping Cheng Yongpeng Yang Nouman Ahmad Shengli Zhang Shiping Huang

International Journal of Hydrogen Energy, Volume 41, Issue 6, Pages 3844-3853

Impact Factor: 3.582 | **Quartile:** 1 | **Citations:** 8

DOI: https://doi.org/10.1016/j.ijhydene.2016.01.017