Muhammad Ahsan

Associate Professor

School of Chemical & Materials Engineering

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About

Dr. Muhammad Ahsan is working as Associate Professor in the School of Chemical & Materials Engineering. Dr. Muhammad Ahsan has a PhD in Energetic Materials Engineering. Dr. Muhammad Ahsan has published 63 research articles & conference papers having a citation count of 612, carried out 3 projects and filed 0 intellectual property.

Qualifications

PhD in Energetic Materials Engineering 2011 - 2016
NUST, Islamabad , Pakistan

MS in Energetic Materials Engineering 2008 - 2010
NUST, Islamabad , Pakistan

BS in Mathematics 2004 - 2008
BZU, Multan , Pakistan

Experience

Associate Professor 2022- Present
School of Chemical & Materials Engineering

Assistant Professor 2022 - 2022
School of Chemical & Materials Engineering

Assistant Professor 2017 - 2022
School of Chemical & Materials Engineering

TVF 2011 - 2017
National University of Sciences and Technology , NUST H-12 Islamabad Pakistan

Awards

Research Projects

National Projects

4th ASEAN-Pakistan Conference on Materials Science (APCoMS 2025) 2025
Funding Agency: ASEAN Pakistan Collaboration Fund
Amount: PKR 24,780,568.00
Status: Approved_inprocess

Fabrication of fluidized bed experimental system 2021
Funding Agency: NUST
Amount: PKR 300,000.00
Status: Completed

Numerical Analysis of Combustion Dynamics for Coal Gasification 2017
Funding Agency: HEC
Amount: PKR 303,000.00
Status: Completed

International Projects

Research Articles

Experimental validation and optimization of bendable linear shaped charges with degressive explosive thickness for aerospace and defense applications 2025

Muhammad Soulaman Khan Muhammad Ahsan Sarah Farrukh Iftikhar Ahmad Erum Pervaiz Abdul Qadeer Malik

Journal of Energetic Materials, 1-33

Impact Factor: 1.700 | **Quartile:** 3

DOI: https://doi.org/10.1080/07370652.2025.2495558

Computational Analysis of Catalytic Combustion Using Finite Volume Method (FVM): Advantages, Constraints, and Potential Applications 2025

Muhammad Ahsan Muhammad Farhan Rafi

Engineering Proceedings, Volume 67(1), Article Number 89

Impact Factor: N/A

DOI: https://doi.org/10.3390/engproc2024067089

Quantification of Impact of Uncertainty on Emissions in a Cement Manufacturing Plant: Surrogate Modeling-Based Approach 2025

Muhammad Usman Iftikhar Ahmad Manabu Kano Farooq Ahmad Muhammad Ahsan

ACS Omega, Volume:10, Issue:9, Pages 9453-9462

Impact Factor: 3.700 | **Quartile:** 2

DOI: https://doi.org/10.1021/acsomega.4c10194

Development and Evaluation of User-Friendly Modeled Approach for Sustainable Polymer Membranes for Advanced Hemodialysis 2025

Ahmed Khan Zaib Jahan Muhammad Ahsan Muhammad Bilal Khan Niazi Muhammad Nouman Aslam Khan Ahmed Sayed M. Metwally Farooq Sher

Advanced Materials Interfaces, Volume:12, Issue:1, Article Number 2400435

Impact Factor: 4.300 | **Quartile:** 2

DOI: https://doi.org/10.1002/admi.202400435

Computational Fluid Dynamics Simulation and Analysis of Non-Newtonian Drilling Fluid Flow and Cuttings Transport in an Eccentric Annulus 2024

Muhammad Ahsan Shah Fahad Muhammad Shoaib Butt

Mathematics, Volume:13, Issue:1, Article Number 101

Impact Factor: 2.300 | **Quartile:** 1

DOI: https://doi.org/10.3390/math13010101

Improving Internal Combustion Engine Performance through Inlet Valve Geometry and Spray Angle Optimization: Computational Fluid Dynamics Study 2024

Muhammad Ahsan Mian Noman

Engineering Proceedings, Volume 72(1), Article Number 6

Impact Factor: N/A

DOI: https://doi.org/10.3390/engproc2024072006

Grey-box modelling for estimation of optimum cut point temperature of crude distillation column 2024

Junaid Shahzad Iftikhar Ahmad Muhammad Ahsan Farooq Ahmad Husnain Saghir Manabu Kano Hakan Caliskan Hiki Hong

CAAI Transactions on Intelligence Technology, Pages 1-15

Impact Factor: 8.4 | **Quartile:** 1 | **Citations:** 1

DOI: https://doi.org/10.1049/cit2.12386

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

Prediction and optimization of emissions in cement manufacturing plant under uncertainty by using artificial intelligence-based surrogate modeling 2024

Muhammed Usman Iftikhar Ahmad Muhammad Ahsan Hakan Caliskan

Environment Development and Sustainability, Pages 1-25

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

DOI: 10.1007/s10668-024-05068-5

Free-Flowing Polymer-Bonded Powder Composition of Hexahydro-1,3,5-trinitro-1,3,5-triazine using Solvent-Slurry Coating 2024

Muhammad Soulaman Khan Muhammad Ahsan Sarah Farrukh Erum Pervaiz Abdul Qadeer Malik

Polymers , Volume 16(6), 841

Impact Factor: 5.0 | **Quartile:** 1 | **Citations:** 1

DOI: doi.org/10.3390/polym16060841

Influence of distributor plate design on mixing characteristics of rice husk biomass in a bubbling fluidized bed gasifier: An experimental and CFD study 2024

Naveed Raza Muhammad Ahsan

Fuel , Volume 358, Part A, Article Number 129893

Impact Factor: 7.4 | **Quartile:** 1 | **Citations:** 6

DOI: https://doi.org/10.1016/j.fuel.2023.129893

Optimizing Design and Operational Parameters for Enhanced Mixing and Hydrodynamics in Bubbling Fluidized Bed Gasifiers: An Experimental and CFD-based Approach 2023

Naveed Raza Rifat Mehdi Muhammad Ahsan Muhammad Taqi Mehran Salman Raza naqvi Emad UdDin

Applied Sciences , Volume: 13, Issue: 16, Article Number:9317

Impact Factor: 2.7 | **Quartile:** 2

DOI: https://doi.org/10.3390/app

Computational Fluid Dynamics Analysis of a Hollow Fiber Membrane Module for Binary Gas Mixture 2023

Salman Qadir Muhammad Ahsan Arshad Hussain

Gases , Volume 3(2), Pages 77-91

Impact Factor: 0 | **Citations:** 3

DOI: https://doi.org/10.3390/gases3020005

Optimization based comparative study of machine learning methods for the prediction of bio-oil produced from microalgae via pyrolysis 2023

Hafeez Ullah Zeeshan Ul Haq Muhammad Nouman Aslam Khan Salman Raza Naqvi Muhammad Ahsan Jiawei Wang

Journal of Analytical and Applied Pyrolysis, Volume 170, ID:105879

Impact Factor: 6.437 | **Quartile:** 1 | **Citations:** 36

DOI: 10.1016/j.jaap.2023.105879

Study of ferroelectric and piezoelectric response of heat-treated surfactant-based BaTiO3 nanopowder for high energy capacitors 2023

Gulraiz Tanvir Mohsin Saleem Hamid Jabbar Amir Hamza Muhammad Asif Hussain Muhammad Zubair Khan Abrar H. Baluch Muhammad Irfan Muhammad Shoaib Butt Faysal Naeem Abdul Ghaffar Muhammad Ahsan Muhammad Asif Rafiq Rizwan Ahmed Malik Adnan Maqbool

Materials Science and Engineering B , Volume 287, Article Number 116100

Impact Factor: 3.407 | **Quartile:** 2 | **Citations:** 9

DOI: https://doi.org/10.1016/j.mseb.2022.116100

Prediction of optimum operating conditions of a furnace under uncertainty: An integrated framework of artificial neural network and genetic algorithm 2022

Muzammil Khan Iftikhar Ahmad Muhammad Ahsan Manabu Kano Hakan Caliskan

Fuel , Volume 330, Article Number 125563

Impact Factor: 8.035 | **Quartile:** 1 | **Citations:** 20

DOI: https://doi.org/10.1016/j.fuel.2022.125563

An intelligent sensing system for estimation of efficiency of carbon-capturing unit in a cement plant 2022

Usman Khan Jadoon Iftikhar Ahmad Tayyaba Noor Manabu Kano Hakan Caliskan Muhammad Ahsan

Journal of Cleaner Production, Volume 377, Article Number 134359

Impact Factor: 11.1 | **Quartile:** 1 | **Citations:** 11

DOI: https://doi.org/10.1016/j.jclepro.2022.134359

Model analysis on effect of temperature on the solubility of recycling of Polyethylene Terephthalate (PET) plastic 2022

Syed Shujaat Karim Sarah Farrukh Takeshi Matsuura Muhammad Ahsan Arshad Hussain Sehar Shakir Lai Fatt Chuah Mudassir Hasan Awais Bokhari

Chemosphere , Volume 307, Part 3, Article Number 136050

Impact Factor: 8.943 | **Quartile:** 1 | **Citations:** 31

DOI: https://doi.org/10.1016/j.chemosphere.2022.136050

Hydrogen production optimization from sewage sludge supercritical gasification process using machine learning methods integrated with genetic algorithm 2022

Zeeshan Ul Haq Hafeez Ullah Muhammad Nouman Aslam Khan Salman Raza Naqvi Muhammad Ahsan

Chemical Engineering Research and Design, Volume 184, Pages 614-626

Impact Factor: 4.119 | **Quartile:** 2 | **Citations:** 59

DOI: https://doi.org/10.1016/j.cherd.2022.06.020

Comparative hydrodynamics study of fluidized bed gasifier incorporating static and rotating air distributor plates: A CFD approach 2022

Naveed Raza Muhammad Ahsan Muhammad Taqi Mehran Salman Raza Naqvi Iftikhar Ahmad

Powder Technology , Volume 405, Article Number 117500

Impact Factor: 5.134 | **Quartile:** 1 | **Citations:** 10

DOI: https://doi.org/10.1016/j.powtec.2022.117500

Process modeling and simulation of ethylene oxide production by implementing pinch and cost analysis 2022

Muhammad Mubashir Muhammad Ahsan Iftikhar Ahmad Muhammad Nouman Aslam Khan

Ain Shams Engineering Journal, Volume 13, Issue 3, Pages 101585 (1-9)

Impact Factor: 3.180 | **Quartile:** 2 | **Citations:** 8

DOI: https://doi.org/10.1016/j.asej.2021.09.012

Improved super capacitive performance of hydrothermally developed Mn and Ni oxides along with activated carbon as ternary nanocomposite 2022

Faiza Khalid Mohsin Saleem Hamid Jabbar Muhammad Gulraiz Tanvir Muhammad Shoaib Butt Abrar H. Baluch Abdul Ghaffar Muhammad Ahsan Rizwan Ahmed Malik Umit Alver Hussein Alrobei Zab dur Rehman Meshal Alzaid Muhammad Zubair Khan

Journal of Physics and Chemistry of Solids, Volume 161, Article Number 110467

Impact Factor: 3.995 | **Quartile:** 2 | **Citations:** 11

DOI: https://doi.org/10.1016/j.jpcs.2021.110467

Process Modeling, Optimization and Cost Analysis of a Sulfur Recovery Unit by Applying Pinch Analysis on the Claus Process in a Gas Processing Plant 2021

Muhammad Arslan Zahid Muhammad Ahsan Iftikhar Ahmad Muhammad Nouman Aslam Khan

Mathematics , Volume 10, Issues 1, Article Number 88

Impact Factor: 2.592 | **Quartile:** 1 | **Citations:** 13

DOI: https:// doi.org/10.3390/math10010088

Design and Development of a Computational Tool for a Dialyzer by Using Computational Fluid Dynamic (CFD) Model 2021

Tuba Yaqoob Muhammad Ahsan Sarah Farrukh Iftikhar Ahmad

Membranes , Volume 11, Issues 12, Article Number 916

Impact Factor: 4.106 | **Quartile:** 2 | **Citations:** 3

DOI: https://doi.org/10.3390/membranes11120916

Model-Based Quality, Exergy, and Economic Analysis of Fluidized Bed Membrane Reactors 2021

Tabassam Nafees Adnan Ahmed Bhatti Usman Khan Jadoon Farooq Ahmad Iftikhar Ahmad Manabu Kano Brenno Castrillon Menezes Muhammad Ahsan Naveed ul Hasan Syed

Membranes , Volume 11, Issues 10, Article Number 765

Impact Factor: 4.106 | **Quartile:** 2 | **Citations:** 4

DOI: doi.org/10.3390/membranes11100765

Computational Analysis of the Hydrodynamic Behavior for Different Air Distributor Designs of Fluidized Bed Gasifier 2021

Naveed Raza Muhammad Ahsan Muhammad Taqi Mehran Iftikhar Ahmad Salman Raza Naqvi

Frontiers in Energy Research, Volume 9, Issues 1, Article Number 692066

Impact Factor: 4.008 | **Quartile:** 2 | **Citations:** 17

DOI: https://doi.org/10.3389/fenrg.2021.692066

Performance Analysis of Blended Membranes of Cellulose Acetate with Variable Degree of Acetylation for CO2/CH4 Separation 2021

Sarrah Farrukh Mohd Hafiz Dzarfan Othman Arshad Hussain Imran Ullah Khan Mohd Hafiz Dzarfan Othman Ayesha Raza Mohd Hafiz Dzarfan Othman Muhammad Ahsan

Membranes , Volume 11, Issue 4, Article Number 245

Impact Factor: 4.562 | **Quartile:** 1 | **Citations:** 19

DOI: https://doi.org/10.3390/membranes11040245

Computational Fluid Dynamics (CFD) Modeling and Simulation of Flow Regulatory Mechanism in Artificial Kidney Using Finite Element Method 2020

Tuba Yaqoob Muhammad Ahsan Arshad Hussain Iftikhar Ahmad

Membranes , Volume 10, Issue no. 7, Article 139

Impact Factor: 4.106 | **Quartile:** 1 | **Citations:** 11

DOI: 10.3390/membranes10070139

Computational Fluid Dynamics (CFD) simulation for the prediction of the venturi scrubber performance using Finite Volume Method 2020

Attaullah Muhammad Bilal Khan Niazi Muhammad Ahsan Majid Ali

International Journal of Computing Science and Mathematics, Volume 11, Issue 4, Pages 338-346

Impact Factor: - | **Citations:** 2

DOI: 10.1504/IJCSM.2020.107601

Computational Fluid Dynamics Analysis of Compressible Flow Through a Converging-Diverging Nozzle using the k-ε Turbulence Model 2020

Muhammad Waqas Khaid Muhammad Waqas Khaid Muhammad Ahsan

Engineering, Technology & Applied Science Research, Volume 10 Issue 1 Pages 5180-5185

Impact Factor: -

DOI: https://www.etasr.com/index.php/ETASR/article/view/3140/0

Jute Based Bio and Hybrid Composites and Their Applications 2019

Muhammad Taqi Mehran Muhammad Ahsan Ashraf Mohammed Zwawi Ramesh Kanthasamy Ali Bahadar

Fibers , Volume 7, Issue 9, Article Number 77

Impact Factor: 0 | **Citations:** 79

DOI: 10.3390/fib7090077

A Computational Fluid Dynamics Approach for the Modeling of Gas Separation in Membrane Modules 2019

Salman Qadir Arshad Hussain Muhammad Ahsan

Processes , Volume 7, Issue 7, Article Number 420

Impact Factor: 2.753 | **Quartile:** 2 | **Citations:** 25

DOI: 10.3390/pr7070420

A computational fluid dynamics (CFD) approach for the modeling of flux in a polymeric membrane using finite volume method 2019

Muhammad Ahsan Arshad Hussain

Mechanics and Industry , Volume: 18 Issue: 4

Impact Factor: 0.874 | **Quartile:** 4 | **Citations:** 6

DOI: 10.1051/meca/2017011

Numerical analysis of a gas separation of CH4/CO2 using hollow fiber membrane module 2018

Salman Qadir Muhammad Ahsan Arshad Hussain

Sigma Journal of Engineering and Natural Sciences, NULL

Impact Factor: 0

DOI: http://eds.yildiz.edu.tr/AjaxTool/GetArticleByPublishedArticleId?PublishedArticleId=2623

Computational Fluid Dynamics (CFD) Analysis of Phthalic Anhydride's Yield Using Lab Synthesized and Commercially Available (V2O5/TiO2) Catalyst 2018

Ali Sarosh Arshad Hussain Erum Pervaiz Muhammad Ahsan

Engineering Technology & Applied Science Research, Volume 8, No. 2, Pages 2821-2826

Impact Factor: -

DOI: https://etasr.com/index.php/ETASR/article/view/1954

A Numerical Comparison of Soave Redlich Kwong and Peng-Robinson Equations of State for Predicting Hydrocarbons? Thermodynamic Properties 2018

Bilal Hussain Muhammad Ahsan

Engineering Technology & Applied Science Research, Vol. 8, No. 1, 2018, 2422-2426

Impact Factor: 0

DOI: https://etasr.com/index.php/ETASR/article/view/1644

Computational fluid dynamics based model development and exergy analysis of naphtha reforming reactors 2017

Jawad Mustafa Manabu Kano Iftikhar Ahmad Muhammad Ahsan

International Journal of Exergy, Vol. 24, No. 2-4, Pages:344-363

Impact Factor: 0.993 | **Quartile:** 4 | **Citations:** 9

DOI: 10.1504/IJEX.2017.087696

Numerical Analysis Of Flash Calculation Using Soave Redlich-Kwong Equation Of State With Matlab 2017

Bilal Hussain Muhammad Ahsan

Sigma Journal Of Engineering And Natural Sciences-Sigma Muhendislik Ve Fenbilimleri Dergisi, NULL

Impact Factor: 0

DOI: http://eds.yildiz.edu.tr/AjaxTool/GetArticleByPublishedArticleId?PublishedArticleId=2466

Computational Fluid Dynamics (CFD) Simulation and Comparison for Different Numbers of Baffles to Reduce Concentration Polarization Effects in Membrane Tubes 2017

Muhammad Ahsan Arshad Hussain

Journal of Engineering and Technological Sciences, Volume 49, Issue 1, Pages 114-131

Impact Factor: 0 | **Citations:** 5

DOI: 10.5614/j.eng.technol.sci.2017.49.1.7

Development Of User-defined Extension For The Simulation Of Membrane Process In Aspen Hysys 2017

Muhammad Ahsan Olivia Meyonette Sweeney Arshad Hussain

Sigma Journal of Engineering and Natural Sciences-Sigma Muhendislik Ve Fen Bilimleri Dergisi, Volume 35, Issue 1, Pages 35-45

Impact Factor: 0

Computational Fluid Dynamics (CFD) Modeling of Heat Transfer in a Polymeric-Membrane using Finite Volume Method 2016

Muhammad Ahsan Arshad Hussain

Journal of Thermal Science, Volume 25, Issue 6, Pages 564-570

Impact Factor: 0.678 | **Quartile:** 4 | **Citations:** 11

DOI: 10.1007/s11630-016-0899-y

Mathematical modelling of membrane gas separation using the finite difference method 2016

Muhammad Ahsan Arshad Hussain

Pacific Science Review A: Natural science and engineering, Pacific Science Review A: Natural science and engineering, Volume 18, Issue 1, Pages 47–52, January 2016

Impact Factor: 0

DOI: http://dx.doi.org/10.1016/j.psra.2016.07.001

Prediction of gasoline yield in a fluid catalytic cracking (FCC) riser using k-epsilon turbulence and 4-lump kinetic models: A computational fluid dynamics (CFD) approach 2015

Muhammad Ahsan

Journal of King Saud University - Engineering Sciences, Volume 27, Issue 2, Pages 130-136

Impact Factor: 0 | **Citations:** 15

DOI: 10.1016/j.jksues.2013.09.001

Mathematical modeling of helium recovery from a multicomponent fuel gas with polymeric membrane 2015

Muhammad Ahsan Arshad Hussain

International Journal of Chemical Engineering and Applications, Volume 6, No 3, Pages 173-178

Impact Factor: 0

DOI: 10.7763/IJCEA.2015.V6.476

A Computational fluid dynamics (CFD) comparison of 3-Lump and 4-Lump kinetic models for predicting gasoline, light gases and coke yield in fluid catalytic cracking (FCC) riser 2015

Muhammad

Mechanics & Industry, Volume 16, Number 4, Article Number 402

Impact Factor: 0.559 | **Quartile:** 4 | **Citations:** 2

DOI: 10.1051/meca/2015016

Numerical analysis of friction factor for a fully developed turbulent flow using k?e turbulence model with enhanced wall treatment 2014

Muhammad Ahsan

Beni-Suef University Journal of Basic and Applied Sciences, Volume 3, Issue 4, Pages 269-277

Impact Factor: 0

DOI: 10.1016/j.bjbas.2014.12.001

Comparison of physico-chemical, advanced oxidation and biological techniques for the textile wastewater treatment 2014

Muhammad Saqib Nawaz Muhammad Ahsan

Alexandria Engineering Journal, Volume 53, Issue 3, Pages 717-722, September 2014

Impact Factor: 0 | **Citations:** 146

DOI: https://doi.org/10.1016/j.aej.2014.06.007

Process Design Analyses of CO2 Capture from Natural Gas by Polymer Membrane 2014

Arshad Hussain Habib Nasir Muhammad Ahsan

Journal of the Chemical Society of Pakistan, Volume 36, Issue 3, Pages 411-421

Impact Factor: 0.345 | **Quartile:** 4

Comparing Numerical Methods for Multicomponent Gas Separation by Single Permeation Unit 2014

Muhammad Ahsan Arshad Hussain

Chiang Mai Journal of Science, Volume 41, Issue 1, Pages 184-199

Impact Factor: 0.371 | **Quartile:** 3

A new type of shooting method for nonlinear boundary value problems 2013

Muhammad Ahsan Sarrah Farrukh

Alexandria Engineering Journal, Volume 52, Issue 4, Pages 801–805

Impact Factor: 0 | **Citations:** 14

DOI: 10.1016/j.aej.2013.07.001

An Alternate Mathematical Approach to Recover Hydrogen with High Permeate Purity from Gas Streams of Small-Medium Level Oil Refineries 2013

Muhammad Ahsan Arshad Hussain

Journal of the Chemical Society of Pakistan, Volume 35, Issue 3, Pages 621-628

Impact Factor: 0.612 | **Quartile:** 4

DOI: https://www.jcsp.org.pk/ViewByVolume.aspx?v=192&i=VOLUME%2035,%20NO3,%20JUN%202013

A comparison of numerical methods used to solve cross flow model for multicomponent membrane gas separation 2013

Muhammad Ahsan Arshad Hussain

World Applied Sciences Journal, Volume 22, Issue 5, Pages 703-711

Impact Factor: 0 | **Citations:** 3

DOI: 10.5829/idosi.wasj.2013.22.05.2202

An Efficient Numerical Approach for the Separation of Gases Using Membrane in a Multicomponent Gas Mixture 2012

Muhammad Ahsan Arshad Hussain

International Journal of Chemical Engineering and Applications, Vol. 3, No. 6, Pages 430-433

Impact Factor: 0

DOI: -

Computational fluid dynamics (CFD) prediction of mass fraction profiles of gas oil and gasoline in fluid catalytic cracking (FCC) riser 2012

Muhammad Ahsan

Ain Shams Engineering Journal, Volume 3, Issue 4, Pages 403-409

Impact Factor: 0 | **Citations:** 15

DOI: http://dx.doi.org/10.1016/j.asej.2012.04.003

Conference Proceedings

Constructive Methods for Boundary Value Problems: Optimizing Heat and Mass Transfer in Porous Materials 2025

Muhammad Ahsan

15th ISAAC (International Society for Analysis, its Applications and Computation) Congress, res.country(124,)

Citations: N/A

DOI: https://doi.org/10.1007/

Computational Analysis of Permeance Prediction for Gas Separation Membrane Using Countercurrent Flow Model 2024

Muahammad Ahsan Thomas LETTENBICHLER

28th International Conference on Circuits, Systems, Communications and Computers (CSCC), res.country(88,)

Citations: N/A

DOI: 10.37394/232031.2024.3.5

Machine Learning-Enabled Prediction and Optimization of Sulfur Recovery Units: A Step towards Industry 4.0 Integration 2023

Imran Khan Husnain Saghir Muhammad Ahsan

6th Conference on Emerging Materials and Processes (CEMP 2023), Islamabad, Pakistan, 22–23 November 2023., res.country(177,)

Citations: N/A

DOI: https://doi.org/10.3390/materproc2024017006

Mathematical Modeling and Simulation of Coal Gasification Process by Applying Pinch and Cost Analysis 2022

Muhammad Ahsan Muhammad Shoaib Zafar

92nd Annual Meeting of the International Association of Applied Mathematics and Mechanics, res.country(57,)

Citations: N/A

DOI: Nil

An alternate approach for the numerical modeling of isothermal flash calculation using Peng-Robinson equation of state 2018

Bilal Hussain Muhammad Ahsan Arshad Hussain

International Conference on Industrial Engineering & Operations Management Pretoria / Johannesburg, South Africa, res.country(247,)

Citations: N/A

DOI: N/A

A numerical modeling of natural gas using multistage membrane permeation 2017

Dr. Muhammad Ahsan Dr. Arshad Hussain

22nd International Congress on Modelling and Simulation (MODSIM2017), res.country(13,)

Citations: N/A

DOI: 10.1021/i260064a005

Book Chapters

Multi-layer Composite (MLC) Membranes Gas Transport Models and Separation Mechanisms 2025

Syed shujaat Karim Muhammad Ahsan Xianfeng Fan Zhibin Yu Sarah Farrukh

In: *Multi-Layer Composite (MLC) Membranes for Gas Separation*, Chapter 4, Pages 159-185

Citations: N/A

DOI: https://doi.org/10.1007/978-3-031-86402-5_4

Techno-economic Analysis of Facilitated Transport Membranes (FTMs) Based CO2 Separation Processes 2023

Muhammad Ahsan Arshad Hussain Syed Shujaat Karim Sarah Farrukh

In: *Book on Facilitated Transport Membranes (FTMs) for CO2 Capture: Overview and Future Trends*, Chapter 9, Pages 249-265

Citations: N/A

DOI: https://doi.org/10.1007/978-3-031-21444-8_9

Editorial Activities

Water 2024

Reviewed Papers for Journals

Impact Factor: 3.4

Processes 2024
Reviewed Papers for Journals
Impact Factor: 2.8

Powder Technology 2024
Reviewed Papers for Journals
Impact Factor: 4.5

Processes 2024
Reviewed Papers for Journals
Impact Factor: 2.8

Journal of the Taiwan Institute of Chemical Engineers 2024
Reviewed Papers for Journals
Impact Factor: 5.5

Journal of Marine Science and Engineering 2024
Reviewed Papers for Journals
Impact Factor: 2.9

Gels 2024
Reviewed Papers for Journals
Impact Factor: 5

Processe 2024
Reviewed Papers for Journals
Impact Factor: 2.8

Processes 2024
Reviewed Papers for Journals
Impact Factor: 3.5

Journal of Marine Science and Engineering 2024
Reviewed Papers for Journals
Impact Factor: 2.7

Modelling 2024
Reviewed Papers for Journals
Impact Factor: 1.3

Symmetry 2024
Reviewed Papers for Journals
Impact Factor: 2.7

Symmetry 2024
Reviewed Papers for Journals
Impact Factor: 2.7

Powder Technology 2024
Reviewed Papers for Journals
Impact Factor: 4.5

Applied Sciences 2024
Reviewed Papers for Journals
Impact Factor: 2.7

Processes 2024
Reviewed Papers for Journals
Impact Factor: 3.5

Powder Technology 2024
Reviewed Papers for Journals
Impact Factor: 4.5

Biomimetics 2024
Reviewed Papers for Journals
Impact Factor: 4.5

Journal of Cleaner Production 2024
Reviewed Papers for Journals
Impact Factor: 9.7

Water 2024
Reviewed Papers for Journals
Impact Factor: 3.4

Journal of Marine Science and Engineering 2024
Reviewed Papers for Journals
Impact Factor: 2.9

Atmosphere 2023
Reviewed Papers for Journals
Impact Factor: 2.9

Processes 2023
Reviewed Papers for Journals
Impact Factor: 3.5

Processes 2023
Reviewed Papers for Journals
Impact Factor: 3.5

Applied Sciences 2023
Reviewed Papers for Journals
Impact Factor: 2.7

Processes 2023
Reviewed Papers for Journals
Impact Factor: 3.5

Applied Sciences 2023
Reviewed Papers for Journals
Impact Factor: 2.7

Applied Sciences 2023
Reviewed Papers for Journals
Impact Factor: 2.7

Sustainability 2023
Reviewed Papers for Journals
Impact Factor: 3.9

Processes 2023
Reviewed Papers for Journals
Impact Factor: 3.5

AIP Advances 2023
Reviewed Papers for Journals
Impact Factor: 1.6

Symmetry 2023
Reviewed Papers for Journals
Impact Factor: 2.7

Powder Technology 2023
Reviewed Papers for Journals
Impact Factor: 5.2

Applied Sciences 2023
Reviewed Papers for Journals
Impact Factor: 2.7

Journal of Marine Science and Engineering 2023
Reviewed Papers for Journals
Impact Factor: 2.9

Agriculture-Basel 2023
Reviewed Papers for Journals
Impact Factor: 3.408

Powder Technology 2023
Reviewed Papers for Journals

Impact Factor: 5.2

Processes 2023
Reviewed Papers for Journals
Impact Factor: 3.352

Processes 2023
Reviewed Papers for Journals
Impact Factor: 3.352

AIP Advances 2023
Reviewed Papers for Journals
Impact Factor: 1.697

Mathematical Problems in Engineering 2023
Reviewed Papers for Journals
Impact Factor: 1.430

Applied Sciences 2023
Reviewed Papers for Journals
Impact Factor: 2.7

Computers in Biology and Medicine 2023
Reviewed Papers for Journals
Impact Factor: 6.698

AIP Advances 2023
Reviewed Papers for Journals
Impact Factor: 1.697

Energies 2023
Reviewed Papers for Journals
Impact Factor: 3.252

Proceedings of The Institution of Mechanical Engineers Part G-Journal of AE 2023
Reviewed Papers for Journals
Impact Factor: 0.175

Defect and Diffusion Forum 2023
Reviewed Papers for Journals
Impact Factor: 0.483

NUST Journal of Engineering Sciences (Vol:15, No. 2) 2022
Edited Journal Issue / Proceeding / Book
Impact Factor: 0

Aerospace 2022
Reviewed Papers for Journals
Impact Factor: 2.660

NUST Journal of Engineering Sciences 2022
Reviewed Papers for Journals
Impact Factor: N/A

Applied Sciences 2022
Reviewed Papers for Journals
Impact Factor: 2.838

AIP Advances 2022
Reviewed Papers for Journals
Impact Factor: 1.697

Applied Sciences-Basel 2022
Reviewed Papers for Journals
Impact Factor: 2.8

Membranes 2022
Reviewed Papers for Journals
Impact Factor: 4.562

AIP Advances 2022

Reviewed Papers for Journals
Impact Factor: 1.697

Membranes 2022
Reviewed Papers for Journals
Impact Factor: 3.748

Journal of Advanced Research 2022
Reviewed Papers for Journals
Impact Factor: 10.479

Entropy 2022
Reviewed Papers for Journals
Impact Factor: 2.738

NUST Journal of Engineering Sciences 2022
Reviewed Papers for Journals
Impact Factor: NA

AIP Advances 2021
Reviewed Papers for Journals
Impact Factor: 1.697

Industrial Crops and Products 2021
Reviewed Papers for Journals
Impact Factor: 6.449

Computation 2021
Reviewed Papers for Journals
Impact Factor: 2.55

Scientific Reports 2021
Reviewed Papers for Journals
Impact Factor: 4.996

Applied Sciences-Basel 2021
Reviewed Papers for Journals
Impact Factor: 2.838

Pharmacy 2021
Reviewed Papers for Journals
Impact Factor: NA

2021
Reviewed Papers for Journals
Impact Factor: 1.697

2021
Reviewed Papers for Journals
Impact Factor: 1.548

2021
Reviewed Papers for Journals
Impact Factor: -

2021
Reviewed Papers for Journals
Impact Factor: 2.22

2021
Reviewed Papers for Journals
Impact Factor: 4.589

2021
Reviewed Papers for Journals

2021
Reviewed Papers for Journals
Impact Factor: -

2021

Reviewed Papers for Journals
Impact Factor: 0

2021

Reviewed Papers for Journals

2021

Reviewed Papers for Journals
Impact Factor: 1.548

2021

Reviewed Papers for Journals
Impact Factor: 1.548

2021

Reviewed Papers for Journals
Impact Factor: 10.479

2021

Reviewed Papers for Journals

2021

Reviewed Papers for Journals
Impact Factor: 1.548

2021

Reviewed Papers for Journals
Impact Factor: -

2021

Reviewed Papers for Journals
Impact Factor: 2.22

2021

Reviewed Papers for Journals

2021

Reviewed Papers for Journals
Impact Factor: 0

2021

Reviewed Papers for Journals
Impact Factor: 10.47

2021

Reviewed Papers for Journals
Impact Factor: 2.328

2020

Reviewed Papers for Journals
Impact Factor: 3.18

2020

Reviewed Papers for Journals
Impact Factor: 1.763

2020

Reviewed Papers for Journals

2020

Reviewed Papers for Journals
Impact Factor: 1.949

2020

Reviewed Papers for Journals

2020

Reviewed Papers for Journals
Impact Factor: 1.502

2020

Reviewed Papers for Journals

2020

Reviewed Papers for Journals

2020

Reviewed Papers for Journals

2020

Reviewed Papers for Journals

2020

Reviewed Papers for Journals

2020

Reviewed Papers for Journals

2020

Reviewed Papers for Journals
Impact Factor: 3.84

2019

Edited Journal Issue / Proceeding / Book
Impact Factor: -

2019

Reviewed Papers for Journals
Impact Factor: 2.029

2019

Reviewed Papers for Journals

2019

Reviewed Papers for Journals

2019

Reviewed Papers for Journals
Impact Factor: 6.992

2019

Reviewed Papers for Journals

2019

Reviewed Papers for Journals

2019

Reviewed Papers for Journals

2018

Reviewed Papers for Journals

2018

Reviewed Papers for Journals
Impact Factor: 1.61

2018

Reviewed Papers for Journals
Impact Factor: 0.755

2018

Reviewed Papers for Journals

2017

Reviewed Papers for Journals

Trainings

3 Weeks workshop on Energetic Materials vis-a-vis their Chemistry, Formulation & Safety Aspects 2023

Partner: Defense/Strategic Organization

Duration: 22-May-2023 to 09-Jun-2023

Aging Studies of Energetic Materials (Propellant and Explosive), 13- 17 June 2022 2022

Partner: Defense/Strategic Organization

Duration: 13-Jun-2022 to 17-Jun-2022