

Muhammad Asif

Associate Professor

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About

Dr. Muhammad Asif is working as Associate Professor in the Pakistan Navy Engineering College. Dr. Muhammad Asif has a PhD in Mechanical Engineering. Dr. Muhammad Asif has published 32 research articles & conference papers having a citation count of 260, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Mechanical Engineering	2016 - 2019
Auckland University of Technology , New Zealand	
MSc in Maintenance Management	2012 - 2013
Glasgow Caledonian University , United Kingdom	
BE in Mechanical Engineering	2005 - 2009
Quest University , Pakistan	

Experience

Associate Professor	2024- Present
Pakistan Navy Engineering College	
Assistant Professor	2019 - 2019
Pakistan Navy Engineering College	
Lecturer	2019 - 2024
Pakistan Navy Engineering College	
Lecturer	2014 - 2019
Pakistan Navy Engineering College	
Associate Professor	2024 - 2025
PNEC, National University of Sciences and Technology , PNEC, National University of Sciences and Technology, Habib Rehmatullah Road, Karachi	
Assistant Professor	2019 - 2024
PNEC, National University of Sciences and Technology , PNEC, National University of Sciences and Technology, Habib Rehmatullah Road, Karachi	
Lecturer	2014 - 2016
PNEC, National University of Sciences and Technology , PNEC, National University of Sciences and Technology, Habib Rehmatullah Road, Karachi	

Research Articles

Impact of different weight fractions of silica nanoparticles on the surface finish, rheological, and mechanical properties of photopolymer 3D printed nanocomposites using UV lasers	2025
Sohaib Zia Khan Muhammad Asif Syed Asad Ali Zaidi Fitriani Imaduddin Abdulrahman Aljabri Ahmed A. D. Sarhan	
Progress in Additive Manufacturing , Pages 1-18	
Impact Factor: 4.400 Quartile: 2	
DOI: https://doi.org/10.1007/s40964-025-01093-6	
Thermo-Mechanical Process-Induced Residual Stresses and Deformation Analysis during Manufacturing of Hull Structure	2024
Muhammad Asif Syed Asad Ali Zaidi Saad Ahmed	
Memoria Investigaciones en Ingeniería , Volume 26, Pages 91-109	
Impact Factor: 0.400 Quartile: 4	
DOI: https://doi.org/10.36561/ING.27.7	
Characterization and Development of Ceramics with Inorganic Additives	2024

<i>Mirza Awais Arif Asif Mansoor Imran Shah Murtaza Hussain Muhammad Asif Inventions</i> , Volume: 9, Issue: 6, Article Number: 121, Pages:14 Impact Factor: 2.1 Quartile: 2 DOI: https://doi.org/10.3390/inventions9060121	2024
Evaluation of preheating impact on weld residual stresses in AH-36 steel using Finite Element Analysis <i>Atif Shehzad Muhammad Asif Najam Siddiqui Muhammad Uzair Syed Asad Ali Zaidi Memoria Investigaciones en Ingeniería</i> , Volume 26, Pages 225-243 Impact Factor: 0.400 Quartile: 4 DOI: https://doi.org/10.36561/ING.26.14	2024
Fatigue Life Estimation for Different Geometrical Configuration of Load-Carrying Cruciform Joint using ABAQUS and Fe-Safe <i>Zulqarnain Mukhtar Muhammad Asif Syed Asad Ali Zaidi Memoria Investigaciones en Ingeniería</i> , Volume 26, Pages 98-124 Impact Factor: 0.400 Quartile: 4 DOI: https://doi.org/10.36561/ING.26.7	2024
Relaxation response of space lattices in the cubic system designed with architected strut, plate, and shell structural ligaments <i>Muhammad Nauman Nawaz Muhammad Asif Kamran Ahmed Khan Asad Ali Zaidi Materials Today Communications</i> , Volume 39, Article Number 109006 Impact Factor: 3.7 Quartile: 2 Citations: 1 DOI: 10.1016/j.mtcomm.2024.109006	2024
Optimization of Cobalt Nanoparticles for Biogas Enhancement from Green Algae Using Response Surface Methodology <i>Asad A. Zaidi Sohaib Zia Khan Muhammad Nihal Naseer Hamad Almohammadi Muhammad Asif Yasmin Abdul Wahab Mohammad Aminul Islam Mohd Rafie Johan Hanim Hussin Periodica Polytechnica Chemical Engineering</i> , Volume 67(1), Pages 116-126 Impact Factor: 1.744 Quartile: 3 Citations: 5 DOI: https://doi.org/10.3311/PPch.20375	2023
Comparison of Machining Simulations of Aerospace Alloy Al6061-T6 Using Lagrangian and Smoothed Particle Hydrodynamics Techniques <i>Muhammad Nauman Nawaz Sohaib Zia Khan Muhammad Asif Abdulrahman Aljabri Asad Ali Zaidi Essam R. I. Mahmoud Lubricants</i> , Volume 10, Issue 11, Article Number 310 Impact Factor: 3.584 Quartile: 2 DOI: https://doi.org/10.3390/lubricants10110310	2022
Research Trends in the Use of Polyaniline Membrane for Water Treatment Applications: A Scientometric Analysis <i>Muhammad Nihal Naseer Kingshuk Dutta Syed Asad Ali Zaidi Muhammad Asif Ali Alqahtani Naief A. Aldossary Rehan Jamil Saleh H. Alyami Juhana Jaafar Membranes</i> , Volume 12, Issue 8, Article Number 777 Impact Factor: 4.562 Quartile: 1 Citations: 11 DOI: 10.3390/membranes12080777	2022
Influence of thermal treatment on the morphology of zinc oxide NPs synthesized by green method <i>Danish Majeed Syed Asad Ali Zaidi Muhammad Nihal Naseer Muhammad Asif MRS Advances</i> , Volume 7, Issue 20, Pages 420-426 Impact Factor: N/A DOI: 10.1557/s43580-022-00279-2	2022
Effects of Receiver Misalignment on the Intercept Factor of Parabolic Trough Collectors <i>Muhammad Uzair Naveed ur Rehman Muhammad Asif Journal of Solar Energy Engineering, Transactions of the ASME</i> , Volume 144, Issue 2, Article Number 024502 Impact Factor: 2.384 Quartile: 2 Citations: 3 DOI: 10.1115/1.4052866	2022
Effect of Architected Structural Members on the Viscoelastic Response of 3D Printed Simple Cubic Lattice Structures <i>Ahmed Abusabir Muhammad A Khan Muhammad Asif Kamran A Khan Polymers</i> , Vol 14, Issue 3, Article Number 618 Impact Factor: 4.329 Quartile: 1 Citations: 22 DOI: doi.org/10.3390/polym14030618	2022

Optical Design of a Novel Polygonal Trough Collector for Solar Concentrating Photovoltaic Applications <i>Naveed ur Rehman Muhammad Uzair Muhammad Asif</i> <i>Arabian Journal for Science and Engineering</i> , Volume 46, Pages 2963–2973 Impact Factor: 2.807 Quartile: 2 Citations: 6 DOI: https://doi.org/10.1007/s13369-020-05163-5	2021
Evaluating the solar flux distribution uniformity factor for parabolic trough collectors <i>Muhammad Uzair Naveed ur Rehman Muhammad Asif</i> <i>Renewable Energy</i> , Volume 157, Pages 888-896 Impact Factor: 8.001 Quartile: 1 Citations: 19 DOI: https://doi.org/10.1016/j.renene.2020.05.058	2020
Reliability Centered Maintenance (RCM) of a Commercial HVAC Air Handling and Condensing Unit <i>Sohaib Ahmed Muhammad Asif Syed Asad A Zaidi</i> <i>European Journal of Advances in Engineering and Technology</i> , Volume 7(7), Pages 1-6 Impact Factor: - DOI: NA	2020
Pre-Feasibility Study of a Biogas Pant for Cattle Farms Based in Pakistan <i>Syed Tahaul Huda Muhammad Saad Chinoy Muhammad Hamza Zafar Malick Asad Yaqoob Muhammad Asif Asad A Zaidi</i> <i>European Journal of Advances in Engineering and Technology</i> , Volume 7(5), Pages 11-16 Impact Factor: - DOI: N/A	2020
In-Situ Dynamic Response Measurement for Damage Quantification of 3D Printed ABS Cantilever Beam under Thermomechanical Load <i>Hamzah Baqasah Feiyang He Behzad A. Zai Muhammad Asif Kamran A. Khan Vijay K. Thakur Muhammad A. Khan</i> <i>Polymers</i> , Volume 11, Article Number 2079 Impact Factor: 3.426 Quartile: 1 Citations: 25 DOI: 10.3390/polym11122079	2019
Experimental and numerical study of the effect of silica filler on the tensile strength of a 3D-printed particulate nanocomposite <i>Muhammad Asif MaziarRamezani Kamran Ahmed Khan Muhammad Ali Khan Kean Chin Aw</i> <i>Comptes Rendus Mecanique</i> , Volume 347, Issue 9, Pages 615-625 Impact Factor: 1.509 Quartile: 3 Citations: 12 DOI: 10.1016/j.crme.2019.07.003	2019
Investigation of the Strain-Rate-Dependent Mechanical Behavior of a Photopolymer Matrix Composite With Fumed Nano-Silica Filler <i>Muhammad Asif Maziar Ramezani Kamran Ahmed Khan Muhammad Ali Khan Kean Chin Aw</i> <i>Polymer Engineering and Science</i> , Volume 59, Issue 8, Pages 1695-1700 Impact Factor: 1.92 Quartile: 2 Citations: 7 DOI: 10.1002/pen.25168	2019
A new photopolymer extrusion 5-axis 3D printer <i>Muhammad Asif Joo Hyun Lee Mikyla J. Lin-Yip Simone Chiang Alexis Levaslot Tim Giffney Maziar Ramezani Kean Chin Aw</i> <i>Additive Manufacturing</i> , Volume 23, Pages 355-361 Impact Factor: 7.173 Quartile: 1 Citations: 43 DOI: 10.1016/j.addma.2018.08.026	2018

Conference Proceedings

- Design and development of photopolymer extrusion 3D printer** 2022
Muhammad Asif Sohaib Zia Khan Syed Asad Ali Zaidi
The 8th International Conference and Exhibition on Sustainable Energy and Advanced Materials (ICE-SEAM) 2022, res.country(100,)
Citations: N/A
DOI: <https://doi.org/10.1063/12.0026611>
- Hullform Design, Optimization and Controllability of a Small Waterplane Area Twin Hull (SWATH)** 2022
Adil Hassan Zeeshan Riaz Naveed.Ali Dr Asif Mansoor Muhammad Asif
2022 19th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)
Citations: 1
DOI: [10.1109/IBCAST54850.2022.9990483](https://doi.org/10.1109/IBCAST54850.2022.9990483)
- Numerical study of the effect of different fillers on the mechanical and thermal properties of Silicone rubber polymer composite** 2021
Maaz Khan Muhammad Asif Hidayat Ullah Khan Zeeshan Riaz
18th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)
Citations: 1
DOI: [10.1109/IBCAST51254.2021.9393251](https://doi.org/10.1109/IBCAST51254.2021.9393251)
- Effect of Interfacial Adhesion on Tensile Strength of 3D Printed Particulate Nanocomposites** 2019
Muhammad Asif Maziar Ramezani Kean Chin Aw Muhammad Asif Maziar Ramezani Kean Chin Aw
2019 4th International Conference on Mechanical, Manufacturing, Modeling and Mechatronics (IC4M 2019) & 2019 4th International Conference on Design Engineering and Science (ICDES 2019) 22–24 February 2019, Nice, France , res.country(75,)
Citations: 1
DOI: [10.1088/1757-899X/520/1/012001](https://doi.org/10.1088/1757-899X/520/1/012001)
- Development of natural fiber reinforced polymer composite as construction material for thermal insulation application** 2017
Kashif Mushtaq Asad A. Zaidi Muhammad Asif Kashif Mushtaq Asad A. Zaidi Muhammad Asif
2nd Doctoral Congress in Engineering , res.country(183,)
Citations: N/A
DOI: N/A
- Designing and fabrication of a portable water purification system for remote regions and disaster affected areas** 2017
Kashif Mushtaq Asad A. Zaidi Muhammad Asif
2nd Doctoral Congress in Engineering , res.country(183,)
Citations: N/A
DOI: N/A

Book Chapters

- Energy management in energy storage systems** 2025
Muhammad Yawar Muhammad Asif Tahir Abdul Hussain Ratlamwala Aleena Amin Khuwaja Syed Abbas Raza Zaidi Jaishree Rajput Asad A. Zaidi Haifeng Liu
In: *Comprehensive Energy Systems* , 2nd Edition, Chapter 5.37, Volume:10, Pages:567-602
Citations: N/A
DOI: <https://doi.org/10.1016/B978-0-44-313219-3.00189-1>
- Energy management in biomass energy systems** 2025
Sheikh Muhammad Ali Haider Asad Ali Zaidi Tahir Abdul Hussain Ratlamwala Sohaib Zia Khan Rahool Rai Muhammad Asif Asim Laeeq Khan Haifeng Liu
In: *Comprehensive Energy Systems* , 2nd Edition, Volume 10, Pages 305-338
Citations: N/A
DOI: <https://doi.org/10.1016/B978-0-44-313219-3.00188-X>
- Metal oxide-based glasses and their physical properties** 2022
Muhammad Nihal Naseer Muhammad Azhar Asad Ali Zaidi Yasmin Binti Abdul Wahab Muhammad Asif Suresh Sugadevan
In: *Book on Metal Oxides for Optoelectronics and Optics-Based Medical Applications*, Chapter 3, Pages 59-71
Citations: 3
DOI: [10.1016/B978-0-323-85824-3.00014-2](https://doi.org/10.1016/B978-0-323-85824-3.00014-2)