### Salma Sherbaz

#### **Assistant Professor**

School of Interdisciplinary Engineering & Sciences

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#### **About**

Dr. Salma Sherbaz is working as Assistant Professor in the School of Interdisciplinary Engineering & Sciences. Dr. Salma Sherbaz has a PhD in Fluid Mechanics. Dr. Salma Sherbaz has published 15 research articles & conference papers having a citation count of 118, carried out 6 projects and filed 0 intellectual property.

#### **Qualifications**

PhD in Fluid Mechanics  Harbin Engineering University , China	2010 - 2014
MSc in Mathematics	2007 - 2009
Quaid-i-Azam University , Pakistan	
BSc in Double Maths Physics	2005 - 2007
University of the Punjab , Pakistan	
F.Sc in Pre-Engineering	2003 - 2005
FBISE, Islamabad , Pakistan	
Matric (SSC) in General Science Group	1993 - 2003
BISE, Rawalpindi , Pakistan	
Experience	
Assistant Professor	2022- Present
School of Interdisciplinary Engineering & Sciences	
Assistant Professor	2015 - 2022
Research Centre for Modelling & Simulation	
Assistant Professor	2014 - 2015

### **Awards**

Key Note Speaker 2012

Spoke as a key note speaker in 17th International Conference on High Performance Marine Vessels, April 20-21, 2012, Shanghai, China.

# **Research Projects**

National Projects	
Equitable Urban Heat Island Mapping: A Citizen Science Approach for Climate Justice Funding Agency: NUST Amount: PKR 1,000,000.00 Status: Approved_inprocess	2024
NUST Digital Twin through Advanced Modeling & Simulation Funding Agency: NUST Amount: PKR 50,000,000.00 Status: Approved_inprocess	2024
Ducted Wind Turbines for Urban Areas Funding Agency: NUST Amount: PKR 1,000,000.00 Status: Approved_inprocess	2024
City-level vulnerability to COVID pandemic: Spatio-temporal analysis of land use and land cover type effect on COVID incidences"  Funding Agency: National Institute of Health (NIH), PAK  Amount: PKR 1,980,000.00  Status: Approved_inprocess	2022
Adoption of a performance evaluation technique for the development of a framework for the climatic- responsive urban design (CRUD) Funding Agency: PIDE RASTA Amount: PKR 1,035,000.00 Status: Approved_inprocess	2021
Design and Optimization of Diffuser for Horizontal Axis Diffuser Augmented Tidal Current Turbine Funding Agency: HEC Amount: PKR 800,000.00	2017

**International Projects** 

Status: Completed

# **Research Articles**

Impact Factor:  $0 \mid$  Citations: 9

**DOI:** https://doi.org/10.1007/s11804-012-1122-5

A novel computational methodology to design solar radiation absorbing glass	2024
Faraan Fareed Uzma Habib Hafiz Ali Haider Sehole Salma Sherbaz Muhammad Bilal Khan Niazi Adnan Maqsood	
Energy and Buildings, Volume:317, Article Number:114358	
Impact Factor: 6.6   Quartile: 1	
<b>DOI:</b> 10.1016/j.enbuild.2024.114358	
Large Eddy Simulation of the Flow Past a Soccer Ball	2022
Sarmad Iftikhar Salma Sherbaz Hafiz Ali Seole Adnan Maqsood Zartasha Mustansar	
Mathematical Problems in Engineering, Volume 2022, Article ID 3455235, 13 pages	
Impact Factor: 0   Citations: 2	
<b>DOI:</b> 10.1155/2022/3455235	
Design and Optimization of a Diffuser for a Horizontal Axis Hydrokinetic Turbine using Computational	2020
Fluid Dynamics based Surrogate Modelling	
Waleed Khalid Salma Sherbaz Adnan Maqsood Zamir Hussain	
Mechanika, Volume 26(2), Pages 161-170	
Impact Factor: 0.597   Quartile: 4   Citations: 7	
<b>DOI:</b> https://doi.org/10.5755/j01.mech.26.2.23511	
Drag reduction of supersonic blunt bodies using opposing jet and nozzle geometric variations	2017
AtiqaBibi Adnan Maqsood Salma Sherbaz LaurentDala	
Aerospace Science and Technology, Volume 69, Pages 244-256	
Impact Factor: 2.228   Quartile: 1   Citations: 76	
<b>DOI:</b> 10.1016/j.ast.2017.06.007	
Machinery Options for Green Ship	2015
Salma Sherbaz Adnan Maqsood Jawad Khan	
Journal of Engineering Science and Technology Review, Vol. 8(3), Pages 169-173	
Impact Factor: 0	
Calculation of Effect of Viscous and Pressure Forces on Trimming Moments	2014
Salma Sherbaz Wen Yang Duan	
Applied Mechanics and Materials, Volume 590	
Impact Factor: 0   Citations: 2	
DOI: 10.4028/www.scientific.net/AMM.590.42	
Operational Options for Green Ships	2012
Salma Sherbaz Wenyang Duan	
Journal of Marine Science and Application, Volume 11, Issue 3, Pages 335–340	
Impact Factor: 0   Citations: 20	
<b>DOI:</b> https://doi.org/10.1007/s11804-012-1141-2	
Radar cross section prediction and reduction for naval ships	2012
Jawad Khan Wenyang Duan Salma Sherbaz	
Journal of Marine Science and Application, Volume 11, Issue 2, Pages 191–199	

## **Conference Proceedings** Challenges and Opportunities Associated with Technology-Driven Biomechanical Simulations 2022 Zartasha Mustansar Haider Ali Lee Margetts Saad Ahmad Khan Salma Sherbaz Rehan Zafar Paracha The 2022 World Congress in Computer Science, Computer Engineering, & Applied Computing (CSCE'22), res.country(233,) Citations: N/A **DOI:** https://doi.org/10.48550/arXiv.2412.12209 Focus to learn more Adoption of a Performance Evaluation Technique for the Development of a Framework for the Climatic 2022 Responsive Urban Design (CRUD) Salma Sherbaz Humera Mughal 1st RASTA Conference, res.country(282,) Citations: N/A DOI: Nil Numerical Investigation of Aerodynamic and Stability Behavior of Corrugated Airfoils at Low Reynolds 2022 Number Huzaifa Saeed Adnan Magsood Salma Sherbaz Laurent Dala AIAA SciTech 2022 Forum, res.country(233,) Citations: N/A DOI: https://doi.org/10.2514/6.2022-0704 Time-Dependent Analysis and Classification of Deformation Mechanism in Head Impact Injury Using 2021 Image Based Finite Element Method (FEM) Zartasha Mustansar Salma Sherbaz Haider Ali Zartasha Mustansar Saadia Talay Samra Zahoor 12th International Conference on Mechanical and Aerospace Engineering, res.country(88,) Citations: 2 DOI: 10.1109/ICMAE52228.2021.9522452 Geometrical Vitality of Human Head model to Calculate Intra Cranial Pressure for Pro-cognitive 2019 Computing Zartasha Mustasar Maria Rathore Arslan Shaukat Salma Sherbaz Nabisha Faroog Faizan Nadeem 18th IEEE conference on cognitive computing and cognitive informatics, Milan res.country(109,) Citations: N/A DOI: https://www.researchgate.net/publication/334786255 IEEE Proceedings of 18th International Conference on Cognitive Informatics Cognitive Computin g ICCICC'19 2016 Computational Modeling of Dynamic Stability Derivatives for Generic Airfoils Muhammad Saleem Mumtaz AdnanMagsood Salma Sherbaz 3rd International Conference on Mechatronics and Mechanical Engineering (ICMME 2016), res.country(48,) Citations: N/A DOI: https://www.semanticscholar.org/paper/Computational-Modeling-of-Dynamic-Stability-for-Mumtaz-Magsood/7c41bc1967712e8cdf95f542a754a8c2230bbc11

2012

**Propeller Efficiency Options for Green Ship** 

2012 9th International Bhurban Conference on Applied Sciences & Technology (IBCAST), res.country(177,)

Salma Sherbaz Wenyang Duan

DOI: 10.1109/IBCAST.2012.6177547

Citations: N/A