Hina Sadaf

Associate Professor

College of Electrical & Mechanical Engineering

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About

Dr. Hina Sadaf is working as Associate Professor in the College of Electrical & Mechanical Engineering. Dr. Hina Sadaf has a PhD in Mathematics. Dr. Hina Sadaf has published 45 research articles & conference papers having a citation count of 955, carried out 1 projects and filed 0 intellectual property.

Qualifications

PhD in Mathematics 2013 - 2016
Quaid-i-Azam University , Pakistan

MPhil in Mathematics 2010 - 2012
Quaid-i-Azam University , Pakistan

MSc in Mathematics 2007 - 2009
International Islamic University , Pakistan

BSc in Mathematics 2004 - 2006
University of the Punjab , Pakistan

Experience

Associate Professor 2023- Present
College of Electrical & Mechanical Engineering

Assistant Professor 2020 - 2023
College of Electrical & Mechanical Engineering

Assistant Professor 2017 - 2020
College of Electrical & Mechanical Engineering

Assistant Professor 2017 - 2017
College of Electrical & Mechanical Engineering

Research Projects

National Projects

Fluid flow analysis with addition of nanoparticles by means of contraction and expansion 2017
Funding Agency: HEC
Amount: PKR 346,000.00
Status: Completed

International Projects

Research Articles

Complex cilia electroosmotic modulated flow analysis with rheology of fractional-order fluid model 2025
Shagufta Ijaz Hina Sadaf
ZAMM Zeitschrift fur Angewandte Mathematik und Mechanik, Volume:105, Issue:5, Article Number e70069
Impact Factor: 2.300 | **Quartile:** 1
DOI: DOI: 10.1002/zamm.70069

Creeping flow of Carreau fluid through a porous slit 2024
Rabia Malik Hina Sadaf Tahreem Asif
Soft Computing , Volume:28, Issue:23, Pages 13039-13051
Impact Factor: 3.100 | **Quartile:** 2

DOI: https://doi.org/10.1007/s00500-024-10366-1

Metachronal wave impact in a channel flow of Prandtl fluid model 2024

Dr. Hina Sadaf Dr Zeeshan Asghar Dr Naheeda Iftikhar

International Communications in Heat and Mass Transfer, Volume: 155, Article Number: 107464

Impact Factor: 7 | **Quartile:** 1 | **Citations:** 9

DOI: 10.1016/j.icheatmasstransfer.2024.107464

Mathematical modeling of Cross-fluid model in a peristaltic channel with viscous dissipation and MHD effects 2024

Hina Sadaf Zeeshan Asghar Shagufta Ijaz

ZAMM Zeitschrift fur Angewandte Mathematik und Mechanik, Pages 1-8

Impact Factor: 2.300 | **Quartile:** 1 | **Citations:** 2

DOI: 10.1002/zamm.202300334

Electroosmotic modulated Newtonian hybrid nanofluid flowing through a peristaltic tube 2024

Naheeda Iftikhar Hina Sadaf Sohail Nadeem

Journal of Thermal Analysis and Calorimetry, Volume 149, Pages 2683-2695

Impact Factor: 4.400 | **Quartile:** 1 | **Citations:** 14

DOI: 10.1007/s10973-023-12847-1

Entropy production in the swirling flow of viscous nanofluid over a stretching cylinder embedded in a porous medium 2023

Rabia Malik Hina Sadaf Saamia raheem

Computational Particle Mechanics, Pages 1-12

Impact Factor: 3.3 | **Quartile:** 1 | **Citations:** 3

DOI: https://doi.org/10.1007/s40571-023-00667-x

Electro-osmotically generalized bio-rheological fluid flowing through a ciliated passage 2023

Shagufta Ijaz Rafia Hina Sadaf

Materials Science and Engineering: B, Volume 290, Article Number 116340

Impact Factor: 3.407 | **Quartile:** 2 | **Citations:** 11

DOI: doi.org/10.1016/j.mseb.2023.116340

Generalized complex cilia tip modeled flow through an electroosmotic region 2023

S. Ijaz M. Abdullah Hina Sadaf S. Nadeem

Journal of Central South University, Volume:30, Issue:4, Page:1217-1230

Impact Factor: 2.392 | **Quartile:** 2 | **Citations:** 13

DOI: 10.1007/s11771-023-5305-9

Mathematical modelling of modified hybrid nanofluid in a peristaltic diverging tube with MHD and convective boundary conditions 2023

Naheeda Iftikhar Hina Sadaf

Computational Particle Mechanics, Pages 1-15

Impact Factor: 3.116 | **Quartile:** 1 | **Citations:** 13

DOI: https://doi.org/10.1007/s40571-023-00553-6

Cilia-driven flow analysis of cross fluid model in a horizontal channel 2022

Hina Sadaf Zeeshan Asghar Naheeda Iftikhar

Computational Particle Mechanics, Pages 1-8

Impact Factor: 3.116 | **Quartile:** 1 | **Citations:** 35

DOI: https://doi.org/10.1007/s40571-022-00539-w

Complex wave's impact on the cilia-generated flow in a vertical tube with an endoscope 2022

Hina Sadaf Shagufta Ijaz

Waves in Random and Complex Media, Taylor and Francis Ltd.

Impact Factor: 4.051 | **Quartile:** 2 | **Citations:** 9

DOI: https://doi.org/10.1080/17455030.2022.2152902

Cattaneo–Christov heat flux model impact for Carreau fluid flow past a stretched cylinder with velocity slip and convective boundary conditions 2022

Rabia Malik Hina Sadaf Zaib un Nisa

Journal of Thermal Analysis and Calarometry, Vol:147, Pages14621-14630

Impact Factor: 4.755 | **Quartile:** 1 | **Citations:** 4

DOI: https://doi.org/10.1007/s10973-022-11659-z

Nano-mediated blood flow rheology under the convective heat transfer rate in an tapered region 2022

S. Ijaz Hina Sadaf E. N. Meraj

Waves in Random and Complex Media, Pages 1-18

Impact Factor: 4.051 | **Quartile:** 2 | **Citations:** 4

DOI: https://doi.org/10.1080/17455030.2022.2117877

Biomechanics of cilia-assisted flow with hybrid nanofluid phenomena impulses by convective conditions 2022

S. Ijaz N. Nasir Hina Sadaf R. Mehmood

Waves in Random and Complex Media, Pages 1-25

Impact Factor: 4.051 | **Quartile:** 2 | **Citations:** 15

DOI: https://doi.org/10.1080/17455030.2022.2085344

Melting heat transfer by forced convection of Sisko fluid 2022

Asif Munir Rabia Malik Hina sadaf Masood khan

Waves in Random and Complex Media, Pages 1-12

Impact Factor: 4.853 | **Quartile:** 2

DOI: https://doi.org/10.1080/17455030.2022.2064560

Consequences of gold nanoparticles of MHD blood flow in a wavy tube with wall properties 2022

Naheeda Iftikhar Hina Sadaf Abdul Rehman

Waves in Random and Complex Media, Pages 1-17

Impact Factor: 4.853 | **Quartile:** 2 | **Citations:** 5

DOI: 10.1080/17455030.2021.2017067

Physiological transport of Rabinowitsch fluid model with convective conditions 2021

Hina Sadaf Iqra Shahzadi

International Communications in Heat and Mass Transfer, Volume 126, Article Number 105365

Impact Factor: 6.782 | **Quartile:** 1 | **Citations:** 23

DOI: https://doi.org/10.1016/j.icheatmasstransfer.2021.105365

Theoretical investigation for convective heat transfer on Cu/water nanofluid and (SiO2-copper)/water hybrid nanofluid with MHD and nanoparticle shape effects comprising relaxation and contraction phenomenon 2021

Naheeda Iftikhar Abdul Rehman Hina Sadaf

International Communications in Heat and Mass Transfer, Volume 120, Article Number 105012

Impact Factor: 6.782 | **Quartile:** 1 | **Citations:** 66

DOI: https://doi.org/10.1016/j.icheatmasstransfer.2020.105012

Analysis of Carreau fluid flow by convectively heated disk with viscous dissipation effects 2020

Rabia Malik Hina Sadaf Fiza dastar

Zeitschrift Fur Naturforschung Section A-A Journal of Physical Sciences, Volume 75, Issue 10, Pages 825–832

Impact Factor: 1.426 | **Quartile:** 3 | **Citations:** 6

DOI: https://doi.org/10.1515/zna-2020-0041

Adverse effects of a hybrid nanofluid in a wavy non- uniform annulus with convective boundary conditions 2020

Hina Sadaf Sara. I. Abdelsalam

RSC Advances , Volume 10, Issue 26, Pages 15035-15043

Impact Factor: 3.361 | **Quartile:** 2 | **Citations:** 89

DOI: DOI: 10.1039/d0ra01134g

Fluid flow analysis of cilia beating in a curved channel in the presence of magnetic field and heat transfer 2020

Hina Sadaf Sohail Nadeem

Canadian Journal of Physics, Volume 98(2), Pages 191-197

Impact Factor: 1.240 | **Quartile:** 4 | **Citations:** 46

DOI: DOI: 10.1139/cjp-2018-0715

Mixed convection analysis of cilia-driven flow of a Jeffrey fluid in a vertical tube 2020

Hina Sadaf Adnan Kiani Nazir Ahmad Mir

Canadian Journal of Physics, Volume 98(2), Pages 111-118

Impact Factor: 1.240 | **Quartile:** 4 | **Citations:** 13

DOI: DOI: 10.1139/cjp-2018-0753

Study of Al2O3/copper–water nanoparticle shape, slip effects, and heat transfer on steady physiological delivery of MHD hybrid nanofluid 2019

Naheeda Iftikhar, Abdul Rehman Hina Sadaf Saleem Iqbal

Canadian Journal of Physics, 1239–1252

Impact Factor: 1.032 | **Quartile:** 3 | **Citations:** 19

DOI: 10.1139/cjp-2018-0551

Heat and peristaltic propagation of water based nanoparticles with variable fluid features 2019

Samreen Sheriff Hina Sadaf Noreen Sher Akbar Nazir Ahmad Mir

Physica Scripta, Volume 94, Number 12

Impact Factor: 1.985 | **Quartile:** 2 | **Citations:** 17

DOI: 10.1088/1402-4896/ab3316

Slip analysis with thermally developed peristaltic motion of nanoparticles under the influence of variable viscosity in vertical configuration 2019

Samreen Sheriff Dr Hina Sadaf Dr Noreen Sher Akbar Dr Nazir Ahmad Mir

The European Physical Journal Plus, Volume 134, Issue 8, Article Number 408

Impact Factor: 3.228 | **Quartile:** 1 | **Citations:** 9

DOI: 10.1140/epjp/i2019-12766-y

Bio-fluid flow analysis based on heat transfer and variable viscosity 2019

Hina Sadaf

Applied Mathematics and Mechanics-English Edition, Volume: 40, Issue: 7, Pages: 1029-1040

Impact Factor: 2.017 | **Quartile:** 1 | **Citations:** 8

DOI: https://doi.org/10.1007/s10483-019-2499-8

Remarkable Role of Nanoscale Particles and Viscosity Variation in Blood Flow Through Overlapped Atherosclerotic Channel: A Useful Application in Drug Delivery 2019

Shagufta Ijaz Hina Sadaf Zahid Iqbal

Arabian Journal for Science and Engineering, Volume: 44, Issue: 7, Pages: 6241-6252

Impact Factor: 1.711 | **Quartile:** 2 | **Citations:** 18

DOI: https://doi.org/10.1007/s13369-019-03779-w

Physiological fluid flow analysis by means of contraction and expansion with addition of hybrid nanoparticles 2019

Hina Sadaf Naheeda iftikhar Noreen Sher Akbar

European Physical Journal Plus, Volume: 134, Issue: 5, Article Number: 232

Impact Factor: 3.228 | **Quartile:** 1 | **Citations:** 17

DOI: 10.1140/epjp/i2019-12598-9

Nano Fluid Flow Analysis in the Presence of Slip Effects and Wall Properties by Means of Contraction and Expansion 2018

Hina Sadaf Rabia Malik

Communications in Theoretical Physics, NULL

Impact Factor: 1.416 | **Quartile:** 3 | **Citations:** 8

DOI: 10.1088/0253-6102/70/3/337

Induced magnetic field analysis for the peristaltic transport of non-Newtonian nanofluid in an annulus 2018

Hina Sadaf Muhammad Usman Akbar Sohail Nadeem

Mathematics and Computers in Simulation 148 (2018) 16–36, NULL

Impact Factor: 1.409 | **Quartile:** 2 | **Citations:** 47

DOI: https://doi.org/10.1016/j.matcom.2017.12.009

Impact of wall properties on the peristaltic flow of Cu-water nano fluid in a non-uniform inclined tube 2018

Abdul Rehman Hina Sadaf Muhammad Najam Khan Naheeda Iftikhar

International Journal of Heat and Mass Transfer, NULL

Impact Factor: 4.346 | **Quartile:** 1 | **Citations:** 41

DOI: https://doi.org/10.1016/j.ijheatmasstransfer.2018.04.098

Permeability conditions for the physiological viscous nanofluid: endoscopic analysis for uniform and non-uniform tubes 2017

M. U. Akbar S. Nadeem Hina Sadaf

Journal of the Brazilian Society of Mechanical Sciences and Engineering, Volume 39, Issue 9, Pages 3413-3423, September 2017

Impact Factor: 1.627 | **Quartile:** 3 | **Citations:** 2

DOI: 10.1007/s40430-017-0829-2

Bio-mathematical analysis for the peristaltic flow of single wall carbon nanotubes under the impact of variable viscosity and wall properties 2017

Iqra Shahzadi Hina Sadaf Sohail Nadeem Anber Saleem

Computer Methods and Programs in Biomedicine, Volume: 139, Pages: 137-147

Impact Factor: 2.674 | **Quartile:** 1 | **Citations:** 51

DOI: http://dx.doi.org/10.1016/j.cmpb.2016.10.016

Exploration of single wall carbon nanotubes for the peristaltic motion in a curved channel with variable viscosity 2017

Hina Sadaf Sohail Nadeem

Journal of the Brazilian Society of Mechanical Sciences and Engineering, Volume: 39, Issue: 1, Pages: 117-125

Impact Factor: 1.627 | **Quartile:** 3 | **Citations:** 28

DOI: 10.1007/s40430-016-0612-9

Analysis of Combined Convective and Viscous Dissipation Effects for Peristaltic Flow of Rabinowitsch Fluid Model 2017

Hina Sadaf Sohail Nadeem

Journal of Bionic Engineering, JOURNAL OF BIONIC ENGINEERING Volume: 14 Issue: 1 Pages: 182-190

Impact Factor: 2.325 | **Quartile:** 1 | **Citations:** 61

DOI: 10.1016/S1672-6529(16)60389-X

Influences of slip and Cu-blood nanofluid in a physiological study of cilia 2016

Hina Sadaf Sohail Nadeem

Computer Methods and Programs in Biomedicine, Volume: 131, Pages: 169-180

Impact Factor: 2.503 | **Quartile:** 1 | **Citations:** 43

DOI: 10.1016/j.cmpb.2016.04.008

Hypothetical analysis for peristaltic transport of metallic nanoparticles in an inclined annulus with variable viscosity 2016

Hina Sadaf Sohail Nadeem

Bulletin of the Polish Academy of Sciences - Technical Sciences, Volume: 64, Issue: 2, Pages: 447-454

Impact Factor: 1.156 | **Quartile:** 2 | **Citations:** 8

DOI: 10.1515/bpasts-2016-0050

Ciliary motion phenomenon of viscous nanofluid in a curved channel with wall properties 2016

Sohail Nadeem Hina Sadaf

European Physical Journal Plus, Volume: 131, Issue: 3, Article Number: 65

Impact Factor: 1.753 | **Quartile:** 2 | **Citations:** 16

DOI: 10.1140/epjp/i2016-16065-y

Trapping study of nanofluids in an annulus with cilia 2015

Sohail Nadeem Hina sadaf

AIP Advances, Volume: 5, Issue: 12, Article Number: 127204

Impact Factor: 1.444 | **Quartile:** 3 | **Citations:** 28

DOI: 10.1063/1.4937474

Effects of nanoparticles on the peristaltic motion of tangent hyperbolic fluid model in an annulus 2015

sohail nadeem Hina sadaf Noreen Sher Akbar

Alexandria Engineering Journal, Volume 54, Issue 4, Pages 843-851

Impact Factor: 0 | **Citations:** 36

DOI: 10.1016/j.aej.2015.07.003

Theoretical Analysis of Cu-Blood Nanofluid for Metachronal Wave of Cilia Motion in a Curved Channel 2015

Sohail Nadeem Hina sadaf

IEEE Transactions on NanoBioscience, Volume: 14, Issue: 4, Pages: 447-454

Impact Factor: 1.969 | **Quartile:** 3 | **Citations:** 48

DOI: 10.1109/TNB.2015.2401972

Metachronal Wave of Cilia Transport in a Curved Channel 2015

Sohail Nadeem Hina sadaf

Zeitschrift Fur Naturforschung Section A-A Journal of Physical Sciences, Volume: 70, Issue: 1, Pages: 33-38

Impact Factor: 0.886 | **Quartile:** 3 | **Citations:** 31

DOI: 10.1515/zna-2014-0117

Analysis of Nanoparticles on Peristaltic Flow of Prandtl Fluid Model in an Endoscopy 2014

Sohail Nadeem Hina sadaf Muhammad Adil Sadiq

Current Nanoscience, Volume 10, Number 5, Pages 709-721

Impact Factor: 1.096 | **Quartile:** 3 | **Citations:** 17

DOI: 10.2174/15734137106661403220000351

Analysis of peristaltic flow for a Prandtl fluid model in an endoscope 2014

Sohail Nadeem Hina sadaf Noreen Sher Akbar

Journal of Power Technologies, Volume 94, Issue 2, Pages 1-11

Impact Factor: 0

DOI: https://www.researchgate.net/publication/312370644_Analysis_of_peristaltic_flow_for_a_Prandtl_fluid_model_in_an_endoscope

Editorial Activities

Priyadharshini Anbalagan 2025

Reviewed Papers for Journals

Impact Factor: 3.2

Multiscale and Multidisciplinary Modeling, Experiments and Design 2025

Reviewed Papers for Journals

Impact Factor: 2.0

International Communications in Heat and Mass Transfer 2025

Reviewed Papers for Journals

Impact Factor: 6.4

Journal of Radiation Research and Applied Sciences 2025

Reviewed Papers for Journals

Impact Factor: 2.5

Advances in nanoparticles 2025

Reviewed Papers for Journals

Impact Factor: N/A

Physics of Fluids 2025

Reviewed Papers for Journals

Impact Factor: 4.1

Advances in Mechanical Engineering 2025

Reviewed Papers for Journals

Impact Factor: 0.2

Journal of Radiation Research and Applied Sciences 2025

Reviewed Papers for Journals

Impact Factor: 1.7

Journal of Radiation Research and Applied Sciences 2025

Reviewed Papers for Journals

Impact Factor: 1.7

International Communications in Heat and Mass Transfer 2024

Reviewed Papers for Journals

Impact Factor: 6.4

Scientific Reports 2024

Reviewed Papers for Journals

Impact Factor: 3.8

Interactions 2024

Reviewed Papers for Journals

Impact Factor: 0

Chinese Journal of Physics 2024

Reviewed Papers for Journals

Impact Factor: 4.6

Numerical Heat Transfer, Part A: Applications 2024

Reviewed Papers for Journals

Impact Factor: N/A

Theoretical and Computational Fluid Dynamics 2024
Reviewed Papers for Journals
Impact Factor: 3.4

Journal of Applied Mathematics and Mechanics 2024
Reviewed Papers for Journals
Impact Factor: 2.3

Acta Mechanica Sinica 2024
Reviewed Papers for Journals
Impact Factor: 3.5

Engineering Applications of Artificial Intelligence 2024
Reviewed Papers for Journals
Impact Factor: 8

Numerical heat transfer. Part A. Applications 2023
Reviewed Papers for Journals
Impact Factor: 2.56

Scientific Reports 2023
Reviewed Papers for Journals
Impact Factor: 4.6

Journal of Advances in Mathematics and Computer Science 2023
Reviewed Papers for Journals
Impact Factor: 1.54

International Journal of Computational Materials Science and Engineering 2023
Reviewed Papers for Journals
Impact Factor: 1.3

BioNanoScience 2023
Reviewed Papers for Journals
Impact Factor: N/A

journal of mathematics & statistics 2023
Reviewed Papers for Journals
Impact Factor: 0.36

New Journal of Physics 2023
Reviewed Papers for Journals
Impact Factor: 3.3

Scientific Reports 2023
Reviewed Papers for Journals
Impact Factor: 4.6

Modern Physics Letters B 2023
Reviewed Papers for Journals
Impact Factor: 1.9

International Journal of Modern Physics B 2023
Reviewed Papers for Journals
Impact Factor: 1.7

Modern Physics Letters B 2023
Reviewed Papers for Journals
Impact Factor: 1.9

Scientific Reports 2023
Reviewed Papers for Journals
Impact Factor: 4.6

Heliyon 2023
Reviewed Papers for Journals
Impact Factor: 4.0

BioNanoScience 2023
Reviewed Papers for Journals
Impact Factor: N/A

Scientific Reports 2023
Reviewed Papers for Journals
Impact Factor: 4.997

2023
Reviewed Papers for Journals
Impact Factor: N/A

2023
Reviewed Papers for Journals
Impact Factor: 0

Far East Journal of Dynamical 2023
Reviewed Papers for Journals
Impact Factor: 4.23

Frontiers in Physics 2023
Reviewed Papers for Journals
Impact Factor: 3.718

Archive of Applied Mechanics 2022
Reviewed Papers for Journals
Impact Factor: 2.467

International Journal of Ambient Energy 2022
Reviewed Papers for Journals
Impact Factor: 2.54

International Journal of Amb 2022
Reviewed Papers for Journals
Impact Factor: 2.54

Waves in Random and Complex Media 2022
Reviewed Papers for Journals
Impact Factor: 4.051

2022
Reviewed Papers for Journals
Impact Factor: 0

2022
Reviewed Papers for Journals
Impact Factor: 1.404

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Reviewed Papers for Journals
Impact Factor: 3.718

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Impact Factor: 3.56

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Reviewed Papers for Journals
Impact Factor: 6.268

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Reviewed Papers for Journals
Impact Factor: 4.853

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Reviewed Papers for Journals
Impact Factor: 1.24

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Impact Factor: 4.626

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Reviewed Papers for Journals
Impact Factor: 4.379

2021

Reviewed Papers for Journals
Impact Factor: 1.74

2019

Reviewed Papers for Journals
Impact Factor: 2.81

2019

Reviewed Papers for Journals

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Reviewed Papers for Journals
Impact Factor: 2.5

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Impact Factor: 2.5

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Impact Factor: 2.5

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Impact Factor: 2.5

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2019

Reviewed Papers for Journals
Impact Factor: 3.198