Maria Athar

Assistant Professor

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About

Dr. Maria Athar is working as Assistant Professor in the School of Electrical Engineering and Computer Science. Dr. Maria Athar has a PhD in Applied Mathematics (Fluid Mechanics). Dr. Maria Athar has published 42 research articles & conference papers having a citation count of 684, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Applied Mathematics (Fluid Mechanics)   2019 - 2023
COMSATS Institute of Information Technology , Pakistan

MPhil in Pure Mathematics (Fixed Point Theory)   2007 - 2010
NUST, Islamabad , Pakistan

MSc in Mathematics   2005 - 2007
Quaid-i-Azam University , Pakistan

BSc in Maths A, Maths B, Statistics   2002 - 2004
University of the Punjab , Pakistan

Experience

Assistant Professor   2023- Present
School of Electrical Engineering and Computer Science

Lecturer   2021 - 2023
NUML , NUML

Lecturer   2009 - 2013
Fatima Jinnah Women University , Fatima Jinnah Women University

Research Articles

Interaction of induced magnetic field, double diffusion convection and multiple slips for thermal radiative biological flow of six-constant Jeffreys nanofluid: Advancements in mechanics   2025
Safia Akram Khalid Saeed Maria Athar Arshad Riaz Alia Razia Malik Mushrifah A.S. Al-Malki
Separation Science and Technology , Volume 60, Issue 2, Pages 316-339
Impact Factor: 2.400 | **Quartile:** 3 | **Citations:** 3
DOI: 10.1080/01496395.2024.2434523

Magnetized peristaltic flow of Sisko nanofluid under thermal radiation and double-diffusive convection with viscous dissipation and slip effects in an asymmetric channel   2025
Safia Akram Khalid Saeed Maria Athar Arshad Riaz Alia Razia Malik Emad E. Mahmoud
Particulate Science and Technology , Volume 43, Issue 2, Pages 229-246
Impact Factor: 2.300 | **Quartile:** 3
DOI: https://doi.org/10.1080/02726351.2025.2450410

Enhancing retention of biological fluid transport of magnetized thermal radiative pseudoplastic nanofluid with double diffusion convection, viscous dissipation and boundary slips   2024
Safia Akram Khalid Saeed Maria Athar Arshad Riaz Alia Razia Mushrifah A. S. Al-Malki
Particulate Science and Technology , Pages: 14
Impact Factor: 2.3 | **Quartile:** 3 | **Citations:** 6
DOI: https://doi.org/10.1080/02726351.2024.2412654

Numerical analysis on theoretical model of magneto-Williamson nanofluid in relation to viscous dissipation, double-diffusion convection, thermal radiation and multiple slip boundaries   2024
Sardar Bilal Safia Akram Maria Athar Khalid Saeed Alia Razia Arshad Riaz

PRAMANA-Journal of Physics, Volume 98, Article Number 125
Impact Factor: 1.900 | **Quartile:** 2 | **Citations:** 7
DOI: https://doi.org/10.1007/s12043-024-02798-z

Dissipative and Multiple Slips on Thermally Radiative Biological Fluid of Magneto-Six-Constant Jeffrey Nanofluid with Double Diffusion Convection: A Numerical Investigation 2024
Sardar Bilal Safia Akram Maria Athar Khalid Saeed Arshad Riaz Alia Razia
BioNanoScience, Pages 1-16
Impact Factor: 3.000 | **Quartile:** 3 | **Citations:** 9
DOI: https://doi.org/10.1007/s12668-024-01560-4

Numerical simulation of double diffusion convection in a six-constant Jeffrey nanofluid with an inclined magnetic field and viscous dissipation: Multiple slips and thermal radiation analysis with peristalsis 2024
Safia Akram Maria Athar Khalid Saeed Arshad Riaz Alia Razia Ghaliah Alhamzi
AIP Advances, Volume 14(7), Article Number 075229
Impact Factor: 1.400 | **Quartile:** 4 | **Citations:** 7
DOI: doi.org/10.1063/5.0219517

A computational simulation for peristaltic flow of thermally radiative sisko nanofluid with viscous dissipation, double diffusion convection and induced magnetic field 2024
Sardar Bilal Safia Akram Khalid Saeed Maria Athar Arshad Riaz Alia Razia
Numerical Heat Transfer, Part A: Applications, Pages 1-22
Impact Factor: 2.000 | **Quartile:** 3 | **Citations:** 8
DOI: https://doi.org/10.1080/10407782.2024.2335557

Impact of multiple slips on thermally radiative peristaltic transport of Sisko nanofluid with double diffusion convection, viscous dissipation, and induced magnetic field 2024
Humaira Yasmin Safia Akram Maria Athar Khalid Saeed Alia Razia J. G. Al-Juaid
Nanotechnology Reviews, Volume 13, Issue 1, Article Number 20240004
Impact Factor: 7.400 | **Quartile:** 1 | **Citations:** 9
DOI: https://doi.org/10.1515/ntrev-2024-0004

Mechanism of Thermally Radiative Prandtl Nanofluids and Double-Diffusive Convection in Tapered Channel on Peristaltic Flow with Viscous Dissipation and Induced Magnetic Field 2024
Yasir Khan Safia Akram Maria Athar Khalid Saeed Alia Razia A. Alameer
Computer Modelling in Engineering & Sciences, Volume 138(2), Pages 1501-1520
Impact Factor: 2.4 | **Quartile:** 2 | **Citations:** 13
DOI: DOI:10.32604/cmes.2023.029878

Role of thermal radiation and double-diffusivity convection on peristaltic flow of induced magneto-Prandtl nanofluid with viscous dissipation and slip boundaries 2023
Safia Akram Maria Athar Khalid Saeed Alia Razia Taseer Muhammad
Journal of Thermal Analysis and Calarometry, Pages 1-16
Impact Factor: 4.4 | **Quartile:** 1 | **Citations:** 24
DOI: https://doi.org/10.1007/s10973-023-12643-x

Mechanism of double diffusive convection due to magnetized Williamson nanofluid flow in tapered asymmetric channel under the influence of peristaltic propulsion and radiative heat transfer 2023
Safia Akram Maria Athar Khalid Saeed Mir Yasir Umair Taseer Muhammad
International Journal of Numerical Methods for Heat & Fluid Flow, Pages 1-22
Impact Factor: 4.2 | **Quartile:** 1 | **Citations:** 22
DOI: https://doi.org/10.1108/HFF-04-2023-0169

Influence of an induced magnetic field on double diffusion convection for peristaltic flow of thermally radiative Prandtl nanofluid in non-uniform channel Author links open overlay panel 2023
Safia Akram Maria Athar Khalid Saeed Alia Razia
Tribology International, Volume 187, Article Number 108719
Impact Factor: 6.2 | **Quartile:** 1 | **Citations:** 43
DOI: 10.1016/j.triboint.2023.108719

Unsteady flow of micropolar fluid on a magnetized sheet: Effects of magnetic and microrotation parameters on wall couple stress and skin friction 2023
Adeel Ahmad Airel Ishaq Maria Athar Junaid Anjum Rub Nawaz
ZAMM-Zeitschrift fur Angewandte Mathematik und Mechanik, Pages 1-16

Polymer presence in boundary layer flow and heat transfer of dusty fluid over a stretching surface 2023

Maria Athar Adeel Ahmad Yasir Khan

Multidiscipline Modeling in Materials and Structures, Volume 19, Issue 4, Pages 617-633

Convection theory on thermally radiative peristaltic flow of Prandtl tilted magneto nanofluid in an asymmetric channel with effects of partial slip and viscous dissipation 2023

Safia Akram Khalid Saeed Maria Athar Alia Razia Anwar Hussain Iram Naz

Materials Today Communications, Volume 35, Article Number 106171

Roll of partial slip on Ellis nanofluid in the proximity of double diffusion convection and tilted magnetic field: Application of Chyme movement 2023

Yasir Khan Maria Athar Safia Akram Khalid Saeed Alia Razia A. Alameer

Heliyon, Volume 9, Issue 4, Article Number e14760

Mechanism of Double-Diffusive Convection on Peristaltic Transport of Thermally Radiative Williamson Nanomaterials with Slip Boundaries and Induced Magnetic Field: A Bio-Nanoengineering Model 2023

Safia Akram Maria Athar Khalid Saeed Alia Razia Taseer Muhammad Huda Ahmed Alghamdi

Nanomaterials, Volume 13, Issue 5, Article Number 941

Theoretical analysis of partial slip on double-diffusion convection of Eyring-Powell nanofluids under the effects of peristaltic propulsion and inclined magnetic field 2023

Safia Akram Maria Athar Khalid Saeed Alia Razia

Journal of Magnetism and Magnetic Materials, Volume 569, Article Number 170445

Mathematical simulation of double diffusion convection on peristaltic pumping of Ellis nanofluid due to induced magnetic field in a non-uniform channel: Applications of magnetic nanoparticles in biomedical engineering 2023

Safia Akram Maria Athar Khalid Saeed Alia Razia Taseer Muhammad Huda Ahmed Alghamdi

Journal of Magnetism and Magnetic Materials, Volume 569, Article Number 170408

Hybrid double-diffusivity convection and induced magnetic field effects on peristaltic waves of Oldroyd 4-constant nanofluids in non-uniform channel 2023

Safia Akram Maria Athar Khalid Saeed Alia Razia Taseer Muhammad Anwar Hussain

Alexandria Engineering Journal, Volume 65, Pages 785-796

Influence of polymers on drag and heat transfer of nanofluid past stretching surface: A molecular approach 聚合物对纳米流体通过可拉伸表面的阻力和传热导的影响: 一种分子方法 2022

Adeel Ahmad Maria Athar Yasir Khan

Journal of Central South University, Volume 29, Issue 12, Pages 3912-3924

An exploration of polymer presence in magneto-hydrodynamic flow and heat transfer past a magnetized stretching surface with effects of Joule heating 2022

Maria Athar Adeel Ahmad

ZAMM-Zeitschrift fur Angewandte Mathematik und Mechanik, Volume 102, Issue 11, Article Number e202100543

Theoretical investigation of double diffusion convection of six constant Jeffreys nanofluid on waves of peristaltic with induced magnetic field: a bio-nano-engineering model

2022

Safia Akram Maria Athar Khalid Saeed Alia Razia Taseer Muhammad

Waves in Random and Complex Media, Pages 1-21

Impact Factor: 4.051 | **Quartile:** 2 | **Citations:** 22

DOI: https://doi.org/10.1080/17455030.2022.2134600

Impact of slip boundaries on double diffusivity convection in an asymmetric channel with magneto-tangent hyperbolic nanofluid with peristaltic flow

2022

Khalid Saeed Safia Akram Adeel Ahmad Maria Athar Alia Razia Taseer Muhammad

ZAMM-Zeitschrift fur Angewandte Mathematik und Mechanik, Pages 1-15, Article Number e202100338

Impact Factor: 1.759 | **Quartile:** 2 | **Citations:** 27

DOI: https://doi.org/10.1002/zamm.202100338

Consequence of Double-Diffusion Convection and Partial Slip on Magneto-Oldroyd-4 Constants Nanofluids with Peristaltic Propulsion in an Asymmetric Channel

2022

Maria Athar Yasir Khan Safia Akram Khalid Saeed A. Alameer Anwar Hussain

Complexity, Volume 2022, Article ID 7634357, 20 pages

Impact Factor: 2.121 | **Quartile:** 2 | **Citations:** 14

DOI: https://doi.org/10.1155/2022/7634357

Impact of Partial Slip on Double Diffusion Convection of Sisko Nanofluids in Asymmetric Channel with Peristaltic Propulsion and Inclined Magnetic Field

2022

Safia Akram Maria Athar Khalid Saeed Alia Razia Metib Alghamdi Taseer Muhammad

Nanomaterials, Volume 12(16), Article Number 2736

Impact Factor: 5.719 | **Quartile:** 1 | **Citations:** 28

DOI: https://doi.org/10.3390/nano12162736

Impact of chemically reactive species on heat and mass transfer of polymeric fluid with Soret and Dufour effects

2022

Maria Athar Adeel Ahmad

Waves in Random and Complex Media, Pages 1-22

Impact Factor: N/A

DOI: DOI: 10.1080/17455030.2022.2067377

The role of double-diffusion convection and induced magnetic field on peristaltic pumping of a johnson–segalman nanofluid in a non-uniform channel

2022

Yasir Khan Safia Akram Maria Athar Khalid Saeed Taseer Muhammad Anwar Hussain Muhammad Imran H. A. Alsulaimani

Nanomaterials, Volume 12(7), Article Number 1051

Impact Factor: 5.076 | **Quartile:** 2 | **Citations:** 28

DOI: https://doi.org/10.3390/nano12071051

Impact of partial slip on double diffusion convection and inclined magnetic field on peristaltic wave of six-constant Jeffreys nanofluid along asymmetric channel

2022

Khalid Saeed Safia Akram Adeel Ahmad Maria Athar Muhammad Imran Taseer Muhammad

European Physical Journal Plus, Volume 137, Article Number: 364

Impact Factor: 3.911 | **Quartile:** 1 | **Citations:** 25

DOI: https://doi.org/10.1140/epjp/s13360-022-02553-6

Nanomaterials effects on induced magnetic field and double-diffusivity convection on peristaltic transport of Prandtl nanofluids in inclined asymmetric channel

2022

Safia Akram Maria Athar Khalid Saeed Mir Yasir Umair

Nanomaterials and Nanotechnology, Volume 12, Pages 1-10

Impact Factor: 3.116 | **Quartile:** 2 | **Citations:** 22

DOI: https://doi.org/10.1177/18479804211048630

Impact of slip on nanomaterial peristaltic pumping of magneto-Williamson nanofluid in an asymmetric channel under double-diffusivity convection

2022

Safia Akram Maria Athar Khalid Saeed Alia Razia

Pramana, Volume 96, Article Number 57

Impact Factor: 2.219 | **Quartile:** 2 | **Citations:** 19

DOI: https://doi.org/10.1007/s12043-021-02287-7

Influence of polymers on flow and heat transfer due to peristaltic waves: a molecular approach

2022

Khalid Saeed Adeel Ahmad Junaid Anjum Maria Athar

Slip impact on double-diffusion convection of magneto-fourth-grade nanofluids with peristaltic propulsion through inclined asymmetric channel

2022

Safia Akram Maria Athar Khalid Saeed Muhammad Imran Taseer Muhammad

Journal of Thermal Analysis and Calorimetry, Pages 1-14

Slip boundaries effects on double-diffusive convection of magneto-pseudoplastic nanofluid on peristaltic flux in an inclined asymmetric channel

2021

Safia Akram Maria Athar Khalid Saeed Alia Razia Taseer Muhammad Anwar Hussain

Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, Pages 1-13

Numerical simulation of effects of Soret and Dufour parameters on the peristaltic transport of a magneto six-constant Jeffreys nanofluid in a non-uniform channel: a bio-nanoengineering model

2021

Safia Akram Maria Athar Khalid Saeed

European Physical Journal-Special Topics, Pages 1-9

Partial Slip Impact on Double Diffusive Convection Flow of Magneto-Carreau Nanofluid through Inclined Peristaltic Asymmetric Channel

2021

Safia Akram Maria Athar Khalid Saeed Taseer Muhammad Mir Yasir Umair

Mathematical Problems in Engineering, Volume 2021, Article ID 2475846, 14 pages

Hybridized consequence of thermal and concentration convection on peristaltic transport of magneto Powell– Eyring nanofluids in inclined asymmetric channel

2021

Safia Akram Maria Athar Khalid Saeed Alia Razia Taseer Muhammad

Mathematical Methods in the Applied Sciences, Pages 1-17

Double-diffusive convection with peristaltic wave in Sisko fluids along with inclined magnetic field and channel

2021

Safia Akram Maria Athar Khalid Saeed Mir Yasir Umair

Waves in Random and Complex Media, Pages 1-23

Crossbreed impact of double-diffusivity convection on peristaltic pumping of magneto Sisko nanofluids in non-uniform inclined channel: A bio-nanoengineering model

2021

Safia Akram Maria Athar Khalid Saeed Alia Razia

Science Progress, Volume 104(3), Pages 1–23

Behavior of fluid flow and heat transfer induced by a stretching surface in the presence of polymers

2021

Maria Athar Adeel Ahmad

Physica Scripta, Volume 96, Issue 9, Article Number 095203

Hybrid impact of thermal and concentration convection on peristaltic pumping of Prandtl nanofluids in non-uniform inclined channel and magnetic field

2021

Safia Akram Maria Athar Khalid Saeed

Case Studies in thermal Engineering, Volume 25, Article Number 100965

Double-diffusivity convection on Powell-Eyring nanofluids in non-uniform inclined channel under the impact of peristaltic propulsion and induced magnetic field 2021

Safia Akram Maria Athar Khalid Saeed Mir Yasir Umair

European Physical Journal Plus , Volume 136, Article Number 494

Impact Factor: 3.758 | **Quartile:** 2 | **Citations:** 18

DOI: https://doi.org/10.1140/epjp/s13360-021-01506-9

Editorial Activities

Numerical Heat Transfer, Part A: Applications 2024

Reviewed Papers for Journals

Impact Factor: 2.8

Numerical Heat Transfer, Part A: Applications 2023

Reviewed Papers for Journals

Impact Factor: 2.8

Journal of Heat and Mass Transfer Research 2023

Reviewed Papers for Journals

Impact Factor: 0