Anum Shafiq

Professor/Senior Researcher: Parallel Algorithms Research Lab
IT4Innovations, VSB – Technical University of Ostrava,
Address: 17. listopadu 2172/15, 708 00 Ostrava-Poruba, Czech Republic
Ranked in the Top 2% Scientists Worldwide (2022; 2023;2024)
Address: IT4Innovations, VSB -Technical University of Ostrava, Ostrava, Czech Republic
Phone: +420728100350

PERSONAL INFORMATION

Email: anumshafiq@ymail.com; anum.shafiq@vsb.cz; anumshafiq@nuist.edu.cn

Academic Profiles:

Home page; Academia; European women in maths; AD Scientific Index Research.com; ResearchGate; Google Scholar; Publons; Orcid; Linkedin; Semantic Scholar

RESEARCH INTERESTS

- Fluid Flow with Nanoparticles
- Computational Fluid Dynamics (CFD)
- Mechanical engineering
- Mathematical and computational methods in statistics
- Applied Mathematics
- Fluid processing and heat transfer systems
- Groundwater modeling
- Heat and Mass Transfer
- Non-Newtonian fluids
- Nonlinear analysis
- Series Solutions of Nonlinear Problems
- Boundary value problems
- Differential system of equations
- Mathematical modeling
- Homotopy analysis method and its applications
- Response Surface Methodology
- Solutions of Nonlinear Differential Equations
- Artificial Neural Network
- Sensitivity Analysis
- Statistics
- Distribution Theory
- Bayesian Inference

EMPLOYMENT HISTORY

Professor/Senior Researcher **23rd September 2024 to Present**
IT4Innovations, VSB – Technical University of Ostrava, Prouba, Czech Republic

Associate Professor **Ist August 2022 to 31st July 2025**
School of Mathematics and Statistics, Nanjing University of Information Science and Technology, Nanjing, China

Associate Professor **Ist August 2019 to 31 August 2022**
School of Mathematics and Statistics, Nanjing University of Information Science and Technology, Nanjing, China

Postdoc Fellow **Feb 2019 to Jan 2020**
Department of Mathematics, North West University, Mafikeng, South Africa

Assistant Professor **18th July 2016 to May 2021**
Department of Mathematics, Preston University, Islamabad, Pakistan

Lecturer **28th Oct 2015** to **18th July 2016**
Department of Mathematics, Preston University, Islamabad, Pakistan

Visiting Assistant Professor **Ist Sep 2017** to **31th Feb 2018**

Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan
Visiting Assistant Professor **Ist march 2017** to **Jan 2019**
Department of Mathematics, PMAS Arid Agriculture University, Islamabad, Pakistan

Visiting Lecturer **Ist march 2016** to **30 Aug 2017**
Department of Mathematics, Allama Iqbal Open University, Islamabad, Pakistan
Visiting Lecturer **Ist sept 2015** to **31th July 2016**
Department of Mathematics, International Islamic University, Islamabad, Pakistan

Teaching Assistant **Spring 2015 (23-02-2015 to 02-06-2015)**
Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan

Teaching Assistant **Fall 2013(10-10-2013 to 31-01-2014)**
Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan

Senior Research Associate **25th September 2012 to 18th May 2016**
Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan

Junior Research Associate **2010-2012**
Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan

Visiting Lecturer **01-07-2009** to **31-03-2012**
Department of Mathematics, Govt. Post Graduate College for Women Rawalpindi, Pakistan

EDUCATION/ACADEMIC DEGREES

Ph.D. (Applied Mathematics) **2012-2016**
Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan
Thesis: Steady flows of viscoelastic fluids due to moving surface with heat transfer

M. Phil. (Applied Mathematics) **2009-2011**
Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan
Thesis: Axisymmetric flow in a third-grade fluid

M. Sc (Applied Mathematics) **2007-2009**
Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan
Field of Study: Applied Mathematics
B. Sc (Graduation) **2005-2007**
Department of Mathematics, **Punjab University Lahore**
Major Courses: Mathematics A, Mathematics B, and Statistics

Editor Experience

Topical advisory panel (MDPI)

- Fractal and Fractional (Q1 : IF = 3.313)
- Micromachines (Q2: IF = 2.891)
- Electronics (Q2; IF = 2.690)
- Data (Q2)
- Applied Mechanics (Q2)
- Fluids (Q2)
- Axioms (Q2; IF = 1.824)
- Symmetry (Q1 : IF = 2.940)
- Lubricants (Q2; IF = 3.584)
- Catalysts (Q1; IF = 4.501)
- Sustainability (Q1; IF = 3.889)

ASSOCIATE/ACADEMIC EDITOR

- Scientific Report
- Journal of Mathematics and Statistics
- Contemporary Mathematics (ISSN: 2705-1064)
- General Letters in Mathematics
- Mathematics in Natural Science (Math. Nat. Sci.)
- Current Chinese Science (ISSN: 2210-2981)
- Adaptation and Personalization
- Journal of Mathematical Sciences and Applications
- Journal of Advances in Nanotechnology
- SCIREA Journal of Mathematics
- Nanoscience and Nanotechnology
- International Journal of Mathematics and Systems Science

- Member of the editorial board of SciEP "Journal of Mathematical Sciences and Applications"
- Member of the editorial board of an international journal namely "Mathematical Modelling and Application

- Full member of Organization for Women in Science for the Developing World (OWSD), Member ID: 14730
- EIMM2022 International Conference on Education Innovation and Modern Management, Sanya, China (Guest Editor)
- 8th International Conference on Mechanics, Mathematics and Applied Physics, Dalian, Liaoning, on November 22-24, (ICMMAP 2024) (Technical Program Committee Member)
- African Society for Industrial and Applied Mathematics (ASIAM) 30 Sep to 5 Oct 2024 (Scientific Committee)
- 7th International Conference on Mechanics, Mathematics and Applied Physics, Dalian, Liaoning, on September 8-10, (ICMMAP 2023) (Organizing Committee Member)
- Asia-Pacific Conference on Applied Mathematics and Statistics (AMS 2023), June 16-18, 2023 in Nanjing, China
- 2023 International Conference on Mechanical Automation and Computer Application（MACA2023）(Technical Program Committees)
- 2022 6th International Conference on Mechanics, Mathematics and Applied Physics (ICMMAP 2022) (Organizing Committee Member)
- 2022 International Conference on Diversified Education and Social Development [DESD2022] July 22nd-24th, 2022, Hangzhou, China (Technical Program Committees)
- Member of European women in mathematics (16- Nov-2021)
- Member of Scientific Committee of "4rth International Conference on Computational Mathematics and Engineering Sciences (**CMES2019**)"
- Member of Scientific Committee of "3rd International Conference on Computational Mathematics and Engineering Sciences (**CMES2018**)"
- Member of Scientific Committee of The African Days On Applied Mathematics
- Member of Scientific Committee of 2nd International Conference on Computational Mathematics and Engineering Sciences (CMES2017)
- Role of Honor in B. Sc. **2005-2007.**
- Merit Scholarship in **Ph.D.** from Quaid-i-Azam University, Islamabad.
- Merit Scholarship in **M. Phil**. from Quaid-i-Azam University, Islamabad.
- Merit Scholarship in **M. Sc**. from Quaid-i-Azam University, Islamabad.
- Reviewer of more than **200** leading International Journals.
- Having **140** International publications.
- Having 1000 impact factor upto **140** publications.

PRESENTATION AT CONFERENCES

Invited Speaker/ Speakerv

- 8th International Conference on Mechanics, Mathematics and Applied Physics, Dalian, Liaoning, on November 22-24, (ICMMAP 2024) (Invited Speaker)
- 7th International Conference on Mechanics, Mathematics and Applied Physics, Dalian, Liaoning, on September 8-10, (ICMMAP 2023) (Keynote Speaker)

- Anum Shafiq (24-46 June 2023); "Significance of Double stratified magnetohydrodynamic Marangoni Casson nanofluid: An application of Probable error" 2023 Asia-Pacific Conference on Applied Mathematics and Statistics (AMS 2023), June 24-26, 2023 in Chongqing, China.
- Anum Shafiq (29-January 2023); "Darcy-forchheimer Williamson nanofluid flow towards nonlinear stretching with rosseland's radiative process" 5th International Ankara Multidisciplinary Studies Congress (27-29 January) 2023, Ankara, Türkiye.
- 2022 6th International Conference on Mechanics, Mathematics and Applied Physics (ICMMAP 2022) (Invited peaker)
- (23 and 24 June 2022) TURK-COSE 2022: IV. International Turkic World Congress on Science and Engineering
- Anum Shafiq (December Ist and 2nd 2021), Impact of Soret and Dufour's convective heat transfer in nanofluid flow along moving needle with artificial neural network. **2021 Oufang Forum for International Young Scholars in Mathematics and Statistics, Nanjing, China.**
- Anum Shafiq (May 26-June 4, 2019), Statistcal study of bioconvective flow of Tangent hyperbolic nanofluid along a non-linear stretching surface. 2nd JNMP conference on Nonlinear Mathematical Physics, Santiago de Chile, Universidad de Santiago de Chile.
- Anum Shafiq (November 16-18 2018), Statistical study of non-Newtonian liquid over a vertical exponentially stretched plate. International workshop on non-linear analysis and applications (IWNAAP 2018), UMT, Lahore, Pakistan.
- Anum Shafiq (August 05-07 2016), Boundary-layer flow of Walters' B fluid with Newtonian heating. 17th International Pure Mathematics Conference, Islamabad, Pakistan.
- Anum Shafiq (November 10-11 2017), 3rd **International Conference On Pure and Applied Mathematics, University of Sargodha, Pakistan**.
- 27th April to 28th April 2017, **3rd National Conference on Mathematical Sciences, IIU, Islamabad, Pakistan.**

SEMINARS

- Anum Shafiq (May 2014), Effect of Joule heating and thermal radiation in the flow of third-grade fluid over the radiative surface. Department of Mathematics, **Quaid-i-Azam University, Islamabad.**
- Anum Shafiq (September 2014), Boundary-layer flow of Walters' B fluid with the Newtonian heating department of Mathematics, **Quaid-i-Azam University, Islamabad.**

CONFERENCE ATTANDES

- Anum Shafiq. 2010. **Recent Developments in Fluid Mechanics.** Quaid-I-Azam University, Islamabad.
- International workshop on "**Mathematics and its applications**" held on 23-25 May, 2011, at COMSTECH, Islamabad.
- 4thAll **Pakistan Mathematical Conference** 2011, Organized By: All Pakistan Mathematical Association (APMA) and National Center for Physics (NCP) , July 21-22, 2011.
- 5thInternational Conference on "**Recent Developments in Fluid Mechanics**" 24thJune to 26thJune 2013.
- International workshop on "**Latest Advancements in Mathematical Sciences**" 27th December to 29th December 2011.
- International workshop on "**Mathematical Sciences and its Applications**" 23rd May to 25th May 2011.
- 6thInternational Conference on "**Recent Developments in Fluid Mechanics**" 24thJune to 26thJune 2013.
- 17th International **Pure Mathematics Conference, Islamabad**: 5th August to 7th August 2016.

REVIEWER SERVICES FOR INTERNATIONAL JOURNALS

- Alexandria Engineering Journal
- World Journal of Engineering and Physical Science
- Plos One
- Applied Bionechs and Biomechanics

- International Journal of Numerical Methods for Heat & Fluid Flow
- Asian Journal of Mathematics and Computer Research
- Physical Science International Journal
- AASCIT Nanoscience
- Computational and Applied Mathematics
- Journal of Basic and Applied Research International
- International Journal of Mathematical Analysis and Applications
- Applied Mathematics and Mechanics English Edition
- International Journal of Biomathematics
- Asian Journal of Mathematics and Computer Research
- Journal of Applied Physical Science International
- Kawait Journal of Sciences
- Applied Thermal Engineering
- Fractal Fract
- Surface Reviews and Letters
- Journal of Modern Applied Statistical Methods
- International Journal of Physics
- Advances in Operator Theory
- Results in Physics
- Open Physics
- BioNanoSciences
- Mathematics Journal (MDPI)
- Symmetric Journal (MDPI)
- Advances in Difference Equations
- Scientific Report
- International Journal of Ambient Energy
- Computer Methods in Biomechanics and Biomedical Engineering
- Journal of Dispersion Science and Technology
- Energies (MDPI)
- Nanomaterials (MDPI)
- Sustainability (MDPI)
- Biology (MDPI)
- Fluids (MDPI)
- Entropy (MDPI)
- Mathematical Problems in Engineering (Hindawi)
- Advances in Mathematical Physics (Hindawi)
- Cogent Mathematics & Statistics
- Physica Scripta
- Quality and Reliability Engineering
- Journal of Mathematical Sciences and Applications
- Informatics in Medicine Unlocked
- Nanoscience & Nanotechnology-Asia
- Propulsion and Power Research
- Coatings
- Heat Transfer
- Journal of Dispersion Science and Technology
- International Journal for Computational Methods in Engineering Science & Mechanics
- Chemical Thermodynamics and Thermal Analysis
- Mathematical Methods in the Applied Sciences

COURSES TAUGHT

M. Phil:

- Numerical solution of Integral Equation
- Numerical solution of ODE
- Numerical solution of PDE
- Fourier analysis
- Non-Newtonian fluid

MSc:

- Fluid mechanics
- Functional analysis
- Mathematical Statistics
- Ordinary differential equation
- Partial Differential Equation
- Complex analysis
- Differential geometry
- Combinatorics
- Discrete Structure
- Functional analysis
- Linear Algebra
- Calculus I
- Calculus II
- Statistics

BS:

- Functional analysis
- Calculus I
- Linear Algebra and ordinary differential equation
- General mathematics (Bio informatics and agriculture)
- Probability Theory (Markov Chain) (3 credit hours in NUIST in (2020, 2021))
- Probability and Statistics (3 credit hours in NUIST in (2020, 2021))
- Linear Algebra (2 credit hours in NUIST in Spring 2022)
- Engineering Mathematics II (3 credit hours in Waterford University; NUIST in (2022, 2023))

- ❖ Probability and Statistics (3 credit hours in CIS; NUIST in (2023, 2024))

ADVISOR EXPERIENCE

- ❖ **PhD = 1 (Co-supervision)**
- ❖ **MS / M. Phil = 9**
- ❖ **Masters = 15**
- ❖ **Bachelors = 15**

PROJECTS SUPERVISED

Ph.D. Thesis Supervision (as a Co-Principal Investigator) 15- 11-2021

- Islam Zari (2021), Modeling and simulation of marangoni convective flow of nanoliquids towards moving surfaces (**Department of mathematics, University of Peshawar, Pakistan**)

MS / M. Phil SUPERVISION

- M. Hassan Raza (2017), **"Magnetohydrodynamics flow of carbon nanotubes over a variable thicked surface"** Department of Mathematics, Preston University Islamabad
- Aqil Hussain (2017) **"Effects of double stratification in stagnation point flow towards a stretched cylinder"** Department of Mathematics, Preston University Islamabad
- Saleem-ud-din (2018) **"Thermosolutal marangoni mixed convective boundary layer flow towards a permeable riga plate"** Department of Mathematics, Preston University Islamabad
- Mona Iram (2018), **"Marangoni convection in the flow of nanofluid over a riga plate"** Department of Mathematics, Preston University Islamabad
- Sikandar Khan (2018) **"Impact Of Homogeneous Heterogeneous reaction on stagnation point flow of walters' B fluid with Newtonian heating"** Department of Mathematics, Preston University Islamabad
- Mudassir Abass (2019) **"Effect of Cattaneo–Christov heat flux model in third grade fluid with variable thermal conductivity towards a variable thicked surface"** Department of Mathematics, Preston University Islamabad
- Ajmal Latif (2019) **"Radiative flow of nanofluid over linear and non-linear stretching surfaces with chemical reaction"** Department of Mathematics, Preston University Islambad
- Muhammad Ishtiaq (2019) **"Impact of magnetohydrodynamics flow of third-grade nanofluid towards a variable thicked surface with Newtonian heating"** Department of Mathematics, Preston University Islamabad
- Muhammad Haroon Haider (2019) **"Thermally stratified squeezing flow of second-grade fluid with cattaneo-christov heat flux towards a Riga plate"** Department of Mathematics, Preston University Islamabad

MASTERS PROJECTS SUPERVISION

- Malik Abar Shahzad (2017) "**Generalized Stokes Problem for an incompressible Couple stress fluid**" Department of Mathematics, Preston University Islamabad
- Muhammad Ikhlaq (2017) "**Adomian Decomposition Method**" Department of Mathematics, Preston University Islamabad
- Samreen Ali (2017) "**Logic in Discrete mathematics and various other fields**" Department of Mathematics, Preston University Islamabad
- Bakhtawer Pervaiz (2017) "**Laplace Transform and its Applications**" Department of Mathematics, Preston University Islamabad
- Fahad Hasan (2017) "**Fractional Derivative**" Department of Mathematics, Preston University Islamabad
- Muhammad Muneeb Zahoor (2017) "**Homotopy Analysis Method**" Department of Mathematics, Preston University Islamabad
- Munnaza Shafaq (2017) "**Complex Analysis and its Applications**" Department of Mathematics, Preston University Islamabad
- Muhammad Faizan Abbasi (2017) "**First Order Differntial Equation**" Department of Mathematics, Preston University Islamabad

- Faiza Maryam (2017) "**Some Perturbation Techniques for Mathematical Problem**" Department of Mathematics, Preston University Islamabad
- Tooba Kanwal (2017) "**Algebraic Equations and Its Applications**" Department of Mathematics, Preston University Islamabad
- Muhammad Nazakat Ali (2017) "**Higher-Order Differential Equation**" Department of Mathematics, Preston University Islamabad
- Irum Naseer (2017) "**Finite Difference Method**" Department of Mathematics, Preston University Islamabad
- Ayesha (2017) "**Fluid Kinematics**" Department of Mathematics, Preston University Islamabad
- Farhan Ullah (2017) "**Differential Transform Method (DTM)**" Department of Mathematics, Preston University Islamabad
- Muhammad Bilal Ali (2017) "**Mean Value Theorem**" Department of Mathematics, Preston University Islamabad
- Umar Farooq Kayani (2017) "**Analysis and Modelling of Non-Dimensional Parameters in Fluid Mechanics**" Department of Mathematics, Preston University Islamabad
- Ehtisham Ali (2017) "**Fourier Transform Solution for MHD Fluid Flow over a Periodically Accelerated Boundary with Slippage**" Department of Mathematics, Preston University Islamabad
- Nosheen Azram (2017) "**Finite Fourier Transform**" Department of Mathematics, Preston University Islamabad
- Najam Us Sahar (2017) "**Shooting Method in Solving Linear and Non-linear Differential Equation**" Department of Mathematics, Preston University Islamabad
- Saira Ghulam Ahmed (2017) "**Bessel and Airy Functions**" Department of Mathematics, Preston University Islamabad
- Nadia Gul (2017) "**Down Hill Method**" Department of Mathematics, Preston University Islamabad

BACHELORS PROJECTS SUPERVISION

- Munazza Gul (2018) "**Analytical Investigation of Metric Spaces and Fuzzy Metric Spaces**" Department of Mathematics, Preston University Islamabad
- Uzma Sajjad (2018) "**Numerical Solution of Convection Diffution By Using FTCS**" Department of Mathematics, Preston University Islamabad
- Basit Roshan (2018) "**Mathematical Spaces**" Department of Mathematics, Preston University Islamabad
- Yasir Shehzad (2018) "**Radiative Flow of Nano-fluids over Linear and nonlinear Surfaces with Chemical Reactions**" Department of Mathematics, Preston University Islamabad
- Sadaf Shahzadi "**Algebraic Equations and its applications" Department of Mathematics**, Preston University Islamabad
- Sad Ur Rehman "**Basic Concepts of Multiplicative Calculus" Department of Mathematics**, Preston University Islamabad
- Wajeeha Tehseen "**A New Generalized Poisson Lindley Distribution" Department of Mathematics**, Preston University Islamabad
- Arfa Qamar Abbasi "**Finite Difference Method and Its Applications" Department of Mathematics**, Preston University Islamabad
- Khawaja Moin Ud Din "**Linear Algebra And Its Applications**" Department of Mathematics, Preston University Islamabad
- Syeda Ifra Batool "**Projectile Motion and Its Applications**" Department of Mathematics, Preston University Islamabad
- Jahanzaib Khan "**Methods for Solving Ordinary Differential Equations**" Department of Mathematics, Preston University Islamabad
- Zeeshan Hanif "**Laplace Transform**" Department of Mathematics, Preston University Islamabad
- Muhammad Fawaz "**Algebra and Trigonometry**" Department of Mathematics, Preston University Islamabad
- Basit Ul Hassan "**Numerical Solution Of Heat Equation Using Finite Difference Method**" Department of Mathematics, Preston University Islamabad

- Nouman Zameer Abbasi "**Comparison of Iterative Methods for Linear and non-Linear Equations**" Department of Mathematics, Preston University Islamabad
- Umair Rasheed "**Differential Equation and Its Applications**" Department of Mathematics, Preston University Islamabad

RESEARCH COLLABORATIONS

1. Prof. Dr. Tasawar Hayat (Pakistan)
2. Prof Dr Atangana (South africa)
3. Dr. Andaç Batur Çolak (Turkey)
4. Dr. Showkat A. Lone (Saudi Arabia)
5. Dr Fahad Jarhad (Turkey)
6. Prof. Kamsing Nonlaopon (Thailand)
7. Prof. Dr. Ahmed Alsaedi (Saudi Arabia)
8. Prof. Dr. T. Barakat (Saudi Arabia)
9. Professor Ali J. Chamkha (Saudi Arabia)
10. Prof. Dr. Bashir Ahmad (Saudi Arabia)
11. Dr. Hamed H. Alsulami (Saudi Arabia)
12. Prof. Dr. Q. M. Al-Mdallal (UAE)
13. Dr. Fazle Mabood (Canada)
14. Dr. Muhammad Awais (Pakistan)
15. Dr. Muhammad Nawaz (Pakistan)
16. Dr. Meraj Mustafa Hashmi (Pakistan)
17. Dr. M. Asif Farooq (Pakistan)
18. Dr. Zakia Hammouch Bouhamidi (Morocco)
19. Dr. Rabia Malik (Pakistan)
20. Ms Tabassum Naz Sindhu (Pakistan)
21. Dr. Ghulam Rasool (China)

Research Publications Summary

	Scopus	Web of Science (Publons)	Reserchgate	Research.com D-Index & Metrics	Google Scholar
Documents	142	139	166	120	190
Citations	5863	5640	6590	4524	8017
h-index	47	46	50	-	55
i10-index	-	-	-	-	130
D-Index	-	-	-	40	-

LIST OF PUBLICATIONS WITH
(First Author, "*" means Corresponding author and Co-author)
Year 2025

1. **Anum Shafiq*,** T. N. Sindhu, and Muhammad Ahmad Iqbal. Nonlinear squeezing flow of stratified fluids: A comprehensive study on convective conditions and probable errors. **International Journal of Thermofluids 28 (2025): 101290.**
2. **Anum Shafiq*,** T. N. Sindhu, and Muhammad Ahmad Iqbal. Precision optimization of reactive squeezing flow in stratified fluids: A response surface exploration. **International Journal of Thermofluids 25 (2025): 101027.**
3. **Anum Shafiq*,** Andaç Batur Çolak, Tabassum Naz Sindhu, and Tahani A. Abushal. Investigating the Sensitivity of Nanofluid Flow around a Cylindrical Disk: A Study of Walter's B Nanofluid using Response Surface Methodology and Artificial Neural Networks. **Journal of Engineering Research (2025).**
4. **Anum Shafiq*,** A. B. Çolak*, and Tabassum Naz Sindhu. A Hybrid Approach of Buongiorno's Law and Darcy–Forchheimer Theory Using Artificial Neural Networks: Modeling Convective Transport in Al2O3-EO Mono-Nanofluid Around a Riga Wedge in Porous Medium. **International Journal for Numerical Methods in Fluids, (2025).**

Co-authors

5. Muhammad Ahmad Iqbal* **and Anum Shafiq*,** Long-term aging at 475° C: Effects on the microstructure and properties of custom 465® alloy. **Results in Engineering 26 (2025): 104704.**
6. T. N. Sindhu*, **Anum Shafiq,** Q. M. Al-Mdallal*, T. A. Abushal, and M. Aslam, A Novel Entropy-Transformed Inverse Weibull Distribution: Development, Properties, and Application in Diverse Data Modeling. **Engineering Reports, 7(7) (2025), e70171.**
7. T. N. Sindhu**, Anum Shafiq*,** Abdon Atangana, Tahani A. Abushal, and Alia A. Alkhathami. Control Charts for Overdispersed Count Data: Exploring the Poisson Chris-Jerry Distribution in Agriculture and Medicine. **Quality and Reliability Engineering International 41 (5) (2025), 1913-1935.**
8. T. N. Sindhu, **Anum Shafiq**[*], Showkat Ahmad Lone, and Tahani A. Abushal. The entropy-transformed Gompertz distribution: Distributional insights and cross-disciplinary utilizations. **Kuwait Journal of Science, 52 (1) (2025): 100335.**
9. Moh. Yaseen, Ritu Bartwal, **Anum Shafiq,** Sawan Kumar Rawat, Qasem M. Al-Mdallal, Umesh Khanduri, and Tabassum Naz Sindhu. **A**nalysis of entropy generation in tri-hybrid nanofluid flow towards a spinning disk under the influence of hall effect and variable viscosity. **International Journal of Thermofluids (2025): 101252.**
10. T. N. Sindhu**,** Ehab M. Almetwally**, Anum Shafiq,** and Tahani A. Abushal. Theory, simulation, and application of the entropy transformation of the Chen distribution to enhance interdisciplinary data analysis. **Journal of Radiation Research and Applied Sciences 18, (2) (2025): 101472.**
11. T. N. Sindhu, M. A., Abd Elgawad, **Anum Shafiq,** and Tahani A. Abushal. Entropy-transformed teissier distribution: A modern statistical framework for engineering, pharmaceutical, and metrological applications. **Journal of Radiation Research and Applied Sciences, 18(3) (2025), 101773.**
12. N., Razi, Muhammad Bilal Riaz, Ambreen Bano, Tayyab Kamran, Umar Ishtiaq, and **Anum Shafiq**. Applying fractional calculus to malware spread: A fractal-based approach to threat analysis. **PloS one 20 (1) (2025): e0313914.**

Year 2024

13. **Anum Shafiq**[*]**,** T. N. Sindhu, M. B. Riaz, M. KH Hassan, and T.A. Abushal. A statistical framework for a new Kavya-Manoharan Bilal distribution using ranked set sampling and simple random sampling. **Heliyon (2024), e38340.**
14. **Anum Shafiq**[*]**,** A. B. Çolak[*] and T. N. Sindhu, Optimization of micro-rotation effect on magnetohydrodynamic nanofluid flow with artificial neural network. **ZAMM-Journal of Applied Mathematics and Mechanics/Zeitschrift für Angewandte Mathematik und Mechanik 104 (8) (2024): e202300498.**
15. **Anum Shafiq**[*]**,** Tabassum Naz Sindhu, Showkat Ahmad Lone, Tahani A. Abushal, and Marwa KH Hassan. An updated software reliability model using the shanker model and failure data. ***Q*uality and Reliability Engineering International 40 (4) (2024): 2078-2095.**

16. **Anum Shafiq*,** A. B. Çolak* and T. N. Sindhu, Comparative analysis to study the Darcy–Forchheimer Tangent hyperbolic flow towards cylindrical surface using artificial neural network: An application to Parabolic Trough Solar Collector. **Mathematics and Computers in Simulation 216 (2024): 213-230.**
17. **Anum Shafiq*,** Andac Batur Colak, Showkat Ahmad Lone, Tabassum Naz Sindhu, and Taseer Muhammad. Reliability modeling and analysis of mixture of exponential distributions using artificial neural network. **Mathematical Methods in the Applied Sciences; 47, 5 (2024): 3308-3328.**

Co-authors

18. Tabassum Naz Sindhu, **Anum Shafiq*,** Showkat Ahmad Lone, Qasem M. Al-Mdallal*, and Tahani A. Abushal. Distributional properties of the entropy transformed Weibull distribution and applications to various scientific fields. **Scientific Reports 14 (1) (2024): 31827.**
19. Tabassum Naz Sindhu, **Anum Shafiq*,** Zakia Hammouch*, Marwa KH Hassan, and Tahani A. Abushal. Analysis of incorporating modified Weibull model fault detection rate function into software reliability modeling. **Heliyon 10 (13) (2024), e33874.**
20. Tabassum Naz Sindhu, **Anum Shafiq*,** Muhammad Bilal Riaz, Tahani A. Abushal, Hijaz Ahmad, Ehab M. Almetwally, Sameh Askar, Introducing the new arcsine-generator distribution family: An in-depth exploration with an illustrative example of the inverse weibull distribution for analyzing healthcare industry data. **Journal of Radiation Research and Applied Sciences, 17 (2) (2024), 100879.**
21. Tabassum Naz Sindhu, Andaç Batur Çolak, Showkat Ahmad Lone, **Anum Shafiq,** and Tahani A. Abushal. A decreasing failure rate model with a novel approach to enhance the artificial neural network's structure for engineering and disease data analysis. **Tribology International 192 (2024): 109231.**
22. Tabassum Naz Sindhu, **Anum Shafiq,** and Z. Huassian, Generalized exponentiated unit Gompertz distribution for modeling arthritic pain relief times data: classical approach to statistical inference. **Journal of Biopharmaceutical Statistics, 34 (3) (2024), 323-348.**
23. A. Nigam, Kamal Kant Sharma, Muhammad Bilal Riaz, Moh Yaseen, **Anum Shafiq*,** and Tabassum Naz Sindhu. Reactive Power Compensation during the Convergence of Grid System with FACTS Devices. **Results in Engineering 23 (2024): 102449.**
24. Yaseen, Moh, Sawan Kumar Rawat, Honey Tyagi, Manish Pant, Ashish Mishra, **Anum Shafiq,** and Chandan Singh Ujarari. Artificial Neural Network with Levenberg-Marquardt Training Algorithm for Heat Transfer Analysis of Ag-TiO2/water Hybrid Nanofluid Flow Between Two Parallel Rotating Disks. **International Journal of Mathematical, Engineering and Management Sciences 9 (4) (2024): 714.**
25. F. Wan, M. B.Yaseen, M. B. Riaz, **Anum Shafiq,** A. Thakur, and MD O. Rahman. Advancements and challenges in uav-based communication networks: A comprehensive scholarly analysis. **Results in Engineering 24 (2024): 103271.**
26. G. Rasool, **Anum Shafiq,** Xinhua Wang, Ali J. Chamkha, and Abderrahim Wakif. Numerical treatment of MHD Al2O3–Cu/engine oil-based nanofluid flow in a Darcy–Forchheimer medium: application of radiative heat and mass transfer laws. **International Journal of Modern Physics B 38, no. 09 (2024): 2450129.**

27. Andaç Batur Çolak, Tabassum Naz Sindhu, Showkat Ahmad Lone, Md Tanwir Akhtar, and **Anum Shafiq*,** A comparative analysis of maximum likelihood estimation and artificial neural network modeling to assess electrical component reliability. **Quality and Reliability Engineering International 40, no. 1 (2024): 91-114.**

Year 2023

28. **Anum Shafiq*,** A. B. Çolak* and T. N. Sindhu, S. A. Lone, Tahani A. Abushal, Modeling and survival exploration of breast carcinoma: A statistical, maximum likelihood estimation, and artificial neural network perspective. **Artificial Intelligence in the Life Sciences, 4, 15 December 2023, 100082.**
29. **Anum Shafiq*,** A. B. Çolak*, and T. N. Sindhu, Modeling of Darcy-Forchheimer magnetohydrodynamic Williamson nanofluid flow towards nonlinear radiative stretching surface using artificial neural network. **International Journal for Numerical Methods in Fluids, 95 (9) (2023): 1502-1520. [I.F. = 2.107].**
30. **Anum Shafiq*,** A. B. Çolak* and T. N. Sindhu, Development of an intelligent computing system using neural networks for modeling bioconvection flow of second-grade nanofluid with gyrotactic microorganisms. **Numerical Heat Transfer, Part B: Fundamentals, DOI: 10.1080/10407790.2023.2273512.**
31. **Anum Shafiq*,** A. B. Çolak*, and T. N. Sindhu, Analyzing activation energy and binary chemical reaction effects with artificial intelligence approach in axisymmetric flow of third grade nanofluid subject to Soret and Dufour effects. **Heat Transfer Research 54 (3) (2023), 75-94. [I.F. = 2.443].**
32. **Anum Shafiq*,** A. B. Çolak*, T. N. Sindhu, Modeling of Soret and Dufour's convective heat transfer in nanofluid flow through a moving needle with artificial neural network. **Arabian Journal for Science and Engineering, 48 (3) (2023), 2807-2820. [I.F. = 2.807].**
33. **Anum Shafiq,** T. N. Sindhu, Z. Hussain, J. Mazucheli, B. Alves. A Flexible Probability Model for Proportion Data: Unit Gumbel Type-II Distribution, Development, Properties, Different Method of Estimations and Applications. **Austrian Journal of Statistics 52 (2) (2023): 116-140. [I.F. = 0.98].**
34. **Anum Shafiq*,** A. B. Çolak*, and T. N. Sindhu, Optimization of the numerical treatment of the Darcy–Forchheimer flow of Ree–Eyring fluid with chemical reaction by using artificial neural networks. **International Journal for Numerical Methods in Fluids, 95 (1) (2023): 176-192. [I.F. = 2.107].**
35. **Anum Shafiq*,** A. B. Çolak*, and T. N. Sindhu. Significance of EMHD graphene oxide (GO) water ethylene glycol nanofluid flow in a Darcy–Forchheimer medium by machine learning algorithm. **The European Physical Journal Plus 138 (3) (2023): 213.**
36. **Anum Shafiq*,** T. N. Sindhu*, S. Dey, S. A. Lone, Tahani A. Abushal*, Statistical Features and Estimation Methods for Half-Logistic Unit-Gompertz Type-I Model. **Mathematics 11, no. 4 (2023): 1007. [I.F. = 2.592].**

37. **Anum Shafiq*,** A. B. Çolak*, and T. N. Sindhu, Construction of neural network based intelligent computing for treatment of darcy-forchheimer sisko nanofluid flow with rosseland's radiative process. **Heat Transfer Research 54 (9) (2023), 77-98. [I.F. = 2.443].**

Co-authors

38. S. K. Rawat, M. Yaseen, **Anum Shafiq***, Manoj Kumar, Qasem M. Al-Mdallal, Nanoparticle aggregation effect on nonlinear convective nanofluid flow over a stretched surface with linear and exponential heat source/sink. **International Journal of Thermofluids, 2023, 100355.**
39. Zahir Shah, Anum Shafiq, Muhammad Rooman, Mansoor H. Alshehri, Ebenezer Bonyah, Darcy Forchhemier Prandtl-Eyring nanofluid flow with variable heat transfer and entropy generation using Cattaneo-Christov heat flux model: Statistical approach. **Case Studies in Thermal Engineering**, 49 (2023), 103376.
40. A. B. Çolak, T. N. Sindhu, S. A. Lone, **Anum Shafiq***, T. A. Abushal, Reliability study of generalized Rayleigh distribution based on inverse power law using artificial neural network with Bayesian regularization. **Tribology International, 185 (2023), 108544.**
41. T. N. Sindhu, **Anum Shafiq**, Z. Huassian, Generalized exponentiated unit Gompertz distribution for modeling arthritic pain relief times data: classical approach to statistical inference. **Journal of Biopharmaceutical Statistics, (2023). DOI: 10.1080/10543406.2023.2210681**
42. T. A. Abushal*, T. N. Sindhu*, S. A. Lone, M. K.H. Hassan, **Anum Shafiq***, Mixture of Shanker Distributions: Estimation, Simulation and Application. **Axioms, 12 (3) (2023): 231. [I.F = 1.824]**
43. T. N. Sindhu*, Z. Hussain, **Anum Shafiq**. A new flexible extension to a lifetime distributions, properties, inference, and applications in engineering science. **Editor(s): Harish Garg, Mangey Ram, In Advances in Reliability Science, Engineering Reliability and Risk Assessment, Elsevier, 2023, 65-89.**
44. Bagh Ali, **Anum Shafiq**, M. M. Alanazi, A. A. Hendi, A. K. Hussein, N. Ali Shah. Significance of Nanoparticle Radius and Gravity Modulation on Dynamics of Nanofluid over Stretched Surface via Finite Element Simulation: The Case of Water-Based Copper Nanoparticles. **Mathematics 11 (5) (2023): 1266. [I.F. = 2.592].**
45. T. N. Sindhu, S. Anwar, M. K.H. Hassan, S. A. Lone, T. A. Abushal*, **Anum Shafiq*,** An Analysis of the New Reliability Model Based on Bathtub-Shaped Failure Rate Distribution with Application to Failure Data. **Mathematics 11, no. 4 (2023): 842. [I.F. = 2.592].**
46. X. Wang, G. Rasool, **Anum Shafiq**, T. Thumma, Q.M. Al-Mdallal. Numerical study of hydrothermal and mass aspects in MHD driven Sisko-nanofluid flow including optimization analysis using response surface method. **Scientific Reports 13 (1) (2023): 7821.**
47. G. Rasool, **Anum Shafiq,** X. Wang, A. J. Chamkha, A. Wakif, Numerical treatment of MHD Al2O3–Cu/engine oil-based nanofluid flow in a Darcy–Forchheimer medium: Application of radiative heat and mass transfer laws. **International Journal of Modern Physics B, (2023), 2450129,** https://doi.org/10.1142/S0217979224501297.

48. S. A. Lone, T. N. Sindhu, M. K.H. Hassan, T. A. Abushal, S. Anwar, **Anum Shafiq**, Theoretical Structure and Applications of a Newly Enhanced Gumbel Type II Model. **Mathematics, 11 (8) (2023), 1797. [I.F. = 2.592].**
49. **G. Rasool, Anum Shafiq*,** Numerical exploration of the features of thermally enhanced chemically reactive radiative Powell–Eyring nanofluid flow via Darcy medium over non-linearly stretching surface affected by a transverse magnetic field and convective boundary conditions. **Applied Nanoscience 13 (1) (2023): 229-246. [I.F. = 3.869].**
50. G. Rasool, A. Wakif, X. Wang, **Anum Shafiq**, A. J. Chamkha, Numerical passive control of alumina nanoparticles in purely aquatic medium featuring EMHD driven non-Darcian nanofluid flow over convective Riga surface. **Alexandria Engineering Journal, 68 (2023), 747-762.**
51. G. Rasool, N. A. Ahammad, M. R. Ali, N. A. Shah, X. Wang, **Anum Shafiq**, A. Wakif, Hydrothermal and mass aspects of MHD non-Darcian convective flows of radiating thixotropic nanofluids nearby a horizontal stretchable surface: Passive control strategy. **Case Studies in Thermal Engineering, 42, (2023), 102654. [I.F. = 6.268].**
52. A. Haleem, **Anum Shafiq***, Sheng-Qi Chen, and M. Nazar, A Comprehensive Review on Adsorption, Photocatalytic and Chemical Degradation of Dyes and Nitro-Compounds over Different Kinds of Porous and Composite Materials. **Molecules, 28 (3) (2023): 1081. [I.F. = 4.927].** https://doi.org/10.3390/molecules28031081
53. G. Rasool, A. Wakif, X. Wang, **Anum Shafiq**, A. J. Chamkha, Numerical passive control of alumina nanoparticles in purely aquatic medium featuring EMHD driven non-Darcian nanofluid flow over convective Riga surface. **Alexandria Engineering Journal, 2022. [I.F. = 6.626].** **https://doi.org/10.1016/j.aej.2022.12.032**
54. M. Rooman, **Anum Shafiq***, Z. Shah*, N. Vrinceanu*, W. Deebani, and M. Shutaywi, Statistical modeling for Ree-Eyring nanofluid flow in a conical gap between porous rotating surfaces with entropy generation and Hall Effect. **Scientific Reports 12, (1) (2022): 21126. [I.F. = 4.996].**

Year 2022

55. **Anum Shafiq***, Andaç Batur Çolak*, and Tabassum Naz Sindhu, Significance of bioconvective flow of MHD thixotropic nanofluid passing through a vertical surface by machine learning algorithm. **Chinese Journal of Physics 80 (2022): 427-444. [I.F = 3.957]**
56. **Anum Shafiq***, Andaç Batur Çolak*, and Tabassum Naz Sindhu, Optimization of Bioconvective Magnetized Walter's B Nanofluid Flow towards a Cylindrical Disk with Artificial Neural Networks. **Lubricants, 10, (9) (2022): 209. [I.F = 3.584]**
57. **Anum Shafiq,** Tabassum Naz Sindhu, Showkat Ahmad Lone, Marwa KH Hassan, and Kamsing Nonlaopon. Mixture of Akash Distributions: Estimation, Simulation and Application. **Axioms 11, no. 10 (2022): 516. [I.F = 1.824]**

58. **Anum Shafiq,** S. A. Lone, Tabassum Naz Sindhu, and Kamsing Nonlaopon, Statistical Modelling for the Darcy–Forchheimer Flow of Casson Cobalt Ferrite-Water/Ethylene Glycol Nanofluid under Nonlinear Radiation. **Symmetry 14 (8) (2022): 1717. [I.F. = 2.713].**
59. **Anum Shafiq** *, A. B. Çolak* and T. N. Sindhu, Modeling of Soret and Dufour's Convective Heat Transfer in Nanofluid Flow Through a Moving Needle with Artificial Neural Network. **Arabian Journal for Science and Engineering, (2022), 1-14. [I.F. = 2.807].**
60. **Anum Shafiq,** Andaç Batur Çolak, Tabassum Naz Sindhu*, Reliability investigation of exponentiated Weibull distribution using IPL through numerical and artificial neural network modeling. **Quality and Reliability Engineering International, (2022), https://doi.org/10.1002/qre.3155 [I.F. = 3.007].**
61. **Anum Shafiq**, A. B. Çolak, Showkat A. Lone , T. N. Sindhu, and T. Muhammad, Reliability modeling and analysis of mixture of exponential distributions using artificial neural network. **Mathematical Methods in the Applied Sciences, (2022), https://doi.org/10.1002/mma.8178 [I.F. = 3.007].**
62. **Anum Shafiq** *, A. B. Çolak*, T. N. Sindhu, and T. Muhammad, Optimization of Darcy-Forchheimer squeezing flow in nonlinear stratified fluid under convective conditions with artificial neural network. **Heat Transfer Research, 53(3) (2022), 67-89. [I.F. = 2.443].**
63. **Anum Shafiq,** Fateh Mebarek-Oudina*, T. N. Sindhu, G. Rasool, Sensitivity analysis for Walters-B nanoliquid flow over a radiative Riga surface by RSM. **Scientia Iranica, 29 (3) (2022), 1236-1249. [I.F. = 1.435].**
64. **Anum Shafiq*,** Andaç Batur Çolak, T. N. Sindhu, Showkat A. Lone, Abdelaziz Alsubie, Fahd Jarad*, Comparative Study of Artificial Neural Network versus Parametric Method in COVID-19 data Analysis. **Results in Physics, 38 (2022): 105613. [I.F. = 4.476].**
65. **Anum Shafiq** *, A. B. Çolak*, T. N. Sindhu, and T. Muhammad, Optimization of Darcy-Forchheimer squeezing flow in nonlinear stratified fluid under convective conditions with artificial neural network. **Heat Transfer Research, 53(3) (2022), 67-89. [I.F. = 2.443].**
66. **Anum Shafiq,** Andaç Batur Çolak*, Chetan Swarup, T. N. Sindhu, Showkat A. Lone, Reliability Analysis Based on Mixture of Lindley Distributions with Artificial Neural Network. **Advanced Theory and Simulations, (2022),** https://doi.org/10.1002/adts.202200100 **[I.F. = 4.105].**
67. **Anum Shafiq** *, T. N. Sindhu, and Naif Alotaibi. A novel extended model with versatile shaped failure rate: Statistical inference with Covid-19 applications. **Results in Physics (2022): 105398. [I.F. = 4.476].**

Co-authors

68. I. Zari, F. Ali, T. S. Khan, **Anum Shafiq,** Radiative Hiemenz flow towards a stretching Riga plate in hybrid nanofluid. **International Communications in Heat and Mass Transfer,139 (2022), 106492. [I.F. = 2.713].**
69. M. D. Shamshuddin, F. Mebarek-Oudina, S. O. Salawu and **Anum Shafiq,** Thermophoretic Movement Transport of Reactive Casson Nanofluid on Riga Plate Surface with Nonlinear Thermal Radiation and Uneven Heat Sink/Source. **Journal of Nanofluids, 11 (6) (2022): 833-844.**

70. Saif Ur Rehman, Nageen Fatima, Bagh Ali, **Anum Shafiq,** Significance of mono and hybrid nanoparticles on the dynamics of Prandtl fluid subject to Darcy Forchiemmer law, Lorentz and Coriolis forces: the case of 3D stretched surface, **Waves in Random and Complex Media, (2022) DOI: 10.1080/17455030.2022.2136780**
71. M. Yaseen, S. Kumar Rawat, **Anum Shafiq**, M. Kumar, and Kamsing Nonlaopon, Analysis of Heat Transfer of Mono and Hybrid Nanofluid Flow between Two Parallel Plates in a Darcy Porous Medium with Thermal Radiation and Heat Generation/Absorption. **Symmetry, 14, no. 9 (2022): 1943. [I.F. = 2.713].**
72. A. Naseem, **Anum Shafiq**, F. Naseem, and M. U. Farooq. Aspects of Homogeneous Heterogeneous Reactions for Nanofluid Flow Over a Riga Surface in the Presence of Viscous Dissipation. **Energies 15, no. 19 (2022): 6891. [I.F. =].**
73. S. A. Lone, T. N. Sindhu, **Anum Shafiq**[*], Fahd Jarad, A novel extended Gumbel Type II model with statistical inference and Covid-19 applications. **Results in Physics, 35 (2022), 105377. [I.F. = 4.476].**
74. Andaç Batur Çolak, Tamer Güzel, **Anum Shafiq**, Kamsing Nonlaopon, Do Artificial Neural Networks Always Provide High Prediction Performance? An Experimental Study on the Insufficiency of Artificial Neural Networks in Capacitance Prediction of the 6H-SiC/MEH-PPV/Al Diode. **Symmetry, 14 (8) (2022), 1511. [I.F. = 2.713].**
75. G. Rasool, **Anum Shafiq**[*], Yu-Ming Chu, Muhammad S. Bhutta, and Amjad Ali. Optimal homotopic exploration of features of cattaneo-christov model in second grade nanofluid flow via Darcy-Forchheimer medium subject to viscous dissipation and thermal radiation. **Combinatorial Chemistry & High Throughput Screening 25 (14) (2022): 2485-2497.**
76. Andaç Batur Çolak**, Anum Shafiq**[*]**,** Tabassum Naz Sindhu, Modeling of Darcy-Forchheimer bioconvective Powell Eyring nanofluid with artificial neural network. **Chinese Journal of Physics, (2022):**
77. G. Rasool, **Anum Shafiq**[*], S. Hussain, M. Zaydan, A. Wakif, Ali J. Chamkha, and M. S. Bhutta. Significance of Rosseland's Radiative Process on Reactive Maxwell Nanofluid Flows over an Isothermally Heated Stretching Sheet in the Presence of Darcy–Forchheimer and Lorentz Forces: Towards a New Perspective on Buongiorno's Model. **Micromachines, 13 (3) (2022): 368. [I.F. = 2.891].**
78. Ali, Bagh, **Anum Shafiq**, Abdul Manan, Abderrahim Wakif, and Sajjad Hussain. Bioconvection: Significance of mixed convection and MHD on dynamics of Casson nanofluid in the stagnation point of rotating sphere via finite element simulation. **Mathematics and Computers in Simulation, 194 (2022): 254-268. [I.F. = 2.463].**
79. I Zari, **Anum Shafiq**[*], G Rasool, Tabassum Naz Sindhu, TS Khan. Double-stratified Marangoni boundary layer flow of Casson nanoliquid: probable error application. **Journal of Thermal Analysis and Calorimetry, 147 (2022): 6913–6929. [I.F. = 4.626].**

80. M. Rooman, **Anum Shafiq,** Z. Shah, N. Vrinceanu, W. Deebani, M.l Shutaywi. Statistical modeling for Ree-Eyring nanofluid flow in a conical gap between porous rotating surfaces with entropy generation and Hall Effect. **Scientific Reports 12 (1) (2022): 21126. [I.F. = 4.996].**
81. F. Mabood, **Anum Shafiq,** W. A. Khan and I. A. Badruddin, MHD and nonlinear thermal radiation effects on hybrid nanofluid past a wedge with heat source and entropy generation.. **International Journal of Numerical Methods for Heat & Fluid Flow, 32 (1) (2022), 120-137. [I.F. = 2.871].**

Year 2021

82. **Anum Shafiq**, Andaç Batur Çolak, and Tabassum Naz Sindhu. Designing artificial neural network of nanoparticle diameter and solid–fluid interfacial layer on single-walled carbon nanotubes/ethylene glycol nanofluid flow on thin slendering needles. **International Journal for Numerical Methods in Fluids, 93 (12) (2021): 3384-3404. [I.F. = 2.107].**
83. **Anum Shafiq**, A. B. Çolak, T. N. Sindhu, Q. M. Al-Mdallal, and T. Abdeljawad. Estimation of unsteady hydromagnetic Williamson fluid flow in a radiative surface through numerical and artificial neural network modeling. **Scientific Reports, 11 (1) (2021): 1-21. [I.F. = 4.996].**
84. **Anum Shafiq**, S. A. Lone, Tabassum Naz Sindhu, Q. M. Al-Mdallal, and G. Rasool. Statistical modeling for bioconvective tangent hyperbolic nanofluid towards stretching surface with zero mass flux condition. **Scientific Reports, 11 (1) (2021): 1-11. [I.F. = 5.133].**
85. **Anum Shafiq**[*], S. A. Lone, T. N. Sindhu, Y. El Khatib[*], Q. M. Al-Mdallal, and T. Muhammad. A new modified Kies Fréchet distribution: Applications of mortality rate of Covid-19. **Results in Physics 28 (2021): 104638. [I.F. = 4.476].**
86. **Anum Shafiq,** G. Rasool, H. Alotaibi, H. M. Aljohani, A. Wakif, I. Khan, and S. Akram. Thermally Enhanced Darcy-Forchheimer Casson-Water/Glycerine Rotating Nanofluid Flow with Uniform Magnetic Field. **Micromachines, 12 (6) (2021): 605. [I.F. = 2.891].**
87. **Anum Shafiq,** T. N. Sindhu, and Q. M. Al-Mdallal. A sensitivity study on carbon nanotubes significance in Darcy–Forchheimer flow towards a rotating disk by response surface methodology. **Scientific Reports 11 (1) (2021): 1-26. [I.F. = 5.133].**
88. **Anum Shafiq,** F. Mebarek-Oudina, T. N. Sindhu, and A. Abidi. A study of dual stratification on stagnation point Walters' B nanofluid flow via radiative Riga plate: a statistical approach. **The European Physical Journal Plus, 136 (4) (2021): 1-24. [I.F. = 3.911].**

Co-authors

89. Ali, Bagh, **Anum Shafiq**, Imran Siddique, Qasem Al-Mdallal, and Fahd Jarad. Significance of suction/injection, gravity modulation, thermal radiation, and magnetohydrodynamic on dynamics of micropolar fluid subject to an inclined sheet via finite element approach. **Case Studies in Thermal Engineering 28 (2021): 101537. [I.F. = 6.268].**
90. Ali, Bagh, Imran Siddique, **Anum Shafiq,** Sohaib Abdal, Ilyas Khan, and Afrasyab Khan. Magnetohydrodynamic mass and heat transport over a stretching sheet in a rotating nanofluid with binary

chemical reaction, non-fourier heat flux, and swimming microorganisms. **Case Studies in Thermal Engineering 28 (2021): 101367. [I.F. = 6.268].**

91. I. Zari, **Anum Shafiq**, Tahir Saeed Khan, and Safia Haq. Marangoni Convective Flow of GO-kerosene- and GO-water-based Casson Nanoliquid Toward a Penetrable Riga Surface. **Brazilian Journal of Physics, 51 (6) (2021): 1747-1762. [I.F. = 1.326].**
92. I. Zari, **Anum Shafiq**, and Tahir Saeed Khan. Simulation study of Marangoni convective flow of kerosene oil based nanofluid driven by a porous surface with suction and injection. **International Communications in Heat and Mass Transfer, 127 (2021): 105493. [I.F. = 5.683].**
93. G. Rasool, **Anum Shafiq**, Yu-Ming Chu, Muhammad Shoaib Bhutta, and Amjad Ali. Optimal Homotopic Exploration of features of Cattaneo-Christov model in Second Grade Nanofluid flow via Darcy-Forchheimer medium subject to Viscous Dissipation and Thermal Radiation. **Combinatorial Chemistry & High Throughput Screening. (2021)** Doi: 10.2174/1386207324666210903144447. **[I.F. = 1.339].**
94. G. Rasool, **Anum Shafiq,** and C. M. Khalique. Marangoni forced convective Casson type nanofluid flow in the presence of Lorentz force generated by Riga plate**. Discrete & Continuous Dynamical Systems-S, 14 (7) (2021): 2517.**
95. G. Rasool, **Anum Shafiq,** and Hülya Durur. Darcy-Forchheimer relation in Magnetohydrodynamic Jeffrey nanofluid flow over stretching surface. **Discrete & Continuous Dynamical Systems-S, 14 (7) (2021), 2497.**
96. **G.** Rasool, **Anum Shafiq,** M. S. Alqarni, A. Wakif, I. Khan, and M. Shoaib Bhutta. Numerical Scrutinization of Darcy-Forchheimer Relation in Convective Magnetohydrodynamic Nanofluid Flow Bounded by Nonlinear Stretching Surface in the Perspective of Heat and Mass Transfer. **Micromachines 12 (4) (2021): 374. [I.F. = 2.891].**
97. T. N. Sindhu, **Anum Shafiq**, Q. M. Al-Mdallal. On the Analysis of number of deaths due to Covid-19 uutbreak data using a new class of distributions. **Results in Physics**, **21 (2021) 103747. [I.F. = 4.476].**
98. T. N. Sindhu, **Anum Shafiq**, Q. M. Al-Mdallal. Exponentiated transformation of Gumbel Type-II distribution for modeling COVID-19 data. **Alexandria Engineering Journal, 60 (1) (2021), 671-689. [I.F. = 6.626].**

Year 2020

99. **Anum Shafiq**, I. Zari, I. Khan, T. S. Khan, El-Sayed M. Sherif, and Asiful H. Sheikh. Marangoni Driven Boundary Layer Flow of Carbon Nanotubes towards a Riga Plate. **Frontiers in Physics, 7 (2020): 215.**
100. **Anum Shafiq**, G. Rasool, L. Phali, C. M. Khalique, Thermosoluted Marangoni convective flow towards a permeable Riga surface. **Open Physics, 18 (1) (2020), 535-544. [I.F. = 1.067].**
101. **Anum Shafiq**[*], and C. M. Khalique. Lie group analysis of upper convected Maxwell fluid flow along stretching surface. **Alexandria Engineering Journal, 59 (4) (2020): 2533-2541. [I.F. = 3.732].**

102. **Anum Shafiq,** G. Rasool, Chaudry Masood Khalique, Significance of thermal slip and convective boundary conditions in three dimensional rotating Darcy-Forchheimer nanofluid flow. **Symmetry, 12 (5) (2020), 741. [I.F. = 2.713].**

103. **Anum Shafiq,** G. Rasool, Chaudry Masood Khalique and M. Aslam, Second Grade Bioconvective Nanofluid Flow with Buoyancy Effect and Chemical Reaction. **Symmetry, 12 (4) (2020): 621. [I.F. = 2.713].**

104. **Anum Shafiq,** I. Khan, G. Rasool, El-Sayed M. Sherif, and Asiful H. Sheikh. Influence of Single-and Multi-Wall Carbon Nanotubes on Magnetohydrodynamic Stagnation Point Nanofluid Flow over Variable Thicker Surface with Concave and Convex Effects. **Mathematics**, **8 (1) (2020): 104**. **[I.F. = 2.258].**

105. **Anum Shafiq**[*]**,** T. N. Sindhu and C. M. Khalique, Numerical investigation and sensitivity analysis on bioconvective tangent hyperbolic nanofluid flow towards stretching surface by response surface methodology. **Alexandria Engineering Journal**. **59 (6) (2020), 4533-4548. [I.F. = 6.626].**

106. **Anum Shafiq**, T. N. Sindhu, Z. Hammouch and D Baleanu, Statistical Approach of Mixed Convective Flow of Third-Grade Fluid towards an Exponentially Stretching Surface with Convective Boundary Condition. **Special Functions and Analysis of Differential Equations, 307,** (2020).

Co-authors

107. G Rasool, **Anum Shafiq**. Numerical exploration of the features of thermally enhanced chemically reactive radiative Powell–Eyring nanofluid flow via Darcy medium over non-linearly stretching surface. **Applied Nanoscience, (2020) 1-18. [I.F. = 3.674].**

108. G. Rasool, **Anum Shafiq** and D. Baleanu, Consequences of Soret–Dufour Effects, Thermal Radiation, and Binary Chemical Reaction on Darcy Forchheimer Flow of Nanofluids. **Symmetry, 12 (9) (2020), 1421. [I.F. = 2.713].**

109. G. Rasool, A. J. Chamkha, T. Muhammad, **Anum Shafiq** and I. Khan, Darcy-Forchheimer relation in Casson type MHD nanofluid flow over non-linear stretching surface. **Propulsion and Power Research 9 (2) (2020), 159-168. [I.F. = 3.738].**

110. **G.** Rasool, **Anum Shafiq** and Iskander Tlili. Marangoni convective nanofluid flow over an electromagnetic actuator in the presence of first-order chemical reaction. **Heat Transfer Asian Research**, **49 (1) (2020): 274-288.**

111. **G.** Rasool, Ting Zhang, Ali J. Chamkha, **Anum Shafiq**, Iskander Tlili, and Gullnaz Shahzadi. Entropy Generation and Consequences of Binary Chemical Reaction on MHD Darcy–Forchheimer Williamson Nanofluid Flow over Non-Linearly Stretching Surface. **Entropy, 22 (1) (2020): 18. [I.F. = 2.524].**

112. G. Rasool, **A. Shafiq**, I. Khan, D. Baleanu, K. S. Nisar and Gullnaz Shahzadi. Entropy Generation and Consequences of MHD in Darcy–Forchheimer Nanofluid Flow Bounded by Non-Linearly Stretching Surface. **Symmetry**, 12 (4), 652. **[I.F. = 2.713].**

113. U Khan, **A. Shafiq**, A Zaib and D Baleanu, Hybrid nanofluid on mixed convective radiative flow from an irregular variably thick moving surface with convex and concave effects. **Case Studies in Thermal Engineering, 21 (2020): 100660. [I.F. = 4.724].**

114. U. Khan, **Anum Shafiq**, A. Zaib, E. S. M. Sherif, D. Baleanu. MHD Radiative Blood Flow Embracing Gold Particles via a Slippery Sheet through an Erratic Heat Sink/Source. **Mathematics, 8 (9) (2020), 1597. [I.F. = 2.258].**

115. U. Khan, **Anum Shafiq**, A. Zaib, A. Wakif, D. Baleanu. Numerical exploration of MHD falkner-skan-sutterby nanofluid flow by utilizing an advanced non-homogeneous two-phase nanofluid model and non-fourier heat-flux theory. **Alexandria Engineering Journal. 59 (6) (2020), 4851-4864. [I.F. = 6.626].**

116. Y. M. Chu, U. Khan, **Anum Shafiq**, A. Zaib. Numerical simulations of time-dependent micro-rotation blood flow induced by a curved moving surface through conduction of gold particles with non-uniform heat sink/source. **Arabian Journal for Science and Engineering, 46 (3) (2020) 2413-2427. [I.F. = 2.334].**

117. F Mabood, I Tlili and **Anum Shafiq,** Features of inclined magnetohydrodynamics on a second-grade fluid impinging on vertical stretching cylinder with suction and Newtonian heating. **Mathematical Methods in the Applied Sciences, (2020): 1-13. [I.F. = 2.321].**

118. F. Mabood, G. Bognár, and **Anum Shafiq.** Impact of heat generation/absorption of magnetohydrodynamics Oldroyd-B fluid impinging on an inclined stretching sheet with radiation. **Scientific Reports 10 (1) (2020): 1-12. [I.F. = 5.133].**

Year 2019

119. **Anum Shafiq,** M. M. Rashidi, Z. Hammouch and I. Khan, Analytical investigation of stagnation point flow of Williamson liquid with melting phenomenon. **Physica Scripta, 94 (2019): 035204 (1-13). [I.F. = 2.487].**

120. **Anum Shafiq**, I. Zari, G. Rasool, I. Tlili, and T. Saeed. On the MHD Casson axisymmetric Marangoni forced convective flow of nanofluids. **Mathematics 7 (11) (2019): 1087. [I.F. = 2.258].**

121. **Anum Shafiq**, I. Khan, G. Rasool, A. H. Seikh, and El-Sayed M. Sherif. Significance of double stratification in stagnation point flow of third-grade fluid towards a radiative stretching cylinder. **Mathematics**, **7 (11) (2019): 1103. [I.F. = 2.258].**

122. **Anum Shafiq,** Z. Hammouch, and Hakan F. Oztop. Radiative MHD flow of third-grade fluid towards a stretched cylinder. **In International Conference on Computational Mathematics and Engineering Sciences,** pp. **166-185.** Springer, Cham, **2019.**

Co-authors

123. Atangana, Abdon, and **Anum Shafiq**, Differential and integral operators with constant fractional order and variable fractional dimension. **Chaos, Solitons & Fractals**, **127 (2019): 226-243. [I.F. = 5.944].**

124. G. Rasool, **Anum Shafiq** and C. M. Khalique, Marangoni forced convective casson type nanofluid flow in the presence of Lorentz force generated by riga plate. **Discrete & Continuous Dynamical Systems-S**, **(2019): 1-18.**

125. Rasool, Ghulam, Ting Zhang, and **Anum Shafiq**. Second grade nanofluidic flow past a convectively heated vertical Riga plate. **Physica Scripta**, **94 (12) (2019): 125212. [I.F. = 2.487].**

126. G. Rasool, **Anum Shafiq**, Chaudry Masood Khalique, and Ting Zhang. Magnetohydrodynamic Darcy–Forchheimer nanofluid flow over a nonlinear stretching sheet. **Physica Scripta, 94 (10) (2019): 105221. [I.F. = 2.487].**

127. G. Rasool, Ting Zhang, and **Anum Shafiq**. Marangoni effect in second grade forced convective flow of water based nanofluid. **Journal of Advances in Nanotechnology**, **1 (1) (2019): 50.**

128. G. Rasool, Ting Zhang, **Anum Shafiq**, and Hulya Durur. Influence of chemical reaction on Marangoni convective flow of nanoliquid in the presence of Lorentz forces and thermal radiation: A numerical investigation." **Journal of Advances in Nanotechnology**, **1 (1) (2019): 32.**

129. Loc Nguyen and **Anum Shafiq,** Semi-mixture regression model for incomplete data, **Adaptation and Personalization, 1 (2019): 1-20.**

Year 2018

130. **Anum Shafiq**, T. N. Sindhu, and Z. Hammouch. Characteristics of Homogeneous Heterogeneous Reaction on Flow of Walters' B Liquid under the Statistical Paradigm. In International workshop of Mathematical Modelling, Applied Analysis and Computation, (2018): 295-311. Springer, Singapore.

131. **Anum Shafiq,** Z. Hammouch and A. Turab, Impact of radiation in a stagnation point flow of Walters' B fluid towards a Riga plate. **Thermal Science and Engineering Progress, 6, (2018), 27-33. [I.F. = 4.946].**

Co-authors

132. A. Naseem, **Anum Shafiq**, L. Zhao and M. U. Farooq, Analytical investigation of third grade nanofluidic flow over a riga plate using Cattaneo-Christov model. **Result in Physics, 9 (2018), 961-969. [I.F. = 4.476].**

133. T. Hayat, S. Qayyum, A. Alsaedi and **Anum Shafiq**, Theoretical aspects of Brownian motion and thermophoresis on nonlinear convective flow of magneto Carreau nanofluid with Newtonian conditions. **Result in Physics, 10 (2018), 521-528. [I.F. = 4.476].**

134. Loc Nguyen and **Anum Shafiq,** Mixture Regression Model for incomplete data. **Scientific Society, 1 (3) (2018): 1-25**

135. M. Munir and **Anum Shafiq**, A generalization of bi ideals in semirings. **Bulletin of the society of mathematicians Banja Luka, 8 (2018), 123-133.**

Year 2017

136. **Anum Shafiq**[*], S. Jabeen, T. Hayat and A. Alsaedi, Cattaneo-Christov heat flux model for squeezed flow of third grade fluid. **Surface Review and letters, 24 (7) (2017), 1750098 (1-11). [I.F. = 1.152].**

137. **Anum Shafiq, Z**. Hammouch and T. N. Sindhu, Bioconvective MHD flow of Tangent hyperbolic nano-fluid with Newtonian heating. **International Journal of Mechanical Sciences, 133 (2017), 759-766. [I.F. = 5.329].**

138. **Anum Shafiq*** **and T**. N. Sindhu, Statistical study of hydromagnetic boundary layer flow of Williamson fluid regarding a radiative surface. **Result in Physics, 7 (2017), 3059-3067. [I.F. = 4.476].**

Co-authors

139. F. Naseem, **Anum Shafiq**, L. Zhao and A. Naseem, MHD Bioconvective flow of Powell Eyring nanofluid over stretched surface. **AIP Advances (USA), 7 (2017), 065013. [I.F. = 1.548].**

140. T. N. Sindhu, M. Aslam and **Anum Shafiq**, Bayesian Analysis of two Censored Shifted Gompertz Mixture Distributions using Informative and Noninformative Priors. **Pakistan Journal of Statistics and Operation Research**, **13 (1) (2017), 227-243.**

141. R. Malik, M. Khan, **Anum Shafiq,** M. Mushtaq and M. Hussain, An analysis of Cattaneo-Christov double-diffusion model for Sisko fluid flow with velocity slip. **Result in Physics, 7 (2017), 1232–1237. [I.F. = 4.476].**

142. F. Mabood**, Anum Shafiq,** T. Hayat and B. Ahmad, Radiation effects on stagnation point flow with melting heat transfer and second-order slip. **Results in Physics**, 7 (2017), 31-42. **[I.F. = 4.476].**

143. T. Hayat, Maria Mumtaz, **Anum Shafiq*** and A. Alsaedi, Thermal stratified three-dimensional flow with inclined magnetic field and Joule heating. **Journal of the Brazilian Society of Mechanical Sciences and Engineering, (2017), 1-15. [I.F. = 2.220].**

144. T. Hayat, M. Mumtaz, **Anum Shafiq*** and A. Alsaedi, Stratified MHD flow of Tangent hyperbolic nanofluid induced by inclined sheet. **Applied Mathematics and Mechanics-English Edition (China), 38 (2) (2017), 271–288. [I.F. = 2.866].**

145. M. Imtiaz, A. Alsaedi, **Anum Shafiq** and T. Hayat, Impact of chemical reaction on third grade fluid flow with Cattaneo-Christov heat flux. **Journal of Molecular Liquid, 229 (2017), 501-507. [I.F. = 6.165].**

Year 2016

146. T. Hayat, **Anum Shafiq***, M. Nawaz and A. Alsaedi, On Non-Linear Flow of Third-grade fluid between the stretching/shrinking sheets. **Journal of Aerospace Engineering (USA), 29 (3) (2016) 04015062. [I.F. = 0.926].**

147. T. Hayat, **Anum Shafiq*,** A. Alsaedi and S. A. Shehzad, Unsteady MHD flow over an exponential stretching sheet with slip condition. **Applied Mathematics and Mechanics-English Edition (China), 37 (2) (2016), 193–208. [I.F. = 2.866].**

148. T. Hayat, **Anum Shafiq*** and A. Alsaedi, Melting heat transfer in a stagnation point flow of Tangent-hyperbolic fluid over a vertical surface. **Journal of Magnetism and Magnetic Materials**, **405 (2016) 97-106. [I.F. = 2.993].**

149. T. Hayat, **Anum Shafiq**[*], and A. Alsaedi. Characteristics of magnetic field and melting heat transfer in stagnation point flow of Tangent-hyperbolic liquid. **Journal of Magnetism and Magnetic Materials 405 (2016): 97-106. [I.F. = 22.993].**

150. T. Hayat, **Anum Shafiq**[*] and A. Alsaedi, Hydromagnetic boundary layer flow of Williamson fluid in the presence of thermal radiation and Ohmic dissipation. **Alexandria engineering Journal**, **55 (3) (2016), 2229-2240. [I.F. = 6.626].**

151. T. Hayat, **Anum Shafiq**, M. Imtiaz and A. Alsaedi, Impact of melting phenomenon in the Falkner-Skan wedge flow of second grade nanofluid: A revised model. **Journal of Molecular Liquids, 215 (2016) 664–670. [I.F. = 6.165].**

152. T. Hayat, S. Jabeen, **Anum Shafiq**[*] and A. Alsaedi, Radiative squeezing flow of second grade fluid with convective boundary conditions. **Plos One, 11(4) (2016), e0152555. [I.F. = 3.534].**

153. T. N. Sindhu, N. Feroze, M. Aslam and **Anum Shafiq**, Bayesian Inference of Mixture of two Rayleigh Distributions: A New Look. **Journal of Mathematics, 48 (2) (2016), 49-64.**

154. T. Hayat, **Anum Shafiq**[*], M. Asif Farooq, Hamed H. Alsulami and S. A. Shehzad, Newtonian and Joule heating effects in two-dimensional flow of Williamson fluid. **Journal of Applied Fluid mechanics, 9 (4) (2016), 1969-1975.**

155. T. Hayat, S. Qayyum, A. Alsaedi and **Anum Shafiq**, Inclined magnetic field and heat source/sink aspects in flow of nanofluid with nonlinear thermal radiation. **International Journal of Heat and Mass Transfer**, **103 (2016), 99–107. [I.F. = 5.584].**

Year 2015

156. T. Hayat, **Anum Shafiq**[*], M. Mustafa and A. Alsaedi, Boundary layer flow of Walter's B fluid with Newtonian heating. **ZNA (Germany) 70 (5) a (2015), 333–341. [I.F. = 1.426].**

157. T. Hayat, **Anum Shafiq**[*], A. Alsaedi and S. Asghar, Effect of inclined magnetic field in flow of third grade fluid with variable thermal conductivity. **AIP Advances, 5 (2015) 087108**. **[I.F. = 1.548].**

158. T. Hayat, U. Shaheen, **Anum Shafiq**[*], A. Alsaedi and S. Asghar, Marangoni mixed convection flow with Joule heating and nonlinear radiation. **AIP Advances (USA), 5 (2015) 077140. [I.F. = 1.548].**

159. T. Hayat, **Anum Shafiq**[*] and A. Alsaedi, MHD axisymmetric flow of third grade fluid by a Stretching Cylinder. **Alexandria Engineering Journal, 54 (2015), 205–212. [I.F. = 6.626].**

Year 2014

160. T. Hayat, **Anum Shafiq** and A. Alsaedi, Effect of Joule heating and thermal radiation in flow of third-grade fluid over radiative surface. **Plos One (USA), 9(1) (2014), e83153. [I.F. = 3.732].**

Year 2013

161. **Anum Shafiq**[*], M. Nawaz, T. Hayat and A. Alsaedi, Magnetohydrodynamic axisymmetric flow of a third-grade fluid between two porous disks. **Brazilian Journal of Chemical Engineering (USA) 30 (3) (2013), 599-609. [I.F. = 3.732].**

162. T. Hayat, **A. Shafiq***, A. Alsaedi and M. Awais, MHD axisymmetric flow of third grade fluid between stretching sheets with heat transfer. **Computers and Fluids (UK), 86 (2013), 103-108. [I.F. = 3.013].**

163. T. N. Sindhu, M. Aslam and **Anum Shafiq**, Analysis of the Left Censored Data from the Pareto Type II Distribution. **Caspian Journal of Applied Sciences Research, 2 (7) (2013), 53-62.**

Year 2012

164. T. Hayat, **Anum Shafiq**, M. Nawaz and A. Alsaedi, MHD axisymmetric flow of third-grade fluid between porous disks with heat transfer. **Applied Mathematics and Mechanics-English Edition (China) 33 (6) (2012), 749–764. [I.F. = 2.866].**

BOOKS / BOOK CHAPTERS

1. **Anum Shafiq** and T. Hayat, Steady flows of differential type fluids: "steady flows of viscoelastics fluids due to moving surface with heat transfer" **LAP LAMBERT Academic Publishing (2017-08-11), 1-272.**
2. **Anum Shafiq**, Islam Zari, Ilyas Khan, Tahir Saeed Khan, El-Sayed M. Sherif, and Asiful H. Sheikh. Marangoni Driven Boundary Layer Flow of Carbon Nanotubes towards a Riga Plate. **Frontiers in Physics, 7 (2020): 215.**
3. **Anum Shafiq**, Z. Hammouch and T. N. Sindhu, Impact of homogeneous heterogeneous reaction on stagnation point flow of Walters' B fluid with Newtonian heating under the statistical paradigm**" International Conference on Mathematical Modelling, Applied Analysis and Computation (ICMMAAC)-2018. Springer Proceedings in Mathematics & Statistics.**
4. **Anum Shafiq**, T. N. Sindhu, Z. Hammouch and D Baleanu, Statistical Approach of Mixed Convective Flow of Third-Grade Fluid towards an Exponentially Stretching Surface with Convective Boundary Condition. **Special Functions and Analysis of Differential Equations, 307, (2020).**
5. T. N. Sindhu, Z. Hussain, **Anum Shafiq**, Chapter 5: A new flexible extension to a lifetime distributions, properties, inference, and applications in engineering science. **In Advances in Reliability Science, Engineering Reliability and Risk Assessment, Elsevier, (2023), 65-89.** https://doi.org/10.1016/B978-0-323-91943-2.00005-8
6. G. Rasool, **Anum Shafiq,** M. I. Khan, Recent Theoretical Approaches to MHD Radiative Heat Transfer in Chemically Reactive Powell-Eyring Nanofluid Flow through Porous Media. **Porous Media - Recent Theoretical Approaches and Future Opportunities, IntechOpen, (2025), 10.5772/intechopen.1011310.**

REFERENCES

Prof. Tomáš Kozubek
Scientific Director
IT4Innovations National Supercomputing Center, VSB – Technical University of Ostrava, Poruba, Czech Republic

E-mail: tomas.kozubek@vsb.cz
phone: +420 597 329 650, mobile: +420 733 677 585
Dr. Tomáš Karásek
Head of PAR Lab

IT4Innovations, VSB -Technical University of Ostrava, Ostrava, Czech Republic
Email: tomas.karasek@vsb.cz
Phone: +420 597 329 648
Dr kanika Dulta
Assistant Professor /Postdoc fellow
Center of Advanced Innovation Technologies, VŠB-Technical University of Ostrava, 708 00, Ostrava-Poruba, Czech Republic
Email kanikadulta10gmail.com
Phone: +4207831818323
Prof. Dr. Abdon Atangana
Professor Institute for Groundwater Studies (IGS), Faculty of Natural and Agricultural Sciences, University of Free State, South Africa.
Email:atanganaa@ufs.ac.za; abdonatangana@yahoo.fr
Professor Andaç Batur Çolak
Istanbul Commerce University, Istanbul, 34445 Türkiye,
Email: andacbaturcolak@hotmail.com abcolak@ticaret.edu.tr
Prof. Dr. Qasem M. Al-Mdallal
Department of Mathematical Sciences, UAE University, P.O. Box 15551, Al-Ain, United Arab Emirates
Email: q.almdallal@uaeu.ac.ae
Prof. Dr. Fahd Jarad
Çankaya University, Department of Mathematics, Head of department.
E-mail: fahd@cankaya.edu.tr
Prof. Dr. Zakia Hammouch
Professor, Department of Mathematics
Université Moulay Ismail, Morocco
Email:z.hammouch@fste.umi.ac.ma, hammouch.zakia@gmail.com
Prof. Dr. Tasawar Hayat
Distinguished National Professor, Department of Mathematics, Quaid-i-Azam University, Islamabad
Email: fmgpak@gmail.com