

# Mudassar Nazar



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## Why *Mudassar*?

- An Applied Mathematician taught several courses like Calculus & Multi-variable Calculus, Ordinary and Partial Differential Equations, Fluid Mechanics, Probability Theory, Mathematical Statistics, Integral Transforms, Linear Algebra, Fractional Differential Equations at undergraduate and graduate levels
- Taught "O" and "A" levels Mathematics at High School before my Ph.D.
- Having fifty research publications in well reputed journals
- Supervised five Ph.Ds., thirty-five MS, and thirty BS theses
- Participated in several National and international conferences/workshops
- Two research projects have been completed

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## ACADEMIC CREDENTIALS

- **School of Mathematical Sciences, University of Science and Technology of China, Hefei, Anhui, China**  
Post-Doctorate (Jan 2018-Dec 2019)
- **Abdus Salam School of Mathematical Sciences (ASSMS), GC University Lahore, Pakistan**  
M.Phil. leading to Ph.D. - Mathematics (2005-2009)  
**Thesis title:** "Analytical Solutions for Some Unsteady Flows of Second Grade and Rate Type Fluids."  
**Supervisor:** Prof. Dr. Constantin Fetecau (Technical University of Iasi, Romania)

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## PROFESSIONAL EXPERIENCE

### **Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University (BZU), Multan, Pakistan**

Worked as "**Professor of Mathematics**", February 2021 – Present

#### **Responsibilities/ Accomplishments:**

- Meticulously teaching courses pertaining to mathematical concepts, statistics, and to application of original and standardized mathematical techniques in solving specific problems and situations
- Dedicatedly providing tutoring and academic counseling to students (provided recommendation letters to students who got fellowships to Ph.D. in China, Thailand, and Saudi Arabia), maintaining class related records, and assessing student coursework. Collaborating and supporting colleagues regarding research interests and co-curricular activities
- Completed research project in collaboration with the researchers from King Faisal University, al Ahsa, Saudi Arabia.

### **School of Mathematical Sciences, University of Science and Technology of China, Hefei, Anhui, China**

Worked as "**Postdoc Researcher**", Jan 2018 – Dec 2020

#### **Responsibilities/Accomplishments:**

- Partaking in collaborative research
- Cordially attending faculty-organized training and networking meetups. Promoting awareness about educational institute's endeavors and forging gainful, long-lasting partnerships that will endure once stay ends

### **CASPAM, BZU, Multan, Pakistan**

Worked as "**Associate Professor**", July 2016 – February 2021

Worked as "**Assistant Professor**", April 2009 – July 2016

#### **Responsibilities/ Accomplishments:**

- Worked with other faculty members to evaluate, revise, and develop curriculum to help ensure student mastery of course content
  - Supported department mission, which centers on student learning through quality instruction, curriculum enhancement, and faculty service.
  - Assisted with implementing policies, objectives, and functions in accordance with Centre philosophy, mission, and procedures; participated in staff and committee work as requested
  - Worked with BS, MS, and Ph.D. scholars as a supervisor, and their research projects
  - Trained students by effective planning and organizing class presentations to give them more confidence, worked collaboratively with other faculty to promote the Centre
  - Supported Centre's mission by focusing on student learning through quality instruction, curriculum enhancement, and faculty service.
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## Wenzhou Kean University, Wenzhou, China (a campus of Kean University, USA)

Worked as “**Lecturer**”, September 2014 – June 2015 (was on leave from BZU)

### Responsibilities/ Accomplishments:

- Effectively planned, organized, and instructed mathematics classes to promote student success.
  - Conscientious teaching courses related to mathematical concepts, statistics, and mathematical techniques in solving specific problems and situations
  - Worked with research activities
  - Directed students by planning and organizing class presentations to give them more confidence
  - To manage office hours for students in order to give them support in current courses and to guide regarding their higher studies
  - To facilitate students in their projects
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## PROFESSIONAL CONFERENCES, PRESENTATIONS & WORKSHOPS

- 1st International Conference on Mathematics and its Applications in Information Technology LUMS, Lahore, Pakistan, November, 27-30, 2005.
  - International Conference on Recent Developments in Fluid Mechanics, Quaid-i-Azam University, Islamabad, Pakistan, July, 02-04, 2007.
  - 3rd International Conference on 21st Century Mathematics Abdus Salam School of Mathematical Sciences, GC University, Lahore, Pakistan, March, 04-07, 2007.
  - 2nd International Conference on Mathematics and its Applications in Information Technology LUMS, Lahore, Pakistan, March, 09-12, 2008.
  - Tenth International Conference Zaragoza-Pau on Applied Mathematics and Statistics Jaca, Spain, September, 15-17, 2008. (Contributed Talk)
  - 4th World Conference on 21st Century Mathematics, Abdus Salam School of Mathematical Sciences, GC University, Lahore, Pakistan, March, 04-08, 2009. (Contributed Talk)
  - 5th World Conference on 21st Century Mathematics, Abdus Salam School of Mathematical Sciences, GC University, Lahore, Pakistan, February, 09-13, 2011.
  - 6th World Conference on 21st Century Mathematics, Abdus Salam School of Mathematical Sciences, GC University, Lahore, Pakistan, March, 06-09, 2013.
  - CASPAM International Conference on Mathematics and Application, 6-7 November, 2017, Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan.
  - International conference on Contemporary Applied Mathematics, In honour of Professor G. Ciarlet on the occasion of his birthday, Fudan University, Shanghai, China, 06-11 May 2018.
  - International Mathematical Union 2018, Sao Paulo, Brazil, 28-29 July 2018.
  - Fifteenth International Conference Zaragoza Pau on Applied Mathematics and Statistics, Jaca, Spain, 10-12 September 2018.
  - First Summer School on New trends in mathematics and applications, University of Swat, Shangla Campus, August 09-13, 2021.
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## CORE STRENGTHS & ENABLING SKILLS

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|---|---------------------------------------|-------------------------------------|
| ▪ Applied Mathematics                         | ▪ Fractional Differential Equations   | ▪ Reporting & Presentation Skills   |
| ▪ Fluid Dynamics                              | ▪ Analytical Solution of PDEs         | ▪ Research & Publications           |
| ▪ Ordinary and Partial Differential Equations | ▪ Integral Transforms                 | ▪ Analytical & Investigative Skills |
| ▪ Probability and Mathematical Statistics     | ▪ Linear Algebra                      | ▪ Heat and Mass Transfer Analysis   |
| ▪ Discrete Mathematics                        | ▪ Calculus and Multivariable Calculus | ▪ Special Functions                 |
|   | ▪ Optimization Theory                 | ▪ Numerical Analysis                |
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## HONORS & AWARDS

- Youngest Tenured Professor in whole Pakistan in the age of 38 years and 5 months
  - Post Doctorate from one of the top one hundred Universities of the World namely “University of Science and Technology of China, Hefei, Anhui, China
  - Participated in International Mathematical Union as an Observer held at Sao Paulo, Brazil, 28-29 July 2018 representing Pakistan
  - Achiever of Research Productivity Award 2011 from Pakistan Council for Science and Technology, Ministry of Science and Technology Pakistan
  - Special Prize for the “Young Speaker” in the “4th World Conference on 21st Century Mathematics, Abdus Salam School of Mathematical Sciences, GC University, Lahore, Pakistan, March 04-08, 2009”
  - Won HEC Indigenous Ph.D. Fellowship, for Ph.D. in Mathematics
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## ADDITIONAL PROFESSIONAL SERVICES

### As Ph.D. External Examiner:

- Abdus Salam School of Mathematical Sciences, GCU Lahore
- GC University Faisalabad
- Islamia University of Bahawalpur, Bahawalpur
- CAMSATS University Islamabad

### As MS/M.Phil. External Examiner:

- COMSATS University Islamabad, Lahore Campus
- GC University Faisalabad
- COMSATS University Islamabad, Vehari Campus
- COMSATS University Islamabad, Attock Campus.
- COMSATS University Islamabad, Wah Cantt Campus
- Institute of Southern Punjab, Multan
- COMSATS University Islamabad, Sahiwal Campus
- Islamia University of Bahawalpur, Bahawalpur

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## RESEARCH GRANTS

Title: Generalization of Thermal and Mass Fluxes for the Flow of Differential Type Fluid with Caputo–Fabrizio Approach of Fractional Derivative

- Sponsored by: Deanship of Scientific Research Saudi Arabia (Nasher Track# 206207)
- Year: 2021 (In progress)
- Amount: 10600 Canadian Dollars

Title: Flow of Rate Type Fluids in Oscillating Rectangular Duct

- Sponsored by: Higher Education Commission of Pakistan.
- Year: 2010 (Successfully completed initially as Co-PI and then as a PI)
- Amount: 2500 Canadian Dollars

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## HQPS

### PhD Students

- 05 completed
- 04 working

### Masters' Students

- 35 completed
- 03 working

### Undergraduate students

- 30 completed

## PROFESSIONAL AFFILIATIONS & SERVICES

### Member:

National Mathematical Society of Pakistan

### Academic Reviewer:

Complexity (Journal)

Journal of Function Spaces (Journal)

Zeitschrift Für Angewandte Mathematik und Mechanik

Numerical Heat Transfer, Part A: Applications

Mathematical Problems in Engineering

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## MEMBERSHIP OF BOARD OF STUDIES

- Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), Bahauddin Zakariya University, Multan, Pakistan.

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## ACADEMIC ADMINISTRATION

- Incharge Examinations of CASPAM
  - Member of Committee of CASPAM to design "Scheme of Studies and Syllabi of M. Phil and Ph. D. Program"
  - Member of Committee of CASPAM to evaluating Ph.D. synopsis
  - Member of Admission Committee of BS (Mathematics)
  - Member of departmental tenure review committee of CASPAM
  - Member of board of faculty of sciences of BZU
  - Member of Senate of BZU
  - Member of Academic Council of BZU
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## GENERAL PUBLICATIONS

### a) International Refereed Journals

#### Research Article

1. S. Abbas, Zaib Un Nisa, **M. Nazar**, A. S. M. Metwally, K. Kędzia, A. Z. Jan, N. Kamolova, Effect of chemical reaction on MHD Casson natural convection flow over an oscillating plate in porous media using Caputo fractional derivative, *International Journal of Thermal Sciences*, 207 (2025) 109355.
  2. S. Abbas, M. Ramzan, I. Inam, S. Saleem, **M. Nazar**, D. Abduvalieva, H. A. Garalleh, Analysis of fractionalized Brinkman flow in the presence of diffusion effect, *Scientific Reports*, 14(1) (2024) 22507.
  3. A. Shafique, M. Ramzan, M. Amir, S. Abbas, **M. Nazar**, E. Ali, A. M. Alharthi, R. Jan, H. A. Garalleh, Heat and mass transfer effects on an unsteady MHD boundary layer flow of fractionalized fluid, *Radiation Effects and Defects in Solids*, (2024) 1-13.
  4. A. Shafique, M. Ramzan, **M. Nazar**, Exploring the role of fractional derivatives on bioconvection flow of Casson fluids in the solar system, *Journal of Earth & Environmental Waste Management*, 2 (3) (2024) 1-13.
  5. S. Abbas, I. Parveen, Z. U. Nisa, M. Amjad, A. S. M. Metwally, **M. Nazar**, A. Z. Jan, Effect of thermal radiation on fractional MHD Casson flow with the help of fractional operator, *International Journal of Theoretical Physics*, 63 (8) (2024) 186.
  6. M. Ahmad, S. Abbas, **M. Nazar**, A. M. Alharthi, H. A. Garalleh, Z. Jastaneyah, D. Abduvalieva, Fractional modeling of unsteady flow of Jeffrey fluid using active and passive control strategies, *Numerical Heat Transfer, Part A: Applications*, (2024) 1-21.
  7. S. Abbas, M. Ramzan, Z. U. Nisa, M. Amjad, A. S. M. Metwally, **M. Nazar**, A comparative study of heat absorption and chemical reaction on MHD flow with fractional derivatives, *Numerical Heat Transfer, Part A: Applications*, 6 (16) (2024) 1-23.
  8. **M. Nazar**, S. Abbas, S. Asghar, S. Saleem, H. Abutuqayqah, H. A. Garalleh, Z. Jastaneyah, Comparison of unsteady MHD flow of second grade fluid by two fractional derivatives, *Numerical Heat Transfer, Part A: Applications*, 6 (15) (2024) 1-21.
  9. S. Abbas, M. Ramzan, A. Shafique, **M. Nazar**, A. S. M. Metwally, D. Abduvalieva, H. Ahmad, R. Jan, Analysis of heat and mass transfer on nanofluid: An application of hybrid fractal-fractional derivative, *Numerical Heat Transfer, Part A: Applications*, (2024) 1-14.
  10. H. A. Garalleh, M. Ramzan, M. Amir, A. Shafique, S. Abbas, A. M. Alharthi, **M. Nazar**, Application of fractional derivative on nanofluid with magnetic field, *Numerical Heat Transfer, Part B: Fundamentals*, 4 (12) (2024) 1-16.
  11. S. Abbas, **M. Nazar**, S. F. F. Gillani, M. Naveed, M. Ahmad, Z. U. Nisa, A CPC fractional model of the heat and mass transport mechanism in Carbon nanotubes with slip effects on velocity, *Modern Physics Letters B*, 38 (13) (2024) 2450100.
  12. S. Abbas, Z. U. Nisa, S. F. F. Gilani, **M. Nazar**, A. S. M. Metwally, A. Z. Jan, Fractional analysis of magnetohydrodynamics Maxwell flow over an inclined plate with the effect of thermal radiation, *International Journal of Theoretical Physics*, 63 (5) (2024) 120.
  13. A. A. Agha, A. M. Zidan, M. Ramzan, A. Shafique, S. Abbas, **M. Nazar**, H. A. Garalleh, Analysis of active and passive control of fluid with fractional derivative, *Numerical Heat Transfer, Part A: Applications*, (2024) 1-19.
  14. S. Abbas, M. Ahmad, **M. Nazar**, Z. Ahmad, M. Amjad, H. A. Garalleh, A. Z. Jan, Soret effect on MHD Casson fluid over an accelerated plate with the help of constant proportional Caputo fractional derivative, *ACS omega*, 9 (9) (2024) 10220-10232.
  15. A. Ahmad, **M. Nazar**, M. Ahmad, Sayed M. Eldin, Z. U. Nisa, H. Waqas, M. Imran, Application of constant proportional Caputo fractional derivative to thermodiffusion Flow of MHD radiative Maxwell fluid under slip effect over a moving flat surface with heat and mass diffusion, *Advances in Mathematical Physics*, 2024 (1) (2024) 9306915.
  16. S. Abbas, Z. U. Nisa, **M. Nazar**, M. Amjad, H. Ali, A. Z. Jan, Application of heat and mass transfer to convective flow of Casson fluids in a microchannel with Caputo–Fabrizio derivative approach, *Arabian Journal for Science and Engineering*, 49 (1) (2024) 1275-1286.
  17. M. Ramzan, A. Shafique, M. Amir, **M. Nazar**, Analytical solution of diffusion thermo effect on MHD second grade fluid flow with heat generation and chemical reaction through an accelerated vertical plate, *Jordan Journal of Physics*, 16 (3) (2023) 341-358.
  18. S. Abbas, M. Ahmad, **M. Nazar**, M. Amjad, H. Ali, and A. Z. Jan, Heat and mass transfer through a vertical channel for the Brinkman fluid using Prabhakar fractional derivative, *Applied Thermal Engineering*, 232 (2023) 121065.
  19. S. Abbas, S. F. F. Gilani, **M. Nazar**, M. Fatima, M. Ahmad, Z. U. Nisa, Bio-convection flow of fractionalized second grade fluid through a vertical channel with Fourier's and Fick's laws, *Modern Physics Letters B*, 37 (23) (2023) 2350069.
  20. M. Ramzan, **M. Nazar**, Z. U. Nisa, M. Ahmad, N. A. Shah, Unsteady free convective magnetohydrodynamics flow of a Casson fluid through a channel with double diffusion and ramp temperature and concentration, *Mathematical Methods in the Applied Sciences*, 46 (10) (2023) 11322-11341.
  21. A. Shafique, M. Ramzan, Z. Ikram, M. Amir, **M. Nazar**, MHD flow of Jeffrey fluid with heat absorption and thermos-diffusion, *Frontiers in Heat and Mass Transfer*, 20 (1) (2023) 1-10.
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22. Z.U. Nisa, M.A. Meraj, A. Shafique, M. Ahmad, **M. Nazar**, N.A. Shah, Advance thermal and mass transports for the fractional flows through a cylindrical domain: a Prabhakar-like generalization, *Waves in random and Complex Media*, DOI: 10.1080/17455030.2022.2154408 (2023).
  23. Z.U. Nisa, A. Shafique<sup>1</sup>, **M. Nazar**, M.I. Asjad, K.H. Mahmood, A. S.A. Alsubaie, M. Inc., A novel fractional study on free convection flow of Brinkman Hybrid nanofluid over an inclined plate, *Thermal Science*, 26(1), S229-S237 (2022).
  24. Y.Q. Wang, A. Shafique<sup>1</sup>, Z.U. Nisa, M.I. Asjad, **M. Nazar**, M. Inc, S.W. Yao, Unsteady flow of Casson nanofluid through generalized Fourier's and Fick's law for heat and mass transfer, *Thermal Science*, 26(1), S29-S38 (2022).
  25. M. Ramzan, A. Shafique, M. Rashid, **M. Nazar**, Z.U. Nisa, Slippage flow of Maxwell fluid over an inclined vertical plate with generalized heat and mass transfer, *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 99(2), 155-167 (2022).
  26. S. Abbas, **M. Nazar**, Z.U. Nisa, M. Amjad, S.M.E. Din, A.M. Alanzi, Heat and mass transfer analysis of MHD Jeffrey fluid over a vertical plate with CPC fractional derivative, *Symmetry*, 14, 2491 (2022).
  27. M. Ramzan, M. Amir, Z.U. Nisa, **M. Nazar**, Thermo-diffusion effect on magnetohydrodynamics flow of fractional Casson fluid with heat generation and first order chemical reaction over a vertical plate, *Journal of Mathematical Analysis and Modeling*, 3(2):8-35 (2022).
  28. M. Ramzan, Z.U. Nisa, **M. Nazar**, Effect of diffusion thermos on MHD flow of Maxwell fluid with heat and mass transfer, *Frontiers in Heat and Mass Transfer*, 19, 12 (2022).
  29. A. Shafique. M. Ramzan, Z.U. Nisa, **M. Nazar**, H. Ahmad, Unsteady magnetohydrodynamic flow of second grade nanofluid (AgCu) with CPC fractional derivative, *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 97, Issue 2 (2022) 103-114.
  30. S.W. Yao, M. Ahmad<sup>1</sup>, M. Inc, I. Ahmad<sup>1</sup>, M.I. Asjad, **M. Nazar**, Suction effect on MHD flow of Brinkman-type fluid with heat absorption and first-order chemical reaction, *Frontiers in Energy Research*, 10:963583 (2022).
  31. M. Ramzan<sup>1</sup>, Z.U. Nisa, A. Shafique<sup>1</sup>, **M. Nazar**, Slip and Thermo Diffusion Effects on the Flow over an Inclined Plate, *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences* 94(2) (2022) 13-28.
  32. A. Shafique<sup>1</sup>, Z.U. Nisa, M.I. Asjad, **M. Nazar**, F. Jarad, Effect of Diffusion-Thermo on MHD flow of a Jeffrey fluid past an exponentially accelerated vertical plate with chemical reaction and heat generation, *Mathematical Problems in Engineering*, Volume 2022, Article ID 6279498, 16 pages, (2022)
  33. A. Ahmad<sup>1</sup>, Z.U. Nisa, **M. Nazar**, M.I. Asjad, M. Ahmad, Influence of Hartmann number on convective flow of Maxwell fluid between two hot parallel plates through porous medium subject to arbitrary shear stress at the boundary, *Journal of Applied Mathematics and Physics*, 2022, 10, 160-171.
  34. M. Ramzan, A. Shafique, M. Amir, **M. Nazar**, Z.U. Nisa, MHD flow of fractionalized Jeffrey fluid with Newtonian heating and thermal radiation over a vertical plate, *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 2022, Volume 61, No. 1, 170-195. (22-01-2022)
  35. M. Ramzan, A. Shafique, **M. Nazar**, MHD flow of second grade fluid with heat absorption and chemical reaction, *International Journal of Theoretical and Applied Mathematics*, 8(2) 30-39 2022.
  36. A. Ahmad, M. Ahmad<sup>1</sup>, **M. Nazar**, Z.U. Nisa, N.A. Shah, Slippage flow of MHD radiative Maxwell nanofluid with CNTs over a moving flat surface with heat and mass diffusion, *Mathematical Sciences*, Published online 03 February 2021.
  37. M. Ramzan, **M. Nazar**, Z.U. Nisa, M. Ahmad<sup>1</sup>, N.A. Shah, Unsteady free convective magnetohydrodynamics flow of a Casson fluid through a channel with double diffusion and ramp temperature and concentration, *Math. Meth. Appl. Sci.* 1-20 (2021).
  38. A. Razzaque, A. Rani, **M. Nazar**, Generalization of thermal and mass fluxes for the flow of differential type fluid with Caputo-Fabrizio approach of fractional derivative, *Complexity*, Volume 2021, Article ID 6052437, 11 pages, (2021).
  39. M. Ramzan<sup>1</sup>, Z.U. Nisa, M. Ahmad<sup>1</sup>, **M. Nazar**, Flow of Brinkman fluid with heat generation and chemical reaction, *Complexity*, Volume 2021, Article ID 65757991, <https://doi.org/10.1155/2021/5757991>, 2021.
  40. A. Ahmad<sup>1</sup>, **M. Nazar**, A. Ali, M. Hussain, Z. Ali, Exact solutions of hydromagnetic fluid flow along an inclined plane with heat and mass transfer, *Journal of Mathematical Analysis*, 12(2) (2021) 1-22.
  41. S. Sarwar, **M. Nazar**, M.A. Imran, Influence of slip over an exponentially moving vertical plate with Caputo-time fractional derivative, *Journal of Thermal Analysis and Calorimetry*, <https://doi.org/10.1007/s10973-020-09700-0> (Published online May 2020)
  42. M. Ahmad<sup>1</sup>, M.A. Imran, **M. Nazar**, Mathematical modeling of (Cu \_ Al2O3) water based Maxwell hybrid nanofluids with Caputo-Fabrizio fractional derivative, *Advances in Mechanical Engineering*, Vol. 12(9) 1-11 (2020).
  43. I. Ahmad, **M. Nazar**, M. Ahmad, Z.U. Nisa, N.A. Shah, MHD free convection flow of CNTs differential type nanofluid over an infinite vertical plate with first order chemical reaction, porous medium and suction/injection, *Mathematical Methods in Applied Sciences*, 1-13 (2020).
  44. Zaib Un Nisa, Ahmad Hajizadeh, **Mudassar Nazar**, Free convection flow of nanofluid over infinite vertical plate with damped thermal flux, *Chinese Journal of Physics*, 59 (2019) 175-188.
  45. Zaib Un Nisa, Nehad Ali Shah, Iskander Tlili, Saif Ullah, **Mudassar Nazar**, Natural convection flow of second grade fluid with thermal radiation and damped thermal flux between vertical channels, *Alexandria Engineering Journal*, 58 (2019) 1119-1125.
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46. Q. Sultan<sup>1</sup>, Z.U. Nisa, **M. Nazar**, Flow of generalized Burgers' fluid induced by sawtooth pulses stress with quadratic edges, *Journal of Applied Mathematics and Physics*, 6 (2018) 1258-1277.
47. **M. Nazar**, M. Ahmad<sup>1</sup>, M.I. Asjad, N.A. Shah, Double convection of heat and mass transfer flow of MHD generalized second grade fluid over an exponentially accelerated infinite vertical plate with heat absorption, *Journal of Mathematical Analysis*, 8(6) (2017) 28-44.
48. M.A. Imran, I. Khan, M. Ahmad<sup>1</sup>, N.A. Shah, **M. Nazar**, Heat and mass transport of differential type fluid with non-integer order time-fractional Caputo derivatives, *Journal of Molecular Liquids*, 229 (2017) 67-75.
49. Q. Sultan<sup>1</sup>, **M. Nazar**, Flow of generalized Burger's fluid between side walls induced by sawtooth pulses stress, *Journal of Applied Fluid Mechanics*, 9(5), 2195-2204 (2016).
50. M. Imran, M. Tahir, **M. Nazar**, M. Kamran, Some couette flows of a second grade fluids due to tangential stresses, *Sci. Int. (Lahore)*, 27(3) (2015) 1755-1760.
51. Q. Sultan<sup>1</sup>, **M. Nazar**, U. Ali, I. Ahmad, On the flow of generalized Burgers' fluid induced by sawtooth pulses, *Journal of Applied Fluid Mechanics*, 8(2), 243-254 (2015).
52. Q. Sultan<sup>1</sup>, **M. Nazar**, M. Imran, U. Ali, Flow of second grade fluid between two walls induced by rectified sine pulses shear stress, *Journal of Mechanics*, 31(5), 573-582, (2015).
53. M.A. Imran, S. Sarwar<sup>1</sup>, D. Vieru, **M. Nazar**, General solution for free convection of viscous fluid near an infinite isothermal vertical plate that applies a shear stress to the rotating fluid, *American Journal of Applied Mathematics*, 2015; 3(3-1): 6-13.
54. Q. Sultan<sup>1</sup>, **M. Nazar**, M. Imran, U. Ali, Flow of generalized burgers fluid between parallel walls induced by rectified sine pulses stress, *Boundary Value Problems*, 2014:152 (Published 23 Sep. 2014).
55. Q. Sultan<sup>1</sup>, **M. Nazar**, W. Akhtar, U. Ali, Unsteady flow of a Maxwell fluid in a porous rectangular duct, *Sci. Int. (Lahore)* 25(2), 181-194 (2013).
56. Q. Sultan<sup>1</sup>, **M. Nazar**, U. Ali, M. Imran, Unsteady flow of Oldroyd-B fluid through porous rectangular duct, *International Journal of Nonlinear Science*, 15(3) (2013) 195-211.
57. **M. Nazar**, M. Zulqarnain<sup>2</sup>, M.S. Akram, M. Asif, Flow through an oscillating rectangular duct for generalized Maxwell fluid with fractional derivatives, *Commun. in Nonlinear Science and Numerical Simulations*, 17, 3219-3234 (2012).
58. **M. Nazar**, F. Shahid<sup>2</sup>, M.S. Akram, Q. Sultan<sup>1</sup>, Flow on oscillating rectangular duct for Maxwell fluid, *Appl. Math. Mech. -Engl. Ed.*, 33(6), 717-730 (2012).
59. **M. Nazar**, A. Mahmood, M. Athar, M. Kamran, Analytic solutions for the unsteady longitudinal flow of an Oldroyd-B fluid with fractional model, *Chemical Engineering Communications*, 199, 290-305 (2012).
60. **M. Nazar**, Q. Sultan<sup>1</sup>, M. Athar, M. Kamran, Unsteady longitudinal flow of a generalized Oldroyd-B fluid in cylindrical domains, *Communications in Nonlinear Science and Numerical Simulations*, 16, 2737-2744 (2011).
61. **M. Nazar**, C. Fetecau, A.U. Awan, A note on the unsteady flow of a generalized second grade fluid through a circular cylinder subject to a time dependent shear stress, *Int. J. Non-Linear Anal. Real World Appls.* 11, 2207-2214 (2010).
62. C. Fetecau, **M. Nazar**, C. Fetecau, New exact solutions corresponding to the second problem of Stokes for second grade fluids, *Int. Journal of Non-Linear Analysis Real World Applications*, 11, 584-591 (2010).
63. C. Fetecau, **M. Nazar**, C. Fetecau, Unsteady flow of an Oldroyd-B fluid generated by a constantly accelerating plate between two side walls perpendicular to the plate, *Int. Journal of non-Linear Mechanics*, 44, 1039-1047 (2009).
64. W. Akhtar, **M. Nazar**, Exact solutions for the rotational flow of generalized Maxwell fluids in a circular cylinder, *Bull. Math. Soc. Sci. Math. Roumanie* 51 (2008).
65. D. Vieru, **M. Nazar**, C. Fetecau, C. Fetecau, New exact solutions corresponding to the first problem of Stokes for Oldroyd-B fluids, *Computers and Mathematics with applications*, 55, 1644-1652 (2008).
66. **M. Nazar**, M. Kamran, A note on the unsteady flow of a generalized Maxwell fluid through a circular cylinder, *Bullettin of the Politechnic Institute of Jassy* (2008).

## b) International Conferences Papers (04)

67. S. Akhter, T. Mahmood, **M. Nazar**, Q. Sultan, Analytic solution for MHD flow of a Newtonian fluid in porous space, *Bulletin of the Polytechnic Institute of Iasi, Romania, Tomul LXI (LX), Fasc. 4.* (2010)
68. **M. Nazar**, M. Athar, W. Akhtar, Axial Couette flow of a second grade fluid due to a longitudinal time-dependent shear stress, presented in the Tenth International Conference Zaragoza-Pau on Applied Mathematics and Statistics Jaca, Spain, 15-17 September, 2008
69. W. Akhtar, **M. Nazar**, On the Helical flow of Newtonian fluids induced by time dependent shear, presented in the Tenth International Conference Zaragoza-Pau on Applied Mathematics and Statistics, Jaca, Zaragoza, Spain, 15-17 September, 2008,
70. C. Fetecau, D. Vieru, **M. Nazar**, C. Fetecau, Limiting Cases of the motion of a non-Newtonian fluid over an infinite plate, *Modern Technologies Quality Reorganization Technical University of Moldavia, Chisinau*, 15-17 June, 2007.

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- 1- My Ph.D. student
  - 2- My M.Phil. / MS student
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