**Brief Profile** 

Name : Dr. Kanika

Date of Birth : 13-07-1994

Educational Qualification

• Ph.D. : Awarded

•M.Tech :

B. Tech :

Work Experience

TeachingResearch1.1 years4.9 years

E-mail ID : Kanika.tomar@miet.ac.in

Contact No. : 9610599811

Area of Interest : Fluid Dynamics, Numerical Analysis, Ordinary Differential

**Equations** 

Teaching

• Subjects Taught at UG Level : Engineering Mathematics-I, II, IV

• Subjects Taught at PG Level : Fluid Dynamics

Research Publications

 • Journals
 : 10

 • Conferences
 : 01

 • Book Chapters
 : 04

No. of National/International Conferences attended/ Paper : 05

Presented

STC/FDP/Summer/Winter Schools/Workshops : 14

/Seminars attended

Awards/Honors : CSIR-NET, CSIR-JRF, GATE

## LIST OF PUBLICATIONS

## **Research Papers Published in International Journals:**

- 1. Mathematical analysis of MHD stagnation point flow of *Cu*-blood nanofluid past an exponential stretchable surface, International Journal for Computational Methods in Engineering Science and Mechanics, https://doi.org/10.1080/15502287.2021.1916173 (2021)
- 2. Heat generation/absorption and radiation effects on hydromagnetic stagnation point flow of nanofluids towards a heated porous stretching/shrinking sheet with suction/injection, Journal of Porous Media, Vol. 23 (1) pp. 27-49 (2020) Sci Journal
- 3. Navier's slip condition and magnetic field effects on unsteady stagnation point flow subject to a stretched plate along to viscous dissipation and Joule heating utilizing nanofluids. Indian Journal of Pure and Applied physics Vol. 57 (12) pp. 861-876 (2019)- **Sci Journal**
- 4. Radiation heat transfer on SWCNT and MWCNT based magnetohydrodynamic nanofluid flow with marangoni convection, Physica Scripta, Vol. 95 pp. 025202 (10pp) (2020)- **Sci Journal**
- 5. Galerkin finite-element numerical analysis of the effects of heat generation and thermal radiation on MHD SWCNT-water nanofluid flow with a stretchable plate. Pramana Journal of Physics, (2020) 94:38, https://doi.org/10.1007/s12043-019-1898-9- **Sci Journal**
- 6. Hydromagnetic Flow of Copper-Water Nanofluid with Different Nanoparticle Shapes toward a Nonlinear Stretchable Plate. In: Mathematics Applied to Engineering and Management, CRC Press, Taylor & Francis Group (2019)- **Book Chapter**
- 7. Similarity Solution of Hydromagnetic Flow Near Stagnation Point Over a Stretching Surface Subjected to Newtonian Heating and Convective Condition. In: Singh V., Gao D., Fischer A. (eds) Advances in Mathematical Methods and High Performance Computing. Advances in Mechanics and Mathematics, Vol. 41 (2019). Springer, Cham- **Book Chapter**
- 8. Modeling of thermal radiation and magnetic effects on Cu–water nanofluid flow embedded in porous medium nearby a stagnation point past a stretching/shrinking plate with suction/blowing and heat source/sink using Keller-box method. Mathematics in Engineering Sciences: Novel Theories, Technologies, and Applications (2019), Taylor & Francis Group- **Book Chapter**
- 9. Viscous dissipation and Joule heating in MHD Marangoni boundary layer flow and radiation heat transfer of Cu—water nanofluid along particle shapes over an exponential temperature, International Journal of Computer Mathematics, Vol. 97 (5) pp. 943-958 (2020)- **Sci Journal**
- 10. Numerical Analysis for Effect of Newtonian Heating Condition on MHD Flow of Cu-water Nanofluid Past a Flat Plate. SSRN: http://dx.doi.org/10.2139/ssrn.3352415(2019)- **Conference Elsevier Series**
- 11. Newtonian heating and convective boundary condition on MHD stagnation point flow past a stretching sheet with viscous dissipation and Joule heating. Indian Journal of Pure and Applied physics, Vol. 56(12) pp. 931-940 (2018)- **Sci Journal**

- 12. Impacts of viscous dissipation and Joule heating on hydromagnetic boundary layer flow of nanofluids over a flat surface subjected to Newtonian heating, SN Applied Sciences 1 (12), 1709.
- 13. Heat transfer and magnetohydrodynamic nanofluids flow behaviors past a nonlinear stretching surface considering viscous dissipation and Joule heating. Indian Journal of Engineering and Materials Sciences, Vol. 27, pp. 33-46 (2020)- **Sci Journal**
- 14. Influence of magnetic field on thermal radiation and particle shapes of copper-water nanofluid considering Marangoni boundary layer. International Journal of Mathematical, Engineering and Management Sciences, Vol. 5, No. 5, pp. 957-970, (2020)- **Scopus Index Journal**
- 15. Dual Solutions for Finite Element Analysis of Unsteady Hydromagnetic Stagnation Point Flow of Cu
  —Water Nanofluid Generated by Stretching Sheet, Advances in Applied Mathematical Analysis and
  Applications, (2019), River Publisher- **Book Chapter**

## **International Conferences**

- 1. Attended an International (e- conference) on "Prospective of Interdisciplinary Research in Science and Technology in Present Scenario" organized by the Department of Physics, Ch. Charan Singh University, Meerut, UP, India held on May 15&16, 2020.
- 2. Presented a paper at the "International Conference on Sustainable Computing in Science, Technology and Management" organized by Amity University Jaipur, Rajasthan, India held on February 26-28, 2019.
- 3. Presented a paper at the "3rd International Conference on Mathematical Techniques in Engineering Applications" organized by Graphic Era Deemed to be University Dehradun, Uttarakhand, India held on December 07-08, 2018.
- 4. Presented a paper at the "2nd International Conference on Modern Mathematical Methods and High Performance Computing in Science and Technology" organized by Inderprastha Engineering College, Ghaziabad, India held on January 04-06, 2018.

## **National Conferences**

1. Attended an Online conference on "Laplace Transforms and their Applications in Engineering" organized by the Department of Mathematics, Kings Engineering College, Chennai, India held on June 27th, 2020.