

Curriculum Vitae

Dr. Deepak K. Maurya

Assistant Professor

Department of Mathematics



Prof. Rajendra Singh (Rajju Bhaiya) Institute of Physical Sciences for Study & Research

Veer Bahadur Singh Purvanchal University, Jaunpur -222003 (U.P.), India

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Academic Details:

Exam. Passed	University / Board	Year of / Passing Appearing	Division/ Rank	Subject(s)
B. Sc.	Dr. R. M. L. Avadh University, Ayodhya	2014	1 st	Physics, Chemistry, Mathematics
N.S.S.	Dr. R. M. L. Avadh University, Ayodhya	2014		
M.Sc.	University of Allahabad, Prayagraj	2016	1 st	Mathematics
NET-CSIR	CSIR Complex, Pusa, New Delhi	December 2015 December 2016 June 2017	AIR-96 AIR-99 AIR-73	Mathematical Sciences
GATE	IIT Roorkee	January 2017	AIR-291	Mathematics
JRF-CSIR	CSIR Complex, Pusa, New Delhi	December 2017	AIR-196	Mathematical Sciences
Ph.D.	University of Allahabad, Prayagraj	22 June 2021 22 February 2022	Thesis Submitted Thesis Awarded	Title: A Study of Certain Viscous Fluid Flow Problems and Their Applications Supervisor: Prof. (Dr.) Satya Deo
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Research/Teaching Interest:

Research Interest: Fluid Mechanics, Flow through porous media, MHD flow

Teaching Interest: Fluid Mechanics, Classical Mechanics, Mechanics, Differential Equations, Integral Equations, Numerical Analysis, Differential and Integral Calculus, Geometry, Operation Research.

Personal Profile Pages:

http://www.vbspu.ac.in/faculty/ (VBSPU Faculty)
https://scholar.google.com/citations?user=XBbJlogAAAAJ&hl=en&oi=ao (Google Scholar)
https://www.researchgate.net/profile/Deepak-Maurya-5/research (ResearchGate)

Life Membership:

- ➤ Center for Professional Advancement Continuous Education (CPACE)
- ➤ International Multidisciplinary Research Foundation (IMRF)
- ➤ Mathematical Society-BHU
- ➤ Global Initiative of Academic Networks (GIAN)

Awards:

- ➤ International Research Excellence Award-2022 in Fluid Mechanics
- ➤ National Academic Excellence Award-2022 in Fluid Mechanics
- ➤ Junior Research Fellow (JRF)
- ➤ 3rd Prize in Paper Presentation entitled "Generalized Stream Function of the Brinkman Equation in the Cylindrical-Polar Co-ordinates" in NCRTMA-2019.

Experiences:

- ➤ Working presently as an Assistant Professor (since November 2019) in the Department of Mathematics, Prof. Rajendra Singh (Rajju Bhaiya) Physical Sciences for Study & Research, Veer Bahadur Singh Purvanchal University, Jaunpur-222003 (U.P.), India.
- ➤ Taught to the B.A./B.Sc. (Mathematics) students in Department of Mathematics, University of Allahabad, during academic sessions 2017-18, 2018-19 and 2019-20 as a research scholar.

Guided Students:

- ✓ Abhishek Pandey, Enrol. No. PU16/263706
- ✓ Diksha Sharma, Enrol. No. PU16/352776
- ✓ Shivani Srivastava, Enrol. No. PU13/578512
- ✓ Vibha Maurya, Enrol. No. PU16/354068

Guiding Students:

- Anant Chaudhary
- Fiza Akhtar

Responsibilities in the Department:

- ✓ Internal Assessment of B.Sc. Semester-1(Mathematics) and B.Sc. Part-3 (Mathematics) students during academic session 2021-2022.
- ✓ Admission coordinator of M.A./M.Sc. (Mathematics) during academic session 2020-2021.

Academic Activities/Responsibilities:

- ➤ Played a role of Convenor by organizing a national seminar (online) on topic "134th Birth Anniversary of Great Indian Mathematician Srinivasa Ramanujan" on December 22, 2021 in Department of Mathematics, Rajju Bhaiya Institute, VBSPU.
- ➤ Played a role of Convenor by organizing a national seminar (online) on topic "Career Opportunities in Mathematics" on September 11, 2021 in Department of Mathematics, Rajju Bhaiya Institute, VBSPU.
- ➤ Played a role of Co-convenor by organizing a seminar on "*National Mathematics Day*" on December 22, 2020 in Department of Mathematics, Rajju Bhaiya Institute, VBSPU.

Orientation and Faculty Development Programme:

- ➤ Participated in 1-week *Faculty Development Programme* on "National Education Policy-2020" during March 28, 2022 April 03, 2022 organized by Ramanujan College, University of Delhi.
- Participated in 1-week *Faculty Development Programme* during September 21, 2020- September 25, 2020 organized by Mathematics and Scientific Computing Department, Madan Mohan Malaviya University of Technology, Gorakhpur.
- ➤ Participated in 4-week *Induction/Orientation Programme* during June 04, 2020 July 01, 2020 organized by Ramanujan College, University of Delhi.

Invited Talk:

➤ Delivered a lecture on topic "Geometrical Meaning of Differential Equations: Singular Solutions" on February 12, 2021 in Department of Mathematics, Govt. S.S.A. P.G. College Sihora Jabalpur (M.P.).

Members of Committees:

- ➤ Board of Studies (B.O.S.) Committee, Department of Mathematics, VBSPU
- ➤ Ph.D. Ordinance Committee, V.B.S. Purvanchal University
- ➤ Ordinance Committee, V.B.S. Purvanchal University
- ➤ Plagiarism Checker Committee, V.B.S. Purvanchal University
- Monitoring Committee, V.B.S. Purvanchal University
- > Time-Table Committee, Rajju Bhaiya Institute, VBSPU
- > Sports Committee, Rajju Bhaiya Institute, VBSPU
- > Safety and Security Committee, Rajju Bhaiya Institute, VBSPU

Published Research Papers:

- ➤ S. Deo and **D. K. Maurya**, Investigation of MHD Effects on Micropolar–Newtonian Fluid Flow Through Composite Porous Channel, Microfluid. Nanofluid., vol. 26, Article no. 64, pp. 1-16, 2022, I.F. 3.090 (**Q1 & SCI**).
- ➤ **D. K. Maurya** and S. Deo, Effect of Magnetic Field on Newtonian Fluid Sandwiched Between Non-Newtonian Fluids Through Porous Cylindrical Shells, *Spec. Top. Rev. Porous Media*, vol. 13 (2), pp. 75-92, 2022, I.F. 0.466 (**SCOPUS**).
- S. Deo, **D. K. Maurya** and A. N. Filippov, Effect of Magnetic Field on Hydrodynamic Permeability of Biporous Membrane Relative to Micropolar Liquid Flow, *Colloid J.*, vol. 83(6), pp. 662-675, 2021, I.F.: 0.93 (**SCI**).
- ➤ **D. K. Maurya,** S. Deo and D. Yu. Khanukaeva, Analysis of Stokes Flow of Micropolar Fluid Through a Porous Cylinder, *Math. Meth. Appl. Sci.*, vol. 44(8), pp. 6647-6665, I.F.: 2.321 (**Q1 & SCI**).
- ➤ S. Deo, **D. K. Maurya** and A. N. Filippov, Influence of Magnetic Field on Micropolar Fluid Flow in a Cylindrical Tube Enclosing an Impermeable Core Coated with Porous Layer, *Colloid J.*, vol. 82(6), pp. 649–660(2020), I.F.: 0.866 (**SCI**).
- ➤ **D. K. Maurya** and S. Deo, Stream Function Solution of the Brinkman Equation in Parabolic Cylindrical Coordinates, *Int. J. Appl. Comput. Math.*, vol. 6:167 (2020), (**SCOPUS**).
- S. Deo and **D. K. Maurya**, Generalized Stream Function of the Brinkman Equation in the Cylindrical-Polar Co-ordinates, *Spec. Top. Reviews Porous Media*, vol. 10(5), pp. 421-428(2019), I.F. 0.466 (**SCOPUS**).

Paper presented in conferences:

- Presented the research paper entitled "Effect of Magnetic Field on Newtonian Fluid Sandwiched Between Non-Newtonian Fluids Through Porous Cylindrical Shells" in the international conference entitled "Advances in Mechanics, Modelling, Computing and Statistics (ICAMMCS-2022)" organized (online) by Department of Mathematics, BITS Pilani Pilani Campus (Rajasthan) during March 19-21, 2022.
- ➤ Presented the research paper entitled "Influence of Magnetic Field on Micropolar Fluid Flow in a Cylindrical Tube Enclosing an Impermeable Core Coated with Porous Layer" in the National conference entitled "New Challenges Emerging in Mathematical Sciences" organized by Banaras Hindu University, Varanasi (Uttar Pradesh) during February 06-07, 2021.
- ➤ Presented the research paper entitled "MHD Effects on Micropolar-Newtonian Fluid Flow Through a Composite Porous Channel" in the international conference entitled "Membrane Process Modeling (MPM-2020)" organized (online) by Department of Higher Mathematics, Gubkin Russian State University of Oil and Gas, Moscow, Russia during December 03-04, 2020.
- ➤ Presented the research paper entitled "Generalized Stream Function of the Brinkman Equation in the Cylindrical-Polar Co-ordinates" in the National conference entitled "Recent Trends in Mathematics and Their Applications" organized by Shri Ramswaroop Memorial University, Lucknow (Uttar Pradesh) during February 21-22, 2019.
- ➤ Presented the research paper entitled "Stream Function Solution of the Brinkman Equation in Parabolic Cylindrical Co-ordinates" in the International conference entitled "Mathematical Modeling and Computations" organized by South Asian University, Chanakyapuri (Delhi) during December 01-03, 2018.

Attended/participated in the workshops and seminars:

- ➤ Participated in One Day International Seminar on "*Transforming Youth Skills for Future 2022 and Academic Excellence Award*" organized by Center for Professional Advancement Continuous Education (CPACE), Vijayawada (Andhra Pradesh) on July 22, 2022.
- Participated in One Day National Seminar on "Integrated Approach in Research & Development for Sustainable Future and Academic Excellence Award" organized by International Multidisciplinary Research Foundation (IMRF), Vijayawada (Andhra Pradesh) on May 14, 2022.
- ➤ Participated in Two Days Workshop on "National Assessment and Accreditation Council (NAAC)" organized by Veer Bahadur Singh Purvanchal University, Jaunpur (Uttar Pradesh) during May 13, 2022 May 14, 2022.

- ➤ Participated in Two Days Workshop on "Outcome Based Education" organized by Veer Bahadur Singh Purvanchal University, Jaunpur (Uttar Pradesh) during April 22, 2022 April 23, 2022.
- ➤ Participated in the workshop entitled "MATHEMATICA as a Teaching Aid" organized by IIT, Roorkee (Uttarakhand) during June 10-14, 2019.
- Participated in the workshop entitled "Applications of MATLAB in Science and Technology" organized by Motilal Nehru National Institute of Technology, Prayagraj (Uttar Pradesh) during April 01-05, 2019.
- ➤ Participated in the National workshop entitled "Advances in Applications of Computational Fluid Dynamics" organized by Motilal Nehru National Institute of Technology, Prayagraj (Uttar Pradesh) during March 06-11, 2019.
- Participated in the NCM workshop entitled "Continuum Mechanics: Principles and Applications" organized by Panjab University, Chandigarh (Punjab) during November 19-24, 2018.
- ➤ Participated in the GIAN short term course entitled "Role of Fluid Flow and Mass Transport in Porous Media for Design of Chemical Reactors for Groundwater Remediation" organized by IIT, Guwahati (Assam) during August 20-24, 2018.
- Participated in the national seminar entitled "Higher Education and Job Opportunities in Rural Areas" organized by Pt. R.L.S. Govt. P.G. College, Alapur Ambedkar Nagar (Uttar Pradesh) on February 28, 2018.
- ➤ Participated in the GIAN short term course entitled "Introduction to Mathematical Theory of Complex Fluids" organized by NIT, Kurukshetra (Haryana) during November 17-22, 2017.
- ➤ Participated in the GIAN short term course entitled "Monotone Iterative Techniques" organized by IIT, Patna (Bihar) during November 05-11, 2017.

Date: 27.08.2022 Place: Jaunpur (U.P.)