



# Curriculum Vitae



**Dr. Deepak Kr. 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 <sup>st</sup>	<i>Physics, Chemistry, Mathematics</i>
N.S.S.	Dr. R. M. L. Avadh University, Ayodhya	2014	-----	-----
M.Sc.	University of Allahabad, Prayagraj	2016	1 <sup>st</sup>	<i>Mathematics</i>
Ph.D.	University of Allahabad, Prayagraj	22 June 2021	Thesis Submitted	<b>Title:</b> <i>A Study of Certain Viscous Fluid Flow Problems and Their Applications</i> <b>Supervisor:</b> <i>Prof. (Dr.) Satya Deo</i>
		15 February 2022	Thesis Awarded	
NET-CSIR	CSIR Complex, Pusa, New Delhi	December 2015	AIR-96	<i>Mathematical Sciences</i>
		December 2016	AIR-99	
		June 2017	AIR-73	
JRF-CSIR	CSIR Complex, Pusa, New Delhi	2017	AIR-196	<i>Mathematical Sciences</i>
GATE	IIT Roorkee	2017	AIR-291	<i>Mathematics</i>

## 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, Operation Research

## Personal Page:

<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:**

- Global Initiative of Academic Networks (GIAN)
- Mathematical Society-BHU

## **Awards:**

- Junior Research Fellow (JRF)
- 3<sup>rd</sup> Prize in Paper Presentation entitled “*Generalized Stream Function of the Brinkman Equation in the Cylindrical-Polar Co-ordinates*” in NCRTMA-2019.

## **Experiences:**

- 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.
- Working as 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.

## **Academic Activities/Responsibilities:**

- 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.
- Played a role of Convenor by organizing a National Webinar on topic “*Career Opportunities in Mathematics*” on September 11, 2021 in Department of Mathematics, Rajju Bhaiya Institute, VBSPU.
- Played a role of Convenor by organizing a National Webinar on topic “*134<sup>th</sup> Birth Anniversary of Great Indian Mathematician Srinivasa Ramanujan*” on December 22, 2021 in Department of Mathematics, Rajju Bhaiya Institute, VBSPU.

## **Orientation and Faculty Development Programme:**

- Participated in 4-week *Induction/Orientation Programme* during June 04, 2020 - July 01, 2020 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.

## **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.

## **Members of Committees:**

- Member of Board of Studies (B.O.S.) in Department of Mathematics, VBSPU
- Ordinance 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**, 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.
- **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), DOI: <https://doi.org/10.1007/s40819-020-00920-4>.
- 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.
- **D. K. Maurya**, S. Deo and D. Yu. Khanukaeva, Analysis of Stokes Flow of Micropolar Fluid Through a Porous Cylinder, *Math. Meth. Appl. Sci.* (Q1 Journal), vol. 44(8), pp. 6647-6665, I.F.: 1.632.
- 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, I.F.: 0.866.
- **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), 2022, DOI: [10.1615/SpecialTopicsRevPorous Media.2022039882](https://doi.org/10.1615/SpecialTopicsRevPorousMedia.2022039882), I.F. 0.466.

### Paper presented in conferences:

- Presented the research paper entitled “*Stream Function of the Brinkman Equation in the Parabolic Cylindrical Co-ordinates*” in the International conference entitled “Mathematical Modelling and Computations” organized by South Asian University, New-Delhi (Delhi) during *December 01-03, 2018*.
- 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 “*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*.

### **Attended/participated in the workshops and seminars:**

- Participated in the GIAN short term course entitled “*Monotone Iterative Techniques*” organized by IIT, Patna (Bihar) during *November 05-11, 2017*.
- 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 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) during *February 28, 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 NCM workshop entitled “*Continuum Mechanics: Principles and Applications*” organized by Panjab University, Chandigarh (Punjab) during *November 19-24, 2018*.
- 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 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 workshop entitled “*MATHEMATICA as a Teaching Aid*” organized by IIT, Roorkee (Uttarakhand) during *June 10-14, 2019*.

Date: 22.02.2022

Place: Jaunpur (U.P.)

**DR. DEEPAK KR. MAURYA**