

L.A.D. & Smt. R.P. College for Women, Nagpur

FACULTY PROFILE



❖ Basic Information

- **Name:** Dr. Swapna Uddhao
- **Designation:** Assistant Professor (CHB)
- **Department:** Mathematics
- **Area of Specialization:** Magnetohydrodynamics

❖ Educational Qualifications: M.Sc., Ph.D. (Mathematics)

❖ Teaching Experience:

- PG Level: CHB at Govt. Institute of Science, Nagpur [2011-2016]
- UG Level: CHB at L.A.D College for Women, Nagpur [2017- Present]

Total Teaching Experience: 13+ Years

❖ Research Experience

- Total Research Experience: 9 Years
- Areas of Research Interest: Magnetohydrodynamics

❖ Research Publications

• Research Papers in National/ International Journals

- Stability of Steady State Solutions with Finite Energy for the Magnetohydrodynamic Flows in the Whole Space R^3 , published in Indian Journal of Mathematics, ISSN: 0019-5324, Volume63, Issue 3, page 393-413, 2021
- Existence and Stability of L^p Solutions of the Steady State Magnetohydrodynamic Equations with Rough External Forces, published online in Differential Equations and dynamical systems, Springer, 2021, P-ISSN: 0971-3514, E-ISSN: 0974-6870, DOI: 10.1007/s12591-021-00578-4
- Holly type Stability of Solutions of Three dimensional Stationary Incompressible Magnetohydrodynamic Equations, published in Differential Equations and

dynamical systems, Springer, P-ISSN: 0971-3514, E-ISSN: 0974-6870, Volume 29, Issue 1, page 35-58, 2021, DOI: 10.1007/s12591-019-00503-w.

- Stability of Solutions of the Magnetohydrodynamic Equations and Convergence to Steady State, published in Asian Journal of Mathematics and Computer Research, P-ISSN: 2395-4205, E-ISSN: 2395-4213, Volume 25, Issue 3, page 140-156, 2018.
- Generic Properties of Solutions of Three dimensional Stationary Incompressible Magnetohydrodynamic Equations, published in Asian Journal of Mathematics and Computer Research, P-ISSN: 2395-4205, E-ISSN: 2395-4213, Volume 20, Issue 4, page 218-231, 2017.
- Some Regularity Properties of Three dimensional Incompressible Magnetohydrodynamic Flows, published in Global Journal of Pure and Applied Mathematics, P-ISSN: 0973-1768, E-ISSN: 0973-9750, Volume 13, Issue 7, page 3349-3365, 2017.
- Energy Equality for Solutions of Three dimensional Incompressible Magnetohydrodynamic Equations, published in International Journal of Pure and Engineering Mathematics (IJPEM), ISSN: 2348-3881, Volume 4, Issue 3, page 1-10, 2016.
- **Orientation / Refresher Courses / FDPs Attended**
 - Five Day International Faculty Development Programon “AI in Research & Innovation” organised by L.A.D & Smt. R.P. College for Women, Nagpur in Collaboration with Yeshwantrao Chavan College of Engineering (YCCE) , Nagpur from 18th to 22nd August 2025.
 - Two Week “NEP 2020 Orientation and Sensitization Programme” under Malaviya Mission Teacher Training Programme(MM-TTP) of University Grants Commission (UGC) organised by UGC-Malaviya Mission Training Centre, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, from 16th March to 30th March 2025.
 - One Week International Level Online Faculty Development Programon “Data Science and Optimization Techniques” organized by the Department of Applied Mathematics and Humanities, YCCE, under the aegis of IQAC, YCCE and in association with NUMTA from 27th January to 3rd February 2025.

- Faculty Development Program on “Outcome Based Learning and Latex” in the Celebration of National Mathematics Day 2024 organized by PGTD of Mathematics, RTM Nagpur University, Nagpur held on 28th December 2024.
- Three Day MS-DEED Level 1 In-Person Workshop on “Introduction to Innovative Pedagogies for Undergraduate Teachers” organized by RTM Nagpur University, Nagpur on 17th to 19th November 2022.
- National Level One Week Online Faculty Development Program on “Mathematics: a Practical Approach in Science and Technology” organized by Department of Basic Science and Humanities, Deogiri Institute of Engineering & Management Studies, Aurangabad from 28th June to 3rd July 2020.
- One Week Online Faculty Development Program on “Advance Research Methodology and Innovative Teaching Pedagogy” organized by Tulsiram Gaikwad-Patil College of Engineering. & Technology, Nagpur from 8th to 13th June 2020.

❖ **Papers Presented in Conferences / Seminars**

- Presented a Poster titled “Stability of Steady State Solutions with Finite Energy for the Magnetohydrodynamic Flows in the Whole Space R^3 ” at International Conference on Advances in Physical, Chemical & Mathematical Sciences (ICAPCM) organized by RTM Nagpur University, Nagpur from 13th to 16th February 2020.
- Presented a Poster titled “Stability of Solutions of the Magnetohydrodynamic Equations and Convergence to Steady State” at Annual young Scholars’ Conference organized by Internal Quality Assurance Cell (IQAC), RTM Nagpur university, Nagpur on 23 & 24 February 2018.
- Presented a Paper titled “Serrin-type regularity for solutions of three dimensional incompressible magnetohydrodynamic equations” at 2nd National Conference on “Recent innovations in Science, Engineering. & Technology” organized by GH Raisoni Institute of engineering and Technology, Nagpur on 10th March 2017.

❖ **Awards / Recognitions**

- Won Best Paper Award for the paper titled “Serrin-type regularity for solutions of three dimensional incompressible magnetohydrodynamic equations” under the track of “Recent advances in Basic Science” in 2nd National Conference on Recent innovations in Science, Engineering. & Technology organized by GHRIET, Nagpur on 10th March 2017.

- Received Smt. Guruvayur Sangameshwar Seshamal Narayanan Memorial Prize for securing the Highest Percentage of Marks in Mathematics in B.Sc. III Year at L.A.D. College, Nagpur.
- Received The Raman Centenary Prize for securing the Highest Percentage of Marks in Electronics in B.Sc. III Year at L.A.D. College, Nagpur.