

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

### Faculty Profile



#### ❖ Basic Inforamtion

- **Name** :Dr. Shraddha Pande
- **Designation:** Assistant Professor
- **Department:** Department of Physics
- **Area of Specialization:** Material Science, Glasses, Fly ash
- **VIDWAN ID-**448288
- **Google Scholar –ID-**  
<https://scholar.google.com/citations?user=iZCtBF8AAAAJ&hl=en>

#### ❖ Education Qualifications:

- Ph.D. (Physics) 2020, R.T.M.N. University, Nagpur.
- M.Phil. (Physics) 2008, S.G.B. Amravati University, Amravati.
- M.Sc. (Physics) 2005, S.G.B. Amravati University, Amravati.
- B.Ed. (Physics, Mathematics), 2011, R.T.M.N. University, Nagpur.
- B.A. (Add) Sociology, 2006 S.G.B. Amravati University , Amravati.

#### ❖ Teaching Experience: 19 years

#### ❖ Research Experience:

- **Total research experience:** 5 years
- **Research Guidance :-** Worked as Research Paper Reviewers for the Journal of Condensed Matter of the Condensed Matter Research Society.
- **Area of Research Interest:** Material Science, Biomass, Glass, fly ash, Nano material.

#### ❖ Research Publication:

##### (A) Research Papers in National /International Journals

- Transport properties of glasses prepared from biomass fly ash, International Journal

of Basic and Applied Research, June, 2014, vol-4

- Preparation of glass from biomass ash and study its properties, International Journal of Research In Biosciences Agriculture & Technology , January 2014, Issue-2, Volume-1 <https://doi.org/10.1016/ijrb.2014.02.002>
- To Prepare Silica Soda Borate Glass from Biomass Fly Ash and Study its Optical Properties, International journal of engineering research & technology (ijert) Volume 06, Issue 03 (March 2017), <http://dx.doi.org/10.17577/IJERTV6IS030058>
- Use of biomass fly ash for preparation of glass and study its properties, IJRAR, 2018 E-ISSN 2348-1269, P- ISSN 2349-513 [http://ijrar.org/viewfull.php?&p\\_id=IJRAR1903044](http://ijrar.org/viewfull.php?&p_id=IJRAR1903044)
- "Effect of biomass ash on elastic and structural properties of Zinc-borate glass system" , Journal of Emerging Technologies and Innovative Research, September 2020. <https://www.jetir.org/papers/JETIR2009434.pdf>
- Biomass fly ash as a source of silica: Comprehensive review, Journal vol.(19) no.(2) 2023 (ISSN 0974-0317) published by L.A.D. & Smt. R.P. College for Women, Shankar Nagar, Nagpur.

## **(B) Books /Book Chapters**

### **Authored-**

- Text Book of Basic Physics (Diploma in Engineering) – DJ Publication.
- B.Sc. - Indian Astronomy (for all branches), Based on syllabus of R.T.M. Nagpur University, Nagpur, ISBN-978-93-48359-80-3
- B.Sc. Physics (Physics of Daily life, General electives semester-I Based on syllabus of R.T.M. Nagpur University, Nagpur ISBN-978-93-48359-08-7
- B.Sc. Physics (DSC-I and DSC- II, Major semester-II & DSC Minor semester IV ) Minor Based on syllabus of R.T.M. Nagpur University, Nagpur ISBN-978-93-6409-211-1
- B.Sc. Physics (DSC-I and DSC- II, Major semester-I & DSC Minor semester III ) Minor , Based on syllabus of R.T.M. Nagpur University, Nagpur ISBN-978-93-48359-08-7

## **(C) Conferences/Seminar proceedings**

- Use of waste Biomass Ash Glass as UV Blocker, International conference AASMD-2014 "Applications of Advanced Materials for Sustainable Development", 17 th January, 2014
- Transport properties of glasses from Biomass ash, National Conference on Material Science Trends & Future in 2014 organized by Bharatiya Mahavidyalaya, Amravati on 10-11 January, 2014.

- International Conference on “Integrated Solid Waste Management Practice in Developing Countries-2017” to be held on April11-12, 2017atCSIR-NEERI,Nagpur.
- Attended the 108th Indian Science Congress held at Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur, in 2023.
- Study of effect of bagasse fly ash on structural and transport properties of Zinc Borate glass, Conference on Recent Innovations in Science and Technology in Jalgaon, 2024.
- Effect of sugarcane bagasse ash on the phase transformation and optical properties of Zinc-Borate glass, proceedings of International Conference on Material Physics & Electronics (ICMPE-2024), on 1-3 July 2024 organized by Gyan-Vigyan Institute Amravati.
- Structural characterization of glass prepared using biomass fly ash, International Conference on Innovations in Science for Sustainable Development (ICISSD-2025), on 19 & 20 March 2025, organized by Smt. Narsamma Arts, Commerce and Science College, Kiran Nagar, Amravati, India, Research Committee and Department of Chemistry and Association of Chemistry Teachers (ACT), Mumbai,
- Participated online in the One- Day National Seminar on Artificial Intelligence – An Emerging Tool for Research in Science and Technology organised by Bhivapur Mahavidyalaya Bhivapur and Science College Pauni on 28 th March 2025.

## ❖ Research Projects:

- **Minor/Major Research Projects:**

S.N.	Title	Funding Agency	Year	Amount Sanctioned
1.	Development of Bio-Derived Carbon Quantum Dots (CQDs) For Emerging Applications.	R.T.M. Nagpur University ,Nagpur	2025	3,00,000/-
2.	Patent Registered Design No. 439217-001- Micro reactor for nanoparticles synthesis”	Government of India	2024	-

### ❖ **Orientation/Refresher Courses/ FDPs Attended**

- Completed Faculty Induction Program-VII organized by UGCMMTTC SGB Amravati University, Amravati.
- Attended 6 days FDP-Pragati ke path Par, organized by L.A.D. college Nagpur from 18<sup>th</sup> -24<sup>th</sup> July 2024
- Short Term Course on NEP Sensitization organized by UGC MMTC, R.T.M.N.University Nagpur
- Participated in 5 Days FDP organized by L. A. D. and Smt. R. P. College for Women, Nagpur,
- Participated in 5 Days, one week online national level FDP organized by Department of Physics., Yashwantrao Chavan College of Engineering, Nagpur, on “Advanced materials and Quantum technology”.
- Participated in one day University level workshop on National Credit Framework as per NEP 2020 on 15th June 2024,organized by Shri Mathuradas Mohota College of science and Board of Studies in Physics, RTM Nagpur University.
- Participated one week FDP on NEP Orientation & Sensitization Programme held during 1- 15 May 2024, organized by the Malaviya Mission Center for Educator of IUCCA, Pune.
- Participated in a Five-Day FDP organized by L. A. D. and Smt. R. P. College for Women, Nagpur in collaboration with Y.C.C. Engineering, Nagpur, on AI in Research and Innovation, from 18 - 22 August 2025.

### ❖ **Papers Presented in conference/Seminar**

- Participated in Bhartiya Vigyan Sammelan (BVS) submitted abstract held on 26 th - 29 th of December 2025, at National Sanskrit University Tirupati..
- Presented Poster entitled “ Structural Characterisation of glass prepared using biomass fly ash” on 1-2 July 2024 International Conference on Innovations in Science for Sustainable Development, Amravati.
- Bio-derived carbon quantum dots (CQDs) – To address critical challenges impacting women’s health and well-being, on 5-6 July 2025, 29th Annual Technological Advances in Science, Medicine and Engineering (TASME)conference, University of Toronto (at Scarborough), Canada

### ❖ **Workshop/ Seminars/ Conferences organized**

- Worked as organizing member at National level conference ‘Green Earth- Clean Earth, organized by L.A.D college Nagpur, on 10 February 2024.

### ❖ **Administrative responsibilities**

- Member of IQAC Task force

### ❖ **Membership of professional Bodies**

- Life time member of Indian Association of Physics Teacher (IAPT)
- Life time member of Association of Indian Physicists (AIP)
- Life time member of VIGYAN Bharati.
- Life time member of UWAN

### ❖ **Awards/Recognitions**

- Selected for State Level “**Tantra Snehi Puraskar**” Presentation on “Use of ICT Tools for Laboratory Practical Work” 2016
- Recognized for innovation in teaching methodology and effective integration of technology in education.
- Conferred with the Rjyastariya Shikshak Puraskar by SwiftNlift Foundation on 7th March 2026.
- Research Paper Reviewers for the Journal of Condensed Matter of the Condensed Matter Research Society.

### ❖ **Extension Activities/Community Engagement**

- Invited as Guest Speaker in NSS-Camp, Mahuzari.
- Invited as an evaluator at zonal level Science exhibition organizes by VIGYAN Baharti.
- Served as mentor in the Registration Committee for the collaborative activity of the Nutriwise Asia Cookery Book Contest, involving LAD College, SVK Shikshak Sanstha, and Jhankar Mahila Mandal, on 12 September 2025.
- Teacher in charge for Reel making competition in AURA 2025-26.
- Co-Convenor for National space Day celebration of Department of Physics **2025-26**.
- Co-Convenor for selling of water sensor diya activity of department of physics-2025
- Co- convenor for Shekdar memorial talk competition 2023-24
- Co- convenor for Shekdar memorial talk competition 2024-25
- Co-Convenor for Alumina student connect programme 2025-26
- Member of Winter -2025 college level examination.

### ❖ **E- Content/MOOCs/ICT Use-**

You tube Lectures: Physics For You@dr.shraddhapande6013

Google Classroom

PHYSICS SEMESTER I & II :

<https://classroom.google.com/u/2/c/NTA3Nzg2ODMxNTg0>

PHYSICS SEMESTER III & IV :

<https://classroom.google.com/c/ODIwMDYwMjc3NzQx>

## ❖ Other Relevant Information

### **(A) College committee Convenorship and Membership:**

- Secured second merit position at University Level in M.phil
- Invited as Chairperson – International Conference, Warora
- Invited as Judge – 45th Interschool Science Exhibition (2019)
- Invited as Guest Speaker – “Social Media Survey” (Govt. of Maharashtra, 2020)
- Invited as Judge – 50th Zonal Science Exhibition (2023)
- Invited as Evaluator – Zonal Science Exhibition by Vigyan Bharati, Nagpur (2026)
- Invited as a chief – guest on National Science Day, at Government ITI, Organised by Government of India
- Appointed as co-coordinator for National Graduate Physics Entrance (NGPE)
- Served as a member for NAAC - Criterion VI.
- Co-Convenor of Admission Committee
- Co-CONvenor of Attendance Committee,
- Member of Parent Teacher Meeting
- Acted as a member of the Intercollegiate Dance Competition for AURA - Cultural Event.
- Contributed as a member of the Registration, Venue, and Stall Arrangement Committee for the National Conference.
- Served as a member of the Mentor Committee & many other committees.
- Worked as Co-program officer in NSS-Unit-I
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