

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

### FACULTY PROFILE



#### ❖ Basic Information

- **Name:** Ms. Shubhangi Vasanta Khapekar
- **Designation:** Assistant Professor
- **Department:** Chemistry
- **Area of Specialization:** Analytical Chemistry
- **VIDWAN ID-** 698072
- **ORCID ID-** 0009-0006-9599-5259

#### ❖ Educational Qualifications: M.Sc. Chemistry, B.Ed., MH-SET

#### ❖ Teaching Experience:

- **Total Teaching Experience:** 5 Years

#### ❖ Research Experience

- **Total Research Experience:** Pursuing Ph. D.
- **Areas of Research Interest:** Analytical Chemistry, Nanocomposites

#### ❖ Research Publications

##### (A) Books / Book Chapters

##### Authored- 5 Books

- *Food Adulteration Chemistry*, B.Sc. Semester I (NEP-2020), based on the syllabus of R.T.M. Nagpur University, Nagpur, ISBN: 978-81-975702-0-9.
- *Cosmetic Chemistry*, B.Sc. Semester I (NEP-2020), based on the syllabus of R.T.M. Nagpur University, Nagpur, ISBN: 978-93-48359-93-3.
- *Kitchen and Nutrition Chemistry*, B.Sc. Semester II (NEP-2020), based on the syllabus of R.T.M. Nagpur University, Nagpur, ISBN: 978-93-48359-51-3.
- *Basics of Environmental Pollution*, B.Sc. Semester II (NEP-2020), based on the syllabus of R.T.M. Nagpur University, Nagpur, **Seminar Proceedings** ISBN: 978-93-48359-62-9.

- *Chemistry in Everyday Life*, B.Sc. Semester III (NEP-2020), based on the syllabus of R.T.M. Nagpur University, Nagpur, ISBN: 978-93-48359-64-3.

## **(B) Conference /**

- “Synergistic ZnIn<sub>2</sub>S<sub>4</sub>/Cu–MOF Nanocomposite for Efficient Removal of Recalcitrant Organic Dyes from Wastewater.” in Proceedings of the International Conference on Advanced Functional Materials (Innovations in Chemical, Physical and Biological Sciences) (ICAFM-2026), pg. 154, held on 6–7 February 2026, organized by Dharampeth M. P. Deo Memorial Science College. ISBN: 978-93-48359-45-2.

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

- Completed Five Day FDP on ‘Student Centric Methodology and Interactive Teaching Strategies using Technological Tools’ from 9th to 13th October, 2023 organised by L.A.D. & Smt. R. P. College for Women, Nagpur under the aegis of Internal Quality Assurance Cell.
- Completed Six Day FDP from 18 to 24 July, 2024 organised by Justice M. L. Pendse Language Lab in collaboration with IQAC, L.A.D. & Smt. R. P. College for Women, Nagpur.
- Participated in National Level One- week FDP on Research Methodology from 22<sup>nd</sup> July to 27<sup>th</sup> July, 2024 organized by Kamla Nehru Mahavidyalaya, Nagpur.
- Participated in an AICTE-recognized Faculty Development Programme on “Nanomaterials, Characterizations and Applications” conducted by the Applied Science Department at Anjuman College of Engineering and Technology, Nagpur, from 29 July to 02 August 2024.
- Completed ‘Online 13th Faculty Induction Programme’ under Malviya Mission Teacher Training Programme (MM-TTP) of UGC organised by UGC-MMTTC, RTMNU, Nagpur from 2nd to 30th January, 2025 and obtained Grade A+.
- Completed ‘NEP- 2020 Orientation and Sensitization Programme’ under Malviya Mission Teacher Training Programme (MM-TTP) of UGC organised by UGC-MMTTC, RTMNU, Nagpur from 16 to 30 March, 2025.
- Completed Five Day International Faculty Development Programme on ‘AI in Research and Innovation’ from 18 to 22 August, 2025 at L.A.D. & Smt. R. P. College for Women, Nagpur under the aegis of the Internal Quality Assurance Cell (IQAC) aiming to integrate Artificial Intelligence in academic research and innovation.

## ❖ Papers Presented in Conferences / Seminars

- Presented paper titled “Green Route Synthesis of PMMA and MgO Composite Materials for Industrial Applications” at International Analytical Science Congress (IASC)-2024, organised by ISAS, JNARDDC & co-organised by VNIT, Nagpur held on 22<sup>nd</sup>-24<sup>th</sup> February 2024.
- Presented paper titled “Colligating Agro Waste with Industrial Effluents for Sustainable Management” at National Conference on Multidisciplinary Research and Studies, organised by Jawaharlal Nehru Arts, Commerce & Science College, Wadi, Nagpur held on 20<sup>th</sup> March 2024.
- Presented paper titled “Efficient Dye Adsorption with  $\text{CaIn}_2\text{S}_4@ \text{GO}$ : A Sustainable Approach” at International Conference on Innovations in Science for Sustainable Development (ICISSD- 2025) organised by Smt. Narsamma Arts, Commerce and Science College, Amravati held on 19-20 March 2025.
- Presented poster titled “Facile Synthesis of  $\text{GO-TiO}_2@ \text{Cu-MOF}$  (10-30%) Composites for Sustainable Organic Dye Adsorption” at International Conference on Breakthrough Innovations in Chemical & Sustainable Sciences: Research and Education (BICSS-2025)" organized by Samrat Vikramaditya Vishwavidyalaya, Ujjain (M.P) Bharat held on November 13<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> 2025.
- Presented poster titled “Synergistic  $\text{ZnIn}_2\text{S}_4/\text{Cu-MOF}$  Nanocomposite for Efficient Removal of Recalcitrant Organic Dyes from Wastewater” at International conference on Advanced Functional Materials (Innovations in Chemical, Physical and Biological Sciences) ICAFM-2026 organized by Dharampeth M. P. Deo Memorial Science College, Nagpur held on 6<sup>th</sup> and 7<sup>th</sup> February 2026.
- Presented paper titled “A Review of Sustainable Graphene-Based Metal–Organic Framework Nanocomposites for Recalcitrant Dye Degradation” at National Conference on “Recent Advances in Basic Science and Technology” (NCABST-2026) organized by Seth Narsingdas Mor College of Arts and Commerce & Smt. G.D. Saraf Science College, Tumsar Dist. Bhandara held on 5<sup>th</sup> March 2026.

## ❖ Membership of Professional Bodies

- Life Member of Vigyan Bharti, Vidarbha Pradesh Mandal (VIBHA), Nagpur
- Life Member of RTMNU Vidyapeeth Shikshan Manch, Nagpur.

## ❖ Awards / Recognitions

- Awarded Gold Medal and secured Top Rank in 4-Credit SWAYAM Course on “Research Methodology in Natural Sciences”, January–April 2024, with 90%.

- Awarded Silver Medal and secured Top Rank in 1-Credit SWAYAM Course on “Effective Writing”, January–February 2024, with 84%.
- Pat on the Back for outstanding achievement in Research by L.A.D. College, Nagpur.

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

- Invited as a Judge for the “Best Student Competition” of Junior College at L.A.D. & Smt. R. P. College for Women, Nagpur on 14<sup>th</sup> December 2024.
- Mentored B.Sc. I Year students who secured Third Prize in Quiz Competition organized by the Department of Chemistry, Science College, Congress Nagar, Nagpur on 16th September 2025.

### ❖ **E-Content / MOOCs / ICT Use**

- Completed 2-Credit SWAYAM Course on “National Education Policy -2020: Professional Development Programme”, 1<sup>st</sup>–31<sup>st</sup> December 2023 and obtained 80%.
- Completed 2-Credit SWAYAM Course on “Roadmap for Patent Creation”, January–March 2024.
- Completed 1-Credit SWAYAM Course on “Effective Writing” during January–February 2024 with 84%, awarded Silver Medal and secured Top Rank.
- Completed 4-Credit SWAYAM Course on “Research Methodology in Natural Sciences” during January–April 2024 with 90%, awarded Gold Medal and secured Top Rank.
- Completed 4-Credit SWAYAM Course on “Advanced Transition Metal Chemistry”, July–October 2024.

### ❖ **Other Relevant Information.**

#### **(A) Intellectual Property Rights (IPR) – Copyrights**

- Copyright: Green Route Synthesis of MgO Nanoparticles and Its Composites with PMMA for Industrial Applications, Reg. No. L-156597/2024, 2024 (Co-Author).
- Copyright: Colligating Agrowaste with Industrial Effluents for Sustainable Management, Reg. No. LD-20250175255, 2025 (Co-Author).

#### **(B) Contribution at University Level**

- Worked as an Internal examiner for B.Sc. Semester -II Chemistry, R.T.M.N.U Practical Exam Summer-2024

- Worked as an Internal examiner for B.Sc. Semester -IV Chemistry, R.T.M.N.U Practical Exam Summer-2024
- Worked as an Internal examiner for B.Sc. Semester -II Chemistry, R.T.M.N.U Practical Exam Summer-2025
- Worked as an Internal examiner for B.Sc. Semester -IV Chemistry, R.T.M.N.U Practical Exam Summer-2025
- Worked as an Internal examiner for B.Sc. (Applied Electronics and Software Technology) Semester -II SEC Chemistry, R.T.M.N.U Practical Exam Summer-2026
- Worked as an Internal examiner for B.Sc. Semester -IV Minor Chemistry, R.T.M.N.U Practical Exam Summer-2026
- Worked as Internal Practical Examiner for B.Sc. Chemistry College and University level Examinations.
- Valuation of Papers of B. Sc. Chemistry Odd and Even Semesters at College and University level Examinations.

### **(C) Workshops/Conferences Attended**

- Participated in “National Workshop on Climate Change & CCUS” organized by CSIR-National Environmental Engineering Research Institute (NEERI), Nagpur on November 29, 2023.
- Participated in “One Day National Symposium on NEP 2020: a global perspective for HEIs” on 16<sup>th</sup> December 2023 at Kavivarya Suresh Bhatt Sabhagruha, Nagpur.
- Attended National Conference on Green Earth- Clean Earth jointly organized by L.A.D. & Smt. R. P. College for Women, Nagpur and IRICH on 10<sup>th</sup> February 2024.
- Participated in International Webinar on “Catalyzing Diversity in Science” on 27<sup>th</sup> February 2024 organized by Kamla Nehru Mahavidyalaya, Nagpur.
- Participated in International Webinar on “Accelerating Equity in Science” on 11<sup>th</sup> February 2025 organized by Jagat Arts, Commerce & I. H. P. Science College, Goregaon, Dist Gondia.
- Participant in the World Record event of *Vidyapeeth Geet Gayan* organized at Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, 2025.
- Successfully completed the Solar Energy Awareness Program (2025) (21st–22nd June) with Grade ‘O’ (Outstanding), organized by Maharashtra Information Technology Support Center in collaboration with Solar Energy Society of India.

## **(D) College Committee Convenorship and Membership**

- Member of A.Q.A.R Criteria – 2
- Member of Students' Quality Assurance Cell (SQAC).
- Member of Dr. S. Iyenger Intercollegiate General Knowledge Quiz Competition.
- Member of Cleanliness Committee, Bulandi Cell and Jagruti Cell.
- Chemical Society Activities (Chemistry Department):
- Scintilla Magazine (2023-24,2024-25,2025-26)- Advisory Board Member
- Worked as Co- Convenor in Two days Floor Cleaner Workshop.
- Worked as Teacher In-charge for Food and Drug Administration Laboratory Visit, Nagpur, on 23<sup>rd</sup> February 2023.
- Worked as a Member for Educational Field Visit to Dinshaw Factory, Butibori, and Raman Science Centre, Nagpur.
- Worked as a Committee Member for Venue Arrangement for the National Science Day Programme and Installation of the Chemical Society.
- Worked as a Committee Member in Skill Development Workshops on ChemDraw Software, Hand Sanitizer, and Use of AI Design Tools for Developing a Scientific Approach in Academics.
- Worked as a Committee Member for Venue Arrangement at the National Conference on "Green Earth – Clean Earth", jointly organized by L.A.D. & Smt. R. P. College for Women, Nagpur and IRICH, on 10 February 2024.
- Worked as a Committee Member for the Annual Prize Distribution, responsible for distributing certificates and cash prizes to winners.
- Worked as a Committee Member for Venue Arrangement at the two-day Faculty Training Workshop on Indian Knowledge System (IKS), organized by L.A.D. & Smt. R. P. College for Women, Nagpur, on 21–22 January 2026.
- Worked as a Committee Member for Venue and Seating Arrangement at the International Women's Day Programme on 7<sup>th</sup> March 2026.
- Worked as a Committee Member for Dance Competition and Venue Arrangement in AURA.
- Student Mentorship program- Mentor for B.Sc. II year Batch-S8 & S9 and B.Sc. III Batch- S6.