### **CURRICULAM VITAE**

#### Dr. (Smt.) PRERNA KATHANE

**Assistant Professor** 

Department of Chemistry

(DST-FIST Sponsored)

Govt.V.Y.T.PG Autonomous College, Durg (CG)

[College with Potential for Excellence, Reaccredited by NAAC with "A+"]

#### **Personal Information**

Date of Birth : June 24<sup>th</sup>, 1970

Sex : Female

Nationality : Indian

Contact Address: Lily- 387, Talpuri (A-Block) Ruabandha, Bhilai -490009, Durg(CG), India

Mob. No.: 919826672649, 918319938814

E-mail : prernakathane04@gmail.com

### **Educational Qualifications:**

B.Sc.: Chemistry, Zoology, Botany; Kalyan PG College, Sector-7 Bhilainagar, Durg (CG)

M.Sc.: Chemistry; Pt. Ravishankar Shukla University, Raipur (CG)

Specialization in P.G.: Inorganic Chemistry

Ph.D.: Chemistry, Pt. Ravishankar Shukla University, Raipur (CG)

## **Experience Summary**

## **Teaching:**

- Undergraduate and Postgraduate teaching from October 1996 till date (nearly 25 years).
- As an Assistant Professor in Chemistry (PSC,MP) from October 1996 to July 1999 [Govt.
   College Shankarnagar, Raipur (CG)]
- Assistant Professor in Chemistry from July 1999 till date[Govt.V.Y.T.PG Autonomous College, Durg (CG)]

#### **Research:**

- Engaged in Research work since 13-07-2011
- Awarded Ph. D. in Chemistry (2017) on the title" Removal of some toxic cations and anions by adsorption onto polyvinyl alcohol-alginate bound nano magnetite microspheres"
- Applied for registration as a guide at Hemchand Yadav University, Durg (CG)

### **Research Project Completed: Minor**

• University Grants Commission (UGC), New-Delhi funded Minor Research Project entitled "Superparamagnetic microspheres composed of polyvinyl alcohol and alginate as adsorbent for removal of toxicants from aqueous system" for the period of June, 2012 to December, 2013 (Rs.1,95,000)

#### **Fellow member**

- Life Member, Indian Chemical Society, Kolkata.
- Life Member, International Science Congress Association.

### **Paper Published**

- 1. Effective removal of dye Alizarine Red S using CTAB modified PVA- Alginate bound nano magnetic microspheres, *International Journal of Scientific and Technical Research in Engineering*, 2(61) (**2017**) 33-41.
- 2. Defluoridation of Water using Adsorbent PVA- Alginate/CTAB Bound Nano Magnetite microspheres: Kinetic & Equilibrium study, *Advance Physics Letter*, 3(2) (**2016**) 36-42.
- 3. Removal of dye safranin-T from aqueous solution by adsorption onto PVA/Aginate bound nano magnetite hydrogel microspheres, *Asian Resonance*, 5 (2) (**2016**) 01-09.
- 4. Adsorption of Cu<sup>2+</sup> ions onto Polyvinyl Alcohol-Alginate bound Nano Magnetite Microspheres: A Kinetic and Thermodynamic study, *International Research Journal of Environment Science*, 4(4) (2015) 12-21.
- 5. Superparamagnetic PVA-A microspheres as adsorbent for Cu<sup>2+</sup> ions removal from aqueous systems, *International Research Journal of Environment Science*, 2(7) (**2013**) 44-53.

#### Paper in Conferences/Seminar/Symposia/Congress/Workshops:

- Fixed bed column study for removal of Anionic dye from aqueous system by CTAB
  functionalized PVA-Alginate bound nanomagnetite microspheres National Conference on
  Advances in Environmental & Chemical Sciences, Raipur (CG) India, March 17-18, 2017
- Removal of dye Safranin-T using Nano magnetite adsorbent: Fixed bed column study, National Conference on Current Environmental Issues & Sustainable Development, BIT, Durg (CG) 2016.
- Defluoridation of water by adsorption using a high efficiency adsorbent PVA-Alginate bound nanomagnetite microspheres, International Conference on Recent Trends in Science & Engineering, Durg (CG) 2016.
- Effective removal of p-Nitro phenol by adsorption onto PVA-Alginate bound nano magnetite microspheres, BRNS-AEACI Symposium on Current, Trends in Analytical Chemistry, Mumbai (MS) 2015.

- Fixed bed column study for removal of Cd(II) ions from aqueous solution by PVA-Alginate bound nano magnetite microspheres, International Conference on Status of Science & Technology in Chhattisgarh State, BIT, Durg (CG), 2015
- Synthesis of nanomagnetite encapsulated PVA-Alginate microspheres and evaluation for its efficiency for Cd(II) ions removal from water, International Conference on Futuristic Materials and Emerging Trends in Forensic and Life Sciences, Nagpur, (MS) 2015.
- Removal of Alizarin red-S dye onto PVA-Alginate bound nano magnetite microspheres,
   International Conference on Water, Kottayam, Kerala, 2015.
- Adsorptive removal of Safranin-T from industrial effluent by nanomagnetite encapsulated PVA-Alginate microspheres, 4<sup>th</sup> International Science Congress, Udaipur, Rajasthan, 2014.
- PVA-Alginate bound Fe<sub>3</sub>O<sub>4</sub> Magnetite nanoparticles as adsorbent for removal of Cu (II) from aqueous medium, 2<sup>nd</sup> International Science Congress, Mathura (UP) 2012.

## Conferences/Seminar/Symposia/ Congress/Workshops Attended:

| Year | Topic of workshop/Seminar/Symposia/Conference                    | Date                |
|------|--|---------------------|
| 2020 | Webinar on Thrust area of research, Hemchand Yadav               | January 09, 2020    |
|      | University, Durg (CG)  |                     |
|      | Webinar on Research Innovation and Extensions, Govt.             | December05,2020     |
|      | V.Y.T. PG Auto. College, Durg (CG) India                         |                     |
|      | International Webinar on Role of Functional Nanomaterials        | October 29-20,2020  |
|      | for Combating Covid 19, Govt. V.Y.T. PG Auto. College,           |                     |
|      | Durg (CG) India.   |                     |
|      | International Webinar on Post Covid -19 World Environment:       | June 05- 07, 2020   |
|      | Prospects and Challenges for Sustainable Development, Govt.      |                     |
|      | V.Y.T. PG Auto. College, Durg (CG) India.                        |                     |
|      | International Conference on Materials for Environment,           | January 24-25, 2020 |
|      | Govt. V.Y.T. PG Autonomous College, Durg (CG) India              |                     |
| 2019 | 9 <sup>Th</sup> International Science Congress, Bhilai Institute | December08-09, 2019 |
|      | of Technology, Durg (CG) India                                   |                     |
|      | International Conference on Recent Trends in Chemical            | November14-16, 2019 |
|      | Sciences, Pt. R.S. University Raipur (CG) India                  |                     |

|      | National Conference on Current Environmental Issues & January 29-30, 2019  |
|------|--|
|      | Sustainable Development, Bhilai Institute of Technology,   |
|      | Durg (CG) India  |
| 2017 | National Seminar on Current Development of Environmental Sciences in Chhattisgarh state, BMM Sect  9, Bhilainagar, Durg (CG) |
| 2017 | National Conference on Advances in Environmental & March 17-18, 2017   |
|      | Chemical Sciences, Pt. R.S. University Raipur (CG) India   |
| 2017 | National Workshop on Emerging Trends of Chemicals in February 06, 2017   |
|      | Human Life, Govt. Dr. W.W. Patankar Girls' P.G. College,   |
|      | Durg (CG)  |
| 2016 | National Conference on Current Environmental Issues & January 29-30, 2016.   |
|      | Sustainable Development, Bhilai Institute of Technology,   |
|      | Durg (CG) India,   |
| 2016 | International Conference on Recent Trends in Science & January 15-16, 2016   |
|      | Engineering, Govt. V.Y.T. PG Autonomous College, Durg  |
|      | (CG) India   |
|      | National level Workshop on Nano-Chemistry, Kalyan P.G.January 08-09, 2016  |
|      | College, Bhilainagar (CG)  |
| 2015 | Workshop on "Green Chemistry and its Future aspects", Govt. November 30, 2015  |
|      | V.Y.T. PG Auto College, Durg (CG)  |
|      | 17 <sup>th</sup> National Conference on Surfactants, Emulsions & Bio November 04-06,2015                                     |
|      | colloids (NATCOSEB XVII), Pt. R.S. University, Raipur (CG)   |
|      | National Seminar on Green Chemistry, BMM Sect9, October 28-29,2015   |
|      | Bhilainagar, Durg (CG)   |
|      | BRNS-AEACI Symposium on Current Trends in Analytical May 26-29, 2015   |
|      | Chemistry, Mumbai (MS), India  |
|      | International Conference on Status of Science & Technology March 19-20, 2015   |
|      | in Chhattisgarh State, BIT, Durg (CG)  |
|      | International Conference on Futuristic Materials and Emerging February 05-07, 2015   |
|      | Trends in Forensic and Life Sciences, NAGPUR University  |
|      | (MS)   |

|      | International Conference on Water: From Pollution to Purification, Kottayam, Kerala   | January 23-26, 2015  |
|------|---|----------------------|
| 2014 | 4 <sup>th</sup> International Science Congress, Udaipur, Rajasthan, India   | December 08-09,2014  |
| 2012 | 3 <sup>rd</sup> International Science Congress, Vrindavan, Mathura (UP) India   | December 08-09,2012  |
| 2011 | 1 <sup>st</sup> International Science Congress, Indore (MP) India   | December 24-25, 2011 |
|      | National Seminar on Emerging Trend in Chemical Sciences,<br>Kalyan P.G. College, Bhilainagar (CG)   | November18-19, 2011  |
|      | National Seminar on Emerging Trend in Chemical Sciences & Future Prospects, Govt.V.Y.T.PG Auto. College, Durg(CG)                                       | October 11-12, 2011  |
| 2010 | 47 <sup>th</sup> Annual Convention of Chemists-2010 & International Conference on Recent Advances in Chemical Sciences, Pt. R.S. University Raipur (CG) | December 23-27, 2010 |
| 2009 | Workshop on Role of women in management of water resources, Ministry of water resources & Central Water Board, Raipur (CG)                              | March 04,2009        |
| 2008 | BITCON-2008, Dept. of Engineering Chemistry, BIT, Durg (CG)   | November 07-08, 2008 |
|      | National Seminar on Medicinal Value of Drugs Extracted from Plants of CG Forests, Govt. Nagarjun P.G. College of Sciences, Raipur (CG)                  | October 17-18, 2008  |
| 2007 | National Symposium on Fundamental & Analytical Aspects of self-organizing system, Kalyan P.G. College, Bhilainagar(CG)                                  | March 08-10,2007     |
| 1999 | National Seminar on Chemistry of Environmental pollution with special emphasis on pesticides, Govt. D. B. Girls' P.G auto. College, Raipur              | January 28-29, 1999  |

# **Other Contributions:**

- Active member, International Conference on Materials for Environment-2020
- Sectional Secretary, Chemical Sciences Section in 9<sup>Th</sup> International Science Congress, BIT, Durg (ISC- 2019)
- Contributed in "Inspire Internship Science Camp"
- Member of Parents-Teacher- Student Association
- Member of Scholarship Committee
- Member of Girls Discipline Committee
- Member of Board of Studies

Dr. (Smt.) Prerna Kathane