

## Dr. Priyanka P. Yadav

**Designation** :Assistant Professor

**Specialization** :Physical Chemistry

**Address**

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### Educational Qualifications

- Ph.D.(Physical Chemistry), The Maharaja Sayajirao University of Baroda, Vadodara, 2009-2015
- M.Sc.(Physical&Polymer Chemistry), The Maharaja Sayajirao University of Baroda, Vadodara, 2006-2008
- B.Sc.(Chemistry),The Maharaja Sayajirao University of Baroda, Vadodara, 2003-2006

### Academic Experience

- The Maharaja Sayajirao University of Baroda, Vadodara Gujarat, India

Duration :December 2014-May 2016

Duration: June 2017-January 2022

- Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar

Duration :January 2022 to till date

### Research Area

Crystal Growth and Design , Crystal Engineering, Supramolecular Chemistry, Molecular Gel

**Expertise** :Physical Chemistry

### List of Publications Research Articles

No. of Publication: 08

- 1) Priyanka Yadav and Amar Ballabh, Synthesis, characterization and nano-particles synthesis using a simple two component supramolecular gelator: A step towards plausible mechanism of hydrogelation; *Colloids and Surfaces A: Physicochem.Eng. Aspects*, (2012), 414, 333.
- 2) Priyanka Yadav, Dalbir Kour, Vivek K Gupta, Rajnikantand Amar Ballabh, Probing the role of weaker interactions in immobilization of solvents in a new class of supramolecular gelator, *RSC Adv.*,(2013),3,8417.
- 3) Priyanka Yadav and Amar Ballabh, Room temperature metallogelation for a simple series of aminothiazole ligands with potential applications in identifying and scavenging mercury ions, *RSC Adv.*, (2014), 4,563.

- 4) Priyanka Yadav, Pradip Kr. Dutta and Amar Ballabh, Combinatorial library approach to realize 2-aminothiazole based two components hydrogelator: A structure-property correlation, *Cryst. Growth. Des.*, (2014), 14, 5966.
- 5) Priyanka Yadav and Amar Ballabh, Synthesis, characterization and nano-particles synthesis using a simple two component supramolecular gelator: A step towards plausible mechanism of hydrogelation; *Colloids and Surfaces A: Physicochem. Eng. Aspects*, (2012), 414, 333.
- 6) Priyanka Yadav, Dalbir Kour, Vivek K Gupta, Rajnikant and Amar Ballabh, Probing the role of weaker interactions in immobilization of solvents in a new class of supramolecular gelator, *RSC Adv.*, (2013), 3, 8417.
- 7) Priyanka Yadav and Amar Ballabh, Room temperature metallogelation for a simple series of aminothiazole ligands with potential applications in identifying and scavenging mercury ions, *RSC Adv.*, (2014), 4, 563.
- 8) Priyanka Yadav, Pradip Kr. Dutta and Amar Ballabh, Combinatorial library approach to realize 2-aminothiazole based two components hydrogelator: A structure-property correlation, *Cryst. Growth. Des.*, (2014), 14, 5966.

### Poster presentations

- 1) ICSSC-2011, Mangalore University, Mangalore, held during December 8-10, 2011, entitled Synthesis and Characterization of Simple Non-covalent Gelator based on melaminium salts: A Crystal Engineering Approach.
- 2) ICSNA-2012, Gujarat University, Ahmadabad, held during February 6-8, 2012, entitled Simple Non-Covalent Hydrogelators based on melaminium salts and its application as Template for synthesis of silver nano particle.
- 3) ISMC-2012, BARC, Mumbai, held during December 11-15, 2012, entitled Designing a new class organogelator and its application as Template for synthesis of silver nano particle.
- 4) MTC-2013, The M.S. University of Baroda, Vadodara, Gujarat, held during March 21-23, 2013, entitled Structural studies of a New Low Molecular Mass Gelator Based on simple organic salts.
- 5) National Conference on Supramolecules and Nanotechnology, Gandhinagar, Gujarat, held during October 18-19, 2013, entitled Two component supramolecular gelator based on salt of melamine and succinic acid: A structure property correlation.

### **Instruments handled**

Single crystal XRD(Agilent), FT-IR (perkinelmer), Dynamic Light Scattering (Bruk Haven), Ultracentrifuge (Perkin Elmer), UV-Visible spectrophotometer (Perkin Elmer)

### **Fellowship**

University Research Fellowship

Funded by: The M. S. University of Baroda, Vadodara

Duration: march 2009 to march 2014