

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: 09

- 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, 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.
- 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, Odd–even effect in a thiazole based organogelator: understanding the interplay of non-covalent interactions on property and applications; *New J Chem*, (2015), 39, 721.
- 6) Priyanka Yadav, Vatsa Patel and Amar Ballabh, Role of S...O non-bonded interaction in controlling supramolecular assemblies in a new series of 2-aminobenzothiazole based organic salts/ co-crystals, *J. of solid state chem.*, (2018),263,231.
- 7) Priyanka Yadav and Amar Ballabh, N-(thiazol-2-yl)benzamide derivatives as a new series of supramolecular gelators: Role of methyl functionality and S...O interaction, *J. of solid state chem.*, (2020), 81,121027.
- 8) Anju R. Chaudhary, Priyanka Yadav, Ashutosh V. Bedekar, Application of optically active aminonaphthols as NMR solvating agents for chiral discrimination of mandelic acid, *Tetrahedron: Asymmetry*, (2014),25,767.
- 9) A.S.Sharma, V.S.Sharma, Priyanka Yadav, Harjinder Kaur, Rajendra S. Varrma, Polystyrene Resins: Versatile and economical support for heterogeneous Nanocatalysts in sustainable organic reactions, *Chem Cat Chem*, (2023),15,e202201493.

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 (perkin elmer), 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