

## Curriculum Vitae

### Dr. Mangesh Nivrutti Potangale

M. Sc. Ph.D (Physical Chemistry)

C/o: Prof. Chandu Potangale

New Arts, Commerce and Science college,

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### Objective:

To work in a professionally managed scientific environment this can provide me an opportunity for learning and growth. Seek a chance to improve the productivity and effectiveness of the research through my skills and knowledge.

### Education Qualifications:

#### Ph. D.

**October 2019**, Thesis title on “**Physicochemical properties of non- imidazolium based ionic liquids: structure and interaction**”

**Research supervisor:** Dr. Shraeddha Tiwari (Assistant Professor)

**University:** Institute of Chemical Technology, Mumbai, India.

**Master of Science June 2012**, Project title on “**Removal of nickel ions from activated charcoal and chitosan**”

**Research supervisor:** Prof. Nileema S. Rajurkar (Emeritus Professor)

**University:** Savitribai Phule Pune University, India.

**Second class (57.7%)** with specialization in Physical Chemistry, Savitribai Phule Pune University, India.

**Bachelor of Science June 2010**, First class with distinction in Chemistry, Savitribai Phule Pune University, India.

### Professional Experience:

❖ **Modern college of Arts, Science and Commerce, Shivajinagar, Pune**

Designation: - Guest Lecturer, Department of chemistry.

Duration:- From January-2013 to May 2013

- ❖ **Nowrosaji Wadia College of Arts, Science and Commerce, Pune**  
Designation: - Guest lecturer  
Department: - Chemistry  
Duration: - From June-2013 to August 2013.
  - ❖ **Institute of Chemical Technology, Matunga, Mumbai**  
Designation: - Visiting faculty  
Department: - Chemistry  
Duration: - From June-2019 to November 2019.
  - ❖ **Mentored various research projects** for undergraduate and post graduate students (Sep. 2013 to Dec. 2018) (Research area: Ionic liquids, physicochemical properties, Spectroscopy etc.)
  - ❖ **Conducted Physical chemistry laboratory practical** of B. Tech. and B. Chem. Eng. at Institute of Chemical Technology, Mumbai (2013-2018)
  - ❖ **Conducted analytical chemistry laboratory practical** of B. Tech. at Institute of Chemical Technology, Mumbai (2013)
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### Academic Achievements:

- ❖ **Junior Research Fellowship** from UGC-SAP (Sep-2013-Nov2015)
  - ❖ **Senior Research Fellowship** from UGC-SAP (Nov-2015- Sep 2018)
  - ❖ Qualified “**GATE 2012 Examination**” with All India Rank-3699.
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### Research Publications:

- ❖ **Mangesh Potangale** , Abhishek Das , Sudhir Kapoor, Shraeddha Tiwari  
"Effect of anions and alkyl chain length on the structure and interactions of *N*-alkyl pyridinium ionic liquids" Journal of molecular chemistry, 2017, **240**, 694–707.
  - ❖ **Mangesh Potangale**, Shraeddha Tiwari  
“Correlation of the empirical polarity parameters of solvate ionic liquids (SILs) with molecular structure (**Accepted in J. Mol. Liq. 2019** DOI: [10.1016/j.molliq.2019.111882](https://doi.org/10.1016/j.molliq.2019.111882))
  - ❖ **Mangesh Potangale**, Shraeddha Tiwari  
“Binary mixtures of pyridinium ionic liquids and DMSO-d<sub>6</sub> (Manuscripts under review)
  - ❖ **Mangesh Potangale**, Shraeddha Tiwari  
“Dissolution of Solvate Ionic Liquids by Molecular Solvents: A Vibrational Spectroscopic Study (Manuscripts under preparation)
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## Conference presentations and Workshop:

- ❖ A poster presented at “**Temperature Dependent Empirical Polarity Parameters Of Solvate Ionic liquid**”, 4<sup>th</sup> ISCB Frontier Research in Chemistry & Biology Interface, Jaipur (**January 2018**)
  - ❖ A poster presented at “ **Binary mixtures of pyridinium ionic liquids and DMSO-d6**”, BITS Pilani, Goa (**January 2017**)
  - ❖ A poster presented at “**Dissolutions of solvate ionic liquids: A vibrational spectroscopic study**” Faraday discussions Murray Edwards College, University of Cambridge, UK (**September 2017**)
  - ❖ A poster presented at “ **Effect of anion and alkyl chain length N-methyl pyrrolidinium ionic liquids**” West Bengal, (**February 2016**)  
A poster presented at “**Vibrational spectroscopic study of ionic liquid system structure and interaction**”, 17<sup>th</sup> CRSI National Symposium in Chemistry, NCL Pune,, Mumbai (**Feb2015**)
  - ❖ Actively participated in “**Laboratory Safety Workshop**” organized by Institute of Chemical Technology (ICT), Mumbai, India from 20<sup>th</sup> to 21<sup>st</sup> March, 2014
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## Achievements and Awards:

- ❖ **2<sup>nd</sup> prize** awarded in the “**Chemistry quiz**” ICT, Mumbai. (**March. 2014**)
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## Technical Skills:

- ❖ Expertise in handling of various instruments such as, **HPLC,GC-MS, UV, FT-IR, CHNS, Particle size analyzer( BET-Analyzer) , PH-Meter, Conductometer, Potentiometer, and Tensiometer.**
  - ❖ The **synthesis of ionic liquids and their structural elucidation** by using various characterization techniques **Raman spectroscopy, <sup>1</sup>H-NMR, FT-IR etc.**
  - ❖ Dedication to a safe and clean work environment and ability to work independently or in multi-disciplinary teams and to deliver high-quality results.
  - ❖ Excellent **presentation skill** and able to write **research articles and proposals.**
  - ❖ Expertise in handling software's such as **Mestronova, Chemdraw, origin** etc.
  - ❖ Literature survey using **Reaxys, Sci-finder, Scopus** etc.
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## Extra Curricular activity:

- ❖ **Successfully completed** a Two days course on “**Laboratory Safety**” conducted by Dept. of chemistry, Institute of Chemical Technology Matunga- Mumbai, 2013.
- ❖ **Volunteer for DST-FIST presentation program** organized by Institute of Chemical Technology, Mumbai (2014).

- ❖ **Volunteer for** Two days course on “**Laboratory Safety**” conducted by Dept. of Chemistry, Institute of Chemical Technology Matunga- Mumbai, 2013.
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### Research Interest:

- ❖ Design, synthesis and application of ionic liquids and their physicochemical properties.
  - ❖ Design, synthesis and solvatochromic properties of solvate ionic liquids and their applications.
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### Personal information:

- Date of Birth : 16 July 1990.
  - Nationality : Indian.
  - Marital Status : Unmarried.
  - Language known : English, Hindi, Marathi.
  - Permanent address : A/P- Narangal (Bk) , Tal- Degloor,  
Dist- Nanded (Maharashtra), Pin- 431723
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### References:

#### **Dr. Shraeddha Tiwari**

Assistant professor,  
Department of Chemistry,  
Institute of Chemical Technology,  
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Tel No. office-+ 91 22 33612618  
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#### **Prof. Radha V. Jayaram**

Head, Professor of Physical Chemistry  
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#### **Prof. Shriniwas D. Samant**

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#### **Prof. Dr. Bhalchandra M. Bhanage**

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I declare that the foregoing information is correct and complete to the best of my knowledge.

**Mangesh Nivrutti Potangale**