



## Sakharam B. Tayade

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### Qualification

**Ph.D.:** Department of Chemistry, Savitribai Phule Pune University, Pune

**Thesis Title:** “Hydrogen-bonded frameworks and coordination polymers based on bipyridine glycoluril for proton conduction.”

**M.Sc.:** Inorganic Chemistry, Dr. B.A.M. University, Aurangabad

**B.Sc.:** B. R. Barwale, College, Jalna, Dr. B.A.M. University, Aurangabad

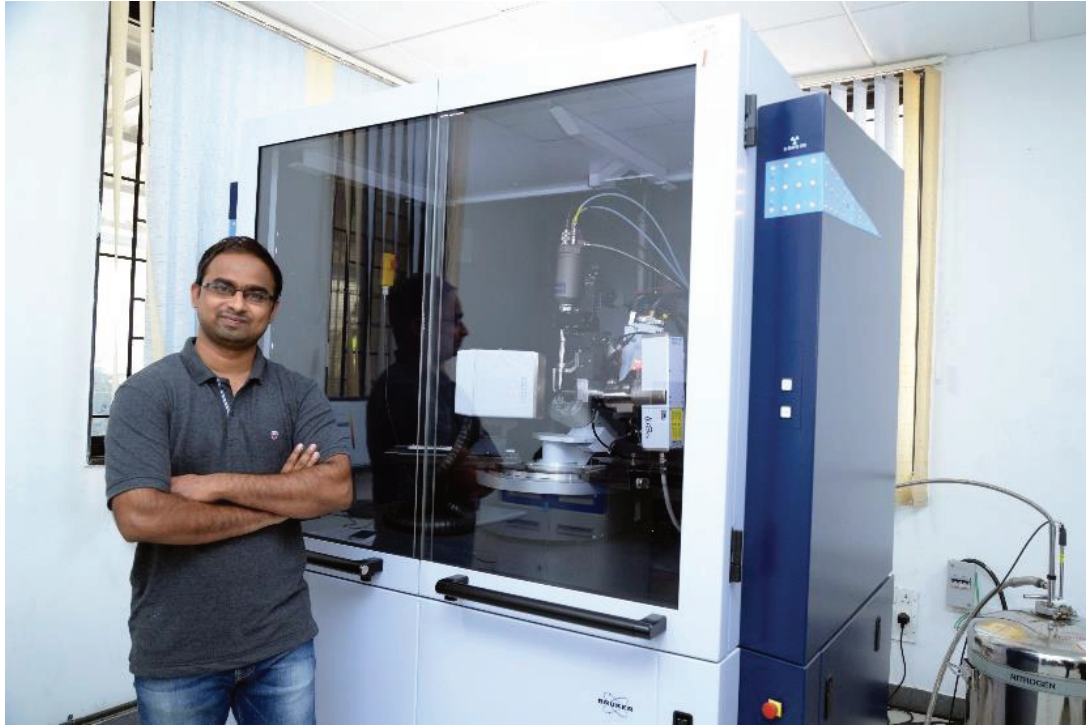
### Research Interest

- Metal organic framework/Coordination polymers and supramolecular chemistry
- Interaction studies in the molecules by crystal engineering using single crystal XRD
- Polymorphs and cocrystal study of active pharmaceutical ingredients (API)
- Water splitting, materials chemistry and energy and environment

### Publication

- 1) **Sakharam B. Tayade**, Vishal M. Dhavale, Avinash S. Kumbhar, Sreekumar Kurungot, Peter Loncke, Evamarie Hey-Hawkins, Bhalchandra Pujari, Proton conduction in a hydrogen-bonded complex of copper(II)-bipyridine glycoluril nitrate, *Dalton Trans.*, 46, 2017, 6968-6974. [Web link](#)
- 2) **Sakharam B. Tayade**, Satish S. Bhat, Vitthal A. Kawade, Avinash S. Kumbhar, Vishal M. Dhavale, Rajith Illathvalappil, Sreekumar Kurungot and Christian Nather, Water mediated proton conductivity in a hydrogen-bonded Ni(II)-Bipyridine glycoluril chloride self-assembled framework, *CrystEngComm*, 2018, 20, 1094-1100. [Web link](#)
- 3) Vitthal A. Kawade, Satish S. Bhat, **Sakharam B. Tayade** and Avinash S. Kumbhar, A one-dimensional self-assembled porous coordination polymer poly[bis(picolinato-N,O) ( $\mu$ -1,2-bis(4-pyridyl)ethane-N,N') cobalt(II)] dimethanol, *Inorganica Chim. Acta*, 2018, 483, 539-543. [Web link](#)
- 4) **Sakharam B. Tayade**, Datta Markad, Avinash S. Kumbhar, Andrea Erxleben and Debamitra Chakravarty, Coordination polymers of Cd(II) and Pb(II) derived from bipyridine-glycoluril ligand: Influence of metal ion size and counter ions, *Acta Cryst. C75*, 2019, 1084-1090. [Web link](#)
- 5) **Sakharam B. Tayade**, Rajith Illathvalappil, Vaidehi A. Lapalikar, Datta Markad, Sreekumar Kurungot, Bhalchandra Pujari and Avinash S. Kumbhar, A Copper(II)-coordination polymer based on a sulfonic-carboxylic ligand exhibits high water-facilitated proton conductivity, *Dalton Trans.*, 2019, 48, 11034-11044. [Web link](#)
- 6) Shivsharan M. Mali, Shankar S. Narwade, Yuvraj H. Navale, **Sakharam B. Tayade**, Renuka Digraskar, Vikas B. Patil, Avinash S. Kumbhar, and Bhaskar R. Sathe, Heterostructural CuO–ZnO Nanocomposites: A Highly Selective Chemical and Electrochemical NO<sub>2</sub> Sensor, *ACS Omega*, 2019, 4, 23, 20129-20141. [Web link](#)

## Conferences and Awards



Dr. Sakharam Tayade at Single crystal X-ray diffractometer



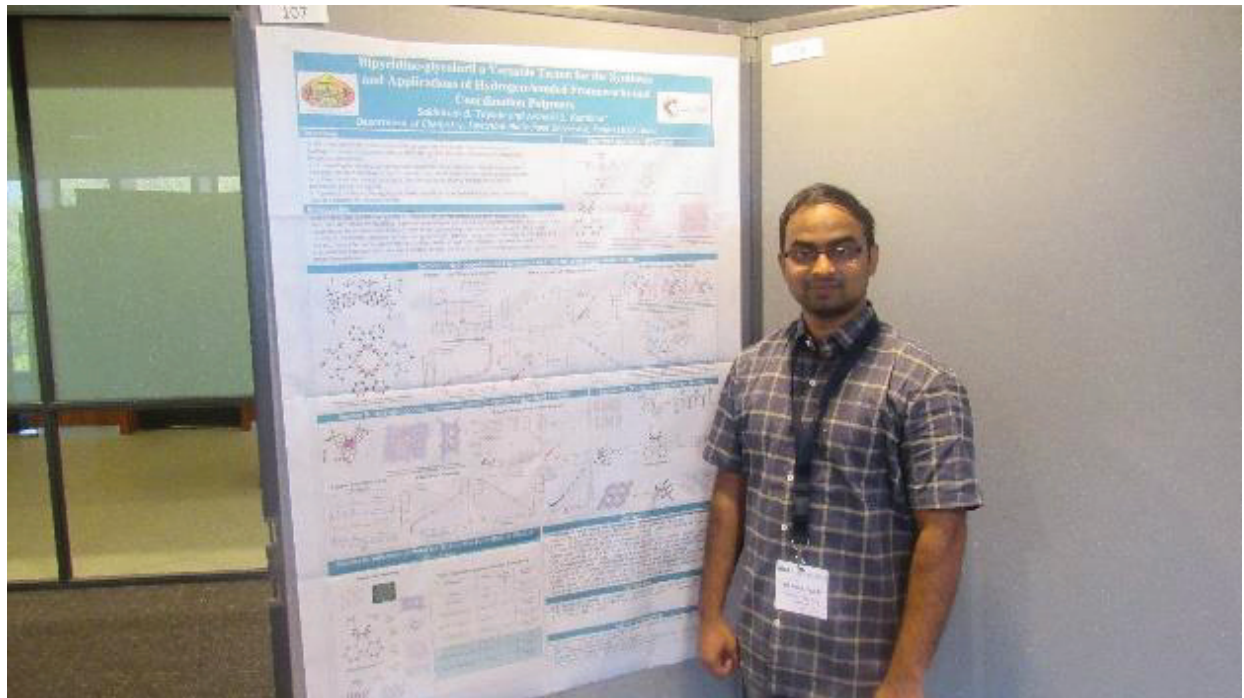
Dr. Sakharam Tayade attending EUROMOF2017 conference at  
TUDelft, Netherlands



Dr. Sakharam Tayade receiving best poster award in Single crystal X-ray workshop at CSIR-NCL.



Dr. Sakharam Tayade receiving best poster award in ICSIC-II-2019 conference at IISER, Pune.



Dr. Sakharam Tayade presenting poster in EUROMOF2017 conference at TUDelft, Netherlands.