COORDINATED SOLVENTS DRIVEN PROTON CONDUCTION IN MOF

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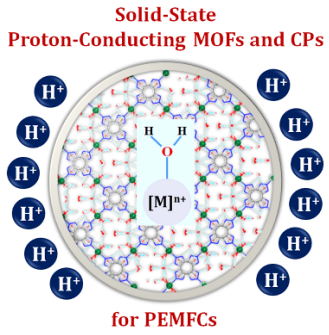
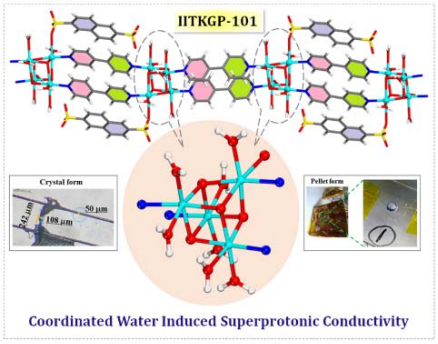
The presentation includes the discussion on design strategy, synthesis and proton conduction properties of MOFs performed at *'Framework Laboratory'* of IIT-Kharagpur [1-8]. Recent past witnessed considerable progress of such materials as solid-state proton conductors (SSPCs) due to their several structural superiority and architectural diversity. A variety of *intrinsic* and *extrinsic* protonic sources have been installed onto these frameworks so far, conversely, metal-coordinated solvent molecules (water, ammonia and dihydrogen-phosphates) acting as *solely intrinsic* proton sources by virtue of their enhanced acidity (due to polarization) are largely unknown in bringing conductivity onto such systems. Those key examples will be focused in this presentation.





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