

## **Internal Webinar**

### **Development of Oxacalixarene-based Fluorescent Probes for the Detection of Environmental Contaminants**

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Supramolecular probes have gained significant attention due to their ease of preparation, tunable cavities and proficiency in functionalisation toward the targeted analytes. Therefore, the supramolecular host provides a great deal in designing target-specific probes.<sup>1</sup> Calixarene, a 3rd generation supramolecular assembly, is widely recognised due to its vessel shape structure and its large variety of applications.<sup>2</sup> I have explored Oxacalixarene - based fluorescent probes and Calix-protected metal nanoparticles for the sensing of environmentally important ions and molecules.<sup>3,4</sup> In this talk, I will discuss my recent works on the sustainable development of dual readout sensors for arsenic, fluoride, methylmercury<sup>5</sup> and the fabrication of portable sensors for their real-time estimation in neighbouring water bodies.

#### **References:**

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- 4 S. Dey, A. Kumar, P. K. Mondal, K. M. Modi, D. Chopra and V. K. Jain, *Dalt. Trans.*, 2020, 49, 7459–7466.
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**Monday, Apr 18<sup>th</sup> 2022**

**02:30 PM**