

Students' Annual Seminar

Bottom-up design of organic and organic-inorganic hybrid membranes for chemical separation

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The pursuit of sustainable, carbon-free separation technology hinges on the efficient separation of gas mixtures with high separation factors and flow rates, i.e. high permselectivity. However, achieving this objective is arduous due to the meticulous engineering at the angstrom scale and intricate chemical manipulation required to design the pores within membranes. To address this challenge, novel membrane design principle is proposed. In my seminar, I shall discuss a proof-of-concept for an anisotropic porous membrane design and its gas (CO_2/N_2) separation performance.

Tuesday, Apr 23rd 2024

11:30 Hrs (Tea / Coffee 11:15 Hrs)

Auditorium, TIFR-H