Tata Institute of Fundamental Research
Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad – 500 046

Internal Seminar

High-Capacity Sodium-ion Batteries: Electrode Engineering Approach

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With increasing demand for efficient and sustainable energy storage solutions, sodium-ion batteries (SIBs) have emerged as viable alternatives to lithium-ion batteries owing to the widespread availability of sodium resources. This presentation discusses the suitability of SnSb-alloy and carbon-based materials as anode candidates for sodium-ion half-cells. Emphasis is placed on the impact of reduced graphene oxide (rGO) integration into SnSb alloys and the effects of Fe, N-doping in carbon-based anode systems aimed at enhancing sodium storage capabilities, comprehensive evaluations of their half-cell performance, stability under cycling conditions, and cycle life characteristics pertinent to sodium-ion battery applications.

Tuesday, Jul 16th 2024

11:30 Hrs

Seminar Hall, TIFR-H