



INDIAN INSTITUTE OF TECHNOLOGY INDORE

Dated: Jan 15, 2018

Advertisement for a Postdoctoral Position

Applications are invited from motivated and eligible candidates for a postdoctoral position in the research project

Lithium Dendrite Suppression in Li-based Batteries

Due to high theoretical capacity, lowest negative potential, and its prospective as next-generation energy storage devices (such as Li-S and Li-O₂ batteries), lithium (Li) metal has received huge attention as a promising anode material, where Li metal electrode is crucial for the battery system. However, several issues associated with Li dendritic growth and unstable solid electrolyte interphase (SEI) layer results in poor electrochemical performances and associated safety complications such as short-circuiting. This project will be focused on finding ways to suppress or mitigate lithium dendrite formation. The research efforts includes but not limited to electrolyte/electrode interphase fabrication/modification, separator tailoring, solid state electrolyte, device fabrication, characterization and testing. This work will be carried out in collaboration with Prof. Vilas G. Pol of Purdue University, IN, USA. <https://engineering.purdue.edu/ViPER/pol.html>

Eligibility: Ph.D. in Chemistry / Electrochemistry / Materials Science, -Engineering / Chemical Engineering / Physics. Please note that you should have defended your Ph.D. dissertation.

Stipend:

Postdoctoral Fellow will be paid consolidated salary based on the following salary structure of the DST for Research Associate.

Category	Emoluments per month
Research Associate-I	Rs. 36,000/-
Research Associate-II	Rs. 38,000/-
Research Associate-III	Rs. 40,000/-

The category will be decided/recommended by the selection committee based on the qualification/Experience/Performance in the interview of the candidate.

Service conditions:

1. DA: Postdoctoral Fellow will not be entitled to DA.
2. House Rent Allowance (HRA): All Postdoctoral Fellow may be provided accommodation based on availability and those residing in accommodation provided by the institute will not be eligible for drawing HRA. Wherever provision of hostel accommodation is not possible, HRA may be allowed to Postdoctoral Fellow as per Government norms applicable in the city/location where they are working. The fellowship amount may be taken as basic for calculating the HRA.
3. Medical Benefits: The Postdoctoral Fellow will be entitled for medical allowance as per institute policy.
4. The travel entitlement for Postdoctoral Fellow for participation in scientific events/workshops in India will continue to be as per institute norms.

Duration: The appointment is for one year.

Interested candidates are requested to submit a detailed CV to Prof. Sudeshna Chattopadhyay via e-mail: sudeshna@iiti.ac.in by March 1, 2018.

Only shortlisted candidates will be intimated by email for an interview. No TA/DA will be paid for appearing in the interview.