

**DEPARTMENT OF CHEMICAL ENGINEERING  
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

**ADVERTISEMENT FOR POST DOCTORAL FELLOWSHIP POSITION**

NO.CHEE/PDF/750

Dated - 15/12/2021

The Department of Chemical Engineering at the Indian Institute of Technology (IIT) Roorkee invites applications from outstanding and enthusiastic researchers for postdoctoral position under the mentorship of **Prof. Ashwini Kumar Sharma**, on "Optimization of lithium-ion battery design and operation towards aging-controlled fast charging: Experimental and modeling investigations".

Last date for submission of application is **15<sup>th</sup> Jan 2022**.

The prospective candidate is expected to have strong background in the area of electrochemistry with special relevance to the battery technology. Candidate should be passionate about working on cutting edge research leading to high impact publications. Other research activities may include participating in research discussion, mentoring students and class-room activities.

**Essential qualifications:** PhD in the area of Chemical Engineering, Material science, Chemistry or Mechanical Engineering with relevant experience in fabrication and testing of advanced rechargeable batteries cells/packs.

**Desirable Qualifications:**

- At least 03 SCI papers published as first (or corresponding) author based on the Ph.D. research work
- Should have hands-on experience and a good understanding of electrode material synthesis, cell fabrication, cell disassembly and characterizations like XRD, FESEM, XPS, TEM, FTIR and electrochemical characterization like CV, EIS, Galvanostatic Charge-discharge.
- Candidates who have defended their PhD thesis in the previous three years may be preferred.

\* Candidates who have recently submitted their thesis are also eligible to apply subject to the condition that they should furnish the proof of the award of Ph.D. degree at the time of interview at IIT Roorkee if shortlisted.

**Duration and Fellowship amount:**

The duration of the fellowship will be of two years extendable by one more year, if necessary. The candidate is expected to join the department as soon as offer letter has been released. The fellow will receive a consolidated fellowship as below: First & Second Year: Rs. 55,000/- per month; Third Year: Rs. 60,000/- per month; Contingencies: Rs. 50,000/-per annum

**How to Apply:**

Candidates can apply with cover letter, curriculum vitae, list of publications, research statement describing their research plans (particularly, in context of the fast-charging and aging of lithium ion batteries) by both regular post and e-mail, to:

The Professor and Head  
Department of Chemical Engineering  
Indian Institute of Technology Roorkee  
Roorkee - 247667  
INDIA

Email: [head@ch.iitr.ac.in](mailto:head@ch.iitr.ac.in) (and copy to [ashwini@ch.iitr.ac.in](mailto:ashwini@ch.iitr.ac.in); Phone: +91-1332-284926(office))

**Notes:**

All the postdoctoral fellows (PDF) will be registered as IIT Roorkee students for availing the facilities of accommodation, hospital, medical insurance scheme, computer centre, library, sports etc.



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