

**DEPARTMENT OF PHYSICS
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

ADVERTISEMENT FOR POST DOCTORAL FELLOWSHIP POSITION

No.: YKS/PHY/IPDF 1

DTD: 04/06/2024

The Department of Physics at the Indian Institute of Technology (IIT) Roorkee invites applications from outstanding and enthusiastic researchers for postdoctoral position under the mentorship of **Prof. Yogesh K. Sharma**, on “**Development of High-Performance Cathode Material for Cheap and Cost-Effective Rechargeable Sodium-ion Batteries**”.

Last date for submission of application is **30, June 2024**.

The prospective candidate is expected to have a strong background in condensed Matter Physics/Material Science/Materials Chemistry with special relevance to the Solid-State Ionics. Candidate should be passionate about working on cutting edge research leading to high impact publication. Other research activities may include participating in research discussion, mentoring students, and class-room activities.

Qualification and Experience:

The prospective candidate should have a reasonably good publication record in SCI based journal. Candidate should have:

Essential qualification: PhD in Condensed Matter Physics/Material Science/Chemistry/Chemical Engineering/Mechanical Engineering/Nanoscience and Nanotechnology/polymer science/Material Engineering or equivalent with relevant experience in fabrication and testing of advanced batteries, cells/packs and modules

Desirable: Hands-on experience and a good understanding with electrode material synthesis and characterizations like XRD, FESEM, XPS, TEM and FTIR including electrochemical characterization like CV, EIS, Galvanostatic Charge-discharge. Theoretical modelling and simulation and ab-initio, DFT calculations

Duration and Fellowship amount:

The duration of the fellowship will be of 1 year, 10 months extendable by one more year, if necessary. The candidate is expected to join the department as soon as the offer letter has been released. The fellow will receive a consolidated fellowship as below in addition with the contingency grant of Rs. 50,000/-per annum.

First & Second Year: Rs. **80,000/- per month**

How to Apply:

Candidates can apply with cover letter, curriculum vitae, list of publications, research statement describing past research and plans for future research by both regular and e-mail, to:

Professor and Head

Department of Physics

Indian Institute of Technology Roorkee

Roorkee - 247667

INDIA

Email: head@ph.iitr.ac.in (and copy to yogesh.sharma@ph.iitr.ac.in Phone: +91-1332-284861(office))

Notes:

- (i) All the postdoctoral fellows (PDF) will be registered as IIT Roorkee students for availing the facilities of accommodation, hospital, medical insurance scheme, computer center, library, sports etc.
- (ii) No TA/DA will be given for attending the interview.

Or

Interview will be conducted online.

About The Research group:

Please visit: https://www.iitr.ac.in/~PH/Yogesh_Kumar_Sharma and
<http://faculty.iitr.ac.in/~yogeshfph/>

About The Department:

Please visit: <https://www.iitr.ac.in/departments/PH/pages/index.html>

About the Institute:

Please visit: www.iitr.ac.in

Yogesh K. Sharma
Principal Investigator
&
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