

जवाहरलाल नेहरू उन्नत वैज्ञानिक अनुसंधान केंद्र

जक्कर पोस्ट, बेंगलूरु - 560064, कर्नाटक, भारत विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार के अधीन एक स्वायत्त संस्थान सम विश्वविद्यालय संस्था



Jawaharlal Nehru Centre For Advanced Scientific Research

Jakkur P.O., Bengaluru - 560064, Karnataka, INDIA An autonomous institution under Department of Science and Technology, Govt. of India. An Institution Deemed-to- be-University

Advt. No.: NCU-EMR-148 26 June 2025

Applications are invited for a temporary position of Junior Research Fellow sanctioned in the Anusandhan National Research Foundation (ANRF) sponsored project under the Principal Investigator Dr. Abhishek Kumar Assistant Professor at Chemistry and Physics of Materials Unit (CPMU), New Chemistry Unit (NCU) and School of Advanced Materials (SAMaT), JNCASR, Jakkur, Bengaluru, 560 064.

Sl. No.	Position and Eligibility	Max. Age limit	No. of positions
1.	Junior Research Fellow [JRF] (Remuneration Rs. 37,000/ plus	27% HRA)	
	Essential Qualification:		
	• M.Sc./M.Tech in Physics, Photonics, Nanotechnology, or related disciplines with a minimum of 60% marks or equivalent CGPA.	35 years	1
	• Strong background in electromagnetic theory, optics, and solid-state physics.		
	• Experience or coursework in numerical simulation tools (e.g., Lumerical FDTD or COMSOL or CST or Tidy 3D).		
	Desirable Qualification:		
	• Prior experience with photonic crystal design, topological photonics, or quantum optics.		
	• Familiarity with cleanroom processes, optical measurements, or micro/nanofabrication.		
2	Role and responsibility		
	 Perform numerical modelling and simulation of photonic crystals using tools such as Lumerical FDTD, COMSOL, or CST or Tidy 3D. 		
	 Design and optimize photonic structures for enhanced performance. 		

- Assist in the fabrication of photonic structures using cleanroom technologies (e.g., EBL, etching, deposition).
- Conduct experimental characterization of fabricated devices (optical measurements, spectral analysis, etc.).
- Work closely with a multidisciplinary team and contribute to publication writing, presentations, and periodic reporting to the funding agency.

Interested candidates are required to send duly filled in Application form in Template (available on website) along copies of original testimonials in support of educational qualification, age, experience, publication, etc with brief resume to abhishekkumar@jncasr.ac.in latest by July 15, 2025.

Abhistek Ke.

Date: 26.06.2025 Signature of the PI

Instructions to candidates:

- 1. Shortlisted candidates will be invited for an online interview.
- 2. Those in employment must submit 'No Objection Certificate' from the employer (applies to only outside candidates)
- 3. Candidates will be selected based on his/her performance in the interview by a selection committee.