

Indian Institute of Technology Indore
Khandwa Road, Simrol, Indore 453 552

Advertisement for JRF position under NBHM, DAE sponsored project

IIT Indore invites applications from highly motivated, sincere, hardworking and research-oriented candidates for the position of JRF in a NBHM, DAE funded research project entitled “Study of Generalized TI systems and Wave-packet systems over LCA groups”. Candidates are strongly advised to visit the profile of [Dr. Niraj Kumar Shukla \(http://iiti.ac.in/people/~nirajshukla\)](http://iiti.ac.in/people/~nirajshukla), before applying against this advertisement. The research staff will be working under Dr. Niraj Kumar Shukla at IIT Indore.

Project Details: The theory of frames was born in 1952 as a part of the non-harmonic analysis. However, its expansive growth in late 80’s is due to the perspective of real-life applications. The frame theory on groups has become the focus of an active research, both in theory as well as in applications due to its potential to unify the continuous theory (integral representations) and the discrete theory (series expansions) in the last two decades. Several researchers have made remarkable contributions in establishing the theory required to analyse frame properties on various groups. The main objective of this project is to investigate more frame properties of generalised version of translation invariant systems and wave-packet systems over various groups. The theory of shift-invariant subspaces of $L^2(\mathbb{R}^n)$ plays an important role in many areas, most notably in the theory of wavelets, spline systems, Gabor systems, and approximation theory

Stipend and duration and Educational qualifications: The amount of fellowship will be as per NBHM norm (www.nbhm.dae.gov.in). Initial appointment is for one year and co-terminus with the project. M.Sc. degree in Mathematics/or in equivalent degree with first division as defined by the awarding Institute/University and passing of NET/GATE.

How to Apply: Interested candidates are requested to send a detailed CV to [Dr. Niraj Kumar Shukla \(nirajshukla@iiti.ac.in\)](mailto:nirajshukla@iiti.ac.in) with subject line “Application for JRF position” latest by **March 15, 2020**. Complete information with respect to such as year of passing, experience, marks etc. should be mentioned in the CV. Incomplete applications will be rejected.

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

Note: The Institute reserves the right to fill or not to fill the post advertised.