

Jaypee Institute of Information Technology, Noida

Applications are invited for the post of one Junior Research Fellow (JRF) and one Research Associate (RA) for our project under the National Quantum Mission (NQM). The broad area of work will be photonic quantum computing.

Project Title: Programmable photonic quantum computing using qubits encoded in different degrees of freedom of a photon

Post: 01- Junior Research Fellow (JRF) and 01- Research Associate (RA-II)

Duration: One year

Emoluments: JRF – 01 (@ Rs 37,000 pm + 27% HRA = Rs 46,990 pm)

RA – 01 (@ Rs 61,000 pm + 27 % HRA = Rs 77,470 pm)

Essential Qualifications:

JRF: Post Graduate Degree in Physics / Physical Sciences OR Graduate degree in professional courses with GATE qualified. Preference will be given to CSIR / UGC/ JRF/NET qualified candidates or any other equivalent National level exam conducted by Govt. agencies like MHRD, DST, CSIR, DAE, DRDO, IITs, IISc etc. However, Non-NET/non-GATE qualified candidates can also apply.

RA: PhD in the area of quantum information or quantum optics or in a related field with a good publication record is required. Experience in the area of experimental optical quantum information will be preferred.

Job Description: The broad area of work will be photonic quantum computing. The project has both theoretical and experimental parts. Selected candidates will be primarily based at Jaypee Institute of Information Technology, Noida, but this is a multi-institute project and project staff will work in a collaborative environment. Primary responsibility will be to engage in the R&D activities related to the development of a photonic quantum computer with a specific focus on error correction and system-specific algorithm designing.

Applications comprising a cover letter, detailed Curriculum Vitae (containing Research experience/publication, if any) must be sent by email to **Prof. Anirban Pathak**, Department of Physics and Materials Science and Engineering, Jaypee Institute of Information Technology Noida on or before **15th April 2025**. The short-listed candidates would be called for interview.

Email: anirban.pathak@yahoo.co.in