Form No: RD-M003



INDIAN INSTITUTE OF TECHNOLOGY PATNA BIHTA PATNA-801106 RESEARCH & DEVELOPMENT UNIT

ADVERTISEMENT NO: R&D/1227/MQR/495 DATED: 16.07.2025

Project No: R&D/SP/PHY/MQR/2024-25/1227

Applications are invited in the prescribed format only for the following assignment in a purely time bound research project undertaken in this institute.

1. (a) Name of the temporary assignment : Research Associate 1 (RA 1)

(b) Number of Post : 01

(c) Duration of the Post : Initially one year (may be extendable based on

satisfactory performance)

2. Name of the temporary research project : A multimode quantum repeater network for

entanglement distribution based quantum

communication.

3. Name of the sponsoring Agency : National Quantum Mission, DST, Technology

Bhawan, New Mehrauli road, New Delhi 110016

4. Consolidated Fellowship/Salary : Rs. 58,000/- per month + HRA as per norms

5. Qualifications & Experience : PhD in Physics/ Cold atoms Physics/Quantum

Optics/Electromagnetically Induced Transparency (EIT) (Experimental)

The Quantum Optics Experiment Lab is at the forefront of research in **slow light phenomena using atomic media**, including alkali vapors and ultracold atoms. As a key participant in India's prestigious **National Quantum Mission (NQM)**, the lab is undertaking an ambitious project to develop a **multi-node quantum repeater network**. This initiative is crucial for advancing entanglement distribution-based quantum communication, aiming to lay the foundation for next-generation secure communication technologies.

The selected Research Associate will have the unique opportunity to contribute to this national mission, collaborate with leading institutions, and gain hands-on experience in state-of-the-art quantum optics and atomic physics experiments. Candidates passionate about experimental physics and eager to work on transformative quantum technologies are strongly encouraged to apply.

The candidate should have a PhD degree with very good academic performance. The upper age limit for applying for the Research Associate 1 position shall be 35 years. Relaxations for SC/ST/OBC/women/PD will be given as per the GOI rules. Working/research experience in the field of Cold Atom Physics/ Quantum Optics and Light-matter experiment will be given preference.

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<u>Last date for receiving applications : 31/07/2025</u>

Interested and eligible candidates may appear for the **WRITTEN TEST/WALK-IN INTERVIEW** on 12/08/2025 at 10:30 am Dr. Raghavan K Easwaran, Dept. of Physics, IIT Patna, Bihta, Patna – 801106 with updated resume along with the original copies of all supporting documents (certificates, mark-sheets, and degrees). No TA/DA is admissible for appearing in the interview.

For any query contact Investigator(s): **Dr. Raghavan K Easwaran, Dept. of Physics, IIT Patna, Emails: raghavanke@iitp.ac.in** Tel.: 0612-3028029.

Assistant Registrar

Copy to:

- 1. Associate Dean, R&D, IIT Patna
- 2. All other IITs/IITBHU/Universities
- 3. Advertisement file
- 4. Project file

Form No: RD-M003



Date: Place:

INDIAN INSTITUTE OF TECHNOLOGY PATNA BIHTA PATNA-801106 RESEARCH & DEVELOPMENT UNIT

PROJECT CODE: R&D/SP/PHY/MQR/2024-25/1227

ADVERTISEMENT NO: R&D/1227/MQR/495 DATED: 16.07.2025 FORMAT OF APPLICATION FOR 'RESEARCH ASSOCIATE'

| Name & Address Including email id and Phone no. (for Correspondence) | | Category (GEN/OBC/SC/S T/PD) | DOB dd/ mm/yy | Professional Exam. (GATE/CSIR-NET, etc) & Validity | |
|---|-------------|------------------------------------|------------------|--|----------------|
| | | | | | |
| Address: | | | | | |
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| Phone: | | | | | |
| Email: | | | | | |
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| Educational Qualification | on | | 1 | | |
| Institute/ Board | Exam Passed | | Year of Passing | | % of Marks/CPI |
| | | 0 th Class | | | |
| | | 2 th Class | | | |
| | | Bachelors Tech/B.E./BCA) | | | |
| | | equivalent | | | |
| | | Masters | | | |
| | (M.Sc/M | Tech/M.E/MCA/ | | | |
| | | MA) equivalent | | | |
| | 01 | equivalent | | | |

| Qualifying degree | Degree/ major/Specialization |
|--------------------------|------------------------------|
| (B.Sc/B.Tech/B.E./BCA) | |
| (M.Sc/M.Tech/M.E/MA/MCA) | |
| Others | |

| Signature of applicant |
|------------------------|
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