



BITS Pilani

Pilani | Dubai | Goa | Hyderabad | Mumbai
Research & Innovation

Junior Research Fellow (to join as PhD Scholars)

Project Title: An Integrated Free Space and Underwater Optical Quantum Communication System

Deadline: 20th April 2025

Date: 14 April, 2024

Applications are invited for **ONE** positions of **Junior Research Fellow*** on the **Accelerated Research on 6G Ecosystem under TTDF Scheme** funded by Department of Telecommunications (DoT), Govt. of India on the project title “**An Integrated Free Space and Underwater Optical Quantum Communication System**” under the supervision of **Prof. Nikumani Choudhury** (CSIS, Hyderabad Campus), **Prof. Syed Mohammad Zafaruddin (PI)** (EEE, Pilani Campus), and **Prof. Jayendra Nath Bandyopadhyay** (Physics, Pilani Campus).

* The selected candidate is encouraged to join PhD Program of BITS Pilani. Interested candidates check the eligibility criteria and qualification process of the PhD program of BITS Pilani (<https://www.bits-pilani.ac.in/admissions/doctoral-program-phd/>).

Scope of work	Essential Qualification	Desirable Qualification
Quantum encryption algorithm, quantum simulation modelling, mathematical analysis, and experimental validation for integrated air-to-underwater quantum communications.	B.E./B.Tech/M.E./M.Tech/MSc. in Communication Engg./ Electronics and Communications Engg /Electrical Engg. /Electronics Engg./ .Computer Science Engg/Information Theory/Physics/Electronics/Computer Science.	Exposure to any one of the following areas is desirable: photonics, quantum mechanics, quantum computing, software development, communication systems, wireless communications.

Number of Vacancies: 1

Fellowship: ₹37,000 - ₹42,000 per month (based on the year of PhD and performance)

Duration: 3 years

Place of work: BITS Pilani, Hyderabad Campus, Telangana 500078

Application process: Submit the Google form: <https://forms.gle/kzJSZxsL1C7sBa5w6>

Submission Deadline: 20th April 2025

Preliminary shortlisting will be based on resume and telephonic/audio-visual interview within a week of last date of application. For final interview, the candidate will be informed through e-mail/ Phone for interview. No TA/DA will be provided in case of personal interview. For more details, please contact:

Prof. Nikumani Choudhury
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BITS Pilani, Hyderabad Campus