RECRUITMENT OF JUNIOR RESEARCH FELLOW

Applications are invited for the position of Junior Research Fellow under the Project titled "Design and Development of Novel Quantum Nano-heterostructures for Sensing and Smart Nanozyme Antibacterial Surface Applications" in the Department of Physics, Berhampur University. The project is sponsored by Science and Engineering Research Board, Government of India.	
Nature of work	The work will involve cutting-edge research and development tasks in the area of sensors for blood glucose detection. The work will be carried out in collaboration with Dr. Shuvendu Jena, BARC, Mumbai, and will involve design, analysis, fabrication and testing of the metal oxide nano structure-based electro optic sensor for measurement of blood glucose level using exhale breath, and design of antibacterial surface effect. The JRF is expected to carry out high impact research, and produce patents/ research manuscripts for journals/conferences in these R&D areas. The work may involve some amount of travels to collaborator and other institutes for characterization, analysis and testing.
No. of Position	**One**
Duration of appointment	For a period of 1 year. It may be further extended based on the performance of the candidate and availability of funding.
Eligibility	**Essential qualification:** - M.Sc./M.E in Electronics / Physics **Desirable:** -Experience in design and Simulation of Optical sensor related devices. - Ability to work in a team, good communication skills. -Expertise in coding **Age limit:** - Below 32 years as on date of application, preferably under 28 years.
Consolidated Salary	Rs. 31, 000/- Per Month
HRA	As per Institute norms.
Medical Benefits	As per the Funding Agency norms.
Leave entitlements	As per the norms.
How to apply	Interested applicants can submit their curriculum vitae, copy of all relevant certificates, and a one-page statement of interest explaining why they are interested in joining the Project to the following address by post.

	Prof. Sukanta K. Tripathy **P. G. Dept. of Physics, Berhampur University** **Bhanja Bihar, Berhampur-760007, Ganjam,** **Odisha**
Last Date of application	15.12.2022

General Instructions:

1. If the number of applications received in response to advertisement is large, the constituted selection committee may restrict the number of candidates to be called for interview to a reasonable limit of desirable qualification and /or on the record of academic performance and/or any other benchmark decided by a committee constituted to screen the applications. No communication will be entertained with candidates who are not called for Interview.
2. If the applicants have any questions, they can write to skt.phy@buodisha.edu.in and in the subject they have to mention "BRNS Project 2022".
3. The appointment is purely temporary and will terminate automatically without any notice or compensation on termination of the research project.
4. The appointed person shall have no claim of appointment / absorption in funding Agency or in Berhampur University.
5. The qualification prescribed should have been obtained from recognized Universities / Institutions.
6. No TA/DA will be admissible for appearing for the interview.
7. Selected candidate will have to join in a reasonable time upon receipt of the offer.

More about the project

Total Duration: 3 Years (December 2022-November 2025)

The aim of the project is to develop a cost effective, portable, and non-invasive biosensor for blood glucose monitoring and development of antibacterial surface effect through surface modification technique. The project, by its very nature, is multidisciplinary and will involve:

- Synthesis of surface modified nano hetero structured materials
- Design, Simulation, and fabrication of fiber based optical sensors
- Design, Simulation, and fabrication of contact angle of surface
- Integration of different electronic and optical components
- Selection and programming of micro controllers and power supply, etc.

This collaborative project demands interaction with medical practitioners and travel between the participating institutes as well as other institutes for carrying out desired R&Ds.

Principal Investigator: Prof. Sukanta Kumar Tripathy, Professor, Department of Physics.

Berhampur University, Bhanja Bihar, Berhampur-760007, Ganjam, Odisha

Email: skt.phy@buodisha.edu.in