

## Ph.D. position under BITS-CDRF (Cross-Disciplinary Research) funded project

Applications are invited for **ONE** position of research fellow for the following project.

Title: Design and Development of FET-Based Sensor for Bio detection using Nano Materials

**Supervisor:** Prof. K. K. Singh (Physics)

Co-Supervisors: Prof. Vilas Gaidhane (EEE), Prof Neeru Sood (Biotechnology)

This position is applicable only to those who aspire to do Ph.D. full time. The candidates check the eligibility criteria and qualification process of the PhD program of BITS Pilani. https://www.bits-dubai.ac.ae/admissions/phd/

## Scope of work:

- 1. Simulation of 2D material using DFT simulation tool.
- 2. Effect of doping on the electronic properties of nanomaterial.
- 3. FET simulation and study the I-V characteristics.
- 4. Device Fabrication.

**Essential Qualification:** Master's Degree in Electronics Engineering, M. Phil in Physics OR Bachelor's Degree with research experience in relevant area

Desirable Qualification / Skills: Knowledge of Gaussian/VASP/ Quantum expresso or any other

DFT based simulation tool.

Fellowship: AED 2500 per month Duration: 3-4 years [normal period]

Place of work: BITS Pilani, Dubai Campus, Dubai, U.A.E.

Additional Benefit: Concession in hostel fees

**Application process:** Please apply with <u>CV and Cover letter</u> (showing alignment and justification with the roles/responsibilities/requirements).

Contact email address: singh@dubai.bits-pilani.ac.in, vhgaidhane@dubai.bits-pilani.ac.in

Preliminary shortlisting will be based on resume and telephonic/audio-visual interview within a week of last date of application. For the final interview, the candidate will be informed through e-mail for interview. The shortlisted candidates may have to join the institute in January, 2024.

Prof K. K. Singh
Physics Department
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Date: 24 Nov, 2023



Prof K. K. Singh, Physics https://universe.bitspilani.ac.in/dubai/singh/profile



Prof Vilas H Gaidhane https://universe.bitspilani.ac.in/dubai/vhgaidhane/profile



Prof. Neeru Sood, Biotechnology https://universe.bitspilani.ac.in/dubai/sood/profile