



BITS Pilani

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

ONE Position of Research Fellow
AlN//Ga₂O₃ heterojunction power
Devices

Goa | Deadline: 28th April 2024 |

Joining: At the earliest

Date: 18 April, 2024

Applications are invited for **ONE** position of Research Fellow on a project, “*Numerical Modeling, Simulation, fabrication and interface analysis of AlN/ β -Ga₂O₃ heterostructure for potential power devices, optoelectronics, and sensing devices for strategic applications*” under the supervision of **Dr. Apurba Chakraborty** (Supervisor) from EEE, BITS Pilani Goa campus and **Dr. Radha Raman Mishra** (Co-Supervisor) from Mechanical, BITS Pilani, Pilani campus. The collaborators of **University of Buffalo (North Campus), USA, Prof. Jonathan Bird and Prof. Bibhudatta Sahoo** will be available in this project to guide the candidate.

This position is applicable only to PhD aspirants. The candidates check the eligibility criteria and qualification process of the PhD program of BITS Pilani (<http://www.bitsadmission.com/phmain.aspx>).

Scope of work	Essential Qualification	Desirable Qualification
Growth and characterization of AlN/Ga ₂ O ₃ heterostructure devices. Modeling and simulation of this device characteristics. Device characterization and measurement.	BE/BTech with ME/M.Tech in ECE, EI, Electrical, Nanotechnology or MSc Physics/Electronics or equivalent with minimum 60% aggregate overall.	Semiconductor device, Characterization (material and electrical), Compound semiconductor etc. GATE and NET qualified candidates will be preferred.

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

Duration: As per BITS Pilani norms (<http://www.bitsadmission.com/phmain.aspx>)

Place of work: BITS Pilani, K.K Birla Goa Campus, India

Benefits: The research fellow will get the chance to work on state of the art growth and characterization facility for compound semiconductor devices. They will also work in collaboration with the University of Buffalo. In addition to the fellowship, they will get contingency fund to support other research related activities. Hostel or Married scholar accommodation can be provided subject to availability and as per the institute's rules and regulations.

Application process: Please apply with **CV and Cover letter** (showing alignment and justification with the roles/responsibilities/requirements) using the below given google form

- <https://forms.gle/ghGaCpmikU77m8ig9> (Deadline: 28th April, 2024)

Selection process: 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 for interview. Selected candidate is required to join as early as possible. For more details, please contact:

Dr. Apurba Chakraborty

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<https://universe.bits-pilani.ac.in/goa/apurbac/profile>