PhD Position Announcement (Dual Degree Program – India & USA)
in
A Miniaturized Quartz Crystal Microbalance and Nanoparticle Delivery-based Theranostic Approach for Early Detection and Treatment of Pancreatic Cancer

Applications are invited for one PhD position in the area of **Acoustic Biosensors, Microfluidics, Point-of-care (POC) Diagnostics, Biomaterials and Drug Delivery** starting **Fall (August) 2026**. The selected candidate will work under the joint supervision of **Prof. Arnab Guha** (BITS Pilani Hyderabad Campus, India) and **Prof. Surya K Mallapragada** (Iowa State University, USA)

Program Structure

- This is a dual PhD degree program.
- The candidate will receive **two PhD degrees:**
  - One from Birla Institute of Technology and Science, Pilani (Hyderabad Campus, India)
  - One from Iowa State University (USA)
- The student will spend:
  - First two years at BITS Pilani, Hyderabad (India)
  - Next two years at Iowa State University (USA)

This project focuses on development of a Theranostic Lab-on-a-Chip (LOC) device for early detection and treatment of pancreatic cancer with applications in biomedical engineering.

Fellowship:

- Rs. 4,44,000 per annum at BITS Pilani Hyderabad Campus, India during 2026-2028.
- **$** 28,000 per annum (including health insurance and a waiver of tuition fee) at Iowa State University, USA during 2028-2030.

Desired Qualifications

- M.Tech./M.E./M.Sc. in Chemical Engineering/ Biomedical Engineering/ Biotechnology/ Nanotechnology or related fields with a minimum of 60% aggregate at both UG and PG levels.
- Strong background in molecular biology techniques, biosensors and materials characterization.
- Experience in biomaterials, nanoparticle synthesis and drug delivery are desirable.
- Knowledge of Programming tools (MATLAB, Python) is an added advantage.
- The candidate needs to clear IELTS/TOEFL exam before going to Iowa State University.

What the Candidate Will Gain

- Exposure to international collaborative research.
- Access to biosensing and drug delivery related research facilities in India and USA.
- Opportunity to work at the interface of biology and engineering.
- Potential for high-impact publications and translational research.

- Interested candidates may upload their **CV, academic transcripts, and a brief statement of research interest (single pdf file)** to the link below before **30th April, 2026**.
- Please note that only qualified and suitable candidates will be called for an interview: (https://forms.gle/N4SghD22PYyk11hbA).

For any query regarding the application, please contact:

Prof. Arnab Guha
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