

# Call for applications -Ph.D. Fellowships in Interdisciplinary Bio-Cyber Physical Systems Funded by BITS BioCyTiH Foundation

(Locations: BITS Pilani -Pilani, Goa & Hyderabad Campuses)

Application Deadline 26th September 2021 Start Date: 10th Oct 201

Website: www.biocytih.co.in



**BITS Pilani** 

### **About BITS BioCyTiH Foundation**

- BITS BioCyTiH Foundation: A Technology Innovation Hub (TIH) established by BITS Pilani under National Mission on Interdisciplinary Cyber Physical System (NM-ICPS) in the area of Bio-CPS funded by Dept. of Science & Technology (GOI).
- Vision Statement: To foster research, innovation, skill development and training in the interdisciplinary area of Bio-CPS through mentoring and nurturing startups and entrepreneurs, and industry & academia collaborations to undertake cutting edge research and provide affordable solutions in the areas of healthcare, agriculture, water and environment.
- Research areas of BITS BioCYTiH
   Foundation: Healthcare, diagnostics,
   Biosensors, devices, Smart Sensors, IOT,
   printed electronics.

### **About PhD Fellowship Positions**

- Applications are invited for 19 PhD fellowships in the relevant areas of Bio-CPS at different locations of BITS Pilani -Pilani, Goa and Hyderabad campuses.
- The BITS BioCyTiH Foundation PhD fellowship awardee must register in the PhD program of BITS Pilani.
- Fellowship: ₹31,000 p.m. for the first two years, ₹33,000 p.m. in subsequent years.
- Duration of PhD program: Maximum up to 5 years, subject to satisfactory progress in project and also in Ph.D. Programme.
- Essential Qualifications:
   First class MSc/MTech / ME (as per the position)
   or equivalent
- Desirable: Valid GATE / NET (or equivalent)
- BITS Pilani PhD program information: https://www.bitsadmission.com/phdmain.aspx

#### **Application Process:**

- Highly motivated eligible candidates may please apply with CV and Cover letter (showing alignment and justification with the requirements) using the online form by 26<sup>th</sup> September 2021 (<a href="https://forms.gle/HSq4Px4ueTGzFrTy8">https://forms.gle/HSq4Px4ueTGzFrTy8</a>).
- Preliminary shortlisting will be based on telephonic/audio-visual interview within a week of last date of application.
- Details of the positions available in various projects are provided below

## **Details of the Positions:**

#	Research	Location	Investigators	No. of	Degree Area	Desirable qualification
"	Area	Location	investigators	Positions	Dogico Aioa	Desirable qualification
Deg	ree Requirement: ME /	MTech	<u>.</u>		<u>.</u>	<u>.                                      </u>
	Fab facility	Goa	Abhijit Pethe Siddharth Tripathi Gautam Bacher	3	ECE, EEE, Mechanical, Material Science	Experience with Microfabrication
2	IoT (CPS) Lab	Goa	<u>Vinayak Naik</u> <u>Sougata Sen</u>	2	CS, ECE	
3	Wireless Communication & IoT	Goa	Nitin Sharma	1	Electronics, Communications, Computer Science	Mathematical and programming skills. Cloud Computing.
4	Underwater Acoustic Sensor Networks	Goa	Sarang Dhongdi K R Anupama	1	EEE, ECE, CS	Computer/ad-hoc networks and signal processing. Network simulators, network embedded boards, Underwater equipment
5	Printed Electronics	Hyderabad	Sanket Goel Satish Kumar Dubey	3	Electronics, Instrumentation, Mechanical, Chemical, Bioengineering	Microfluidics, MEMS, Sensing
	Data Security	Hyderabad	<u>Chitranjan Hota</u>	1	Electronics, Communications, Computer Science	
Deg	ree Requirement: ME /	MTech / N	ISc			
7	Cancer Drug Resistance	Pilani	Rajdeep Chowdhury Shibasish Chowdhury Kamlesh Tiwari Yashvardhan Sharma Sudeshna Mukherjee Michelle A Anthony	1	Biological Sciences or allied discipline	Molecular biology experiments, Bioinformatics, patient data analysis.
8	Biomarkers in Cardiovascular Complications	Pilani	Syamantak Majumder Shibasish Chowdhury Inamur R Laskar A R Harikrishnan	1	Biological Sciences or allied discipline	Animal models, Biochemistry and molecular biology experiments
9	Circuit design and required modifications in sensing device	Pilani	SK Verma	1	Electrical, Electronics and Instrumentation	
10	Biosensor Development of for detection of Aflatoxin B1 and Urea	Goa	Sunil Bhand, Gautam Bacher	2	Biotechnology, Biochemistry, Nanotechnology, Bioelectronics, bio- engg.	Thin film devices, electrochemical Impedance spectroscopy, Immunosensor
11	Cognitive Neuroscience, Computational Psycholinguistics, Consumer Neuroscience, Brain Computer Interface, Machine Learning, Deep Learning and pattern recognition	Goa	Veeky Baths	1	Computer Science, Cognitive Science, IT	Brain Computer Interface / EEG data analysis/ Computational Psycholinguistics/ Sentimen analyses and NLP, machine learning algorithms and libraries
12		Goa	Angshuman Sarkar Samit Chattopadhyay	1	Biological Sciences or allied discipline	Molecular biology experiments and animal cell culture
13	Protein Chemistry	Goa	<u>Dibakar Chakrabarty</u>	1	Biological Sciences or allied discipline	Biochemical assays and protein structure and function