

ASIAN SMART CITIES RESEARCH AND INNOVATION NETWORK (ASCRIN)

EXPRESSION OF INTEREST FOR JOINT PHD SCHOLARSHIP

DESCRIPTION

The Asian Smart Cities Research and Innovation Network (ASCRIN) has been initiated by La Trobe University, Melbourne Australia, in partnership with premier research institutions in India.

Ten PhD positions are currently available with scholarship funding for students enrolled in a Joint PhD program at the Birla Institute of Technology and Science (BITS), Pilani, and La Trobe University. Candidates will be based at BITS Pilani throughout his/her candidature and will have the opportunity to visit La Trobe University in Melbourne, Australia for typically one year during the research project.

Please check the admission requirements to undertake a PhD at [BITS Pilani](#) and [La Trobe University](#). Note that a candidate may apply by meeting only the BITS Pilani entry requirements, but in order to be confirmed into the Joint PhD program at La Trobe University and BITS, they will need to meet any additional La Trobe University requirements within 12 months of commencement of their PhD at BITS Pilani.

The Expression of Interest (EOI) form is the first stage in considering whether you might be suitable for selection to undertake a PhD within the ASCRIN network.



BENEFITS OF THE SCHOLARSHIP

For candidates enrolled in a Joint PhD between La Trobe University and BITS Pilani:

- BITS Pilani PhD fellowship: INR 31,000 – 33,000 pm.
- A stipend of AUD \$28,597 p.a. (2021 rate) for up to one year during residency at a La Trobe University campus
- A La Trobe University Full-Fee Research Scholarship, covering tuition fee relief for up to four years at La Trobe University
- Return economy airfare between Delhi and Melbourne

ASCRIN PROJECT DETAILS

Project title: **Intelligent planning of Prosumer Microgrid (PMG) Load Management in Smart Cities for Optimal Energy Consumption**

Project Team: **Prof. Alivelu M Parimi and Prof. Hitesh Mathur** from, Department of EEE, BITS-Pilani, Hyderabad campus and Pilani Campus in collaboration with **Prof. Abdun Mahmood, and Prof. Naveen Chilamkurti** from La Trobe University, Australia.

Abstract: This project proposal aims at reduction in energy consumption cost through intelligent monitoring of the loads and generations of the PMG with BESS. When prosumers along with Net Zero Buildings (NZB) participate in energy bidding process, energy cost minimization in PMG can be achieved. Thus planning, design and operation of the Prosumer Microgrid (PMG), and optimization of energy consumption and its cost when multiple prosumers are involved at distribution level Microgrids is the aim of the project. This would be achieved using real time data analytics by developing Intelligent and Adaptive Monitoring and Prediction systems for the Load and Generation, taking into account the available generation from Renewable Energy Sources (RES) in PMG based smart cities.

Minimum and desirable qualifications needed: ME/ MTech in Power Systems/ Smart Grids/Energy or equivalent with 70% marks or 7 CGPA for BITS Pilani and Requirements from La Trobe University (<https://www.latrobe.edu.au/study/apply/research/doctor>). First class in B.E/B.Tech in EEE or allied disciplines and First class or equivalent in M.E/MTech with GATE Qualification.

CANDIDATE DETAILS:

PERSONAL DETAILS

Title		Given Name(s)	
Gender		Family Name	
Date of birth (dd/mm/yyyy)			
Contact address			
Email address			
Mobile number including country code			
Country of Citizenship			
Country of Dual Citizenship (if applicable)			
Country of Permanent Residency			
Country of birth			

RESEARCH INTERESTS

Please provide up-to 10 key words that best describe your technical research interests and expertise (in AI/ML, handling of data, data analytics and Intelligent and Adaptive Monitoring and Prediction techniques)

EDUCATIONAL BACKGROUND

Highest Level of Education

Name of qualification/degree	Year completed	University/College	Completion Status (completed/ ongoing)	Final Grade (GPA or equivalent) if available

CURRICULUM VITAE

Attach a CV (maximum 2 pages in length) highlighting any relevant prior project / research / professional work experience including relevant publications.

STATEMENT OF PURPOSE (MAXIMUM 500 WORDS)

Please provide a personal statement of no more than 500 words. The statement should describe your personal motivation to undertake further study and can include details of your personal circumstances as well as your life and work experiences. It should emphasise any aspect of your personal history that may enhance your application, for example prior project or research and development experience, publications, extracurricular activity, community involvement, relevant personal characteristics and any outstanding academic or professional achievements.

CHECK LIST

- ☐ I have attached my CV (max 2 pages)
- ☐ I confirm that I have reviewed eligibility requirements at one Indian Home Institution and that at La Trobe University

HOW TO SUBMIT

Email the completed form to PI.alivelu@hyderabad.bits-pilani.ac.in, latest by **10/07/2021**.

Interested candidates with the above mentioned qualification and relevant experience can send the required documents giving detailed information about the educational qualifications, research experience and published research papers if any, by July 10th, 2021 to the Principal Investigator, Prof. Alivelu M Parimi via email: alivelu@hyderabad.bits-pilani.ac.in

Important Dates:

1. Last date for application: 10th July 2021
2. Intimation to shortlisted candidates to be called for online interview: 12th July 2021
3. Date of online interview: 15th July 2021
4. Last date of applying to PhD program for the selected student at BITS Pilani is 26th July, 2021 as per the norms of BITS Pilani.

Please note that only qualified and suitable candidates will be called for interview which will be held online at BITS-Pilani, Hyderabad Campus by July 12th, 2021. Selected candidate should register for Ph.D programme of BITS Pilani, subject to the fulfillment of the requirements of the BITS Pilani and La Trobe. Project investigator will not be responsible for any miss communication/connectivity issue during online-interview session. Schedule of such session once decided will not be changed. It will be responsibility of the candidate to ensure all that he/she is well connected and present during allotted slot. The online-interview committee will call the student during their allotted slot.

ASCRIN Founder La Trobe University: CRICOS Provider 00115M

CRICOS Course Code: 0100696 - Doctor of Philosophy (High Cost)

CRICOS Course Code: 0100697 - Doctor of Philosophy (Low Cost)