

## 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:** Remote sensing enabled public policy analysis of air-pollutants in peri-urban environments: An Indo- Australian case study – RESPIRE

##### Project Team:

**LA TROBE PRINCIPAL SUPERVISOR:** Dr Timothy Clune, Department of Management, Sport & Tourism

**BITS PRINCIPAL SUPERVISOR:** Dr Lavanya Suresh, Department of Humanities and Social Science

**BITS Co-SUPERVISOR:** Dr Manik Gupta, Department of Computer Science and Information Systems

**Abstract:** This project aims at understanding the nature of air pollution in peri-urban areas in the context of agriculture, the relative effectiveness of existing policy controls and opportunities for development of new evidence-based policy frameworks to support urban planning decisions. As city boundaries and urban populations expand, urban and rural actors in the peri-urban environment will necessarily come into conflict. A key challenge for the government is to provide effective and efficient policy measures to mitigate the conflict.

The project will comprise a comparative evaluation of current approaches to the management of agricultural air pollution in the peri-urban environment, using case studies from impacted locations both in Australia and India. The project will contribute new knowledge to the management of this issue through an evidence-based policy framework that can be incorporated in planning decisions. The project will review the relative effectiveness of existing governance structures associated with urban development in the peri-urban environment through the examination of relevant policy, literature and documentation of contested land uses such as that available through the courts and complaint registers of Regulatory Bodies. The evaluation of the effectiveness will be supported by interviews with key stakeholders such as local government, industry representative bodies and regulators. The project will be complimented through the use of remote sensing to inform the relative risk of current and projected land use practices on prospective urban development. Remote sensing can be used to study the correlations between the spatial temporal land use patterns, vegetation patterns and major pollutant concentration profiles.

**Essential Qualifications :**

- M.A./M.S. in Social Science (with dissertation) in the areas of Development Studies/ Geography/ Political Science/ Environmental Science/ Sociology/ Demography (or) M.E./MTech. with applied research in environmental issues
- Demonstrates the ability to analyse both quantitative and qualitative data
- Requirements from La Trobe University are listed here- <https://www.latrobe.edu.au/study/apply/research/doctor>

**Desirable Qualifications:**

- Working understanding of programming tools like R/ARCGIS/Python etc.
- Publications is an added advantage

**Please fill the details below and send this EOI to us as instructed at the end of the document.**

**TO BE FILLED BY THE CANDIDATE:**

**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 (discipline specific interests e.g. AI/ML in Computer Science discipline, or Radio frequency design for Electrical Engineering)


## 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 in PDF format.

## 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.

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## CHECK LIST

- I have attached my CV (max 2 pages) in PDF format
- I confirm that I have reviewed eligibility requirements of BITS Pilani and La Trobe University
- Publications (if any) in PDF format

## HOW TO SUBMIT

Email the completed EOI form as a **single PDF** with all attachments to [lavanya@hyderabad.bits-pilani.ac.in](mailto:lavanya@hyderabad.bits-pilani.ac.in). The subject of the email must be: ASCRIN: PhD EOI to be considered. The last date of application is **12th July, 2021 @ 5:00 pm**

### *Important Dates:*

1. Last date for application: 12th July 2021
2. Intimation to shortlisted candidates to be called for online interview: 15th July 2021
3. Date of online interview: 19th July 2021
4. Last date of applying to the 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 the online interview. If you are selected through the interview process then you will be required to register for the Ph.D. programme of BITS Pilani, subject to the fulfillment of the requirements of the BITS Pilani and LA Trobe, by 26th July 2021.