

ASIAN SMART CITIES RESEARCH AND INNOVATION NETWORK (ASCRIN)

EXPRESSION OF INTEREST FOR JOINT PHD SCHOLARSHIP

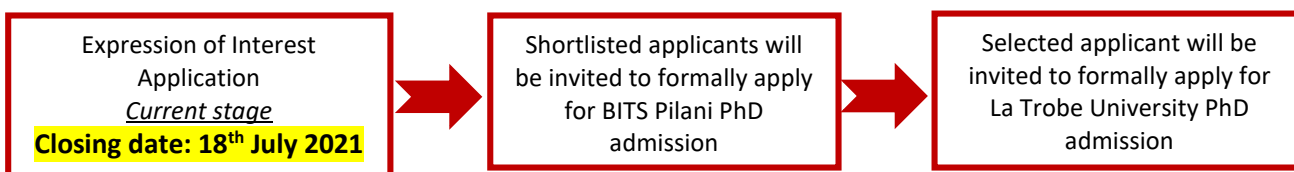
Applications are invited for joint PhD program at BITS Pilani and La Trobe University, Australia

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.

A PhD Position in Geotechnical Engineering is 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.

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 1 year during residency at a La Trobe University campus
- A La Trobe University Full-Fee Research Scholarship, covering tuition fee relief for up to 4 years at La Trobe University
- Return economy airfare between Delhi and Melbourne

ASCRIN PROJECT DETAILS

Project Title: Feasibility Studies for Reusing Construction and Demolition Waste for Smart Cities

Project Team: **Dr. Anasua GuhaRay** – BITS Pilani Hyderabad Campus, **Dr. Aboel Naga Hossam** – La Trobe University, Australia, **Dr. G.V. Ramana** – IIT Delhi

<https://universe.bits-pilani.ac.in/hyderabad/guharay/Profile>

Abstract: This project seeks to study the feasibility of using Construction and Demolition Waste (CDW) as an alternate low-carbon material in construction. The volume and nature of CDW generated and reused each year in two target metropolitan cities, Greater Hyderabad (India) and Melbourne (Australia) will be studied. The study will also focus on adopting an accelerated carbonation technique to reconstitute the finer portion of the waste into a material suitable for use as a lightweight aggregate. Detailed material and geotechnical characterization of individual material, as well as their mixture in different proportions, will be investigated experimentally for pavement base/subbase applications. The proposed optimum mix will be applied to a pilot-scale pavement section to assess its feasibility. The assessment of the performance of CDW will lead to higher uptake of this alternative material and enable the diversion of significant quantities of CDW from landfills. This

will also result in increased confidence in the usage of these alternative low-carbon materials by end users, contractors, and design consultants.

Minimum and desirable qualifications needed: M.Tech. / M.E. in Geotechnical Engineering with a good knowledge in large scale geotechnical experiments.

How to Apply: Send your complete application as per the attached format to the following e-mail address: guharay@hyderabad.bits-pilani.ac.in

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 in Geotechnical Engineering (e.g. Ground Improvement, Numerical Modelling, Soil Dynamics etc.)

EDUCATIONAL BACKGROUND

Provide Education Details from Class 10 to M.Tech. / M.E.

Name of qualification/degree	Year of Completion	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 / GATE Score (if any) / 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 guharay@hyderabad.bits-pilani.ac.in

Last Date of Application: 18th July 2021