

**Department of Science & Technology**  
**(International Bilateral Co-operation Division)**

An India-Canada joint call for proposal under **DST - IC IMPACTS, Canada** was issued by Department of Science and Technology (DST), Ministry of Science & Technology, Government of India, New Delhi and IC-IMPACTS, Canada for inviting joint research activities carried out by Indian and Canadian researchers on the theme of **“Cyber-Physical Systems to Support Green Buildings in Smart Cities”**.

The last date for submitting the proposals was 31<sup>st</sup> May, 2019. A total of 29 proposals were received against the call. After judicious assessment based on scientific strength, technical aspects, project objectives and national priorities of both the countries, Department of Science and Technology (DST), India and Ministry of Science, Technology and IC-IMPACTS, Canada have jointly decided to support the following 6 proposals. Project coordinators are being informed separately to complete administrative formalities for release of DST grant.

**List of Projects**

|   | <b>Title of the Project</b>  | <b>Indian PI Name and Institute Details</b>   | <b>Canadian PI Name and Institute Details</b>   |
|---|--|---|---|
| 1 | Large Area Microbolometer Uncooled Focal Plane Arrays for Thermal Imaging  | <b>Prof.Madhusudan Singh,</b><br>IIT Delhi  | <b>Prof. Ghassan Jabbour,</b><br>Department of Electrical Engineering and Computer Science,<br>University of Ottawa   |
| 2 | Carbon neutrality through combined CO2 capture and novel H2 technology with production of non-conventional fuels for smart cities        | <b>Dr.Subrata Borgohain Gogoi,</b><br>Department of Chemistry Dibrugarh University Assam          | <b>Prof Ibrahim Dincer,</b><br>Department of Mechanical Engineering, University of Ontario, Institute of Technology (UOIT)  |
| 3 | Metawall Metamaterial based lightweight panel wall for enhanced building acoustic and seismic resistance                                 | <b>Dr.Arnab Banerjee,</b><br>IIT Delhi  | <b>Prof. Sreekanta Das,</b><br>Department of Civil Engineering, University of Windsor   |
| 4 | Metamaterial walls for improved acoustic performance in green building   | <b>Dr.Arpan Gupta,</b><br>IIT Mandi   | <b>Dr. Umberto Berardi,</b><br>Department of Architectural Science,<br>Ryerson University,<br>Ontario, Canada,  |
| 5 | Improving building energy demand predictions in Smart Cities through sensor observations and considerations of landscape characteristics | <b>Dr.Prasad Avinash Pathak,</b><br>FLAME University,<br>Vadzai, Pune Lavale,<br>Pune Maharashtra | <b>Fitsum Tariku,</b><br>Director, Building Science Graduate Program and Building Science Center of Excellence, Department of School of Construction and the Environment, |

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|---|--|---|---|
|   |  |   | BCIT Burnaby  |
| 6 | Harnessing the potential of renewable energy (Solar / Wind) for sustainable building energy management through Compressed Air Energy Storage | <b>Dr.V Gayathri</b> ,<br>Vellore Institue Of<br>Technology | <b>Prof. Fariborz Haghghat</b> , Department of Building, Civil, and Environmental Engineering, Concordia University |