



**UK-India- Sri Lanka Young Scientists Networking Conference  
Towards sustainable energy technologies and low carbon buildings  
for climate change mitigation**

**6 February - 8 February 2008, New Delhi, India**

Organised by Oxford Brookes University, Oxford; Indian Institute of Technology, New Delhi; and British Council India & Sri Lanka Region.

#### **OBJECTIVES**

The overall objective of this international conference is to develop a core group of young researchers and professionals from UK, India & Sri Lanka, working in the field of *Sustainable Energy technologies and Low Carbon Buildings for Climate Change Mitigation*.

The conference will provide a forum to meet, discuss, debate and share research, and form a knowledge-sharing network for future research.

#### **SCIENTIFIC CO-ORDINATORS**

The conference is co-ordinated by Mr Raghu Saxena (Head, Regional Climate Security Project, British Council, India), Dr Rajat Gupta (Co-Director at the Oxford Institute for Sustainable Development: Architecture, Oxford Brookes University) and Professor G N Tiwari (Professor, Centre for Energy Studies, India Institute of Technology, New Delhi).

#### **DATES**

- Tuesday 5 February - Young scientists from UK, India and Sri Lanka arrive in New Delhi.
- Wednesday 6 February - Thursday 7 February: Conference in New Delhi
- Friday 8 February - Opportunity for young researchers to visit their counterpart's institutions in the Delhi area.
- Friday 8 February - Conference ends

#### **VENUE**

New Delhi, India

#### **WHO IS THE CONFERENCE FOR?**

The conference is designed for a group of around 10 Indian and 10 UK 'young scientists & researchers - defined as early to mid-stage post-doctoral researchers and recently-appointed lecturers/professors. Consideration will also be given to applications from final year PhD students.

Priority will be given to applicants from India, Sri Lanka and the UK with interests in developing networks with their counterparts in the UK and India respectively. What has worked well before in the Indian context, is that each UK-Indian-Sri Lanka scientist is able to create a one-to-one network.

## CONFERENCE CONTEXT

The growing concern over the issue of mitigating the worst impacts of climate change - is reflected in the use of the term 'sustainable energy', which includes sources with relatively long life and relatively low impacts. The implication is that the long-term *availability* of energy sources is not the only issue. What also matters is that they can be used into the future without damaging the planets climate and ecosystem, or indeed the human social system, i.e. their use must be socially and environmentally sustainable. At the same time, technologies which run on sustainable energy have to be evaluated within the built environment, as energy use in buildings for heating, lighting and ventilation, especially in industrialised countries, is responsible for half the carbon dioxide emissions that drive climate change.

The proposed conference therefore addresses these issues and brings together the current research and development on sustainable energy technologies and low carbon buildings for climate change mitigation onto a common platform, to move towards a low carbon future. Clearly the scientific study in this area is of great importance and presents a unique opportunity for developing future UK-India-Sri Lanka collaborative research.

The conference is also very timely with respect to another important initiative - a national networking event for professionals working on solar energy and climate change mitigation, which is planned to be held at IIT Delhi – and there will be opportunity for participating young researchers to interact with wider network of professionals from across India.

## CONFERENCE FORMAT

Part of the 2 / 3 days will be devoted to oral presentations. Invited experts from UK, India and Sri Lanka will give a number of introductory overview talks on key topics. The emphasis will, however, be on presentations by the young scientists / researchers. The number and length of the latter will be decided once participants have been selected - but the expectation is for 15-20 minute talks. It may also be possible to show relevant posters. The rest of the time will be devoted to discussion and brainstorming sessions - in plenary and in smaller, topic-based groups.

Following the conference, an opportunity will be provided for visits to relevant institutions within easy travelling distance of New Delhi.

The conference will consider a number of **different themes** as mentioned below.

- Energy efficiency in buildings
- Solar Radiation and its applications in thermal and electrical mode
- Photovoltaic and solar thermal systems
- Wind power and biomass technologies in buildings
- Earth-air heat exchanger and ground source heat pumps
- Energy and exergy analysis of solar thermal / electrical systems
- Carbon counting for sustainable energy technologies and buildings
- Passive solar buildings and day-lighting
- Low carbon building design using renewable energy
- Low carbon cooling technologies in buildings
- Building materials with low embodied carbon
- Life cycle cost analysis based on energy and exergy output
- Low carbon communities
- Making low carbon buildings financially viable

Selected papers from the conference may be published in the form of a book or a special issue of an international refereed journal.

## TRAVEL AND ACCOMODATION

For participants selected to take part, the costs of the conference (return travel to Delhi, overnight accommodation and meals) will be met by the British Council. Participants must, however, agree to take part in the whole event.

## HOW TO APPLY

If you would like to participate in this conference, please write a short note explaining what you believe you would get out of this conference and how your research interests fit within its scope. Submit this together with a short (two page) CV and an abstract of 200-400 words describing research relevant to any of the themes listed above that you could present (oral and/or poster) at the conference.

### **Applications by UK scientists by e-mail to Dr Rajat Gupta, Oxford Brookes University**

E-mail: [rgupta@brookes.ac.uk](mailto:rgupta@brookes.ac.uk)

### **Applications by Indian scientists by e-mail to Professor G N Tiwari, IIT Delhi**

Email: [gntiwari@ces.iitd.ac.in](mailto:gntiwari@ces.iitd.ac.in)

### **The deadline for applications is 15 November 2007**

Applicants will be notified by 30 November 2007 and receive a more detailed programme of activities.

## CO-ORDINATORS' CONTACT DETAILS

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