UKIERI
UK-India Education and Research Initiative

One Day UKIERI Seminar on

Concrete for Sustainable High Performance Infrastructure: Challenges and Opportunities

at GNDEC, Ludhiana (Pb) on 17 February, 2010

Introduction

Concrete, due to its robustness, global availability and versatility, is immensely important to the provision of infrastructure for the growing population and their increased expectations. However, it is estimated that Portland cement, the most important ingredient of concrete is responsible for 5% of all global man-made CO_2 emissions, making it a significant contributing factor to global warming and climate change. UKIERI partners are developing innovative cements to reduce CO_2 emissions, and other concerns with the production of cement and aggregates.

Furthermore, concrete has often been inappropriately specified and made. This results in resource inefficiency and durability concerns, and expensive repairs. Since there is no alternative to concrete, so UKIERI partners have investigated methods for mitigating these associated factors.

UKIERI partners of research project entitled "Sustainable High Performance Concrete Infrastructures", are outreaching construction industry through this seminar for the benefit to all concerned. Under this UKIERI project partner Institutes of Higher Learning are carrying research in the following areas:

- Development of Innovative Cements
- Use of Local Wastes as Fillers and Aggregates
- Durability and Performance of Concrete
- Sustainable Structural Concrete

Who should attend

Civil Engineers, Architects, Construction Managers, Concrete produces, Academicians and Researchers dealing with concrete and / or sustainability issues, post-graduate students of related disciplines.

Schedule

08:30 – 09:00	Registration
09:00 - 09:30	Introduction to Seminar, Welcome Addresses and Lighting of Dais
09:30 – 10:10	Structural Concrete and Sustainability
10.10 - 10.50	Concrete: Fundamentals, Research and Practice
11:10 – 11:50	Better Use of Cements for Sustainable, Enhanced Concrete Performance
11:50 – 12:30	Green Concrete: Utilising Recycled and Secondary Aggregates
13:30 – 14:10	Utilising Fillers and Improving Concrete Performance
14.10 – 14.50	Fire Endurance of Concrete Structures
15:10 – 15:50	Designing Concrete for Durability and Sustainability
15:50 – 16:30	Indian Concrete Construction Industry's Perspective
16:30 – 17.15	Panel Discussion

Organised by

Civil Engineering Department
Guru Nanak Dev Engineering College, Ludhiana (Pb) 141 006 India

Contact: Dr. H.S.Rai, Professor (9198552 25007) Dr. J.N Jha, Prof. & Head (9872 843371)
Email: hsrai@gndec.ac.in , civil@gndec.ac.in : Website: http://www.gndec.ac.in/tp/

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About UKIERI

UK India Education and Research Initiative (UKIERI) is a five year programme which aims to substantially improve educational links between India and the UK.

UKIERI has done tremendously well by creating over 475 new Indo-UK higher education and school links. This initiation is to create a 'step change' in educational relations between India and the UK, so that in the longer term the two countries become each other's partner of choice in education and research.

Objectives

By strengthening institution to institution collaboration and promoting stronger links to industry and related communities, this initiative will lead ultimately to India and the UK being each other's preferred partner.

Partners

Following Institutes of Higher Learning have collaborated for the project:

United Kingdom

1. University of Dundee
2. University of Bath

India

1. Birla Institute of Technology & Science (BITS), Pilani
2. Indian Institute of Technology Delhi
3. Guru Nanak Dev Engineering College, Ludhiana
4. Malaviya National Institute of Technology, Jaipur
5. Dr B R Ambedkar National Institute of Technology, Jalandhar
6. SRM University, Chennai
7. National Institute of Technology Karnataka, Surathkal
8. SV National Institute of Technology, Surat

About CED

Civil Engineering Department of Guru Nanak Dev Engineering College was established in 1956 and is one of the premier institutes of North India. It has been accredited twice by National Board of Accreditation (NBA) since 2004 and is running both U.G., P.G. and Ph.D. programs in Structural Engineering, Geotechnical Engineering and Environmental Science & Engineering. It has got state of the art facilities for R&D.

Registration

Completed registration forms (along with registration fee of Rs. 500/-, Rs. 200/- in case of student) should be sent to address given on title page, latest by Mon 8 Feb 10.

Application form

Name	:
Designation	:
Department	:
Mailing Address	: : :
Phone No	:
E-mail	:
	Signature of Applicant