









of Technology, Jaipur



Dr B R Ambedkar National







2nd Announcement

UKIERI Concrete Congress

Concrete for 21st Century Construction

8-10 March 2011

Venue:

Indian Institute of Technology Delhi

http://ukiericoncretecongress.com/

In collaboration with:











Concrete for 21st Century Construction

BACKGROUND AND AIMS OF THE CONGRESS

Internationally renowned for its research excellence, the Concrete Technology Unit of the University of Dundee, UK, together with eight Higher Indian Institutes for Technical Education, is organising this Congress, to be held at the Indian Institute of Technology, Delhi. The Indian Institutions involved are: Birla Institute of Technology and Science, Pilani; Guru Nanak Dev Engineering College, Ludhiana; Indian Institute of Technology Delhi; National Institutes of Technology at Jaipur, Jalandhar, Surat and Surathkal and SRM University, Chennai. These institutions are partners in the collaborative research programme carried out in both the UK and India under the UKIERI Scheme (UK-India Education and Research Initiative) funded by the two governments. The group has now been working together for nearly $2\frac{1}{2}$ years, dealing with issues relating to sustainability and high performance in concrete infrastructure.

The Congress will aim to address new developments in concrete and construction and their role in responding, within the framework of appropriate, innovative and sustainable use of materials, to the rapid growth in the national infrastructure demands in India and elsewhere. This will be a three day Congress, as outlined below:

Day 1: Opening Ceremonies

Delegates will be welcomed by high level experts in the field of construction, sustainability and science and technology from both India and the UK.

Day 2: New Developments in Concrete Construction

This one day event will provide an opportunity to hear from global experts who will examine the current developments taking place within the concrete construction industry that are relevant to India and other countries with rapidly growing construction programmes. The topics covered will address the technical challenges being faced by concrete as a material as it strives to adapt to ever increasing demands placed on it by designers and the environments in which it must perform. In addition, the speakers will examine the role which concrete has to play in addressing the need for sustainable, economical infrastructure in the 21st century.

Day 3: Concrete for High Performance Sustainable Infrastructure

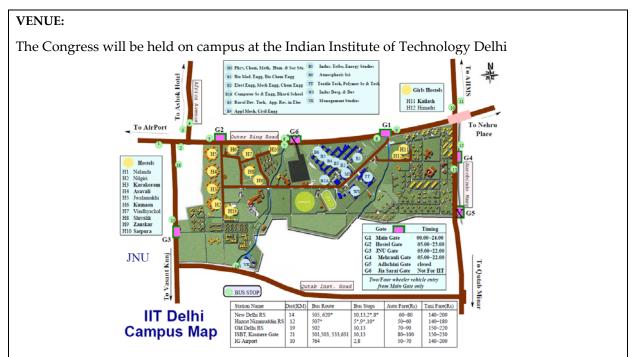
The work presented here is dissemination of the UKIERI collaborative research project undertaken by UK and Indian Higher Education Institutions. The work has focussed on developing innovative cements to enhance performance, resource use and reducing CO₂ emissions, utilise local waste materials to address sustainability, develop performance-based specifications to encourage selection of appropriate materials and demonstrate the use of sustainable concrete design opportunities in structures to provide increased confidence in use.

WHO SHOULD ATTEND THE SEMINAR

- Design Engineers and Architects
- Contracting Engineers
- Local and Regional Authorities
- Research Funding Bodies
- Professional Bodies

- Ready Mixed Concrete Suppliers
- Precast Concrete and Materials Suppliers
- Highway Authorities and Designers
- Academics and Researchers
- Trade Associations

Concrete for 21st Century Construction



For further information on travelling to the Congress and staying in Delhi, please visit the official UKIERI Congress travel agent: **www.planyourholiday.com**

8 MARCH		
CONCRETE FOR 21st CENTURY CONSTRUCTION		
OPENING CEREMONY		
OPENING ADDRESSES		
Welcome Address		
Lighting of the Dias		
Organizing Institutions		
Opening of the Congress		
OPENING PAPERS		
Sustainability Framework for Concrete Construction		
P Chana (Mineral Products Association, UK)		
Designing Right Concrete is Critical to Durable and Sustainable Construction:		
Are We getting There?		
K. Day (Innovative Concrete Technologist, Australia)		
Concrete for 21st Century: New Canvas for Today's Changing World		
H. Moats (Board member, American Society of Concrete Construction, USA)		
Other Opening Papers to Come		

9 MARCH

NEW DEVELOPMENTS IN CONCRETE CONSTRUCTION

(Please note this is a tentative programme which may be subject to change)

	THEME 1: DEVELOPMENTS FOR A 21 ST CENTURY CONCRETE INDUSTRY		
09.00 - 09.20	Cement Combinations and Specifying Concrete by Performance		
03.00 03.20	M J McCarthy, R K Dhir, M D Newlands (University of Dundee, U. K.) and S P Singh (National Institute of		
	Technology Jalandhar, India)		
09.20 - 09.40	Processed Fly Ash: Promoting the Green Concrete Construction Agenda in India		
	Georg Dirk, Dirk India pty Ltd (India)		
09.40 - 10.00	New Trends in Concrete Admixtures and Cement additives in Asia Pacific		
	Ohta (Japan), Q. Feng (China), A. Bendeh (India) and N. Kar (Singapore), BASF: The Chemical Company, South Asia Pte Ltd		
10.00 - 10.20	Use of Recycled and Secondary Aggregates: An Overview		
	R K Dhir (University of Dundee, U. K.), K A Paine (University of Bath, U. K.), J deBirto (Instituto Superior Tecnico, Portugal), M Etxeberria (Univerrsitat Politecnica de Catalunya, Spain), N Y Ho (Samwoh Corporation PteLtd, Singapore) C S Poon (Hong Kong Polytechnic University, H. K.) and V W Y Tam, University of Western, Australia)		
10.20 - 10.30	Discussion		
10.30 - 11.00	Tea / Coffee and Exhibition		
11.00 – 11.20	Training the Concrete Construction Workforce		
	C. Dordi (Ambuja Cements Ltd, India)		
11.20 – 11.40	Developments in Readymix Concrete.		
	V. Kulkarni (Principal Consultant, Ready Mixed Concrete Manufacturers' Association, India)		
11.40 – 12.00	Roller Compacted Concrete for Dam Construction		
	T. Warren (RCC Consulting Engineer, U.S.A.)		
12.00 – 12.20	Lightweight Concrete: From Blocks to Skyscrapers		
	A. Beattie, A. Doel (Lytag Ltd, U. K.) and M. Tiwari (Biltech Building Elements Ltd, India)		
12.20 – 12.30	Discussion		
12.30 – 14.00	Lunch and Exhibition		
	THEME 2: HIGH PERFORMANCE SUSTAINBLE CONCRETE		
14.00 – 14.20	Renewing Singapore's Urban Landscape – The High Strength Concrete Option		
14.20 14.40	G. K. C. Ong (National University of Singapore, Singapore)		
14.20 – 14.40	Use of Fine Fly Ash in Developing High Performance Concrete		
14.40 15.00	R K Dhir and M J McCarthy (University of Dundee, UK)		
14.40 – 15.00	High Performance Silica Fume Concrete and Some Applications in India		
15.00 15.20	R. Scott University of Durham, U. K.) and S P Singh (National Institute of Technology Jalandhar, India)		
15.00 – 15.20	High Strength Concrete in Developing Modern Infrastructure – Learning from Hong Kong Examples		
15 20 15 20	A. K. H. Kwan (University of Hong Kong) and Y. N. S. Chan (Wong & Cheng Consulting Engineers Ltd Hong Kong) Discussion		
15.20 – 15.30			
15.30 – 16.00	Tea / Coffee and Exhibition		
16.00 – 16.20	Concrete Roads and Bridges in an Indian Scenario.		
16.20 – 16.40	S. A. Reddi (Consultant, India) Smart Materials in Structural health Monitoring and Non-Destructive Evaluation of Concrete Structures		
10.20 - 10.40			
16.40 – 17.00	S. Bhalla and B. Bhattacharjee (Indian Institute of Technoolgy Delhi, India) Protecting Concrete in Waste Water Environment Against Acid Attack		
10.40 - 17.00			
17.00 – 17.20	E. Kleen (M C Bauchemie, Germany) and W. Kay (WAK Technologies, Singapore) Foamed Concrete Opportunities		
17.00 - 17.20	M R Jones (University of Dundee, U. K.) and M. Mohammed (Government Public Works department, Malaysia)		
17.20 17.45			
17.20 – 17.45	DISCUSSION AND CLOSING REMARKS		

10 MARCH

CONCRETE FOR HIGH PERFORMANCE SUSTAINBLE INFRASTRUCTURE

(Please note this is a tentative programme which may be subject to change)

	THEME 1. INNOVATIVE CEMENTS AND LISE OF LOCAL MATERIALS		
00.00.00.00	THEME 1: INNOVATIVE CEMENTS AND USE OF LOCAL MATERIALS		
09.00 – 09.20			
09.20 - 09.40	R K Dhir and M D Newlands (University of Dundee, UK), S P Singh (National Institute of Technology Jalandhar, India) Improving Engineering and Durability Properties of High Volume Fly Ash Concrete		
09.20 - 09.40	I N Patel and C D Modhera (National Institute of Technology Surat, India)		
09.40 – 10.00	Modification of Porosity and Pore Size Distribution due to Fly Ash Addition in PC Paste/Mortar		
05.40 - 10.00	K Vendhan and B. Bhattacharjee (Indian Institute of Technology Delhi, India)		
10.00 – 10.20	Development of Alternative Binders to Portland cement concrete Using Fly ash Blastfurnace Slag		
	M C Narasimhan, G Nayak, B T Ajith and M K Rao (National Institute of Technology Surathkal, India)		
10.20 – 10.30	Discussion		
10.30 – 11.00	Tea / Coffee and Exhibition		
11.00 – 11.20	Value Added Use of Waste Materials in Concrete: The Indian Experience A.Misra (National Institute of Technology, Jaipur, K S B Narayan and S C Yaragal (National Institute of Technology, Surathkal, S N Desai (National Institute of Technology, Surat)		
11.20 – 11.40	Use of Recycled and Secondary Aggregates in Concrete: Engineering and Environmental Performance K A Paine (University of Bath, U. K.), R K Dhir, J E Halliday, L Zheng and D Cooery (University of Dundee, UK), H S Rai (Guru Nanak Dev Engineering College, India)		
11.40 – 12.00	Paper to Come		
12.00 – 12.20	Pozzolana and Slag Bended Portland Cement and Rebar Corrosion		
	J. Kujur (BIT Mesra, Ranchi, India)B. Pradhan (Indian Institute of Technology Guwahati, India) B. Bhattacharjee (Indian Institute of technology Delhi, India		
12.20 – 12.30	Discussion		
12.30 – 14.00	Lunch and Exhibition		
	THEME 2: DURABILITY PERFORMANCE AND SUSTAINABILITY		
14.00 – 14.20	Embedding Sustainability in Performance-Based Specifications		
	M D Newlands and Jones M R (UK) , B. Bhattacharjee (Indian Institute of Technology Delhi, India)		
14.20 – 14.40	Specifications for High Performance Concrete in India		
	B Bhattacharjee (Indian Institute of Technology Delhi, India), A Misra (National Institute of Technology Jaipur, India), H S Rai (Guru Nanak Dev Engineering College Ludhiana, India)		
14.40 – 15.00	Barriers to Progressing Concrete Fit for 21st Century		
	M D Newlands and R K Dhir, (University of Dundee, U K)		
15.00 – 15.20	Paper to Come		
15.20 – 15.30	Discussion		
15.30 – 16.00	Tea / Coffee and Exhibition		
16.00 – 16.20	Enhancing Structural Performance: Utilising Fibres		
	A P Singh and S P Singh (National Institute of Technology Jalandhar, India), Patil, D Shah (National Institute of Technology Surat, India), S Bhalla (Indian Institute of Technology Delhi, India), S B Singh (Birla Institute of Technology and Science Pilani, India)		
16.20 – 16.40	Engineered Cementitious Composites for Structural Concrete		
	S B Singh and S Madappa, Birla Institute of Technology and Science Pilani, India), M C Narasimhan (National Institute of Technology Surathkal, India)		
16.40 – 17.00	Flexural Response of Steel Reinforced Engineered Cementitious Composite Beams		
	S B Singh and M V R Subramanian (Birla Institute of Technology and Science Pilani, India)		
17.00 – 17.20	Flexural Fatigue Strength of Concrete Reinforced with Steel Polypropylene Hybrid Fibres		
	S P Singh, A P Singh and V Bajaj (National Institute of Technology Jalandhar, India)		
17.20 – 17.45	DISCUSSION AND CLOSING REMARKS		

Concrete for 21st Century Construction

ATTENDANCE AT THE CONGRESS

The Congress will be timetabled to allow delegates a number of attendance options. Delegates may combine attendance at the event with pre or post Congress tours enjoying Indian culture and local tours can be arranged through the dedicated UKIERI Concrete Congress travel agent: www.planyourholiday.com.

CONGRESS FEES AND REGISTRATION

The Congress Fees will include:

- Lunches;
- Teas/coffees;
- Receptions;
- One set of hardbound Congress Proceedings containing the full paper manuscripts.

The fees have been devised to attract wide international participation. For organizations wishing to send more than one delegate the fee structure is shown below:

FEE PER DELEGATE*			
	1 Delegate	2 Delegates	3+ Delegates
Early Bird Registration**	Rs. 4,000	Rs. 3,600	Rs. 3,200
Standard Registration	Rs. 6,000	Rs. 5,400	Rs. 4,800
Authors Registration	Rs. 4,000	Rs. 3,600	Rs. 3,200
Student Registration	Rs. 2,000	Rs. 1,800	Rs. 1,600

^{*} Overseas delegates: Kindly make payment in equivalent USD.

To Register for the Congress, please complete the form at the back of this brochure.

CONGRESS DINNER

A Congress Dinner will be held during the event.

LANGUAGE AND VENUE

The Congress will be presented in English and will be held on the campus of the IIT Delhi.

ACCOMMODATION AND TRAVELLING TO THE CONGRESS

The venue for the Congress is the campus of Indian Institute of Technology Delhi. For those wishing to book travel, please visit the website of the official UKIERI Congress travel agent www.planyourholiday.com

Comfortable, low cost accommodation for delegates wishing to stay on Campus will be available. A list of hotels in the vicinity can be found by contacting www.planyourholiday.com

^{**} Registration before 31 January 2011

Concrete for 21st Century Construction

SPONSORING AND EXHIBITING AT THE CONGRESS

SPONSORING THE CONGRESS

The focal point of the Congress will be the exhibition and organisations are invited to sponsor the event and take the opportunity to exhibit and network with the delegates. Sponsors will gain exposure from a range of promotional benefits including:

- FREE TRADE FAIR SPACE AT THE CONGRESS (Full exhibition cost is Rs 50,000).
- FREE DELEGATES: Number depends on package (see below), any additional delegates at a 35% reduced rate.
- CONGRESS DINNER PROMOTION: Banners with Sponsors names displayed at the Dinner.
- PROMOTION ON THE CONGRESS WEBSITE, BROCHURES AND PROGRAMME: The Congress website will prominently display details on Sponsors and a link directly to the Sponsor's own website. Sponsors company profile will also be printed in the Programme given to all the delegates at the Congress.

SPONSORSHIP OPPORTUNITIES				
Sponsorship Cost Free Exhibition Dinner				Dinner
Sponsorship Package		Delegates	Space	Spaces
Diamond	Rs. 3 Lakhs	10	Free	10
Gold	Rs. 2 Lakhs	6	Free	6
Silver	Rs. 1 Lakh	3	Free	3

EXHIBITING AT THE CONGRESS

Organisations may simply wish to be Exhibitors at the Congress. For further information on how to become an exhibitor and the benefits to be gained, please see contact details below.

For Sponsorship and Exhibition Information, please contact:

Professor R K Dhir, University of Dundee, U K. Tel: +44 121 427 8108, Email: r.k.dhir@dundee.ac.uk

For further information on other aspects of the Congress, please contact

Professor B Bhattacharjee, Department of Civil Engineering, Indian Institute of Technology Delhi. Hauzkhas, New Delhi - 110 016, India, Tel: +91 11 2659 1193, Email: <u>bishwa@civil.iitd.ac.in</u>

Professor S P Singh, Department of Civil Engineering, Dr B R Ambedkar National Institute of Technology, P.O. REC, Jalandhar - 144 011 (Pb) India. Tel: +91 181 2690 301 Ext 2305, Email: spsingh@nitj.ac.in

Dr Moray Newlands, University of Dundee. UK Tel: +44 1382 386562, Email: m.d.z.newlands@dundee.ac.uk

UKIERI Concrete Congress Concrete for 21st Century Construction

8-10 March 2011

REGISTRATION FORM

	DELEGATE 1		DELEGATE 2
Name:		Name:	
Position:		Position:	
Organisation:		Organisation:	
Address:		Address:	
Telephone:		Telephone:	
Fax:		Fax:	
Email:		Email:	
Applicable		Applicable	
Registration		Registration	
Fee:		Fee:	

Please tick one of the following payment options:

I wish to pay by Bank Transfer	I wish to pay by Demand Draft

	Payment by Bank Transfer	Payment by Demand Draft
Indian Delegates/I	Payments	Indian Delegates/Payments:
Account Name: UKIERI Concrete Congress Account No.: 2945101001240 Beneficiary Bank: Canara Bank, NIT Campus, Jalandhar, India Beneficiary Bank IFSC Code No.: CNRB0002945		Demand Draft in favour of UKIERI Concrete Congress , payable at Jalandhar .
Overseas Delegate	s/Payments	Overseas Delegates/Payments:
Intermediary Bank	: Bank of America, New York, Account No. 6550791917, Swift Code: BOFAUS3N	The demand draft in USD should be made payable at <i>New York</i> . The demand draft along with the registration form should be sent to the following address:
Beneficiary Bank:	Account Name: UKIERI Concrete Congress Account No.: 2945101001240 Bank: Canara Bank, NIT Campus, Jalandhar, India Bank Code: 2945: Swift Code: CNRBINBBBMC	Dr S P Singh, Professor of Civil Engineering Dr B R Ambedkar National Institute of Technology P.O. REC, Jalandhar – 144 011, India E-mail: spsingh@nitj.ac.in Ph: +91 98140 88475 (M)
•	nned copy of the confirmation receipt of the Bank Transfer	Fax: +91 181 2690 932, 2690 320 (By Attention)

PLEASE COMPLETE AND RETURN THIS REGISTRATION FORM TO:

Dr S P Singh, Professor of Civil Engineering Dr B R Ambedkar National Institute of Technology P.O. REC, Jalandhar – 144 011, India

Fax: +91 181 2690 932, 2690 320 (By Attention) E-mail: spsingh@nitj.ac.in

Should a delegate be unable to attend, please inform the organisers as quickly as possible. Alternatively, please inform the organisers should you wish to send a replacement delegate.