



Workshop  
on  
Design of Composite Structures  
25th September 2010 (Saturday)

Organised by  
**Indian Concrete Institute**  
(NEW DELHI CENTRE)

**REGISTRATION FORM**

(Please type or use Block Letters)

Name.....

Designation.....

Organisation.....

Mailing Address.....

Phone / Mobile.....

Fax..... E-mail Id.....

Please tick the appropriate category

ICI Member  Free Delegates  Others

ICI Membership No.....

**Details of Demand Draft / Cheque\***

DD/Cheque No.....Date.....

Amount (Rs.).....Drawn on.....

(Photocopies of Registration form can also be used)

Date..... Signature.....

\* The payment is to be made in the form of Demand Draft / Local Cheque/ Multicity Cheque drawn in favour of ' **Indian Concrete Institute, New Delhi** ' payable at New Delhi.

The Registration form along with workshop fee shall be sent to:

**Ms. Sehba Azhar**  
UPFRONT Advertising Pvt. Ltd.  
306, Gupta Arcade, Shreshtha Vihar, Delhi - 110092

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**Workshop Fee :**

All Delegates : Rs. 2500 /-  
(10% discount to ICI Members)

**Mode of Payment :**

By draft or local cheque or multicity cheque drawn in favour of  
" **Indian Concrete Institute, New Delhi** "  
payable at New Delhi, latest by 10th September 2010.

**Organizing Secretary :**

**Er. T. Viswanathan**

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**Event Manager :**

**Ms. Sehba Azhar**

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Note : All correspondence should be addressed to the event managers



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(NEW DELHI CENTRE)

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Tel : 91-11-24317684, 24319288 Fax : 91-11-24316057

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Workshop  
on

**Design of Composite Structures**

25th September 2010 (Saturday)

At

Scope Convention Centre,  
Core 8, Near CGO Complex,  
7, Lodhi Road, New Delhi



Organised by :

**Indian Concrete Institute**  
(NEW DELHI CENTRE)

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## OBJECTIVE

New methods, new design concepts and a better understanding of the trade-off between structural reliability and life cycle costs make the future an exciting time for Structural Engineers. In evaluating the same, engineers need to keep in mind the potential advantages the Structural Systems can offer. These include lighter weight, higher strength to weight ratio, higher quality material, easy adoption for long span construction, speed of construction, ability for easy repair, lighter foundation, long term durability, easy accessibility and inspection, aesthetics while offering due respect to the environment and sustainable development. Other properties like the ductility and toughness of the systems allow absorption of excessive loading above design values without catastrophic failures.

In India, traditionally, the Indian Railways had adopted steel superstructure for the bridges and of late composite steel bridges are extensively adopted for the urban flyovers due to space constraint, the least disturbance to the traffic and the minimum activity at the site as the components are prefabricated, transported and assembled at the site which also reduces the time of construction. Recently the Indian Railways have also made it mandatory to adopt steel composite construction for all Road over Bridges.

A steel-concrete composite construction is also quite popular in buildings. The floor beams, bracing and columns are fabricated in steel and the floor slab is precast / cast-in-situ concrete construction. Metro station buildings are classical examples of steel-concrete composite construction in India. Though the steel concrete composite buildings are rare in India, in other parts of the world, this type of construction is quite common, one popular example was World Trade Centre in USA. Another type of composite construction is Concrete Composite Construction where the beams, columns can be precast and the slabs can be of cast-in-situ. This type of construction is quite common both in bridges and buildings.

The workshop will attempt to bring out the latest methods in the design of composite structures. As Eurocodes are the

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latest codes on the design of composite structures, the workshop will attempt to familiarize the Indian Engineers to the current design practices in the design of composite construction according to Eurocode 4. "Design of Composite Steel and Concrete Structures."

## ABOUT THE WORKSHOP

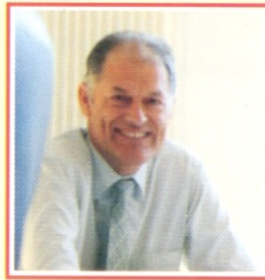
The Workshop will be conducted by Dr. Paul Jackson, Technical Director of Gifford UK.

The workshop will be spread over 5 sessions.

Lecture notes and copies of Presentation will be distributed to all registered delegates.

## ABOUT THE SPEAKER

**Dr. Paul Jackson** BSc PhD CEng FICE FStructE



**Dr. Paul Jackson** obtained his PhD from Plymouth University, UK. He is the Technical Director of Gifford UK and has been associated with the firm for the past 22 years. He served Cement and Concrete Association of UK prior to his joining Gifford. He has been involved with the BSI Committees since 1980. He has represented UK on CEN Committees for both concrete and composite structures. He worked on calibration studies preparing for the implementation of Eurocodes for both the Highways Agencies and Railway Safety and Standard Board of UK. He has published over 30 papers and regularly reviews papers for ACI, ICE and Istru E. Dr. Jackson was extensively involved in drafting of Eurocodes 4. "Design of Composite Steel and Concrete Structures". He is the convenor of the BSI's working group of Concrete and Composite bridges.

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## WORKSHOP PROGRAMME

9:00 am	Registration
10:00 am	Inauguration
10:30 am	Introduction and Fundamentals of Composite Construction
11:00 am	Introduction to Eurocodes EN1990, EN1991 and actions
11:30 am	Break
11:45 am	Design of Concrete Structures to Eurocodes EN1992
1:00 pm	Lunch
1:45 pm	Design of steel structures to Eurocodes EN1993
3:00 pm	Break
3:15 pm	Design of composite Steel and Concrete Structures to Eurocodes EN1994
4:30 pm	Interactive Session
5:00 pm	Closing Ceremony Concrete Day Celebration to follow

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