

LEARNING FROM EXPERIENCE

ONE-DAY INTERNATIONAL  
WORKSHOP ON

**3D PRINTING OF  
CONCRETE**

**K P PRADEEP SYMPOSIUM ON PIONEERING  
SCIENCE AND DEVELOPMENT FOR CONSTRUCTION**

**DATE:** 8<sup>TH</sup> AUGUST, 2016

**VENUE:** IC&SR AUDITORIUM, IIT MADRAS, CHENNAI

ORGANISED BY



Indian Concrete Institute  
Chennai Centre

IN ASSOCIATION WITH



Indian Institute of Technology  
Madras, Chennai

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## WHAT IS 3D PRINTING?

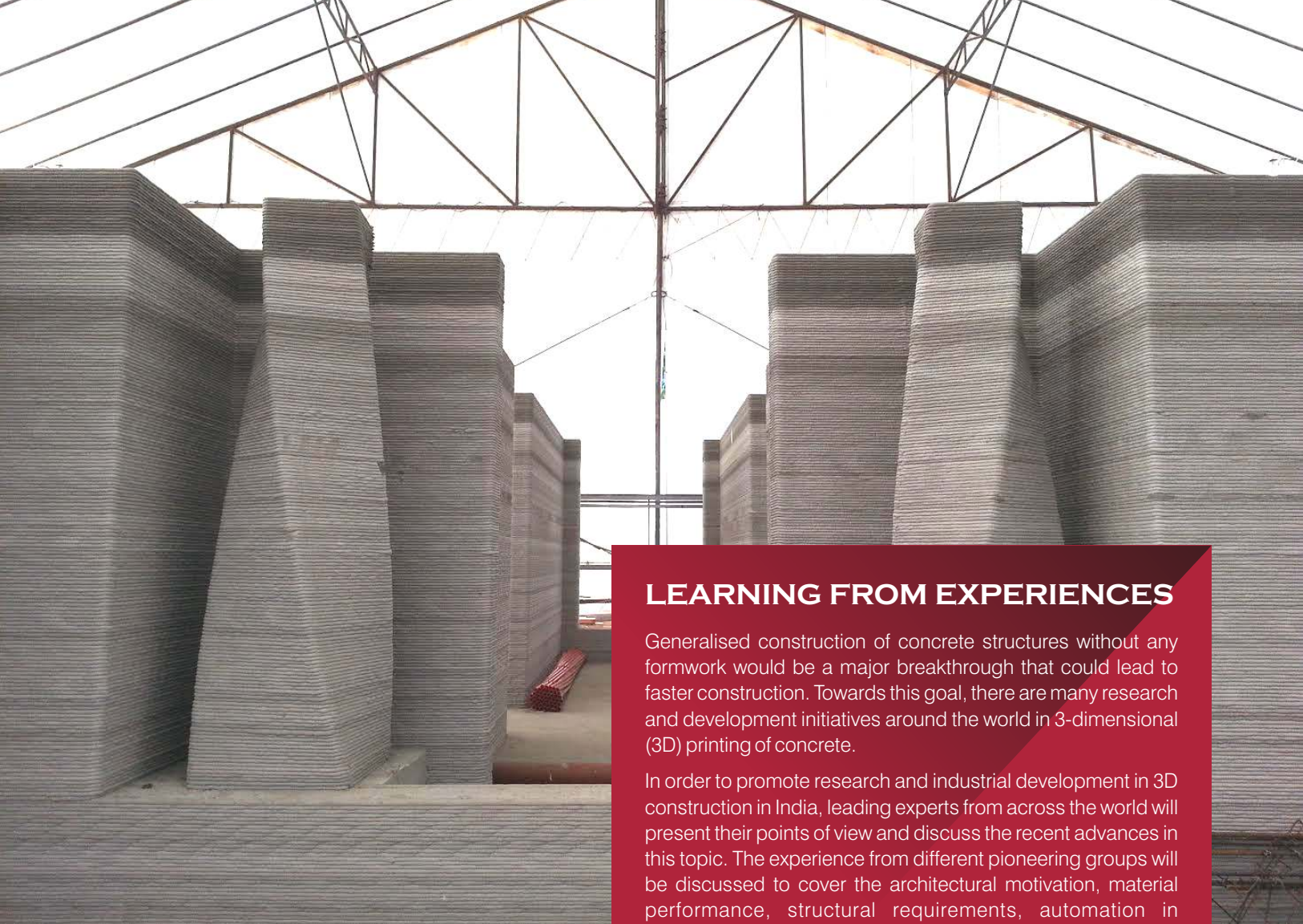
The first two industrial revolutions lowered production time and costs. 3D Printing - '**The next industrial revolution**' - is walking a similar path. The making of a 3D printed object is achieved using additive processes. In an additive process, the product is created by laying down successive layers of material. Each of these layers can be seen as a thinly sliced horizontal cross-section of the eventual object.

## 3D PRINTING IN CONSTRUCTION

In the construction industry, 3D printing is slowly beginning to emerge as an option to create complex components or to 'print' the entire building. The process involved in construction is well-suited to 3D printing - as much of the information required to construct already exists as a result of the design process. 3D printing is being seen as a way for faster and more accurate construction of complex items as well as lowering construction costs and waste.







## LEARNING FROM EXPERIENCES

Generalised construction of concrete structures without any formwork would be a major breakthrough that could lead to faster construction. Towards this goal, there are many research and development initiatives around the world in 3-dimensional (3D) printing of concrete.

In order to promote research and industrial development in 3D construction in India, leading experts from across the world will present their points of view and discuss the recent advances in this topic. The experience from different pioneering groups will be discussed to cover the architectural motivation, material performance, structural requirements, automation in construction, and practical implementation.

## TENTATIVE LIST OF SPEAKERS

- ♦ Alexander Schofield, Emerging Objects, USA
- ♦ Koshy Varghese, IIT Madras, India
- ♦ Ravindra Gettu, IIT Madras, India
- ♦ Surendra P. Shah, Northwestern University, USA
- ♦ Timothy Wangler, ETH Zurich, Switzerland
- ♦ Viktor Mechtcherine, TU Dresden, Germany
- ♦ Vivien Esnault, LafargeHolcim, France
- ♦ Zongjin Li, Hong Kong Univ. of Science and Technology, China

## WHO SHOULD ATTEND:

The workshop will be of interest to industry professionals, academics and researchers who are interested in the latest developments in the construction industry. The success of 3D printing requires the collaboration of materials, construction and automation experts and participants from all these disciplines will benefit from the workshop.





## WORKSHOP FEE

|                      |                    |                 |                                    |
|----------------------|--------------------|-----------------|------------------------------------|
| <b>Delegates Fee</b> | <b>ICI Members</b> | <b>Students</b> | <b>ICI Student Chapter Members</b> |
| ₹ 3,450              | ₹ 2,875            | ₹ 2,300         | ₹ 1,725                            |

\*Including ST of 15%

### MODE OF PAYMENT

Registration form along with the workshop fee by demand draft / local cheque / multicity cheque drawn in favour of "Indian Concrete Institute Tamilnadu Centre" payable at Chennai.

### FOR NET BANKING

Indian Concrete Institute Tamilnadu Centre  
Bank Name: CANARA BANK  
Branch: CS Branch, Kotturpuram, Chennai - 600085.  
Account No: 1550101009176; IFSC: CNRB0001550

## SPONSORSHIP OPPORTUNITIES

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| <b>PATRON</b>    | <b>DIAMOND</b>   | <b>PLATINUM</b>  | <b>SUPPORTING ORGANISATIONS</b> |
| ₹ 10,00,000      | ₹ 5,00,000       | ₹ 2,00,000       | ₹ 50,000                        |
| 5 Free Delegates | 3 Free Delegates | 2 Free Delegates | 1 Free Delegates                |

\*Including ST of 15%

## ADDRESS FOR COMMUNICATION

### One-day International Workshop on **3D PRINTING IN CONCRETE**

K P Pradeep Symposium on Pioneering Science and Development for Construction

102/11, Tripti Apartments, Marshall's Road, Egmore, Chennai - 600 008.

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