

## Congratulations

Prof. Ravindra Gettu has been bestowed with RILEM Honorary Fellowship in recognition of his exemplary leadership as RILEM Association President, Technical Activities Committee Chair and Cluster Convener along with serving as the Deputy Chair of Technical Committee and in Bureau.

In frame, Prof. Gettu with Dr. Nicolas Roussel...



### In this issue

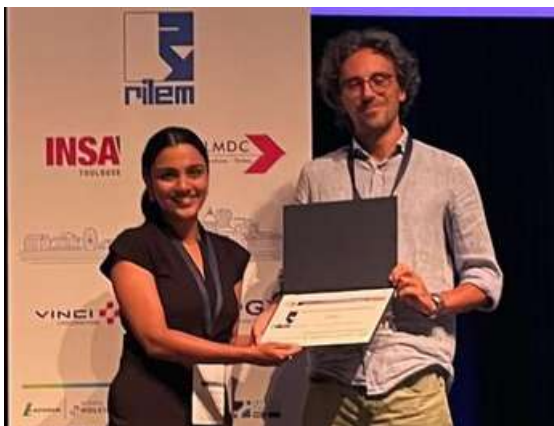
#### Events

- Two Parallel Workshops C3S and CTSI will be held at Research Park, IIT Madras on September 24

#### Awards

- Prof. Ravindra Gettu has been bestowed with RILEM Honorary Fellowship
- Dr. Surender Singh has been selected for the prestigious INAE Young Associate Award in the Civil Engineering Category
- Ms. Anupama V.A. received best paper award in the 78th RILEM Week held in conjunction with the RILEM Conference on Sustainable Materials & Structures (SMS 2024) in Toulouse, France

Dr. Surender Singh has been selected for the prestigious Indian National Academy of Engineering (INAE) Young Associate Award (formerly Young Engineer Award) in the Civil Engineering Category. Dr. Surender's research interests include recycling of pavements, cement concrete roads, roller compacted concrete pavements, and special concretes. Surender is the current Chairperson of the RILEM Youth Council and a standing committee member of the Transportation Research Board (TRB) technical committee on the design and rehabilitation of concrete pavements (AKP20).



Anupama receiving her best paper award from Prof. Enrico Sassoni

Ms. Anupama V.A. (guided by Dr. Manu Santhanam) received best paper award (€1000 cash prize and an invitation to submit a paper in RILEM technical letters) for her paper on salt weathering resilience of masonry systems in the 78th RILEM Week held in conjunction with the RILEM Conference on Sustainable Materials & Structures (SMS 2024): Meeting the major challenges of the 21st century in Toulouse, France, from 25 to 30 August 2024. Anupama also received the 2024 RILEM PhD Travel Grant.



# 7<sup>th</sup> One-day workshop on Corrosion and its Control in Concrete Structures (C3S)

9 to 5 pm, **September 24, 2024 (Tuesday)**  
E-Block, IIT Madras Research Park, Chennai, India

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**IIT  
MADRAS**



**About the C3S workshop series:** Many major concrete structures are designed for a service life of 100+ years. However, many are corroding much earlier and not able to meet the design/service life requirements due to chloride-attack and carbonation. These can be avoided by using appropriate use of material systems. Moreover, most repairs are excessively focused on structural strengthening aspects and neglect the durability of repairs. This leads to short-lived and frequent repairs, creating huge economic burden (about 2% or more of GDP in managing the corrosion in concrete infrastructure). If we do not take adequate measures in this regard, then we will have to face expensive repair works on the large number of concrete structures that are being built now. To create awareness about this, the Dept. of Civil Engineering at IIT Madras has been organizing the C3S workshops since 2016. This is the 7<sup>th</sup> C3S workshop, which is formulated to educate engineers about corrosion mechanisms and how to design for durability or service life and combat corrosion of steel in concrete structures with a blend of both theoretical and practical aspects.

## Speakers



**Dr. Deepak Kamde**  
INSA Toulouse, France  
*Workshop overview &  
Corrosion in concrete structures*



**Prof. Carmen Andrade**  
CIMNE/UPC, Spain  
*Duracrete and fib models & input  
parameters for service life design*



**Prof. Piyush Chaunsali**  
IIT Madras, Chennai, India  
*Performance specifications for concrete  
structures*



**Prof. Robert Melchers**  
Univ. of Newcastle, Australia  
*Importance of concrete quality and placement  
on minimizing corrosion of steel*



**Prof. Mark Alexander**  
Univ. of Cape Town, South Africa  
*Practical corrosion control: Effect of  
exposure conditions, material selection, and  
surface treatments*



**Prof. Shwetha Goyal**  
Thapar Inst., Patiala, India  
*Evolution & performance of corrosion  
inhibitors*



**Mr. Biswajit Ghosh**  
Tata Steel Limited, India  
*Corrosion resistant steel bars for  
concrete structures*



**Mr. Vishal Seth**  
Jindal Stainless Limited, India  
*Ferritic stainless steel bars for concrete  
structures*



**Prof. Burkan Isgor**  
Oregon State Univ., USA  
*Technologies for corrosion measurements  
with and without connection to steel*



**Dr. Gino Ebell**  
BAM, Berlin, Germany  
*Performance & failure mechanisms of  
galvanic anodes*



**Mr. Dhruvesh Shah**  
Vector Corrosion, India  
*Optimized condition assessment and  
durable repairs*



**Prof. Radhakrishna G. Pillai**  
IIT Madras, Chennai, India  
*Discussion & Closing*

## Registration Fee (including taxes)

**On or before September 20, 2024**  
**Spot registration is not allowed**

**Indian (INR)**

**4000**

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See next page for schedule ...



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## Tentative Programme Schedule

09:00 – 09:30 am	Welcome address & Corrosion in concrete structures	Dr. Deepak Kamde, INSA Toulouse, France
09:30 – 10:00 am	Duracrete and fib models & input parameters for service life design	Prof. Carmen Andrade, CIMNE/UPC, Spain
10:00 – 10:30 am	Performance specifications for concrete structures	Prof. Piyush Chaunsali, IIT Madras, India
10:30 – 11:00 am	Importance of concrete quality and placement on minimizing corrosion of steel	Prof. Robert Melchers, Univ. of Newcastle, Australia
11:00 – 11:30 pm	<b>Tea/coffee break</b>	
11:30 – 12:00 pm	Practical corrosion control: Influence of exposure conditions, material selection, and surface treatments	Prof. Mark Alexander, Univ. of Cape Town, South Africa & IIT Madras, India
12:00 – 12:20 pm	Evolution & performance of corrosion inhibitors	Prof. Shwetha Goyal, Thapar Inst., India
12:20 – 12:40 pm	Corrosion resistant steel bars for concrete structures	Mr. Biswajit Ghosh, Tata Steel, India
12:40 – 01:00 pm	Ferritic stainless steel bars for concrete structures	Mr. Vishal Seth, Jindal Stainless Limited, India
01:00 – 02:00 pm	<b>Lunch break</b>	
02:00 – 02:30 pm	Field corrosion measurements without connection to steel	Prof. Burkan Isgor, Oregon State Univ., USA
02:30 – 03:00 pm	Performance & failure mechanisms of galvanic anodes	Dr. Gino Ebell, BAM, Berlin, Germany
03:00 – 03:20 pm	Optimized condition assessment and durable repairs	Mr. Dhruvesh Shah, Vector Corrosion, India
03:20 – 03:40 pm	<b>Discussion &amp; Closing</b>	Prof. Radhakrishna G. Pillai, IIT Madras, India
<b>Coordinators</b>		

Dr. Deepak Kamde, INSA, Toulouse, France; [deepak.kamde89@gmail.com](mailto:deepak.kamde89@gmail.com)

Prof. Shweta Goyal, Thapar Inst. of Engg. & Tech., Patiala, India; [shweta@thapar.edu](mailto:shweta@thapar.edu)

Prof. Radhakrishna G. Pillai, IIT Madras, Chennai, India; [pillai@civil.iitm.ac.in](mailto:pillai@civil.iitm.ac.in)

For queries, please email to [consec@civil.iitm.ac.in](mailto:consec@civil.iitm.ac.in)



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code to register



# Construction Technologies for Sustainable Infrastructure (CTSI)

9 to 5 pm, September 24, 2024 (Tuesday), IIT Madras Research Park, India

## About the workshop:

In this workshop, we intend to focus on the practical applications of certain technologies and processes and how they can improve project performance. We will have interactive/game sessions on the following three topics.

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## Topic 1 (9 to 10:30 am): Contract Specifications to Implement Technological Innovations in Project Sites

**Dr. Murali Jagannathan, IIT Madras**

Specifications are techno-legal documents that must be carefully drafted, balancing legal compliance and technological requirements. The key elements of a good specification will be discussed, and subsequently, the participants will be asked to develop their custom specifications for an item of their choice.

## Topic 2 (11:00 am to 12:00 pm): Implementing Lean Construction in Project Sites – Demonstration through Games

**Prof. Ashwin Mahalingam, IIT Madras**

Lean construction refers to using processes, tools, and techniques that aim to reduce non-value-adding activities (like waiting, unnecessary motion, excess inventory, etc.) and thereby help improve overall project productivity. Actual implementation at the site is challenging as lean implementation requires a tectonic shift in mindset. To help understand the practical benefits, the instructor will introduce the airplane game to appreciate the benefits of lean implementation.

## Topic 3 (1:30 pm to 5:00 pm): Target Value Delivery

**Dr. Nikhil Bugalia & Thirumalai Rajan, IIT Madras**

The traditional process (target value design) prioritizes design as a cost driver, dictating that designers must know what they're building before determining costs. Today's process (target value delivery) makes cost, value, and constructability the drivers of design. The participants will learn the concept of Target Value Delivery through an interactive game, learning about balancing financial and sustainability values for a project.



Dr. Murali Jagannathan



Prof. Ashwin Mahalingam



Dr. Nikhil Bugalia



Mr. Thirumalai Rajan

## Registration Fee (including taxes)

On or before September 15, 2024	Indian	Foreigner
Spot registration is not allowed	INR 4000	USD 50

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## Coordinators

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