



C S M S

CONCRETE SUSTAINABILITY MATERIALS & STRUCTURES

L O W - C A R B O N C O N C R E T E

VENUE

University of Malta
Aula Magna, Valletta Campus

DATE

Friday, 12th of December
08:00 am - 16:00 pm



REGISTRATION

<https://forms.gle/q7PwTor9Qf8txf377>



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ORGANIZED BY:



L-Università
ta' Malta

IN ASSOCIATION WITH:



XJENZA
MALTA



HIPERCRETE
Project

IN COLLABORATION WITH:



Philip A Tabone
BUILDING MATERIALS | INDUSTRIAL EQUIPMENT



WITH THE SUPPORT OF:



CENTRAL CEMENT LIMITED
Incorporating Jumbo Bags Ltd.



BUILDING & CONSTRUCTION
AUTHORITY



MGPEI



SBE
MALTA



Kamra
tal-Periti

Your support through a small donation to Puttinu would be greatly appreciated





CONCRETE SUSTAINABILITY MATERIALS & STRUCTURES

LOW - CARBON CONCRETE

CSMS 2025: REGISTRATION

DATE Friday, 12th December, 2025
TIME 08:00 AM to 16:00 PM
VENUE University of Malta, Aula Magna, Valletta Campus, Malta

REGISTRATION

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ABSTRACT SUBMISSIONS

<https://forms.gle/ndVAfN9QKzZgYCqc6>



Deadline: 14/11/2025

CSMS 2025: WORKSHOP [GOZO]

DATE Monday, 15th December, 2025
TIME 09:00 AM to 16:00 PM
VENUE Cittadella, Victoria, Gozo

REGISTRATION

<https://forms.gle/C12eWXD1UmHEXYYUA>



FREE OF CHARGE. REGISTRATION MANDATORY.



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OVERVIEW

CSMS 2025 (Concrete Sustainability: Materials and Structures) is an international conference dedicated to advancing knowledge, innovation, and collaboration in sustainable construction. Bringing together leading researchers, engineers, and industry professionals, the event will highlight the latest developments in both fundamental and applied research on cement-based materials, advanced construction technologies, and sustainable structural design.

With a strong focus on reducing the environmental footprint of the built environment, CSMS 2025 will showcase breakthroughs in low-carbon concrete technologies, recycling and reuse strategies, and performance optimization aimed at creating durable and resilient structures. The conference will also feature keynote lectures by world-renowned experts covering key topics such as concrete rheology, high-performance concrete, and the emerging field of 3D-printed concrete.

Serving as a dynamic platform for sharing cutting-edge research, exploring industrial applications, and fostering global partnerships, CSMS 2025 seeks to accelerate the transition toward more sustainable and resource-efficient construction practices worldwide.

KEY NOTE LECTURER

Professor Kamal Khayat, a globally recognized concrete scientist, joined Missouri S&T in 2011 as the Vernon and Maralee Jones Professor of Civil Engineering and Director of the Center for Infrastructure Engineering Studies. He previously led major national transportation research centers, managing over \$37 million in projects, and earlier served at Université de Sherbrooke, where he established a C\$16M advanced research facility. At Missouri S&T, he founded the Clayco Advanced Construction and Materials Laboratory, opened in 2020. He has secured more than \$46 million in research funding, supervised over 100 graduate and postdoctoral scholars, and published more than 500 papers and books.



Professor Khayat is widely recognized as one of the world's leading concrete scientists. His pioneering research in the rheology of cement-based materials led to the development of self-consolidating concrete (SCC), now a global standard in high-rise, precast, and repair applications. SCC has revolutionized construction by improving efficiency, safety, and durability while reducing costs. His groundbreaking contributions have earned him numerous international honors, including the 2020 UM System President's Award for Sustained Career Excellence in STEM and the American Concrete Institute's Robert E. Philleo and Arthur Anderson Medals.



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PROGRAMME

08:00 to 08:30 **Registration**

08:30 to 09:00 **Opening of the Event:**
Prof. Ruben Paul Borg, Chair CSMS 2025 University of Malta
Dr. Melchior Cini, Xjenza Malta, Director R&I Unit

09:00 to 10:30 **Key Note Lecture**
Advances in Rheology of Concrete: Self-Consolidating Concrete; Basic Notions of Rheology; Pumping of HPC with Adapted Rheology
10:30 to 10:45 *Prof. Kamal Khayat, Vice Chancellor Missouri S&T, USA*

10:30 to 10:45 **Coffee Break**

10:45 to 11:00 **Applied Research in Construction Materials and Structures:**
Prof. Simon Fabri, Pro-Rector for Research, University of Malta

Cement and the Climate Boarder Adjustment Mechanism:
Ing. Abigail Cutajar, CEO Climate Action Authority

11:00 to 12:30 **Structural Health Monitoring of Reinforced Concrete Structures**
Prof Edward Gatt, Prof. Ruben Paul Borg (Water Tower Restoration Project, ReSHELAIence HORIZON 2020)

Digital Inspection of Concrete Brudges in Coastal Area
Prof Carl Debono, Prof. Ruben Paul Borg, Dr. Dylan Seychell, Dr. Vijay Prakash, Dr. Muhammed Ali, Prof. Saviour Formosa, Prof. Wei Ding, Prof. Jiangpeng Shu, (DiHICs SINO XJENZA Malta)

Limestone Waste Recycling for Low-Impact High-Performance Concrete
Dr Himanshu Sharma, Prof. Ruben Paul Borg, (ReCON XJENZA Malta)

Low-Carbon High-Performance Mortar for Retrofit of 20th Century Heritage
Ing. Igor Semenov, Prof. Ruben Paul Borg (SINCERE HORIZON Europe)

3D Concrete Printing: Waste Recycling for High Performance Concrete
Ing. Loai Al Mawed, Prof. Mustafa Sahmaran, Prof. Ruben Paul Borg (3DConcrete XJENZA Malta, SMACORT Tubitak)

Waste Glass As A Binder In Low Carbon Cement-Based Materials
Ms. Mirabel Degabriele, Prof Ruben Paul Borg (GLASS_Cem FUSION XJENZA Malta)



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PROGRAMME CONTINUED

- 11:00 to 12:30 **Plastic Waste Recycling in Concrete**
Mr. Giancarlo Marini, Ing. Carlos Jimenez, Prof. Ruben Paul Borg (SPARC TESP XJENZA Malta)
- 12:30 to 13:30 **Lunch Break**
- 13:30 to 15:00 **Key Note Lecture**
High Performance Concrete Applications: Fiber-Reinforced Concrete for Bridge Deck Rehabilitation; Self-Consolidating UHPC; Eco-Friendly Concrete for 3D Printing
Prof. Kamal Khayat, Vice Chancellor Missouri S&T, USA
- 15:00 to 15:45 **CSMS Concrete Industry Forum: Quality Concrete in Malta**
Chair: Perit David Xuereb
Panel Members:
1. Building and Construction Authority, Perit Roderick Bonnici
2. Central Cement Ltd, Mr. Jimmy Sammut
3. Attard Bros Ltd. Mr. Karl Attard
4. PATM Ltd. Mr. Anthony Tabone
5. MCCM, Mr. Andre Cachia
6. KTP, Perit Andre Pizzuto
7. Xjenza Malta, R&I Executive, Rachel De Bono
- 15:45 to 16:00 **Closure of the Conference**





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W O R K S H O P

DATE Monday, 15th December, 2025
TIME 09:30 AM to 13:30 PM

VENUE
Cittadella
Victoria, Gozo

PROGRAMME (GOZO)

- 09:30 to 10:00 **Registration and Coffee**
- 10:00 to 10:30 **Opening of the Workshop:**
Prof. Ruben Paul Borg, Chair CSMS 2025 University of Malta
- 10:30 to 11:15 **Key Note Lecture**
Advances in Rheology of Concrete: Self-Consolidating Concrete
Prof. Kamal Khayat, Vice Chancellor Missouri S&T, USA
- 11:15 to 12:00 **Key Note Lecture**
High Performance Concrete Applications: Fiber-Reinforced Concrete for Bridge Deck Rehabilitation; Self-Consolidating UHPC
Prof. Kamal Khayat, Vice Chancellor Missouri S&T, USA
- 12:00 to 12:30 **Advances in Low Carbon Concrete**
Prof. Ruben Paul Borg
- 12:30 to 12:40 **Closure of the Workshop**
- 12:40 to 13:30 **Networking Lunch**

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