



XVI DBMC

16th International Conference on
Durability of Building Materials
and Components

10-13 October 2023

Abstract submission

Extended to February 2023



清华大学 土木水利学院
SCHOOL OF CIVIL ENGINEERING
TSINGHUA UNIVERSITY

Tsinghua University
Beijing, China

<https://dbmc2023.civil.tsinghua.edu.cn>

Scope

The triennial conferences of DBMC (Durability of Building Materials and Components) have been recognized as a high-quality forum for scientific research and knowledge sharing in the broad areas of civil engineering and architecture. The past 15 editions of DBMC conferences have brought forth deep insights and technical solutions to the key challenges confronting the whole engineering community. Today, more than ever, the engineering community should be mobilized to address the global issue of sustainability for our whole society.

Tsinghua university proudly announces the XVI DBMC conference from October 10-13, 2023 in Beijing, China. The 4-day event will be hosted by the organizing team from the School of Civil Engineering, Tsinghua university, together with the sponsoring organizations and institutions. The XVI DBMC will focus on the solutions of building industry to the sustainability development, thereby promoting the multi-disciplinary exchanges and collaborations amongst material and data scientists, and civil and environmental engineers. The conference topics include: innovative construction materials, components and building elements, their durability and practice of durability in design, intelligent construction, and life-cycle engineering. The XVI DBMC conference provides a communication platform for both scholars and engineers, especially young engineers and students.

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Li Zhang, Tsinghua University, China
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Themes and Topics

Theme 1: Innovative materials
Topic: High performance materials
Topic: Eco-green materials
Topic: Multi-functional and smart materials
Theme 2: Durability
Topic: Actions and mechanism
Topic: Testing and modeling
Topic: Design, assessment and practice
Topic: Specifications and standards
Topic: Historical heritage and monuments
Theme 3: Climate change and resilience
Topic: Climate loads and building resilience
Topic: Urban heat islands and overheating
Topic: Nature-based solution and green roofs
Theme 4: Intelligent construction
Topic: Construction automation and robotics
Topic: Numerical infrastructure and intelligent design
Topic: 3D printing
Theme 5: Life cycle engineering
Topic: Life cycle costing and methods
Topic: Recycling and waste management
Topic: Carbon sink, trapping and reduction

Important dates

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| First call for paper | July 30, 2022 |
| Abstract submission | <i>extended to February, 2023</i> |
| Abstract acceptance | <i>until February 28, 2023</i> |
| Full paper submission | <i>until April 15, 2023</i> |
| Full paper acceptance | <i>until May 31, 2023</i> |
| Early-bird registration | January 1, 2023 to June 30, 2023 |
| Regular registration | <i>from July 1, 2023</i> |

Secretariat

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Invited lectures



Karen Scrivener
Full Professor,
Construction Materials
Laboratory, EPFL
Lausanne, Switzerland

Lecture: Understanding the Durability of Blended Cements particularly LC3 Systems



R. Douglas Hooton
Professor Emeritus,
Department of Civil & Mineral
Engineering,
University of Toronto, Canada

Lecture: Adopting Performance Specifications for Assessing Concrete Durability and Enabling Use of Innovative Concretes



Michael A. Lacasse
Ph.D., P.Eng.
Senior Research Officer,
National Research Council,
Canada

Lecture: Building Resilience to the Effects of Climate Change



Jean-Michel Torrenti
Senior Researcher and
Director
Department Materials and
Structures,
University Gustave Eiffel,
France

Lecture: Durability of Concrete Structures: Couplings between Mechanical and Physico-chemical Behaviors



Geoffrey (Qiping) Shen
Chair Professor of
Construction Management
The Hong Kong Polytechnic
University, China

Lecture: Ensuring Value for Money for Large and Complex Construction Projects: The Value Management Approach



Viktor Mechtcherine
Full Professor and Director,
Institute for Construction
Materials at TU Dresden,
Dresden, Germany

Lecture: Sustainable and Smart Building Materials for Digital Concrete Technologies



Lin-Hai Han
Tenured full professor,
Guangxi University (president)
Tsinghua University,
China

Lecture: Concrete-filled Steel Tubular Hybrid Structures in Severe Conditions: Research, Application and Standard

Sponsors



International Union of Laboratories and Experts
in Construction Materials, Systems and
Structures (RILEM)



International Council for Research and
Innovation in Building and Construction (CIB)



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