

# ANNOUNCEMENT & CALL FOR PAPERS

10<sup>th</sup> International RILEM Symposium on

## Self-compacting Concrete

5<sup>th</sup> International Symposium on

## Design, Performance and Use of Self-consolidating Concrete

2<sup>nd</sup> International Workshop on

## Rheology and Pumping of Fresh Concrete

Changsha, China

Oct 14-17, 2022

### ORGANIZERS

Hunan University

Central South University



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Surendra P. Shah	USA
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Olafur Wallevik	Iceland
Kamal H. Khayat	USA
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Deju Zhu	China
Minhong Zhang	UK
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### ORGANIZING COMMITTEE

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Qiang Yuan	Central South University
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## INTRODUCTION

The 1<sup>st</sup>–9<sup>th</sup> International RILEM Symposium on Self-compacting Concrete were held in Iceland (2003), USA (2005,2008,2010, 2016), Belgium (2007), France (2013) and Germany (2019), respectively. The 1<sup>st</sup>–5<sup>th</sup> Design, Performance and Use of Self-consolidating Concrete were held in China (2005, 2009, 2013, and 2018). Many world-leading experts have given state-of-the-art speeches on SCC. The objective of the 10<sup>th</sup> International RILEM Symposium on Self-compacting Concrete, the 5<sup>th</sup> International Symposium on Design, Performance and Use of Self-consolidating Concrete and the 2<sup>nd</sup> International Workshop on Rheology and Pumping of Fresh Concrete, is to bring researchers and practitioners together to exchange the new advances on the design, construction and manufacturing of SCC.

## VENUE

The proposed city, **Changsha**, is an important commercial, manufacturing, and transportation center in China. Changsha is also a famous historical and cultural city with a history of over 3,000 years. Changsha and its surrounding areas have world-famous humanities and natural landscapes, such as Yuelu Academy, Zhangjiajie, and Tianmen Mountain. Changsha can be easily accessible by direct international flight from many cities. Moreover, Changsha is connected with Shanghai, Beijing or Guangzhou by high-speed train.

## IMPORTANT DATES

Jul. 15, 2022 Submission of 300-word abstracts  
Aug. 15, 2022 Acceptance notification to authors  
Aug. 28, 2022 Submission of draft paper  
Sept. 30, 2022 Submission of final camera-ready manuscripts  
Oct. 14, 2022 Check-in

## CONFERENCE SECRETARY

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## CALL FOR PAPERS

Topics on all aspects of SCC and rheology of cement-based materials will be considered.

### Part 1: SCC

#### 1. Raw Materials and Mix Design for SCC

- ✧ Selection of ingredients
- ✧ Use of chemical admixtures & SCMs & fibers in SCC
- ✧ Mix design procedures

#### 2. Workability of SCC

- ✧ Rheology of SCC
- ✧ Action mechanisms of chemical admixture & SCMs
- ✧ New instruments and test methods

#### 3. Properties of Hardened SCC

- ✧ Development of mechanical properties
- ✧ Visco-elastic properties
- ✧ Durability

#### 4. Structural Performance of SCC

- ✧ Structural properties of SCC elements
- ✧ Bond to reinforcement
- ✧ Seismic resistance
- ✧ Long-term properties of structural elements

#### 5. Constructability and Applications of SCC

- ✧ Production and QA/QC
- ✧ Constructability and formwork pressure
- ✧ Technical and economic evaluation
- ✧ Case studies

### Part 2: Rheology & Pumping

#### 1. Rheological behavior of fresh concrete

- ✧ Non-Newtonian behavior
- ✧ Thixotropic behavior
- ✧ Shear-thinning and shear-thickening behavior
- ✧ Factors affecting rheology and its mechanisms

#### 2. Measurements of rheological parameters

- ✧ Oscillatory shearing test
- ✧ Special testing techniques or setups

#### 3. Numerical simulation of concrete flow

- ✧ Numerical simulation tools
- ✧ Simulation techniques
- ✧ Simulation of concrete flow in different circumstances

#### 4. Rheology & Pumpability

- ✧ Rheology, tribology and pumpability
- ✧ Prediction of pumping
- ✧ Full-scale pumping test
- ✧ Pumping techniques

#### 5. Rheology & 3D printing

- ✧ Rheology and shape holding capacity
- ✧ Rheology and multi-layer casting bonding
- ✧ 3D printing concrete equipment and techniques

## SUBMISSION OF ABSTRACT AND PAPER

Submit your abstract and full paper to [scc2022@163.com](mailto:scc2022@163.com), and the format will be published on the website.

## CONFERENCE PROCEEDINGS

Experts in relevant areas will review all papers. Accepted papers will be published by RILEM and will be sent to ISTP for citation.

## REGISTRATION FEES

	Before Aug.15, 2022	After Aug.15, 2022
General participant	€550	€650
Full-time student	€300	€350
Accompany	€300	€350

Note: Fees include copy of conference proceedings, attendance at all sessions, opening reception, banquet, lunches and dinners from Oct. 14 to 17 tea breaks during the conference, and cultural performance.