ANNOUNCEMENT & CALL FOR PAPERS

10th International RILEM Symposium on

Self-compacting Concrete

5th International Symposium on

Design, Performance and Use of Self-consolidating Concrete

2nd International Workshop on

Rheology and Pumping of Fresh Concrete

Changsha, China

Sep 23-26, 2023

ORGANIZERS

Hunan University

Central South University









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INTRODUCTION

The 1st_9th 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 1st_5th Design, Performance and Use of Self-consolidating Concrete were held in China (2005, 2009, 2013, 2018), Many world-leading experts have given state-of-the-art speeches on SCC. The objective of the 10th International RILEM Symposium on Self-compacting Concrete, the 5th International Symposium on Design, Performance and Use of Self-consolidating Concrete and the 2nd 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

Jun. 15, 2023 Submission of 300-word abstracts

Jul. 15, 2023 Acceptance notification to authors

Jul. 28, 2023 Submission of draft paper

Aug. 31, 2023 Submission of final camera-ready manuscripts

Sep. 23, 2023 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, 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 July 15, 2023	After July 15, 2023
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 Sep. 23 to 26 tea breaks during the conference, and cultural performance.