

Members



Host



The event is sponsored by the DFG, Deutsche Forschungsgemeinschaft. There is **no fee** to participate, but registration is **mandatory**. Please register by emailing dfg-spp2005@tu-dresden.de **before May 25th, 2025**.

Participants and language

Participants are typically researchers, or industry specialists, including material suppliers, rheologists and construction professionals. Language of the event is English.

Local Organizing Committee

VIKTOR MECHTCHERINE	MARTINA AWASSI
SHRAVAN MUTHUKRISHNAN	SILVIA REIßIG
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DFG SPP 2005 Grand Finale

Lab / to / Site

Concrete Rheology

DFG Priority Programme 2005
Rheology of reactive, multiscale,
multiphase construction materials
3-4 June 2024
Dülfer Saal TU Dresden

Monday, June 3


12:00 - 13:00	Registration
13:00 - 13:30	Greetings & Introduction to SPP 2005 <i>Viktor Mechtcherine</i>

Keynote Presentation

13:30 - 14:10	Quantitative Analysis of Concrete's Rheological Properties <i>Dimitri Feys</i>
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Session 1: From Qualitative Comparison Towards Quantitative Prediction

14:10 - 14:40	How Rheometry can Help us Unlock the Secrets of Concrete? <i>Inka Mai and Dirk Lowke</i>
14:40 - 15:00	Computer Vision Based Concrete Rheometry <i>Christian Vogel</i>
15:00 - 15:20	Penetration Rheometry <i>Silvia Reißig</i>

15:20 - 15:50	Coffee Break 
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Session 2: Phase Separation Phenomena in Building Material Systems

15:50 - 16:20	Phase Separation in Concrete: Boon or Misery? <i>Viktor Mechtcherine and Shravan Muthukrishnan</i>
16:20 - 16:40	Addressing Technical Challenges in Concrete Pumping: Phase Separation Mitigation <i>Daniil Mikhalev and Mortiz N. Kluwe</i>
16:40 - 17:00	Casting of Concrete – Vibration and De-airing of Cementitious Systems <i>Bastian Strybny and Julian Link</i>

Session 3: Influence of Molecular/Microscopic Changes on Macroscopic Properties

17:00 - 17:30	Influence of Molecules, Small Particles and Surfaces on the Rheology of Cement Paste <i>Dietmar Stephan and Jürgen Neubauer</i>
17:30 - 17:55	Dynamic Phase Content and Rheology <i>Cordula Jakob, Neven Ukrainczyk and Jiaxin Chen</i>
17:55 - 18:15	Calcined Clays and their Reactivity in Cementitious Materials <i>Thomas Sowoidnich and Thorsten Schäfer</i>

19:00 - 22:00

Evening Function



[<https://www.carolaschloesschen.de>]

Evening at “Carolaschlösschen”, a historic restaurant in Dresden. Established in 1895, this Neorenaissance-style venue is beautifully situated on the picturesque Lake Carola.



Tuesday, June 4

Keynote Presentation

09:00 - 09:40	Practical Application of Rheological Assessment through Experimental and Numerical Methods <i>Nicolas Roussel</i>
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Session 1: Intertwining Rheometry and Analytics

09:40 - 10:10	Inside Concrete Flow – Overcoming Challenges from Heterogeneity, Reactivity and Application <i>Michael Haist and Wolfram Schmidt</i>
10:10 - 10:30	Combined Methods for Characterization of Cement Pastes <i>Tamara Meyer and Christopher Klein</i>
10:30 - 10:50	In-Situ Microstructure Investigation of Mineral Suspensions <i>Mahmoud Eslami</i>

Coffee Break + Photograph

10:50 - 11:20



Session 2: Modular Toolbox of Model Systems and Techniques

11:20 - 11:50	Multiscale Simulation of Concrete Rheology <i>Rüdiger Schwarze, Carsten Schilde and Holger Steeb</i>
11:50 - 12:10	Meso- and Microscale View on Concrete Flow: New Results from CFD-DEM Simulations <i>Sina Hassanzadeh</i>
12:10 - 12:30	Optical observation of flow profiles in model System for Cementitious Material <i>Günter K. Auernhammer</i>

12:30 - 13:30

Lunch

13:30 - 13:50	Interlaboratory Studies on the Rheology of Cementitious Materials <i>Alexander Mezhev, Bastian Strybny and Shravan Muthukrishnan</i>
13:50 - 14:10	Interlaboratory Studies on Calcined Clays' Reactivity <i>Thomas Sowoidnich, Christiane Rößler and Christopher Hoffmann</i>
14:10 - 14:30	Storing and Managing Research Findings of over 6 Years <i>Shravan Muthukrishnan and Daniel Jansen</i>

14:30 - 15:00

Closing Remarks

15:00

Farewell Drinks