

Venue

Dresden, capital of Saxony and host city to the Summer School, is a special place in many ways. It welcomes its visitors with a unique constellation of the river Elbe in harmony with the old city centre. You can still experience traditional Dresden, dating back to the Baroque era with famous sights, such as the Zwinger, Semperoper, cathedral, the recently rebuilt Frauenkirche and many famous art collections (e.g. Grünes Gewölbe).



The Technische Universität Dresden, the venue of the Summer School, is one of eleven German Universities of Excellence since its being named as such in June 2012. Its roots date back to 1828. Nowadays, it is the home of learning for about 35,000 students, offers scientific education through 14 different faculties and serves industry with its vast resources.

The lectures at the Summer School will be held in Room E02 at Georg-Schumann-Str. 7. The exercises will be carried out in the laboratories of the research institutes participating in the DFG GRK 2250.

Supporting organisations



Organizing committee

Viktor MECHTCHERINE	Iurie CUROSU
Martina AWASSI	Ting GONG
Martina GÖTZE	Ali HERAVI

Accommodation

Free accommodation will be provided to international participants in a hotel, which is within walking distance to the Summer School facilities.

Further information

Further information can be accessed through the event homepage www.tu-dresden.de/biw/ifb/grk2250, or you may contact our school secretary:

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TECHNISCHE
UNIVERSITÄT
DRESDEN



www.tu-dresden.de

Dresden International
Summer School (DISS)
of DFG GRK 2250

**MINERAL-BONDED
COMPOSITES FOR
ENHANCED
STRUCTURAL IMPACT
SAFETY**

Dresden,
14-19 July 2019

Summer School of DFG GRK 2250

The Dresden International Summer School (DISS) is organized by the Research Training Group GRK 2250 “Mineral-bonded composites for enhanced structural impact safety” established in 2017 by the German Research Society (DFG) at the TU Dresden. Existing concrete or reinforced concrete structures feature, as a rule, a relatively low resistance to various types of dynamic loading, such as earthquake, impact or blast. The goal of GRK 2250 is to bring substantial improvements in the impact resistance of existing buildings by applying thin layers of innovative, mineral-bonded composites. This approach should enhance public safety and the reliability of vitally important infrastructure in economically and ecologically viable manner.

Scope

The goal of the Summer School is to bring master and PhD students working on impact resistance of concrete structures and fiber-reinforced cement-based materials together and give them a comprehensive overview of the state-of-the-art research in the field. The focus will be on use of textile-reinforced concrete (TRC) and strain-hardening cement-based composites (SHCC) for strengthening of existing concrete structures against impact loading. Lectures and exercises will be offered on the following topics:

- Material design and production of high-performance mineral-based composites
- Mechanical characterization and material modelling at high strain rates
- Structural design and numerical simulation of strengthened elements
- Sustainability assessment

Lecturers

The International Summer School is offered as a series of interactive lectures by leading international experts in the field, such as:

Prof. Edeltraud Günther (TU Dresden)
Prof. Stefan Hiermaier (Fraunhofer EMI)
Prof. Barzin Mobasher (Arizona State Univ.)
Prof. Josko Ozbolt (Universität Stuttgart)
Prof. Marco di Prisco (Politecnico di Milano)
Assist. Prof. Ravi Ranade (University at Buffalo)
Prof. Bert Sluys (TU Delft).

The lectures will be accompanied by practical exercises, laboratory tours, presentations by participants and other activities.



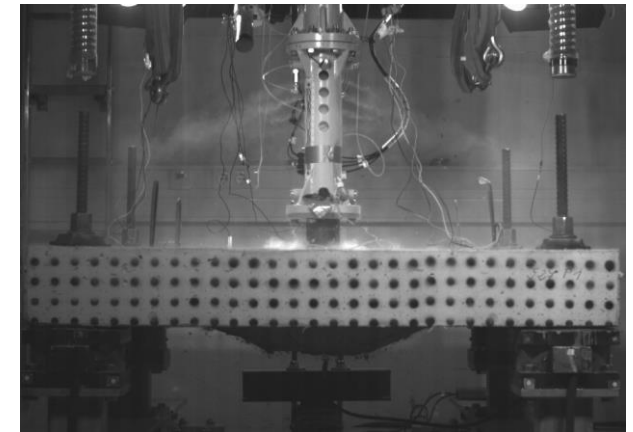
Participants, completion

The number of participants will be limited to 20 top, mostly international master and PhD students additionally to the PhD students of GRK 2250. At the conclusion of the Summer School a certificate of participation will be issued to all participants. Credit points, if desired, will be certified as well to the participants who submit a written report either on the results and evaluation of lab exercises.

Application

Well-qualified master and PhD students are encouraged to apply for participation in the Summer School by March 31, 2019. The applications will be reviewed by a jury at the TU Dresden. Decisions on participation will be made by May 1, 2019. Please note that due to the limited number of participants not all applicants can be invited to join the Summer School. In cases of equivalent qualifications, the person(s) applying first will be preferred. The application should include:

- CV
- Motivation letter
- Recommendation letter by a professor.



Fees and sponsoring

Participation in the Dresden International Summer School including an attractive cultural program is free of charge to all participants. Beyond that, TU Dresden will cover the accommodation costs of international students completely and also take over 50% of travel expenses. The event is supported by RILEM (rilem.org), fib (fib-international.org), ACI (concrete.org), ACF (asianconcretefederation.org), and IA-FraMCoS (framcos.org).