### **Venue**

Dresden, host city to the Summer School and capital of Saxony, is a special place in many ways: it welcomes its visitors with a unique constellation of the river Elbe in harmony with the city centre's development. 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. Nowdays, 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 Alfred-Hütter-Laboratory of the Inst. of Construction Materials at Georg-Schumann-Str. 7a.

### **Presenter**



# Local organizing committee

Viktor MECHTCHERINE Jörg R. NOENNIG Martina AWASSI Iurie CUROSU Steffen MÜLLER Egor SECRIERU

### **Accommodation**

Free accommodation will be provided to international participants in the International Guest House of the TU Dresden, which is within walking distance of the Summer School facilities. In well justified cases German participants will be offered rooms free of charge as well.

## **Further information**

Further information can be accessed through the event homepage <a href="https://www.tu-dresden.de/biw/ifb/diss2015">www.tu-dresden.de/biw/ifb/diss2015</a>, or you may contact our school secretary:

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www.tu-dresden.de

Dresden International Summer School (DISS)

HIGH-PERFORMANCE
FIBRE-REINFORCED
CEMENT-BASED
COMPOSITES (HPFRCC)
FOR FUTURE
INFRASTRUCTURE

Dresden

26-31 July 2015

#### Summer School of Excellence

The use of new types of fibre-reinforced concrete could revolutionise the planning, development, dimensioning, structural and architectural design, construction and renovation of building structures in many areas of application. The International Summer School focuses on novel high-performance fibre-reinforced, cement-based composites (HPFRCC) for new construction as well as for the strengthening and repair of buildings and infrastructure. The Summer School is part of the TU Dresden's Institutional Strategy funded by the Excellence Initiative of the German Federal and State Governments.

# Scope

The goal the Summer School is to bring PhD students and post-doctoral candidates working with novel HPFRCC together and give them a comprehensive overview of the state-of-the-art research in the field of the material design and testing of such materials as well as of their use in new construction and for the strengthening and repair of buildings and infrastructure. The focus will be on textile-reinforced concrete (TRC) and strain-hardening cement-based composites (SHCC). Lectures and exercises will be offered to the following topics:

- Production and early age properties
- Mechanical characterisation and material modelling
- Structural design: New structures and strengthening
- Durability and durability design
- Building physics and architectural design.

#### Lecturers

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

Prof. Michael Kaliske (TU Dresden)

Prof. Minoru Kunieda (Gifu University)

Prof. Viktor Mechtcherine (TU Dresden)

Prof. Barzin Mobasher (Arizona State Univ.)

Prof. Marco di Prisco (Politecnico di Milano)

Prof. Volker Slowik (HTWK Leipzig).

The lectures will be followed by theoretical and practical exercises.



# Participants, completion

The number of participants will be limited to 30 top, mostly international PhD students and Post-Docs. At the conclusion of the International Summer School session 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 or on the solution of theoretical tasks.

## **Application**

Well-qualified PhD students and Post-Docs are encouraged to apply for participation in the Summer School by **April 30, 2015**. The applications will be reviewed by a jury at the TU Dresden. Decisions on participation will be made by Mai 15, 2015. 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 your professor.



## Fees and sponsoring

Participation in the Summer School includes an attractive cultural program which is **free of charge** to all participants. Beyond that, TU Dresden will cover the travel and accommodation costs of international applicants up to 100%. In well grounded cases partial support can be offered German participants as well. The event is supported by RILEM (www.rilem.org), fib (www.fibinternational.org.), IA-FraMCoS (framcos.org), and DAfStb (www.dafstb.de).