



Research Training Group DFG GRK 2250

Mineral-bonded composites for enhanced structural impact safety

SUMMER SCHOOL 2024

Dresden, 18-20 September 2024

*In conjunction with the
XI International Symposium on Fiber Reinforced Concrete – BEFIB 2024*



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SCIENTIFIC AND SOCIAL PROGRAMME

WEDNESDAY, 18TH OF SEPTEMBER 2024

Time	Place	Event
19:00 – 21:00	TU Dresden	Welcome event

THURSDAY, 19TH OF SEPTEMBER 2024

Time	Place	Event			
8:45 – 9:00	TU Dresden, Von-Mises-Bau, Georg-Schumann- Str. 7, 01187 Dresden Room E02	Official opening	Viktor Mechtcherine	Chairperson: Cesare Signorini	
9:00 – 9:15		Introduction of the participants	All		
9:15 – 10:15		<i>Textile Reinforced Concrete for Sustainable Infrastructural Applications</i>	Flávio de Andrade Silva <i>PUC Rio de Janeiro, Brazil</i>		
10:15 – 10:45		Coffee break			
10:45 – 11:15		TU Dresden, Von-Mises-Bau, Georg-Schumann- Str. 7, 01187 Dresden Room E02	<i>A1/III – Development and evaluation of fiber-based 3D structures for high energy dissipation in impact-loaded concrete components</i>	Juan D. Ortega	Chairperson: Waseem Ashraf
11:15 – 11:45			<i>A2/III – Fiber and sustainable interphase modification</i>	Julia Hübner	
11:45 – 12:15	<i>A3/III – Green mineral-bonded reinforcing materials with fiber reinforcement</i>		Ameer H. Ahmed		
12:15 – 13:15	Lunch				
13:15 – 14:15	TU Dresden, Von-Mises-Bau, Georg-Schumann- Str. 7, 01187 Dresden Room E02	<i>Engineering solutions to improve the resistance of RC protective structures to extreme loads</i>	Avraham N. Dancygier <i>Technion – Israel Institute of Technology, Israel</i>	Chairperson: Julia Hübner	
14:15 – 14:45		<i>A4/III – Automated reinforcement with mineral-bonded fiber composites</i>	Chentaoya Hu		
14:45 – 15:15		<i>A5/III – Engineering model for calculation and design of RC slabs strengthened against impact</i>	Nicholas Unger		
15:15 – 15:45		<i>A6/III – Strengthening of structures subjected to normal forces against impact</i>	Ghazaleh Taheri		
17:00 – 21:30	Networking event and dinner				

FRIDAY, 20TH OF JUNE 2024

Time	Place	Event		
8:30 – 9:30	TU Dresden, Von-Mises-Bau, Georg-Schumann- Str. 7, 01187 Dresden Room E02	<i>Cohesive fracture model for crack propagation in pull-out of fibres from concrete</i>	Andrea Nobili <i>University of Modena and Reggio Emilia, Italy</i>	Chairperson: Ameer H. Ahmed
9:30 – 10:00		<i>B1/III – Multiscale simulation of the fracture behavior of FRC under impact</i>	Stefan Löhnert	
10:00 – 10:30		<i>B3/III – Robust Design Optimization of hybrid strengthening layers at impact</i>	Abhinav A. Khedkar	
10:30 – 11:00		<i>B4/III – Failure simulation of structures under impact</i>	Andres O. Oropeza	
11:00 – 11:30		Coffee Break		
11:30 – 12:10		<i>Image-based techniques for crack monitoring in civil engineering material testing</i>	Hans-Gerd Maas <i>TU Dresden, Germany</i>	
12:10 – 12:40		Pitch presentations by international students		International students
12:40 – 14:15		Floating poster session and lunch		
14:15 – 14:45		<i>C1/III – Concepts of 3D particle tracking for energy dissipation analyses in impact</i>	Milad Davoudkhani	Chairperson: Abhinav A. Khedkar
14:45 – 15:15		<i>C2/III – Sustainability and resilience evaluation of reinforcement strategies with novel composites</i>	Waseem Ashraf	
15:15 – 15:45	<i>C3/III – AI methods for the sustainable and synergetic use of the results of GRK 2250 for the design and optimization of impact protection</i>	Jinghou Bi		
16:00	Event closure and farewell			