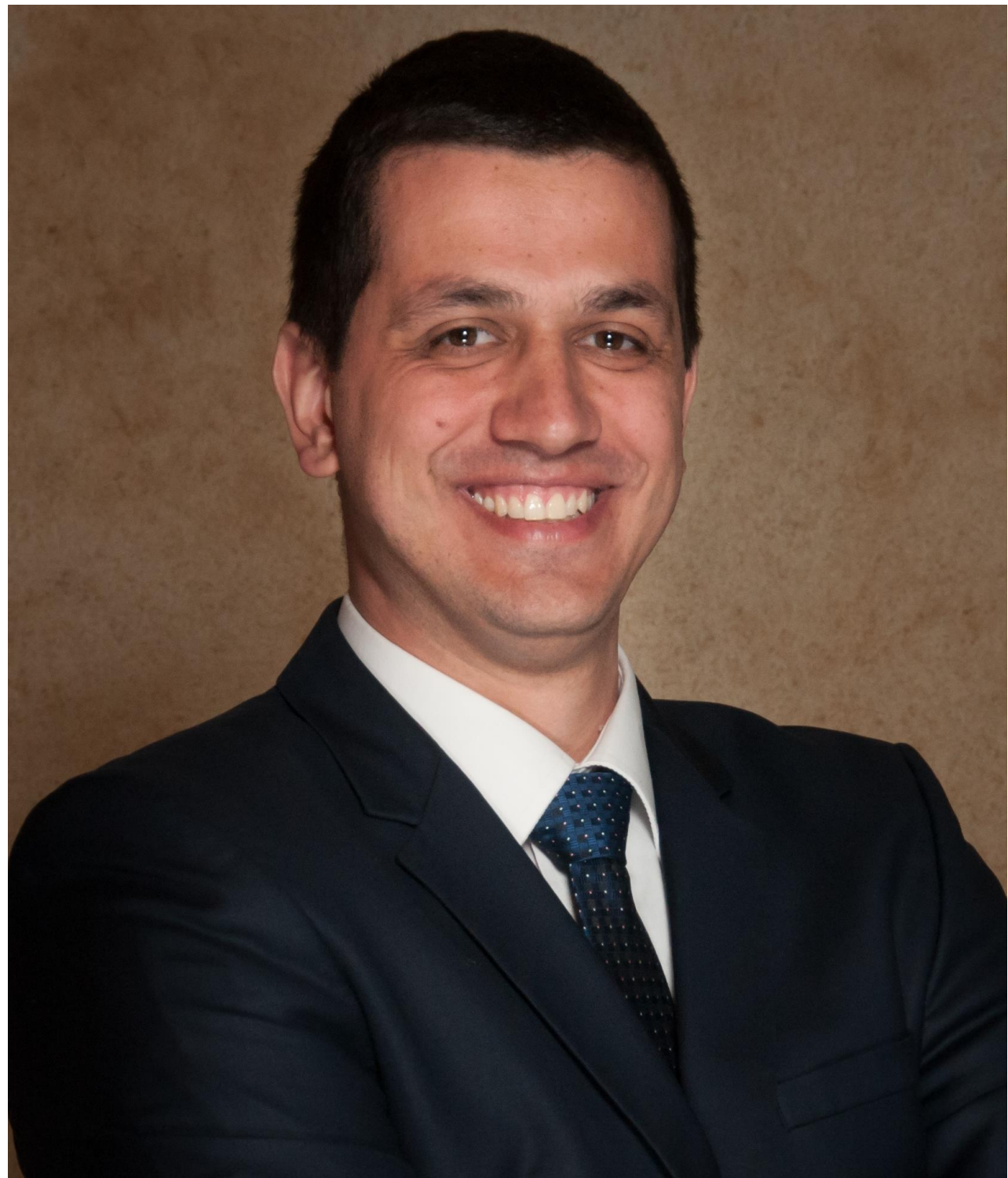


结构防灾减灾工程系 学术讲座



题目 (Topic): Seismic Performance of Reinforced Concrete Structures in Recent Earthquakes

报告人 (Speaker): Marko Marinković 副教授

时间 (Time): 2026年10月29日 (周四, 14:00-16:00)

地点 (Venue): 土木大楼B206

主持人 (Chair): 周志光 教授

报告人简介 (About the Speaker)

Dr. Marko Marinković is an Associate Professor at the Faculty of Civil Engineering, University of Belgrade, specializing in earthquake engineering, structural dynamics, and seismic assessment and strengthening of buildings. He earned his PhD in 2018 through research conducted at the University of Belgrade and RWTH Aachen University (Germany), developing an innovative system for seismic-resistant masonry infills. He is a co-inventor of a patented seismic connection system and leads the RELAR project on rapid earthquake loss assessment and recovery. He serves as Vice President of the Serbian Association for Earthquake Engineering and chairs its Learning from Earthquakes committee. He contributes to the development of the second generation of Eurocode 8. His experience combines experimental and numerical research, structural design, vibration mitigation, and earthquake reconnaissance missions in Albania, Croatia, and Türkiye. His doctoral research received awards from the Chamber of Commerce and Industry of Serbia and the Association of Structural Engineers of Serbia.

报告简介 (Outline)

Based on field data and visual evidence collected during post-earthquake reconnaissance missions, this presentation evaluates the seismic performance and primary failure modes of reinforced concrete (RC) structures affected by the severe earthquakes in Albania (2019), Croatia (2020), and Turkey (2023). Across these three regions, the observed structural damage highlights recurring vulnerability patterns rooted in non-ductile detailing, design oversights, and inconsistent code enforcement. Key failure mechanisms include soft-story collapses driven by open ground-floor commercial spaces, severe shear and flexural cracking in inadequately confined columns and beam-column joints, and lap-splice failures caused by insufficient transverse reinforcement and wider stirrup spacing. Additionally, the interaction between RC frames and unreinforced masonry infill walls consistently induced short-column effects and out-of-plane infill failures, posing substantial falling hazards and overall structural instability. By synthesizing first-hand photographic documentation and damage statistics across these distinct seismic events, the presentation contrasts regional construction practices against actual ground motion demands, ultimately emphasizing the urgent necessity for rigorous quality control, modern code compliance, and targeted retrofitting strategies to mitigate collapse risks in existing RC building stocks.

欢迎各位老师和同学参加!

All interested are welcome!