



International Workshop on Seismic Performance of Sub-standard RC Structural Members

April 7, 2023 – Friday

Program / Time Zone GMT+3

10:00 - 10:20 Welcoming and Opening

Session 1 **Session Chairs: Caglar Goksu Akkaya & Uğur Demir**

10:20 - 10:40 Alper İlki (Istanbul Technical University)

"Seismic Performance of Sub-standard Columns Project Overview and Insights from Recent Earthquake Observations"

10:40 - 11:00 Uğur Demir (Izmir Institute of Technology)

"Exploring Seismic Performance through Research Projects and Laboratory Work"

11:00 - 11:20 Safiye Gündoğan (Istanbul Technical University, Kırklareli University)

"Investigating the Seismic Performance of Sub-standard Columns under High Axial Stresses and Long-Term Loading"

11:20 - 11:40 Ufuk Yazgan (Istanbul Technical University)

"Substandard Buildings with Differential Support Settlements: Preliminary Results Related to a Challenging Problem"

11:40 - 12:00 Sadık Can Girgin (Dokuz Eylül University)

"Numerical Simulation of Shear-Dominated RC Members with Nonlinear Truss Analogy"

12:00 - 12:20 Lucas Hogan (University of Auckland)

"Seismic Assessment of Corroded RC Structures Using a Simplified Mechanics Approach"

12:20 - 12:40 Caglar Goksu Akkaya (Istanbul Technical University)

"From the Lab to the Field: Experimental Studies on the Seismic Performance of Sub-standard RC Structural Members and Related Observations from the 06 February 2023 Kahramanmaraş Earthquakes"

12:40 - 13:50 Break

Session 2 **Session Chairs: Ufuk Yazgan & Ö.Tuğrul Turan**

13:50 - 14:10 Riyadh Al-Mahaidi (Swinburne University of Technology)

"Collapse Assessment of Seismically Damaged Low Ductility RC Columns Strengthened with CFRP Composites"

14:10 - 14:30 Halil Sezen (Ohio State University)

"Seismic Performance and Collapse of Reinforced Concrete Buildings"

14:30 - 14:50 Theodoros Rousakis (Democritus University of Thrace)

"Retrofit of Deficient Reinforced Concrete Columns Assisted by Testing Towards Advanced Resilience - Critical Open Issues"

14:50 - 15:10 Ciro Del Vecchio (University of Sannio)

"Seismic Performance of Existing RC Buildings: Learning from Field Observations and Laboratory Tests"

15:10 - 15:30 Marco Di Ludovico (University of Napoli Federico II)

"Recent Advances in the Seismic Strengthening of Existing RC Buildings with Composite Materials"

15:30 - 15:50 Erdem Canbay (Middle East Technical University)

"Reason for Sub-standard Reinforced Concrete Structures"

15:50 - 16:10 Idris Bedirhanoglu (Dicle University)

"New Retrofitting Technique for Substandard Columns to Prevent Shear-Compression Failure"

16:10 - 16:30 Closing