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Sa zadovoljstvom Vas pozivamo na predavanje:

## **Drift-Driven Design and Assessment: Guides for Earthquake Engineers**

Predavač:

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## **Abstrakt**

Drift is the key response parameter in design and assessment of building structures subject to earthquake ground motions. Yet, in typical seismic design and assessment procedures, drift appears as the last thing the earthquake engineer is asked to check. Perhaps this is because of the historical “force-based” roots of the codes or it is because of perceived difficulty in estimating inelastic displacements. If one appreciates that during an earthquake “the structure is not loaded but it loads itself”, as stated by Professor Mete Sozen, it becomes obvious that drift should be the primary response parameter to check. In this talk, a collection of guides will be presented to help earthquake engineers in drift-driven design and assessment. The centerpiece is a stunningly simple yet efficient expression for estimating drift in a building, known as the Velocity of Displacement, which was proposed by Prof. Mete Sozen in 2003. Original evidence and findings from additional research studies will also be presented.



## **Predavač**

Ayhan Irfanoglu is professor and associate head of civil engineering in the Lyles School of Civil Engineering at Purdue University, West Lafayette, Indiana, USA. He holds a BSCE from the Middle East Technical University in Ankara, Turkey, and MSCE and PhD from the California Institute of Technology. Prior to joining Purdue University in 2005, he worked as a consulting engineer at Wiss, Janney, Elstner Associates in Emeryville, California. His main teaching and research interests are related to structural engineering with focus on structural dynamics, earthquake engineering, engineering seismology, and classical as well as simulation-based structural analysis. Starting with the 1994 Northridge (California) earthquake, he participated in several reconnaissance following earthquakes, namely, 1999 İzmit and Düzce/Turkey, 2003 Bingöl/Turkey, 2010 Haiti, 2011 Erciş/Turkey, 2016 Meinong/Taiwan, and 2017 Puebla/Mexico earthquakes. He is a member of the American Concrete Institute (ACI), Disaster Reconnaissance Committee (Cmte 133), and a member and the secretary of the Simplified Design of Concrete Buildings Committee (Cmte 314). He is also a member of the Earthquake Engineering Association of Turkey, Earthquake Engineering Research Institute (USA), Seismological Society of America, and the American Society of Civil Engineers (ASCE). Dr. Irfanoglu is an associate editor for the ASCE Journal of Performance of Constructed Facilities and the Frontiers in Built Environment – Earthquake Engineering.