

# NOVEMBER 2023 MEETING ANNOUNCEMENT

This month we will be hearing from:

***Abdolreza (Reza) Osouli, Ph.D., P.E.***

Title:

***Assessing Risk of Structure Damage Over Abandoned Coal Mines***



Abdolreza (Reza) Osouli, Ph.D., P.E. is the executive director of Marino Engineering Associates, Inc. (MEA). He has been active in research and has published over 70 peer-reviewed journal and conference papers. Dr. Osouli's presentation will cover key aspects of mine subsidence engineering, a subject that is not well understood, and embraces a number of engineering disciplines. He will present Case histories which illustrate different ground movement and damage scenarios. This virtual presentation (Via Zoom) will be presented in a manner that is understandable to anyone interested in learning more about mine subsidence.

**WHEN:** November 8, 2023 1200 - 1300

**WHERE:** In Person at Matsu College Room JKB 128  
-or- Virtually via Zoom Meeting Link  
Please refer to the meeting email/calendar invite.

**LUNCH:** Pizza (\$10)

**ZOOM MEETING LINK:**

<https://us06web.zoom.us/j/84927973970?pwd=MWsxYUhhSTdoNzJiMmZiaVg1b0dzQT09>

## **Presentation:**

### **Assessing Risk of Structure Damage Over Abandoned Coal Mines**

**Abdolreza (Reza) Osouli, Ph.D., P.E**  
**Marino Engineering Associates, Inc.**  
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This presentation covers key aspects of mine subsidence engineering, a subject that is not well understood, and embraces a number of engineering disciplines. It focuses on the causes of mine subsidence and how mine stability relates to the resulting ground movements. Different mining and geologic conditions determine the mode of failure of the mine. The mode of mine failure in turn affects the resulting subsidence movement. Prediction of subsidence and damage potential or risk are also key aspects of subsidence engineering. Case histories will be presented which illustrate different ground movement and damage scenarios. This presentation will be presented in a manner that will be understandable to anyone that would be interested in learning more about mine subsidence.

## **Biography:**



Abdolreza (Reza) Osouli, Ph.D., P.E. is the executive director of MEA. He started working at MEA in 2008 when he was at the University of Illinois Urbana Champaign working on his PhD degree in geotechnical engineering. With MEA, Dr. Osouli over the years has graduated from a Staff Engineer, a Geotechnical Engineer, a Project Engineer, a Senior Geotechnical Engineering Consultant to the Executive Director. Dr. Osouli also has been active in research and has published over 70 peer-reviewed journal and conference papers related to deep excavations, pier group

foundations, geotechnical numerical analyses, geo-construction, slope stability, subsidence engineering, mine stability, rock mechanics, surface erosion levees, scours in riverbeds, base and subbase aggregate quality control for pavements, seismic performance of retaining walls, and liquefaction. Dr. Osouli also has co-authored many technical reports for various projects related to subsidence engineering and forensic engineering. Dr. Osouli has supervised engineers and technician in conducting subsurface investigation involving field and laboratory testing on soils and rocks, grouting operation of underground mine voids, seepage and stability of levees and slopes, design and analyses of underground coal mines as practicing engineer and researcher. Dr. Osouli has been member of ASCE G-I Embankments, Dams and Slopes Committee and Geotechnics of Soil Erosion for a number of years.