

2023 ARMA Future Leader Webinar Series

Every Two Weeks on Fridays 9-10 AM MT



11th lecture: August 11, 2023

Please reach out to shahrzad.roshankhah@utah.edu to get the Zoom meeting information.

Speaker: Zoheir Khademian

Title & Abstract:

Investigation of parameters affecting seismic potentials in a deep longwall mine

Seismicity can be induced by rock failures or slips along geologic structures around mine workings. Depending on their intensity and proximity to the working area, seismic events may raise safety concerns in underground mining operations. However, the geological and mining parameters leading to destructive seismic events are poorly understood. Monitoring seismic events coupled with geomechanical modeling can be useful tools for understanding underlying mechanisms and main factors causing destructive seismic events. This talk reviews seismic events recorded in a deep longwall mine (>450 m) in Virginia and evaluates the geologic conditions that lead to areas with high seismic event activities (> 1 ML) during mining of longwall panels.

Biography:

Zoheir Khademian received his PhD from the Colorado School of Mines in mining and earth systems engineering. He is working at NIOSH in the ground control team. His main interest is to integrate lab testing, field measurements, and modeling tools for improving mine layout and support system designs.

