



2024 ARMA Awards

N.G.W. COOK PH.D. DISSERTATION AWARD

Sana Zafar

“Geophysical Signatures of Crack Initiation and Growth in Rocks under Uniaxial Compression”

M.S. THESIS IN ROCK MECHANICS AWARD

Cameron Philips

“Quantifying Causes and Variability of Rockfall Activity: Comparison of Rock Slopes Monitored Using Terrestrial Remote Sensing”

CASE HISTORY AWARD

Neda Dadashzadeh, Lindsay Moreau-Vertaan, Kathy Kalenchuk

“Methodology for Quantifying Domain-Based Seismic Hazard Using Robust Causal Factor Analyses Focused on Geology, Geometry, and Mining Activities”

APPLIED RESEARCH AWARD

Andrea Lisjak, Omid Mahabadi, Bryan Tatone

“Acceleration of a 2D/3D Finite-Discrete Element Code for Geomechanical Simulations Using General Purpose GPU Computing”

ARMA DISTINGUISHED SERVICE AWARD

Wei Fu, *Itasca Consulting Group* (Junior Level)

Akash Chaurasia, *Colorado School of Mines* (Student Level)

PRESIDENTIAL CITATION

Herbert F. Wang, Professor Emeritus, *University of Wisconsin-Madison*

For his service as Chair of the Selection Committee for the Transition of Management and Directorship of ARMA, 2023-2024.

ARMA BEST PAPERS

Puneet Seth, Duane Mikulencak, Ronny Hofmann, John W. Dudley

“Evolution of the Reservoir Stress Path During Depletion and Re-inflation and Its Implications”

Avesiena A. Primadiansyah, Erik Eberhardt, Ryan Campbell, Sandi Firmanulhaq, Hendri Silaen, Anton Perdana

“Integrating Stress Fracturing and Bulking Monitoring for Deformation-based Ground Support Design Calibration in a Deep Caving Operations”

David O. Potyondy, Wei Fu

“A 3D Subspring Network Breakable Voronoi Model for Rock: Laboratory-Scale Behavior”

Eve Meltzer, Damian Stefaniuk, Herbert H. Einstein

“A Microscale Analysis of Millimeter-wave Induced Vitrified Basalt for Use in Enhanced Geothermal Energy Systems”

Sangcheol Yoon, Romain Prioul, William Bailey, Richard A. Birchwood, Adrian Rodriguez-Herrera, Joe Stefani

“Assessing CO₂ Leakage Risks and Fault Stability: A Coupled Flow and Geomechanics Simulation with Uncertainty Analysis of Fault Properties”

John-Paul Latham, Laurent Gerbaud, Naveen Velmurugan, Jorge Aising, Cedric Chambres, Sadjad Naderi, Jiansheng Xiang, Xiaowei Yang

“A Study of Rock Breakage under Extreme Submerged Confining Pressure: Can DTH Hammer Drilling Deliver?”