



## 2020 ARMA Awards

### **N.G.W. Cook Ph.D. Dissertation Awards**

The Role of Pore Structure in Permeability Evolution Observed in Laboratory Studies of Marcellus and Wolfcamp Shale. **Brandon Schwartz**. Nominated by Derek Elsworth.

Investigating Brittle Rock Failure and Associated Seismicity Using Laboratory Experiments and Numerical Simulations. **Qi Zhao**. Nominated by Giovanni Grasselli.

Hydraulic Fracture Interacting with Partially, Cemented and Non, Persistent Natural Fracture. **Wei Fu**. Nominated by Andrew Bunger.

### **M.S. Thesis Award**

Geomechanics and Mineralogical Characterization of Intact Heterogeneous Rocks from the Legacy Skarn Deposit. **Matthew David Clark**. Nominated by Jennifer Day.

### **Rock Mechanics Research Award**

Damage Characterization Due to Microcracking Near Coalesced Hydraulic. *Journal of Rock Mechanics and Geotechnical Engineering*, 10, 805, 817. 2018. **Hampton, J.C., Gutierrez, M., Matzar, L., Hu, D., Frash, L.** Nominated by Dr. Norm Warpinski.