



# SUMMERXCHANGE

**Access to the SUMMERXCHANGE technical program becomes available July 19, 2022. Watch and learn at your convenience this summer with full availability to presentations and sessions through the end of September.**

## Live Virtual Keynote

- The sizzling content continues with a dynamic panel discussion. More information coming soon!

## Recorded Presentations

- **MINEXCHANGE 2022 Keynote Session:**
  - The Undiplomatic Truth: Mining Missing the Mark on Securing Popular Support  
*Ambassador Todd Chapman, International Business Consultant*
  - The Power of Purpose (Robert E. Murray Innovation Lecture)  
*George Hemingway, Managing Partner, Stratalis*
- **Signature Lectures:**
  - Health & Safety Division Breakfast: Mining's Social License in an ESG World  
*Hugh Thatcher, Thatcher Company*
  - Dreyer Lecture: Navigating the Hurricane of the Junior Resource Market in the Search of Ore Deposits  
*Jeff Pontius, Geologist*

## Technical Session Content Capture (30+ presentations - audio and slides)

- **Coal & Energy: Automation and Innovation in Mine Production Operations**
  - A Discussion of the Design and Development of an Intrinsically Safe Drone for Underground Coal Mining Applications  
*Pedram Roghanchi, Assistant Professor, New Mexico Institute of Mining & Technology*
  - Development of Shuttle Car Autonomous Docking with a Continuous Miner Using 3-D Depth Cameras  
*Joseph Sottile, Professor, University of Kentucky and Sibley Miller, University of Kentucky*

Concepts for the Development of an Autonomous Roof Bolting Module for Enhancing Miner Safety

*Steven Schafrik, University of Kentucky; and Anastasia Xenaki, Mining Engineer, University of Kentucky*

Developing a Semi-Autonomous Shuttle Car: Performance of a Lab-Scale Prototype

*Vasilis Androulakis, University of Kentucky*

- **Coal & Energy: Accessing Capital in the Ever-Changing Energy Landscape**

Social Challenges for Coal in Raising Capital

*John Craynon, Teaching Assistant Professor, West Virginia University*

- **Environmental: Environmental Policy and Regulation**

Status of Waters of the U.S. in the Arid West

*Brian Lindenlaub, Vice President, WestLand Resources, Inc*

Implications of Operating in an Environmental Justice Community

*Alma Feldpausch, Principal Health Scientist, Ramboll US Consulting*

Real-Time Monitoring and Data Management of a NEPA Draft EIS Public Comment Period

*Jessica Joyner, Project Manager, Brown and Caldwell*

Decarbonization Strategies for Miners

*Ron Miller, Principal, Reliant Energy Solutions LLC*

- **Environmental: Mine Water Management**

Making Informed Operational Decisions for Water Management at a Remote Legacy Mine Using a Probabilistic Water Balance Model

*Dale Kolstad, Vice President, Barr Engineering Co.*

Geochemical Model to Predict Aquifer Restoration Following Low pH In-Situ Uranium Recovery

*Kathryn Johnson, Senior Geochemist, Barr Engineering Co.*

Wetbud: A Constructed Wetlands Design Tool

*Caroline Gerwig, Student*

Impacts Assessment to Wetlands During Mine Development – Looking Beyond Drawdowns

*Vikas Tandon, Lead Environmental Scientist, Foth Infrastructure & Environment, LLC*

- **Mining & Exploration: Geosciences: Geology: Making the Grade - Operational Practices for Improving Grade Control**

Improvement of Productivity Through Mine to Mill Reconciliation

*Abani Samal, Principal, GeoGlobal LLC*

An Operational Tool to Adjust Ore Polygons for Blast Movement

*Seshadri S. Kanchibotla, Director, Seshat Consultants Pty Ltd*

- **Mining & Exploration: Management: Mine Financing & Investing**

Digital and Technological Trends Enabling Supply Chain Transparency and How this Could Impact Mine Finance and Projects

*Pratt Rogers, Assistant Professor, University of Utah*

- **Mining & Exploration: Management: Sustainable Development Across the Entire Mining Value Chain**

Building a Global Community: The Creation of the Global GeoForum

*Mackenzie Sorensen, Senior Mineralogist, Rio Tinto*

Using the Sustainable Livelihoods Framework to Understand Artisanal and Small-Scale Mining in Colombia

*Alejandro Delgado-Jimenez, PhD Student, Colorado School of Mines*

The Permitting and Public Relations of Controversial Projects in Mining

*Madison Akers, Grad. Mining Engineer, Northern Star Resources*

5.7 Magnitude Earthquake and the Kennecott Tailings Storage Facility

*Eva Hover, Hydrologist, Rio Tinto*

- **MPD: MPD Plenary Session**

The Journey...and the Lessons

*Kathleen Altman, Consultant, Chair of SME Council of Education*

- **Tailings: Technological Advancements**

Site-Specific Approach for Developing Profiles of Critical State Soil Mechanics Parameters in Mine Tailings Deposits

*Jason Harvey, Geotechnical Engineer, Barr Engineering Co*

Tailings Draindown Estimates: Implementation and Considerations

*Nick Rocco, Geotechnical Engineer, Newfields*

Inherent Uncertainties in Determining Breach Parameters Utilized in Numerical Tailings Dam Breach

*Mark Walden, NewFields Mining Design and Technical Services*