A New Research Center at Colorado School of Mines and Virginia Tech

Richard Wendlandt (rwendlan@mines.edu), *Zhaoshan Chang* (SEG F, chang@mines.edu),
Wendy Harrison (wharriso@mines.edu), *Yaoguo Li* (ygli@mines.edu),
Thomas Monecke (SEG FL, tmonecke@mines.edu), and *Matthias Chung* (mcchung@vt.edu)

Colorado School of Mines and Virginia Tech have recently been awarded a major grant by the National Science Foundation to set up a new research center focusing on advanced subsurface earth resource modeling. The award has been made under the Industry/University Cooperative Research Centers program, which represents the National Science Foundation's primary mechanism to support industry-driven, precompetitive applied research. The grant covers costs related to operating the center and augments support the center receives from industry and other sponsors during its first five years of operation. The grant may be renewed for a period of up to 15 years to form a sustained partnership among industry, academia, and government.

The purpose and long-term vision of the center is directed toward challenges in developing 3-D geologic models for mineral deposits, integrating diverse geoscience data to inform decision-making and minimize geologic risk, beginning with locating and mining subsurface earth resources and continuing through mine closure and environmental remediation. The research will be conducted in four thrust areas: (1) development of geophysical and geochemical instrumentation, analysis, and interpretation methods for enhanced characterization of rock properties; (2) integration, scaling, and inversion of diverse geologic, petrophysical, and geophysical data types of dissimilar spatial resolution and distribution to identify and characterize earth resources; (3) development of information methodologies for reducing risk associated with decision-making; and (4) computational imaging and development of graphical and exploratory data analysis solutions and visualization tools. Training of students and young professionals will be an important component of the new center.

The vision of the center has been developed over the past three years in close collaboration with a group of industry advisors. A planning meeting supported by the National Science Foundation was conducted in September 2017, involving representatives from 38 exploration and mining companies and government agencies. The first formal meeting with the industry and agency membership will be conducted November 8 to 9, 2018, at Colorado School of Mines to define the first set of research projects. New companies are always welcome to join. 🅂🄴🄶

The Geology of Hydrothermal Ore Deposits Modular Course at Colorado School of Mines

5-day Modular Course | Golden, Colorado | January 3–7, 2019

DESCRIPTION

This modular course is for graduate students and professionals in industry and academia who want to improve their understanding of the geology and genesis of hydrothermal ore deposits. The course will provide a comprehensive overview of the geology, geochemistry, mineralogy, alteration, structure, and exploration approaches for the following deposit types:

- Epithermal Deposits
- Orogenic Gold Deposits
- Porphyry & Skarn Deposits
- Sediment-Hosted Pb-Zn Deposits
- VMS Deposits

To register contact Marry Carr (mcarr@mines.edu) or go to www.eventbrite.com/e/geology-of-hydrothermal-ore-deposits-tickets-49856267438

PRESENTERS

- **Zhaoshan Chang**
- **Richard Goldfarb**
- **Jeff Hedenquist**
- **David Leach**
- **Thomas Monecke**

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