

APRIL NEWSLETTER

Check out upcoming events with the SME Community and other organizations in Colorado!

Detailed event information included in newsletter.



CALENDAR

April 11

April 18

April 20

EVENTS

EMCD Meeting

Malone's Clubhouse Grill

**Joint Meeting with
SME CO State**

Rio Grande - Fort Collins

**Miners Give Back
Earth Day Event**

Crown Hill Park

OFFICER SPOTLIGHT

RICHARD SCHWERING

Richard Schwering is currently a Principal Resource Geologist with Hard Rock Consulting, LLC. His usual job activities include database validation, geologic modeling, mineral resource estimation, and technical reporting. He began his career in the mining industry in 2009 as an exploration geologist, completed his first mineral resource estimate in 2013, and has been with Hard Rock Consulting since 2015. He is a Registered Member with SME with competencies in Geology and Resource Modeling.

Mr. Schwering joined SME in 2016 and quickly volunteered to be part of the Board of Directors with the Colorado Section of SME. Serving as the Programs Chair during 2016/2017 term, he has been continuously involved with the Colorado Section Board of Directors and served two terms as Chair from the summer of 2018 through the summer of 2020. He is currently serving on the board as the Programs Chair.

Mr. Schwering participated in and led volunteer efforts with Jefferson County Open Space which culminated in the Colorado Section receiving this year's Miners Give Back Award. He just finished chairing the Mineral Education Coalition booth at the National Science Teaching Associations conference in Denver. Preparation for this conference started in September of 2023 and ended in March with the distribution of over 1200 free rock and mineral kits to teachers to help educate students on the importance of mining and mined minerals. The rock and mineral samples on display at MEC's booth represented essential elements, minerals, and metals required for sustainable energy solutions.



Richard accepting the Miner's Give Back award on behalf of the SME Colorado Section at the SME 2024 MinExchange Conference in Phoenix, Arizona this past March.



An avid volunteer with the Minerals Education Coalition (MEC).

EMCD APRIL MEETING

DINNER AT MALONE'S CLUBHOUSE GRILL

THURSDAY, APRIL 11 - 6PM

The Scenery of Bolivian Mining & Lithium

Dr. Juan Carlos Madeni (Colorado School of Mines)

\$40 per person, RSVP to Philip Keller (303) 974-2151, pkeller@energyfuels.com

Abstract: Historically, Bolivia has been a country with an economy based on the extraction of natural resources. Before the Spanish colonization, the local people already practiced small-scale mining of precious metals such that of gold and silver. During the Spanish colonization, mining of the largest silver mine started (1545); today, more than 10,000 miners are still working in it. In recent years (1996) another large silver-zinc deposit was discovered; today, it is the third-largest silver mine and is mined with state-of-the-art technology. These are just examples of Bolivia's historical and current mining activities. However, what is the condition of the mining industry in Bolivia today? How is this business managed? What are the factors for the current mining situation? Those are some of the questions that will be addressed in this work.

In the last 10 years, recent exploration has identified significant deposits of strategic and critical minerals as well as traditional in different parts of the country. This is raising the interest of foreign investors; however, they are still trying to figure out how to work in the current legal conditions for investment, and some do not even consider taking the required investment risks. In the last 35 years, exploration for new minerals revealed the existence of a large lithium deposit in the Uyuni Salt Lake, which, according to the USGS and other organizations, is the largest in the world. Bolivia has kept closed access to this lithium deposit, especially to Western countries and investors, because of political ideologies; on the contrary, it has provided access to countries politically aligned. How does that affect the lithium exploitation in Bolivia? What are the plans of the Bolivian government? Can Western economies participate in this lithium extraction? Details will be provided.

All of these opportunities for Bolivia's mining industry have developed new regional and global geopolitics affecting Bolivia's economy and the Western economies to some extent. However, according to the analysis performed in this work, there are investment opportunities. Still, they need to be managed in unique manners, some of which will be discussed in this presentation.

Finally, despite the conditions imposed by the socialist government in Bolivia, the authors of this work are promoting improving the relations between the USA and Bolivian governments, which should help improve the conditions for mining in Bolivia for local and foreign investors.

Bio: Dr. Madeni is an engineer, a materials scientist, an entrepreneur, and an educator. Most of his professional experience is in technological innovation in materials for the aerospace, energy, petroleum, microelectronics, and glass processing industries. He served as the R&D Director for Diamond Materials Technology, a Meyer Burger Company based in Switzerland, and is currently the Head for Metallurgy and Advanced Materials at Johns Manville, a Berkshire Hathaway Company. He co-founded Fidem LLC, energy and real estate, and Mine Water SRL, mining and mineral processing. Dr. Madeni is also an Adjunct Professor at the Colorado School of Mines and teaches in the Metallurgical and Materials Engineering Department. Some of his business skills include strategic planning, acquisitions, budgeting, business development, supervision, prioritization, innovation, and direction of short- and long-term projects.

Juan Carlos is a member and leader in different professional organizations, such as ASM International, TMS, EMCD, AMPP, and AWS from which he has received awards for his research, leadership, and service. He advocates for and promotes higher education in Science, Technology, Engineering, and Mathematics (STEM); he hosts students from elementary schools through college in the scientific laboratories where he works. Juan Carlos has served as the president of the Board of Directors at STEM Generation Inc., a non-profit organization. Dr. Madeni obtained a BSc and an MSc in Metallurgical and Materials Engineering, a PhD in Materials Science from the Colorado School of Mines, and a Leadership Diploma from the University of Denver.

18 APRIL 2024

**SME CO
JOINT MEETING
WITH CO STATE**



RIO GRANDE

Mexican Restaurant

FORT COLLINS, CO



- **BURRITO
BUFFET
INCLUDED**
- **CASH BAR**
- **LIGHTNING
PRESENTERS:
6:45 - 7:45**

6 - 8:30 PM

**PROFESSIONALS
\$40**

**STUDENTS:
FREE**

*Register
Now!*

[https://community.smenet.org/
colorado/events](https://community.smenet.org/colorado/events)



Miners Give Back!

The SME Colorado Section is inviting members to volunteer with Jefferson County Open Space to spend Earth Day at Crown Hill Park as a way to protect wildlife and continue to provide healthy and safe nature based experiences to our visitors. The event is available to the public and space is limited. Only 39 spots (out of 60) are available.

Volunteers will be focusing on 3 main objectives:

- Helping to control noxious weeds, which helps keep natural habitats resilient amidst a changing climate.
- Planting native plant species to increase habitat resiliency to changing climate conditions across all lands.
- Trash pick up, which will help create a more friendly habitat for our wildlife and to ensure that harmful debris stays out of our waterways.

Volunteers will meet and park at Wheat Ridge High School. In the spirit of Earth Day please carpool or take alternative transportation to the project.

Earth Day Climate Action: Creating Resilient Habitat at Crown Hill Park

Saturday, 20 April 2024 | 09:00 am - 1:00 pm

Wheat Ridge High School

9505 W 32nd Ave, Wheat Ridge, CO 80033

Participants must register through the website and sign a waiver.

[Offero: Volunteer Assignment \(jeffco.us\)](https://jeffco.us)

Participant Information

REQUIREMENTS:

Be able to hike and use a variety of tools, including shovels, picks, and rakes. Volunteers under 16 must be accompanied by a parent or guardian. Be prepared for numerous and changing environmental conditions.

WHAT TO BRING & WEAR:

Project waiver: All volunteers need to sign a waiver. If you register online, then you will sign it electronically. Paper copies will also be available at the work site.

Closed-toe, sturdy shoes are required (no sandals).

Work gloves (if you have them).

Plenty of water (2 quarts minimum).

Rain gear and appropriate layers for the forecasted weather.

Snacks.

Necessary medications like Epi-Pens, inhalers, etc.

Sunscreen and insect repellent.

A day pack.

NO PETS ALLOWED.