



Mining and Metallurgical Society of America

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New Job Description?

Recently I was listening to a podcast and the following comment was made – “As our lives reopen after the pandemic, there’s a good chance you’re also wondering what you are supposed to be doing.” Regardless of whether you believe we are truly able to reopen or if we are “reopening” simply because we can no longer stay isolated, the world as we knew it in February 2020 has irrevocably changed.

Yep – I just stated the obvious. There isn’t a one of us who doesn’t recognize that the last 15 months will have a lasting impact on the world economy and the mental and physical health of the world’s population. It is almost mind boggling how many crazy things have happened from a little virus disrupting the global economy to shortages to a new focus on diversity and equality to the drive toward a “green economy.” I don’t know about all of you, but I have found myself asking “what am I supposed to be doing?”

The global minerals industry is now poised to be asking that question even more we have in the past. The transition to a “green economy” is going to present a greater challenge to the industry and the perception of the industry more than it ever has in the past (yep – another obvious statement). In the past couple of weeks, three articles have caught my attention:

“Lithium Gold Rush: Inside the Not-So-Green Race to Power Electric Vehicles,” The New York Times, May 6, 2021 (<https://www.nytimes.com/2021/05/06/business/lithium-mining-race.html>)

The premise of the article is the tension between various parties and the construction of Lithium America’s lithium project in Nevada and the need for lithium and environmental protection. Sadly, the article states “traditional mining is one of the dirtiest businesses out there.”

“Biden’s Not-So-Clean Energy Transition,” The Wall Street Journal, May 12, 2021 (<https://www.wsj.com/articles/bidens-not-so-clean-energy-transition-11620752282>)



Amy E Jacobsen
MMSA President, 2019-2020

NEWS AT A GLANCE

2021 DUES

Regular Member—\$150

QP Member—\$250

+ \$50 for each QP category

Retired Members—\$50

for Regular

\$100 for QP

Due by January 1, 2021

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This opinion piece summarizes some of the findings reported by the International Energy Agency (IEA) released in May 2021. The IEA has pointed out that the move to clean energy will be a shift to a “material-intensive energy system” that could counter the emissions saved by electric cars (Hmmm – many of us are familiar with this concept that is generally known as the conservation of mass and energy). I would encourage you to read the IEA document (<https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>).

“Biden Looks Abroad for Electric Vehicle Metals, in Blow to US Miners,” Fox Business, May 25, 2021 (<https://www.foxbusiness.com.cdn.ampproject.org/c/s/www.foxbusiness.com/markets/biden-looks-abroad-electric-vehicle-metals-us-miners.amp>)

-In summary, President Biden has indicated the US will rely on ally countries to supply the materials needed for electric vehicles rather than using minerals mined and produced in the US.

In my opinion, these articles point out the latest challenge for the minerals industry. The take aways from these articles:

- The perception of the mining industry continues to be that it is environmentally damaging and “dirty.”
- A lot of material is going to be needed to transition to the “green economy.”
- The green economy may not be as green as it seems.

Yep – once again obvious conclusions. Now to get to the point – organizations such as MMSA **MUST** play a role in the discussion. When you look at our objectives, we clearly state that our primary objective is to serve the National Welfare of the United States of America as it relates to the Mineral Industries. We recognize that we do not operate in a bubble, so this objective has a global implication to it as well.

We have numerous programs that have been implemented in the past couple of years with the goal of moving toward accomplishing this objective, but we need to ask ourselves if we are doing enough or if what we are doing is still applicable. In my last article, I challenged each member to recruit another member. We can only move to accomplishing MMSA’s objective if we have members who are engaged, interested and willing to participate (this includes financial participation by paying dues).

This challenge still stands, but I am going to present you with an additional challenge. I want each of you to consider what MMSA is supposed to be doing. We need your ideas and thoughts on what we can do to contribute to the well being of the global minerals industry. By the way, it doesn’t have to be on the big scale – local efforts sometimes have greater impact. In the upcoming couple of months, we are going to be sending out a couple of surveys. Please take the time to fill out these surveys. Additionally, please consider joining one of the strategic committees or sending in your ideas. And as always, thanks for your continuing support of MMSA!

MMSA Committee News

Abandoned Mine Lands Committee

The AML hosted a very successful webinar on April 19, 2021 and is currently gathering feedback from participants. The webinar and slides will be posted on <http://www.mmsa.net>. The committee is now focusing on the in-person event scheduled for April 6, 2022 at the Holiday Inn & Suites Phoenix Airport. More information to follow.

Government Committee

The Critical Minerals (..er Penalty Elements) from Mine to Metal in the Copper Supply Chain Zoom Webinar – May 14, 2021 – 1pm MT was very successful. The Slides and recording are being prepared for the website, <http://www.mmsa.net>.

Other ideas for future webinars and an in-person conference are being pursued.

Quality Membership Committee

The pilot mentorship program is progressing and the committee will now turn its attention to member recruitment.

The Quality Membership Committee will launch a membership drive to attract more members to MMSA. The committee is currently preparing materials to facilitate discussions with potential members. All MMSA members

are encouraged to look around at colleagues and associates for possible new MMSA members. The membership requirements are available on the MMSA website. Supporting information is being updated and will also be available on the MMSA website. Look for new slide presentations and other resources on the website.

QP Enhancement Committee

The committee is turning its attention to ESG. The MMSA offers an Environmental QP and Environmental, Social, and Government issues have an increasingly important role in mining projects. The committee is planning a high level panel webinar followed by more in-depth webinars and is compiling a list of potential speakers on this important topic. Look for more information on this.

The Next Big Thing Committee

The panel webinar with breakout rooms (via Zoom) **Setting the Right Foundations to Perform High Quality Due Diligence** on April 23, 2021 was very successful. The facilitators for each of the break-out rooms will provide a short written summary of their session. These will be posted to the website with the recoding of the main Zoom session <http://www.mmsa.net>

The committee is work on the next step. Due Diligence is a topic that is of great interest to many people in the industry.

Guidelines on Due Diligence

Short Course on Due Diligence procedures

Put together something for the SME financial meeting in New York in 2022

2021 National Mining Hall of Fame Inductees

2021 Inductees Induction Ceremony

October 23, 2021

The National Mining Hall of Fame and Museum (NMHFM) has announced the class of 2021 National Mining Hall of Fame inductees. This year's inductees, selected by the National Mining Hall of Fame's Board of Governors, are being honored for setting new and uniform standards and improving

existing processes for feasibility studies and resource/reserve estimation, executive contributions and proactive leadership in safety and diversity, innovative practical application of geostatistics, and lifetime contributions to the education of many of the world's leading mining industry professionals.

The Prazen Living Legend of Mining Award, named for renowned mining artist Gary Prazen, will also be presented at the ceremony.

2021 National Mining Hall of Fame Inductees:

Dr. Richard L. (Dick) Bullock (1929-2020) was one of mining's greatest experts on valuation, operations, and research and development.

Gary J. Goldberg (1959-) became President and CEO of Newmont Mining Corp. in 2013. He turned the company's overall performance around through a disciplined focus on safety, technical fundamentals, and value over volume.

Harry M. Parker (1946-2019) was best known for his leadership in establishing clear and defensible methods for classifying mineral resources and reserves in the global mining sector.

Raja V. (Raj) Ramani (1938-) has devoted most of his career to educating mining industry leaders through his affiliation of more than 50 years with The Pennsylvania State University.

2021 Prazen Living Legend of Mining Award

Elizabeth J. B. (Liz) Arnold comes from a logging and farming background and married a miner. She became involved with People for the USA!— (PFUSA). She rose from "member" to Nevada State Chairman with 13 chapters across Nevada. The PFUSA Board of Directors decided their next Chairman of the Board should be a grassroots person, Liz was elected and re-elected for 3 terms. Liz dedicated many years of her life to public education and outreach because she believed it was critical to our future.

Congratulations to all the current and former MMSA Members who have been honored by the National Mining Hall of Fame. The MMSA will be attending and supporting the 2021 Inductees Induction Ceremony on October 23, 2021.

**South Dakota Mines
Mining and Explosives
Virtual Mining Engineering Youth Camp**

Do you know any high school students who want to learn more about mining and explosives? If yes, then please encourage them to sign up for this FREE virtual camp to be held July 12-14, 2021 from 10 AM to noon MDT each day using the Zoom platform. Topics include the importance of mining for advanced technology and green energy, blasting videos, and competition in Kahoot! quizzes to determine who is a "master blaster". Google SD Mines Virtual Explosives Camp or type in this link <https://bit.ly/2S5zKJ8>

**Webinar Series
National Academies of Science,
Engineering, Medicine**

Webinar Session 3: June 1, 2021 2:00 - 4:30 PM
This webinar will discuss the regulatory, legal, environmental, economic, and policy challenges associated with diversifying and building a new critical minerals supply chain from within the U.S. What are the barriers to bringing these critical minerals to market in the U.S.? <https://cerspring2021.splashthat.com/>

**In Memorium
James David Lowell**

James Lowell, 92, of Tucson, was born and died at home, in quarantine. Dave was born on a ranch outside Nogales on February 28, 1928, during a polio epidemic, and he died in Tucson on May 3, 2020 (not of Covid-19). After earning a B.S. in mining engineering (UA) and a M.S. in geology (Stanford), he became an exploration geologist, and during an eventful 71-year career he traveled millions of miles and worked in over 30 countries. Applying a visionary understanding of geological processes, he deduced the location of 17 major mineral deposits, beginning with the Kalamazoo orebody at San Manuel, AZ in the 1960s. He also located the largest copper deposit in Argentina, a titanium mining district in Paraguay and Brazil, a major gold mine at Pierina in Peru, and the world's largest copper mine, La Escondida, in Chile. He loved his family, ice cream and English Springer Spaniels. Always loyal and generous to his family and to the UA, he supported UA science, engineering and sports programs. His autobiography, "Intrepid Explorer" (UA Press, 2014) is packed with geology and adventures.

Congratulations to **Tim Arnold** who has been awarded the [University of Idaho](#)'s Silver and Gold Award for his commitment to natural resources and responsible [#mining](#). Tim is the COO and on the Integra DeLamar team.

Membership Update

Regular Member Applications:

Endorsers

QP Applications:

Endorsers

Regular and QP members accepted:

Bryson Hinkins (QP) Phillip Allen (QP)

Membership Deletions:

James Lowell (Deceased) Kenneth Brunk

MMSA presently has a total of 330 members, four in process. Currently, **200** members are QP members. Additions, deletions and routine changes to the Society's data base and member biographies are accessible through the Members On-line page in our web site, at www.mmsa.net. This data base is the best source for information on any particular member.