



# Mining and Metallurgical Society of America

P.O. Box 271794 • Littleton , CO 80127

Phone: 720-203-2380 • Web site: [www.mmsa.net](http://www.mmsa.net)

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*Susan R. Wager,  
Judy Colgan  
[contactmmsa@mmsa.net](mailto:contactmmsa@mmsa.net)*

## TRIPLE 1s in 2021, Scholarships and Many Thanks

Part 1

As you are aware, we are in the middle of the TRIPLE 1s in 2021 Challenge! In March, I wrote about how critical it is for MMSA to bring in new members who will be the future leaders of this organization and our industry. As a result, the membership committee has launched a campaign to encourage our members to get out there and to recruit new members.

MMSA is a “by invite” organization. We cannot simply get members by advertising. Our members-to-be must be sponsored and this is where all our members come into the picture! It is my hope that **each one of you** will recruit at least one new member in the next 3 months. We have sent out several emails providing you with tools you can use in recruiting new members. These tools include a flyer, a presentation and an example letter. If you haven’t received these tools, please let me know and we’ll get them to you.

**Help MMSA in its efforts to  
Engage Professional Mining-Industry Leaders!  
Support and Promote the Global Mining and Metallurgical Industries!  
Forge the Future of MMSA and the Minerals Industry!**

Remember – for every new member recruited, we will contribute additional funds to one of the several groups we support. So, not only are you backing MMSA in its objectives by recruiting new members, but you will also be supporting other minerals-industry organizations and causes!

Part 2

In the past month, a small group of us have been engaged with the selection of the 2022 recipients of the MMSA – SME Foundation Presidential Scholarship. This was my third year in this important effort.



Amy E Jacobsen

MMSA President, 2019-2020

**Have you paid your  
2022 DUES?**

**Regular Member—\$150**

**QP Member—\$250**  
+ \$50 for each QP category

**Retired Members—\$50  
for Regular  
\$100 for QP**

**Due by January 1, 2022**

**Contact Judy Colgan:**  
[contactmmsa@mmsa.net](mailto:contactmmsa@mmsa.net)

Each year we have had somewhere between 40 and 60 applicants (both undergraduate and graduate students). I continue to be impressed by the caliber of these students. Although the MMSA-SMEF Presidential Scholarship guidelines set the bar quite high, nearly every applicant has met the minimum criteria. That is incredible and important!

Why important? This means there are 40 to 60 enthusiastic and high-achieving students who are dedicated to our industry and who will be entering the industry upon their graduation. These students are the future leaders of our industry and they represent the global reach of the industry.

These students are exactly the type of people MMSA needs to recruit once they meet our membership requirements. But they won't get recruited if we aren't on the watch for them. So, to circle back around to the TRIPLE 1s Challenge – look around you. Do you see young professionals who would make excellent members in the future? Do you see young professionals who might be eligible, but who don't know about MMSA? Talk to them about MMSA – let them know who we are and what makes MMSA different and a great organization to join. I joined MMSA because someone took the time to talk to me about MMSA (thanks Paul Chamberlin!). I'm sure most of you can remember who recruited you. Now it's your turn!

### Part 3

Finally, for the last part of this article. This will be my last newsletter article as the President of MMSA. I would like to thank all of you who supported MMSA in the past three years. It has been my absolute pleasure to have been able to contribute to this organization and its members. I have been incredibly fortunate to have been able to work with such a great group of professionals! I would like to especially thank the Executive Committee (Mick Gavrilovic, Jack McPartland, Chris Wyatt, Mike Blois and Andrea Brickey). These folks will be stepping into new leadership roles starting in January/February, so I hope you will continue to support them as you have me.

I also want to express a heartfelt thank you to the Council and all the strategic committee members and chairs. These committees have accomplished an amazing number of projects in the past three years in spite of the pandemic. Without your incredible involvement and dedication, MMSA would not exist!

I would also like to thank our Executive Director,

Susan Wager. Susan is retiring at the end of 2021. She has had a yeoman's job keeping up with all the moving pieces as we initiated all the new programs and projects in the past 3 years! Great job Susan!

I would also like to thank Betty Gibbs for her continuing support as Susan took the reins in 2019 and I would like to welcome Judy Colgan as she steps into the Executive Director role in 2022. I can truly say it has been incredible to work with all three of these Executive Directors!

I am excited about the future of MMSA and our industry. As I read the scholarship applications with students focusing on critical topics such as health and safety, environmental and social responsibility, data analytics, ground control and advancements in hydrometallurgy, I can't help but to remember how this industry improves the world and why I love this industry. Of note - many of the students grew up in mining communities and are well aware of how important the industry is to their community's quality of life, especially the international students. As an industry, we often feel under attack, but we must never forget that what we do is amazing, exciting and, more often than not, groundbreaking (couldn't resist that one!). Organizations like MMSA help to advance our industry into the future – be apart of this exciting effort and get out there and recruit at least one new member!

## MMSA Committee News

### QP Enhancement Committee

The QP Enhancement Committee hosted a webinar on November 19th, 2021: Compliance with NI 43-101 – The Regulators Observations on Ongoing and Emerging Challenges – The Good, The Bad, and the Ugly. The panelists were Victoria Yehl, P. Geo. Senior Geologist, British Columbia Securities Commission and Chris Collins, P. Geo. Chief Mining Advisor, British Columbia Securities Commission. This webinar was attended by 86 participants and there were many questions. Thanks to all who participated in this webinar.

The next webinar in the is ESG Webinar Series #2 Social Issues – Social License to Operate, December 3, 2021 -- 1pm MT. The panelists will be **Debra Johnson**, a strategic advisor and C-

level global executive focusing on mining and industrial sectors, and Elizabeth Freele, a social performance and ESG strategist. You must register for this free webinar at: <https://us02web.zoom.us/j/84451234567>

### Abandoned Mine Lands Committee

The AML committee is gearing up for the April 6, 2022 in-person summit in Phoenix, Arizona. The event may have some on-line participation available. The summit will also include field trips. The original date for this summit was in April of 2020, but the COVID-19 pandemic caused two postponements. The MMSA had previously hosted two very successful events on abandoned mine lands in Golden, Colorado and Reno, Nevada and is excited to continue. Look for more news on this event.

### Government Committee

The Government Committee has been reviewing the activities of the Women’s Mining Coalition Government committee to see where the MMSA could support their efforts. The WMC has a fact sheet on current legislation: See [WMC-usa.org](http://WMC-usa.org). The MMSA is considering hosting a webinar with the WMC on some of these topics. The Committee

is also interested in the impacts of Land Withdrawal and is gathering information on this topic.

### Quality Membership Committee

The Committee has prepared materials to facilitate discussions with potential members. All MMSA members are encouraged to look around for 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.

The items that have been sent out to the members include:

A sample email that could be sent to potential members.

A list of members that can be used a reference for potential sponsors that an applicant may know or worked with.

A flyer: Who is the MMSA?

Member application forms

## Membership Update

### Regular Member Applications:

None

### QP Applications:

Devon Whalen (Metallurgy)

### QP members in Process:

Chase Ruff

Miguel Miranda-Gasca

Robert Archibald

### Membership Deletions:

Laurence G. Stevens, Michael David Martin

### Endorsers

### Endorsers

Leonard Hill

H. John Head

Adam House

MMSA presently has a total of 331 members, three 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](http://www.mmsa.net). This data base is the best source for information on any particular member.

**National Mining Hall of Fame Induction Banquet**

MMSA was a table sponsor for the National Mining Hall of Fame Induction Banquet, held at the Westin Airport Hotel on October 23, 2021.

Two of the inductees were MMSA members:

Dr. Richard Bullock (1929-2020) began his mining career in Minturn, CO after graduating from college in 1951. During his time at St. Joe Lead, he developed the Bullock Burn Cut, used to blast development drifts, that would become the world standard and is still used today. He also worked with manufacturers to develop the first pneumatic drill jumbo in the U.S. During his many years in the mining industry, he was a Distinguished Member, Jackling Award recipient and Legion of Honor member of SME. He was named Honorary Professional Engineer of Mines and was elected to the Missouri School of Mines and Metallurgy Academy.

Dr. Raja V. Ramani devoted nearly his entire career to educating the mining industry. He touched the lives of thousands of industry leaders through his 50+ year affiliation with Pennsylvania State University, and extensive involvement with SME. He published over 200 papers, co-authored a textbook on mine ventilation and air conditioning, contributed 25 articles to handbooks and encyclopedias and edited the proceedings of 15 symposia. A winner of several prestigious awards, he was elected to the National Academy of Engineering in 2005 and served on committees that evaluated many of mining’s hottest topics. He has been a consultant to international agencies and mining companies world-wide on health, safety, productivity, and environmental issues.

Four Colorado School of Mines students also sat at the MMSA table and enjoyed an evening of celebrating the mining industry.



Betty Gibbs, Mick Gavrilovic



CSM Students



CSM Students



Pat James and Sharon Newman

## Memoriam

**Laurence G. Stevens** (Larry), PHD. passed away quietly on October 30, 2021 in Tucson, Arizona. Born on April 22, 1932 to Elmer G. and Mae (White) Stevens in Detroit, Michigan. Upon graduation from High School, Dr. Stevens enlisted in the U.S. Army, serving honorably for two years during the Korean conflict. Dr. Stevens graduated from Alma College, Alma Michigan with a degree in Chemistry in 1954, earned his Masters of Science in Chemistry from Michigan Technological University in 1958, and his PHD in Inorganic Chemistry from Wayne State University in 1962.



Dr. Stevens was an Assistant/Associate Professor of Chemistry at Michigan Tech University until 1965. He left Academia and accepted the positions of Sr. Project Scientist, and Director of Research and Development for Calumet and Hecla Copper Company in Calumet, Michigan. Upon closure of C&H in 1969, Larry relocated to Universal Oil Products (C&H's parent company) main offices in Des Plaines, Illinois and later in Tucson, Arizona continuing his work in R&D. From 1980 to 1988 Larry served as Director of Technology – Mining and Metallurgical Division for Ralph M. Parsons Co., Pasadena, California. From 1988 until his passing, he held executive positions including Director,

Vice President and as a Consultant, with the Indium Corporation of America, Utica, New York.

During his career, Dr. Stevens Co-Authoring numerous technical papers and was awarded patents on extractive metallurgy, process metallurgy and Indium and Bismuth alloys. In 1998 he was accepted into the Michigan Tech College of Sciences and Arts Academy, the inaugural year of inductees.

Professional organizations and affiliations include: Society for Mining, Metallurgy and Exploration (SME), The Mining and Metallurgical Society of America (MMSA), and the American Chemical Society (ACS).

Known by his peers for his precise techniques in the lab, and meticulous note keeping, Larry is best known by those close to him as a person of honesty and integrity – values that he taught, values that he demonstrated, and values that he lived by.

A long-time resident of Michigan's Keweenaw Peninsula and Copper Country, Larry enjoyed spending time with family as well as photography, restoring classic automobiles, fishing and the outdoors.

Larry is survived by his wife of 67 years, Helen (Joynt) Stevens, his brother, Allen Stevens of Alma, Michigan, his son Chuck (Mary Ann) of Pahrump, Nevada and daughters Sally Watters (Tim) Oro Valley, Arizona and Amy Lansburg Valdosta, Georgia, eight grandchildren and nine great-grandchildren.

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### **Michael David Martin** **July 27, 1927 – October 25, 2021**

Michael David Martin, age 94, of Golden, Colorado passed away on Monday, October 25, 2021. Michael was born July 27, 1927.

Michael Martin was a Senior Associate with Behre Dolbear from 1995 until his retirement in 2019. Before Behre Dolbear he held positions with several companies including Cyprus Minerals Corporation, where he served as Executive Vice President and Vice President of Acquisitions and Development for the company's Gold Division. Mike's expertise included open pit mine capital and operating costs, infrastructure, and organization. He was involved in numerous feasibility and due diligence studies of base and precious metal properties; property evaluations; operational audits and optimizations; and mine equipment selection and costing. Mike was an important member of the Behre Dolbear team and he will be greatly missed. Mike was a racket-ball champion well into his 80s. He traveled all over the country playing and winning in tournaments.