



MINING FOUNDATION OF THE SOUTHWEST

Thomas L. ALDRICH, Executive Director

PO Box 42317 , TUCSON, AZ 85733

520-577-7519 (office), 520-577-7073 (fax)

January, 2019

www.miningfoundationsw.org
admin@miningfoundationsw.org

CONCENTRATES

Members of the 2018 Hall of Fame Committee wish to express their gratitude to all the sponsors and guests for making the 36th Annual American Mining Hall of Fame Banquet & Fundraiser a resounding success.. Over 600 tickets were purchased to celebrate Red Conger's induction into the American Mining Hall of Fame. Conger is President and Chief Operating Officer - Americas for Freeport McMoRan and has served the mining industry since 1977.

Along with Conger, four past mining industry stalwarts, Andrew J. Prichard, Medora Hooper Krieger, E. A. Cappelen Smith and William Pierce and Robert B. Scanlan were inducted. Krieger's daughter, Kathy Pessin and her husband Jim were present for the ceremony.

In addition, Medals of Merit were presented to Hugh M. Miller, Professor, Colorado School of Mines. and to Marian C. LaLonde, Partner at Quarles & Brady, LLP for their current respective contributions in advancing the always evolving mining sector.

Sundt Construction, Inc., one of the country's largest and most respected general contractors. was the recipient of the Industry Partnership Award.

The Southern Arizona Business Coalition was the recipient of a Special Citation Award for their support of the mining industry.

*A BIG Thanks
to our Sponsors!*

THANK YOU 2018 SPONSORS

Diamond—EPIROC

*A BIG Thanks
to our Sponsors!*

PLATINUM

FISmidth, Freeport-McMoRan Inc., Independent Mining Consultants, Komatsu America Corp., M3 Engineering , Mining & Metallurgical Society of America, Southwest Energy LLC and Tim Snider

GOLD

Ames Construction, Arizona Mining Association, ASARCO - AMC, Grupo Mexico, Barrick Gold, Boart Longyear, Doosan Bobcat, Empire Southwest, Fred Banfield, Modular Mining Systems, Inc., Newmont Mining Corporation, PLS Logistics Services, Royal Gold, Ruen Drilling, SRK Consulting, Stantec and WestLand Resources, Inc.

SILVER

Apache Nitrogen Products Inc., Arcadis, CAID, Cascade Drilling, Cementation, Copper State Nut & Bolt Co., CTI, Fennemore Craig P.C., George A. Tsiolis-Attorney at Law, Golder Associates, Hexagon Mining, , Hudbay Minerals Inc., IEC Supply, KGHM, Lhoist North America, Meridian Engineering Company, Montgomery & Associates, Motion Metrics International, Orica, Origin Mining Company LLC, Professional Minerals Development LLC, Progressive Environmental Services, Quarles & Brady LLP, Skyline Assayers & Laboratories, SOUTH 32, SUNDT Construction, Inc., Valley Forge & Bolt and Yellow Jacket Drilling Services.

OTHERS

E3 Strategies LLC, Golden Vertex Corp., National Mining Hall of Fame & Museum , Southern Arizona Business Coalition and Split Engineering.

MESSAGE FROM OUTGOING PRESIDENT, David Travis



From the MFSW executive committee we hope everyone had a safe and enjoyable holiday season. The Hall of Fame banquet got the holiday season kicked off in grand fashion. We received great feedback from many of our stakeholders and attendees on how they enjoyed the evening. I had several people approach me who were attending for the first time and ask, “Does this banquet occur every year and when is the next one so I can put it on my schedule.” Our inductees and honorees were very appreciative of all the effort by the Foundation members for organizing the event, producing the videos and making it a memorable experience.

In closing 2018 and looking forward to 2019, the Mining Foundation of the Southwest had one of its best years in recent memory in terms of membership, fundraising and banquet attendance. Individual membership went from 95 to 136 or a 43% increase, net funds raised approached \$150k and the banquet booked 600+ people. All of the success means we’re well funded to execute our mission of interacting with as many young people as possible about the importance of minerals in our lives. A healthy and growing membership says our members want to be part of an organization with a great cause.

Tom Aldrich, our executive director, did an excellent job in 2018. Tom does all the real work of keeping track of the finances, ordering materials, paying the bills, soliciting donations, finding new members and coordinating with our vendors to meet the deadlines. The foundation’s success in 2018 is a direct reflection of Tom’s hard work and dedication.

I want to acknowledge Pam Wilkinson for the outstanding job she has done over the last ten years as Outreach Coordinator and wish her well in her upcoming retirement. The U of A’s new outreach coordinator, Molly Radwany, is bringing a fresh look to the outreach program. We fully support Molly as she learns more about the southwest mining operations, vendors and support organizations. Some of our members may be called upon to help review organizational materials and assist in event activities in the future.

2019 ANNUAL MEETING

Date: Wednesday, February 06, 2019

Time: 3:00 p.m. — 5:00 p.m.

Place: Viscount Suite Hotel

4855 E. Broadway, Tucson, AZ 85711

SEEN AND HEARD AT THE 36th AMERICAN MINING HALL OF FAME AWARDS BANQUET



MFSW President David Travis (L) presents the Hall of Fame Plaque to 2018 Honoree, Red Conger.



MFSW President David Travis presents the Prazen Support Statue to Red Conger's wife, Sissy Sailors.



MFSW Hall of Fame Chairman Chris Wilson (R) presents the Medal of Merit to 2018 Honoree Hugh Miller.



MFSW Hall of Fame Chairman Chris Wilson presents the Medal of Merit Under 40 to 2018 Honoree Marian LaLonde.



MFSW Hall of Fame Chairman Chris Wilson presents the Industry Partnership Award to James Norine of Sundt.



MFSW Hall of Fame Chairman Chris Wilson (R) presents the Special Citation Award to Bill Assenmacher and Rick Grinnell of SABC.

SEEN AND HEARD AT THE 36th AMERICAN MINING HALL OF FAME AWARDS BANQUET



HOF Chairman Chris Wilson and Dr. Mary Poulton (L), Co-Director of the IMR, present Pam Wilkinson with a mounted copper splash wall hanging in recognition of her 10 years as the Mining Outreach Coordinator. Pam Will retire this spring.



Board of Governor member Will Wilkinson and his wife Pam enjoy the evening.



MFSW HOF Chairman Chris Wilson (R) presents the Mining Past Plaque to Kathy Pessin, daughter of 2018 Honoree Medora Krieger Hopper



Tom Scartaccini greets Rohini Sharma as John Marek and Connie Hill look on.



AMIGOS President Sydney Hay and her husband Dan and Ross and Anita Barkley of Call & Nicholas strike a pose.



The Hugh Miller family took this opportunity to gather together to see Hugh receive the Medal Of Merit.

More Photos at <https://www.miningfoundationsw.org/page-1847263>



There was quite a crowd enjoying the cocktail hour prior to the dinner and program honoring this years Inductees.



Julie Thomas, Kevin Gilbreth, Georjia Motta, Jane Thomas, and Lyn Thomas of Pioneer Equipment were all ready to go!



Empire Southwest, 2014 Industry Partnership Award winner has been a regular at the banquet for many years.



Our Diamond sponsor Epiroc was out in full force to enjoy the evening, renew old acquaintances and make new friends.



Red Conger and family were the center of attention at this year's awards banquet. Red's father Harry M. Conger (right of center) was the 1990 Inductee.



Gary Goldberg, the 2018 Inductee, was back with his wife and other guests to celebrate another year.

More Photos at <https://www.miningfoundationsw.org/page-1847263>



The CAID table celebrated SABC's Special Citation recognition.



Komatsu, the 2012 Industry Partnership Award winner has also been a regular at the banquet for many years.



The SME table had 12 guests including their President Barb Arnold, SME Board member John Mansanti and SME Executive Director Dave Kanagy.



CTI President Gregg Gibbons brought his company in force as they celebrated the evening.



Over 50 students and professors from the University of Arizona were able to attend the banquet thanks to the generosity of our sponsors and individual members.



Tom Aldrich, Corina Leyva and Darsi Aldrich greeted the 600 guests in attendance at this year's HOF Banquet with a big smile and a warm welcome.

SEEN AND HEARD AT THE 36th AMERICAN MINING HALL OF FAME AWARDS BANQUET

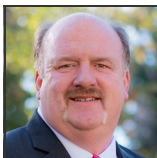
- The 36th American Mining Hall of Fame Awards Banquet & Fundraiser recorded a net profit of almost \$151,000.
- Fifty eight sponsors generously donated to the Foundations' Education Program allowing the MFSW to continue underwriting its Outreach Program and offering additional financial supplement to various SME & SEG student chapters.
- Companies and individuals purchased over 600 tickets making this the most successful HOF Banquet ever.
- Red Conger was introduced via video tape by 2012 inductee Richard Adkerson, President and Chief Executive Officer of Freeport-McMoRan and received a standing ovation on his official induction into the American Mining Hall of Fame.
- Three raffle prizes including a set of the History of Mining in Arizona books, 50,000 Marriott Awards points and a 2 night complimentary stay at this JW Marriott Starr Pass Resort were awarded during the course of the evening.
- Pam Wilkinson was recognized for her 10 years of service as Outreach Coordinator.
- Over 50 faculty members and students from the University of Arizona were guests of the 36th Annual Banquet, thanks to the generosity of the sponsors and to our Inductee, Gary Goldberg.

Below are the tribute videos on all 2018 honorees:



Inductee Red Conger

<https://www.miningfoundationsw.org/page-1847246>



Medal of Merit, Hugh Miller

<https://www.miningfoundationsw.org/page-1847247>



Medal of Merit Under 40, Marian LaLonde

<https://www.miningfoundationsw.org/page-1847247>

Inductees from Mining's Past

<https://www.miningfoundationsw.org/page-1847252>

Industry Partnership, Sundt Construction, Inc.

<https://www.miningfoundationsw.org/page-1847249>

Special Citation, Southern Arizona Business Association (SABC)

<https://www.miningfoundationsw.org/page-1847248>

Outreach Corner by Pam Wilkinson

MFSW Outreach Coordinator Activities: Mid-November 2018 - January 2019

Late November through January has been frenetic with travel: school visits, merit badge workshops and meetings, despite the fact that I am now part time! The banquet this year was as usual, amazing. Thank all of you for the gorgeous copper splash, it is hanging prominently in our family room. It is the perfect retirement gift and I am incredibly grateful for your thoughtfulness.

There were two Mining in Society merit badge workshops at Freeport-McMoRan facilities, Miami and Sierrita. These workshops continue to be well received and evaluations are overwhelmingly positive. The added benefit of these events, is that we also reach the parents of the scouts, helping them understand how important mining is to their way of life. The management at CalPortland Plant is interested in doing a similar event at their facility, so a representative attended the workshop to see how it works. I will be in discussion with them, as they move forward on what to do at their facility.



Training the volunteers: Sierrita



Volunteers: Sierrita



Explaining the day to the Scouts



Scouts attending the workshop

Outreach Corner by Pam Wilkinson (cont.)



Volunteers at Miami:



Scouts at Miami



Miami: Introduction to the schedule for the day

Thank you goes out to all of the volunteers who participate in these workshops, it would not be possible without them!

On other things scouting, it looks like SME is going to have a booth at the World Scouting Jamboree in July 2019! I am considering being a part of this event. If any of you are interested in volunteering your time to introduce scouts from around the world to mining, please reach out to me! (NOTE: the good news about retirement from the University of Arizona is that I am able to retain my email account: pkwilkinson@email.arizona.edu)

I am also moving forward in conjunction with Freeport-McMoRan on the mining merit badge for the Girl Scouts of Southern Arizona council. The badge will have activities for all levels of Girl Scouting and should be a fun badge to earn.

New state science standards have been adopted and so it will be necessary to make the presentations applicable to the new standards. I am certain this is possible. Teachers who are familiar with the outreach program and recognize its value will continue to welcome presentations about mining into their classrooms. And as things continue to change, it becomes ever more important to take the message directly into the classrooms around the state. If I can get into biology classrooms where none of the standards are about mining, I am certain the new standards will not prevent the program from moving forward.

P

Outreach Corner by Pam Wilkinson (cont.)

Below are the tables for the outreach covered for this report:

| Organization | Location | Attendees | Date |
|--|------------|------------|-----------|
| Scottsdale Prep Acad Eng. Club | Scottsdale | 12 | 10/2/2018 |
| ASTA Conference | Gilbert | 70 | 11/2/2018 |
| Mining in Society Merit Badge workshop | Miami | 23 | 11/3/2018 |
| Mining in Society Merit Badge workshop | Miami | 20 | 11/3/2018 |
| Mining in Society Merit Badge Workshop | Sierrita | 56 | 1/12/2019 |
| Mining in Society Merit Badge Workshop | Sierrita | 42 | 1/12/2019 |
| Total | | 223 | |

| School | City | Stu- dents | Adults | Date | days | classes |
|-----------------------|------------|---------------|-----------|----------------------|-----------|------------|
| Pinnacle HS | Scottsdale | 442 | 3 | 11/13-16/2018 | 3 | 14 |
| Bogle Jr Hi | Chandler | 576 | 5 | 11/26-30/2018 | 5 | 20 |
| Flowing Wells Jr Hi | Tucson | 317 | 3 | 12/5-7/2018 | 3 | 11 |
| Sonoran Trails | Cave Creek | 446 | 3 | 12/10- 11,13/2018 | 3 | 15 |
| Newell Barney Jr Hi | Chandler | 246 | 3 | 12/12,14/2018 | 2 | 11 |
| Western Peaks MS | Surprise | 81 | 1 | 12/17/2018 | 1 | 3 |
| Highland Jr Hi | Gilbert | 140 | 1 | 12/19/2018 | 1 | 6 |
| Sonoran Heights Elem. | Surprise | 97 | 1 | 12/20/2018 | 1 | 3 |
| Thatcher MS | Thatcher | 149 | 1 | 1/8/2019 | 1 | 6 |
| Pima MS | Pima | 154 | 1 | 1/9/2019 | 1 | 8 |
| Mogollon HS | Heber | 105 | 1 | 1/16/2019 | 1 | 5 |
| Mogollon Jr Hi | Heber | 107 | 1 | 1/17/2019 | 1 | 5 |
| Total | | 2860 | 24 | | 23 | 107 |

Outreach Corner by Molly Radwany

In addition to several successful outreach events at the end of 2018, November, December and January were also full of opportunities for networking and professional growth. I was able to attend my first MFSW Banquet, the SME Arizona conference and the Lowell Institute's Mining Summit. I've been able to connect with professional and student organizations over the past few months and have been discussing ways to work with these groups to achieve our common outreach goals. I will be volunteering as education committee chair for the newly formed Arizona chapter of Women in Mining.

One of the more unique events was a tour of the San Xavier Mining Laboratory to a 9-year old reporter for Bear Essentials News. We're still waiting on the article to come out – but I will send it along once it does! I also assisted with a tour for a group from Phoenix's Southern Mountain Community College, and I hope this will become a recurring event.

In November I led my first in-the-classroom activity for the 7th grade science classes at Flowing Wells. After a presentation, students were asked to match minerals with the products made from them based on their chemical or physical properties.

November's Arizona STEM Adventure was our first really big science-fair event, attended by about 1,000 middle schoolers. Garrett (LIMR intern) and I were going nonstop and had three displays – a DIY paper circuit (complete with a list of a few minerals needed to make this), copper leaching in vinegar and copper-plating of a nickel and of course minerals and rocks and their uses. This was good preparation for the spring when most of Arizona's big science fairs occur. Our first of 2019 is on January 26th and is expected to see 7,000 visitors.

| Event | Date | Number of attendees |
|---|----------------|-----------------------------|
| Tour of San Xavier mine for "Young Reporter" | November, 2018 | 2 (9-year old and father!) |
| Science Night at Flandrau Science Center | November, 2018 | ~45 (middle schoolers) |
| Arizona STEM Adventure at Pima Community College | November, 2018 | ~300 (middle schoolers) |
| Tour of San Xavier mine for Southern Mountain Community College STEM club | November, 2018 | 21 (college group) |
| Flowing Wells Junior High | November, 2018 | 390 (7 th grade) |
| Total | | ~758 |

Outreach Corner by Molly Radwany (cont.)



Garrett Szura (LIMR intern) telling middle schoolers about how we use minerals in our everyday lives at the Arizona STEM Adventure.



Middle schoolers constructing a paper circuit at Flandra's Science Night.



9-year old reporter from Bear Essentials News on a tour of U of A's San Xavier Mining Laboratory.

MEET YOUR GOVERNORS



Don Earnest (Term expires 2019)

Don is the President of Resource Evaluation Inc.. His company has been providing geologic consulting services to the domestic and international mining industry, for over 17 years. He previously worked at Idarado Mining Company, The Anaconda Company, Pincock, Allen, & Holt, Inc., Sunshine Mining Company and The Winters Company. Don was President of the MFSW in 2003 and 2004 and was the HOF Chair in 2002. He has served on the Board of Governors since 2000. Don is a graduate of The Ohio State University with a Bachelor of Science (BS) degree in Geology.



Corolla Hoag (Term expires 2020)

Cori is an Arizona-registered geologist with over 30 years of experience in the mining industry. She received her B.S. (geology) from Western Washington University and her M.S. (economic geology) from The University of Arizona. She is a principal with SRK Consulting based in Tucson. She is an officer of Arizona Geological Society and an active member of SME. Cori was President of the MFSW in 2013 and was the HOF Chair in 2010, 2011 and 2012. She has served on the Board of Governors since 2008.



Nyal Niemuth (Term expires 2021)

Nyal is a Graduate of the University of Wisconsin and retired as the Chief Economic Geologist from the Arizona Geological Survey in 2017 and now has his own consulting company. Niemuth is a member of numerous professional organizations and has authored and co-authored many journal publications. He is also the recipient of the 2010 American Mining Hall of Fame Medal of Merit Award. He has served on the Board of Governors since 2013.



Rod Woodcock (Term expires 2021)

Rod retired as Chief Engineer at FMI's Chino Operations in 2015. He holds a Bachelor of Science Degree in Mining Engineering from the New Mexico Institute of Mining and Technology. During his 40 year career he held numerous positions of responsibility from Mine Planning to Drill and Blasting Supervisor to Mill/Concentrator Operations Superintendent to Project Manager. Rod also worked at the U.S. Bureau of Mines, Sharon Steel Corporation and Kerr McGee. He has been on the BOG since 2016,



MEMBERS' CORNER

We now have 57 new members. Thank you all for your support of the MFSW. Total membership is at 138. Go out and encourage your associates to join. On behalf of David Travis, our 2018 President, the Foundation wishes to extend a warm welcome to:

Linda Aldrich - Aldrich is the sister of Executive Director Tom Aldrich and is retired. Over this past year she has helped the HOF Committee track down photos and information on one of the Mining's Past Honoree and is in possession of some outstanding proofreading skills..

Alberto Bennett, P.E. - Bennett is the President of M3 Engineering and Technology and has twenty eight years of electrical-mechanical experience. Alberto has his Bachelor of Science in Electrical-Mechanical Engineering from Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico. Alberto joined M3 in 1998 and his experience includes project engineering, project management, construction supervision, startup, field engineering and maintenance of equipment for industrial and mineral processing plants.

Mark Davis- Davis is the Product Manager and West US and Mexico Sales Manager at KETO Pumps. Mark has his Bachelor of Science degree in Mechanical Engineering from Northern Arizona University and has worked in the industry for almost 20 years.

Tiffany Morris - Morris is the Office Operations Coordinator / Legal Specialist at Quarles & Brady LLP here in Tucson. She is responsible for day-to-day office management in coordination with other Administrative Officers and Directors and other firm leaders. She serves as an Ambassador for the Tucson Metro Chamber of Commerce and the Greater Oro Valley Chamber of Commerce and recently attended her first HOF Banquet.

Tim Oliver - Oliver received his BS in Environmental Engineering from the New Mexico Institute of Mining and Technology. He has seen the mining industry from all angles and conditions spending time working for operating companies, working as independent consultant, earning a PE license and working in project management for engineering firms.

Christopher Peters - Peters joined Montgomery & Associates in 2014, bringing years of well-rounded experience in groundwater modeling, well design and construction, and water resources investigations for mining, municipal, and environmental projects worldwide. Chris is the 2018-2019 membership chair for the Tucson chapter of the Society for Mining, Metallurgy, and Exploration (SME).

Arlan Ruen - Ruen is President of Ruen Drilling Inc., Ruen was established in 1974 providing core drilling services to the mining industry. While still active in mining, the company enjoys the reputation as a leader in geotechnical core drilling, providing defensible design data for tunnels, bridges, dams, highways and other civil projects.

IN MEMORIAM

Marvin Hustad—Honorary Member MFSW



Marvin past away on December 28, 2018. He was born on January 21, 1928, in Alberta, Canada and was raised on a dairy farm in Wisconsin. He graduated with a Bachelor of Science in Mining Engineering from the Wisconsin Institute of Technology, after a distinguished career with the United States Army and National Guard. He served in World War II in the Mountain Division and as a rifle platoon sergeant and sharpshooter. In 1958, Marvin joined M.M. Sundt Construction Company as a project engineer working on the Titan II missile site in California. He was elected to the M.M. Sundt board of directors in 1974, and retired from M.M. Sundt in 1991 as Senior Vice President and head of the industrial division. Marvin held various affiliations, including membership in the National Rifle Association, Mining Club of the Southwest, and American Institute of Mining Engineer (AIME). He was an officer in our predecessor organization the Mining Club of the Southwest in 1985, was a charter member of the MFSW in 1993 and on the MFSW Board of Governors from 1993 – 2000. He was awarded an Honorary Membership in the MFSW in 2001. Marvin is survived by his wife, Jacqueline; daughters, Cynthia Ledbetter and Karen Dailey (Kevin); grandchildren, Alesia Ledbetter and Andrew Joshua Van Boerum and brother, Edward.

David Lincoln —2012 Medal of Merit Recipient



Born on November 10, 1925, in Cleveland, Ohio, David died at his home in Paradise Valley, Arizona, on March 16, 2018, after a brief illness. He was 92 years old. David moved with his family to Paradise Valley, Arizona, at age six. He studied electrical engineering at the California Institute of Technology. In 1950 he married Joan Rechlin, his wife until her death in 2016.

He was the son of John Cromwell Lincoln, 1998 Inductee from Mining's Past, who took control of the Baghdad Copper Corporation in September of 1944 and in 1947 founded the Lincoln Foundation, an educational philanthropy that supported land policy research and instruction in U.S. universities.

David Lincoln oversaw the creation of the Lincoln Institute of Land Policy – the organization that exists today – in 1974, served as chair for 22 years, and remained an active board member for the rest of his life.

David assumed the presidency of Bagdad upon the death of his father in 1959. In the early 1950's, Bagdad converted to open pit and capacity was increased to 6,000 tons per day. Overburden was stockpiled for later leaching which began in the early 1960's. Initially the copper was recovered as cement copper by iron precipitation. The cement copper was refined on site to pure copper powder and sold for friction and molding applications.

In addition to founding his own company, Lincoln Laser Company, David Lincoln took an active role in his family's many businesses, including Lincoln Electric Company, which his father founded in 1895 and built around a series of inventions that included the portable arc welder.

"Good ethics is good business, and ethics is its own reward," David Lincoln wrote of the company. "One does not have to sacrifice to be ethical. It is doing the right thing."

Beyond his leadership of the Lincoln Institute, David Lincoln helped create Claremont Lincoln University at the Claremont School of Theology, to help diverse students learn to live ethically and foster understanding across different faiths.

David is survived by his four children Kathryn, Virginia Louise, Carl Richard, and James Robert—and by six grandchildren and twelve nieces and nephews.

HALL OF FAME COMMITTEE MEETING

Date: Tuesday, February 12, 2018

Time: 3:30 p.m. — 4:30 p.m.

Place: ASARCO Training Center, 1150 N. 7th Ave., Tucson, AZ

RSVP: admin@miningfoundationsw.org OR 520-577-7519

ANNUAL MEMBERSHIP NOW DUE

Please sign on to <http://miningfoundationofthesouthwest.wildapricot.org/join> to renew your 2018 membership. Those who still prefer to renew membership by checks should continue to forward payments to P.O. Box 42317, Tucson, AZ 85733. **Your donations are tax deductible to the extent allowed by law.**

