



Stanley M. Howard's presidential portrait from 2016.



Honoring Stanley Howard, A True Friend to TMS

Kaitlin Calva

The TMS family has lost a great supporter, excellent teacher, and true friend in Stanley M. Howard, who passed away on May 15, 2021, at the age of 75.

As an undergraduate student at Colorado School of Mines, Howard joined TMS—then still The Metallurgical Society of the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME)—in 1966. After receiving his Ph.D. in metallurgical engineering, he joined South Dakota School of Mines and Technology as an assistant professor, holding a number of leadership positions over the years, including chair of the Department of Materials and Metallurgical Engineering from 1994 to 2000, Faculty Senate Chair, Chair of the Faculty, and Material Advantage Advisor. Most recently, he was professor emeritus, since 2014, for a 50-year career with the university. Howard was also a registered Professional Engineer since 1973.

As an active member of TMS, Howard participated in many committees, both functional and technical, within his “home division” of the Extraction & Processing Division. He was a key reader for *Metallurgical and Materials Transactions B* and has also instructed several short courses and presented numerous papers at TMS annual meetings over the years. His first term on the TMS Board of Directors came in 2009 as the Financial Planning Officer. Just a few years later he was elected to the presidential rotation, serving as the 2016 TMS President. His presidential year was



Stan Howard (left), Patrice Turchi (center), 2015 TMS President, and Hani Henein (right), 2014 TMS President, pause for a photo before the awards ceremony at the TMS 2016 Annual Meeting & Exhibition.

a busy one, as Howard set out to improve upon the member experience through his work with the Board of Directors. In his March 2016 *JOM* article, “Building the Global Professional Community: A Priority for the Year Ahead,” he said: “Mostly, my focus will be trying to give back what I have gained from TMS by ensuring that it is a welcoming professional home to all—a place where anyone, from anywhere, at any point in their career can find inspiration, collegiality, shared passion, and answers to their questions or colleagues who will join them in the search for answers.”

As president, Howard helped the Society realize a number of new projects and collaborations. Patrice Turchi, 2015 TMS President, outlined just a few of his contributions: “During his presidential cycle, it is worth noting several of Stan’s major accomplishments: more international collaborations and a completed agreement for Extraction 2018; accomplishment towards facilitating the transition of

In April 2016, Stan Howard visited TMS headquarters in Warrendale, Pennsylvania, and was presented with his presidential *JOM* cover, pictured here. The June 2016 *JOM* cover featured the style of Nashville’s Hatch printing, as Nashville, Tennessee, was the location of that year’s annual meeting, and the blue and gold color scheme reflects Howard’s school colors at South Dakota School of Mines and Technology.



Stan Howard (left) and TMS Executive Director Jim Robinson visit Cambridge University in 2016 to participate in TMS Fellow Michael Ashby’s 8th International Materials Education Symposium, where Howard gave an invited presentation on the TMS student program.

students and young professionals to meaningful participation in the life of the Society with digital access to information; the creation of the Bladesmithing Committee; and the promotion of a more diverse cadre of young professionals; as well as his role in the move of the TMS headquarters to Pittsburgh, and in the TMS Foundation activities.”

Howard was also a longtime supporter of the TMS Foundation and a strong believer in its mission to give back to the next generation of scientists and engineers. “I participate in supporting the TMS Foundation because I was blessed with the opportunity to receive an engineering education and continue to be the beneficiary of many generous thoughts and actions,” he said in a February 2015 *JOM* article, “TMS2015 Shines A Spotlight on the TMS Foundation.” He became a TMS Foundation Trustee and member of the Silver Society for lifetime giving in 2015 and rose to the Titanium Society in 2017.

In one of his last activities as a TMS member, Howard received the 2021 Alexander Scott Distinguished Service Award. He recorded a brief acceptance speech for the virtual TMS-AIME Awards Ceremony, which debuted at the TMS 2021 Virtual Annual Meeting & Exhibition in March 2021.



Stan Howard addresses viewers of the TMS-AIME Awards Ceremony during the TMS 2021 Virtual Annual Meeting & Exhibition as he receives the 2021 Alexander Scott Distinguished Service Award.

In the video, which can be viewed through Channel TMS on YouTube at www.youtube.com/user/ChannelTMS (see Howard’s award at time stamp 44:00), he made the following comments about his experiences as a TMS member: “John Hager informed me in 1968 as his graduate student at Colorado School of Mines that I would be saying ‘yes’ to TMS service for many years to come. He mentored me

Sharing Memories of Our Friend Stan

“As I reflect on my contact with Stan, I remember that he always spoke well of everyone. He was very confident of his talents, abilities, and capabilities, but very humble about them at the same time. When he was Financial Planning Officer of TMS, he was very astute about TMS finances. As a member of the TMS Executive Committee, I never worried about TMS finances, because Stan was at the wheel.”

—Hani Henein, Professor, University of Alberta, and 2014 TMS President

“Stan was a great mentor and friend. He modeled the virtues we should aspire to, including respect, dignity, empathy, and especially and most prominently, integrity. We can do no less than our best to pay it forward.”

—Robert W. Hyers, Professor, University of Massachusetts

“Dr. Howard was a professor for several of my metallurgical engineering courses as an undergraduate while at the South Dakota School of Mines and Technology. As students, we were always in awe of his knowledge of and talent with thermodynamics and transport phenomena—two of the harder subject areas for undergrads. While the classes were difficult, Dr. Howard always strove to find real-world examples to make the topics relevant. Later, while serving with the TMS Board of Directors and in other committee roles, I worked with Stan under different circumstances. I discovered a whole different side of his personality. He had a dry wit and a deep caring for TMS and its members. He was always a pleasure to work with because of his infectious enthusiasm and positive attitude.”

—Ray Peterson, Technology Director, Real Alloy, and 2009 TMS President

“Stan was always a calm voice of reason. Not only was he one of the smartest people I’ve ever met, but he was really, really good at spotting unforeseen problems or consequences to some course of action. Jokingly I told him once recently that he was an LMD (Land Mine Detector)! He laughed and said that was a lot different than his younger years when he liked to blow things up! It seemed to me Stan was good at everything he attempted, whether it was genealogy, investing, economics, teaching, fundraising, ABET requirements, etc. His teaching skills were phenomenal. Beyond his polymath skills, Stan was a ‘one in a million’ friend, mentor, educator, and many other titles. For me there will be a huge void in any future TMS meeting, since that was always a chance for me to get to sit and talk to Stan.”

—Garry Warren, Professor Emeritus, University of Alabama, 2011 TMS President, and Chair, TMS Foundation Board of Trustees

“Professor Stan Howard, an accomplished leader in his capacity as a TMS volunteer for decades in addition to being a remarkable dedicated materials scientist since the 1960s, will be greatly missed. I interacted more closely with Stan during his presidential cycle that started when I was TMS President in 2015. I came to realize that Stan was an effective TMS leader because of his knowledge, vision, and experience. Every successful organization needs a continued and sustainable roadmap, and Stan always had boundless enthusiasm to grow TMS via new programs while nurturing the initiatives already in progress.

As to the person, Stan Howard is the paragon of professionalism with a special passion for thermodynamics, a topic that occupied a lot of our free time together. He did what he promised, with a kind soul. Besides giving much to TMS, Stan has been involved in many civic activities in addition to all of his professional responsibilities and the mentorship of many students. Stan was articulate, efficient, and a person of very high standards and ethics. On a parallel track, Stan was unbeatable on literature, poetry, and family history. Needless to say, it was with great sadness that I was made aware that my dear friend Stan had passed away. The materials science community and TMS has lost a great mind, and I will miss a great friend.”

—Patrice Turchi, Retired Senior Scientist, Lawrence Livermore National Laboratory, and 2015 TMS President

during my early career and urged me to participate in a number of the many activities at TMS, and I urge you to do the same for your young charges and not-so-young associates; otherwise TMS is just a meeting, or an e-mail, or a website. TMS can only function effectively with a cadre of dedicated and talented volunteers, who we fortunately have in great

abundance... Through service, volunteers become better professionals through the opportunities afforded them. I have gained much more than I have given. Thank you for this very much appreciated recognition. However, the greatest honor has been simply to serve our fantastic minerals, metals, and materials society. I love TMS."

Remembering Stanley Howard

Marc Meyers

The loss of my dear friend Stan Howard saddens me greatly. He is one of the persons for which I have nourished an admiration ever since we were colleagues at the South Dakota School of Mines and Technology, in 1976. I was a young assistant professor, and he was a more experienced associate professor and provided guidance and advice. We were a small department, only six members, and shared coffee every morning at 10:30 in the faculty lounge. This was a welcome break from our matinal teaching and was an opportunity to exchange ideas and comment on the progress and challenges of our students. I was deeply impressed by the personal attention that each student received. The professors were also counselors and their guidance often pointed them in the right directions when they strayed.

I arrived in the middle of the winter and, as soon as spring brought a welcome warmth, started to jog with Stan. This time together gave us the opportunity to exchange ideas and aspirations. From him I learned the complexities of churches in a small community. Stan played an important role in the Church of Christ, and continually helped members of his church in all kinds of situations. Gradually, I learned more about his personal background. He was born in Torrington and spent his childhood between Lusk and Lingle, Wyoming, where his family had a ranch. He used to joke that all people in Lusk were super-intelligent, setting up the question: "Why?"

He would smile and answer: "Because they are bi-Lingle!"

These three neighboring towns were only a couple of hours from Rapid City, South Dakota, and I drove through



TMS Foundation Trustees (left to right) Marc Meyers, Viola Acoff, Carl Cady, and Stan Howard catch up at a donor dinner event held at the TMS 2018 Annual Meeting & Exhibition in Phoenix, Arizona.

them many times. He had a great love for the immense skies of Wyoming, which he called, "God's Country."

At some time, I had the opportunity to meet his mother, a very intelligent lady who had a B.S. in literature. His father was an excellent mathematician. He and his three brothers and sister must have inherited the clear logical mind which made him a superior teacher of difficult subjects, such as thermodynamics, pyrometallurgy, and computer engineering. My brother Carlos was one of his students and can attest to his rigor and excellence. Stan was a man with high moral principles and led his life in a true Christian way. His actions were guided by commitment, honesty, and dedication.

The Wyoming lands had been granted to his family and he worked on the ranch throughout his childhood and college days. It was interesting that he did not adhere to the cowboy mystique of boots, silver buckle, and ten-gallon hat. He was usually dressed in a suit and preferred his Oldsmobile Toronados to pickup trucks. A devoted father and husband, he was abstemious and hardworking. As a proof of love, one of his daughters donated a kidney to him when his own failed. I was amazed when he described the project he undertook in his Rapid City house. He was expanding his basement and ran into a large rock. He thought about using explosives to blast it, but this was not feasible. In the end, he found a solution: he lifted the entire house using hydraulic jacks and redid the foundation!

After getting his Ph.D. from the Colorado School of Mines, under the hardest-working professor in the department, John Hager, Stan joined South Dakota School of Mines where he spent his entire career. The many classes of students can attest to his high standards and excellence in teaching. He was also a bright researcher and developed extraction methods for the Black Hills ores. He introduced me to TMS and nominated me to the Board of Editors of *Metallurgical and Materials Transactions* in the late 1970s. He served TMS in many capacities and his careful attention to all aspects of the Society generated admiration from his colleagues and led to his election to President. More recently, he was very active in the TMS Foundation and performed spectacularly. He regularly called me to discuss Foundation matters or just to chat. Our TMS has lost a dedicated member, the university a most talented professor, and I, personally, an esteemed colleague and a friend.

Marc Meyers is a Distinguished Professor of Materials Science at the University of California, San Diego. He has been a TMS member since 1974 and is a 2011 TMS Fellow.

