an interview with

kevin zeik

2021–2022 aime president
Talk about the path that led to your term as AIME president — what steps were taken to get to that point?

My path to AIME began as I was approached by Dale Heinz, who was past president of AIME in 2014 and a 35+ year member of the Iron & Steel Society (ISS)/AIST. Having served with Dale in many technical capacities within AIST, he knew my passion for always wanting to do “something more.” At the direction of the Board of Directors and Ron Ashburn, the executive director of AIST, Dale approached me to become a trustee to AIME with a two-year term that would expire in 2017. I accepted this opportunity as I was sure that it would lead to further education and professional connectivity, well beyond AIST. During those first two years, I participated in many meetings where the direction, operating principles and practices, and the governance of AIME were passionately discussed, finally reaching consensus that the new governance structure, the Board of Directors, would include the executive directors of the four societies represented by AIME, namely AIST; the Society for Mining, Metallurgy and Exploration (SME); the Society for Petroleum Engineers (SPE); and The Minerals, Metals and Materials Society (TMS) along with a member from each society. Near the end of my two-year term, I was asked by Ron Ashburn if I would consider becoming an AIME board member in the rotation to become AIME president in the future (the new governance structure includes having the member from each society in the board rotation for president, and not the society executive directors). I was again honored to be considered for this extremely prestigious role, as I knew that it would increase my exposure to great scientists, engineers and educators, all of whom dedicate their lives to their professions, and are recognized by their own societies as well as AIME. The path to president of AIME is paved with history and heritage, and we are all constantly reminded of those 23 mining engineers who got together 150 years ago, in Eastern Pennsylvania, to form what is now AIME.

What did you set out to do with your year as AIME president — did you have any particular points of interest you wanted to focus on?

My goal statement was “The Next 50.” AIME had just celebrated 150 years since its inception in 1871, by a group of 23 mining engineers “to preserve their collective knowledge and experiences for the benefit of future engineers through a Society of similar professionals.” AIME has four simple principles of exercising fiscal responsibility, distributing funds for awards and scholarships,
facilitating interaction with the relevant engineering and scientific communities, and last, but not least, honoring the legacy and traditions of AIME. As president, my goal was to establish an operational and management path forward so that AIME could maintain continuity far into the future, preserving those four basic principles. Our current executive director, Michele Lawrie-Munro, has been an excellent leader for AIME for several years, but as we look to the future, myself, the Board of Directors and Michele were all looking for a way to ensure long-term continuity and viability, while exercising fiscal responsibility. We have begun to explore the potential paths forward for association management as of this interview. The second goal was to build from the success of the past president, George Luxbacher, who initiated a full review of all AIME assets and donations, some of which date from the early 1900s. To honor donor intent, each fund was carefully screened and recorded as to intended use. During my presidency, we began the process to determine the amounts that could be used for each of our awards as well as amounts that could be provided annually to each member society, with the overall intent to at least maintain, if not continue to grow, our overall assets.

What was your biggest accomplishment during your term as AIME president?

My biggest accomplishment as president was actually personal to me. I gained a deep respect for the activities and technical opportunities of the mining, petroleum and materials societies, by attending conferences and interacting with technical personnel in areas that are “connected” to steel in many ways. The reasons to join ISS/AIST were to learn, and to gain interactions and make connections with other technical folks all focused and passionate about iron and steel engineering, education and innovation. As president of AIME, this afforded me the opportunity to greatly expand my appreciation for engineering, education and innovation into many more areas. I now have vision of how iron and steel is interwoven into the mining and petroleum communities, into energy and also into how steel fits into society as an advanced material. This has greatly increased my enthusiasm toward innovation and how all of these disciplines can support each other. And, I must say that I am proud to represent the iron and steel community as president of AIME, and very humbled by and grateful to Ron Ashburn and the AIST Board of Directors for giving me this opportunity.

You've had a long career in the steel industry. How did you become involved with AIST?

My path began as a new member of ISS back in the early 1990s. Early on, attending the annual conferences gave me a personal connection into the bigger world of steelmaking beyond my job at United States Steel Corporation. I was exposed to the challenges of steel products and how to achieve higher-performance steels, using the basic knowledge gained from attending and presenting at these conferences (I was a physical/mechanical metallurgist very interested in microstructure/property relationships). From there, I began to chair technical sessions as a way to get involved with ISS, working my way to chair of the then-Mechanical Working Division. During my tenure as general manager of research at U. S. Steel, I encouraged our engineers and scientists to not only attend the conferences, but also to present their work and become actively involved in committee work. In the early 2000s, I became a member of the Board of Directors at ISS during the transition to AIST, where I remained active in conference attendance, programming and envisioning the future for AIST. Two years ago, I was asked, and quickly and graciously accepted, the role as an AIST Board of Directors member and a member of the AIST Executive Committee.

You've spent many years in research and innovation roles — what do you see coming down the pipeline for innovations in steel?

One word: sustainability. Steels, like all other materials, are undergoing a transition to a net-zero carbon footprint future. The extraction and
preparation of raw materials, the processes we use to make iron and steel, the recycling processes, the sources of fuels to be used as reductants and energy all must be challenged. I see these challenges placed directly on everyone represented by AIST and the other societies represented by AIME; specifically, industries, suppliers, universities and also the government and private sectors. This global challenge must be met with and embraced by the world’s scientists, engineers and entrepreneurs if it is to happen and effectively support future manufacturing of steel, and really all materials. I also see the word “innovation” interwoven into the word “sustainability” because it is going to take innovative solutions to get us to net-zero greenhouse emissions. Many of the solutions that we will use have yet to be commercially developed, but are underway at the university, government lab and even at the industrial research level. These solutions must be cost-effective as well as environmentally effective to protect the industry. Steel really is the most abundant, most recycled material on planet Earth and steel will remain with us for our green planet’s future.

For AIST members who are not familiar with AIME, what would you like them to know about our parent association?

AIME was formed just over 150 years ago, in 1871, when 23 “mining” engineers in Pennsylvania had an idea to preserve their collective knowledge and experiences for the benefit of future engineers through a society of similar professionals. The organization grew with the quest to explore and increase productivity and created a Petroleum Division in 1922, an Iron and Steel Division in 1928, and an Institute of Metals Division in 1933. AIME was one of the first national engineering societies established in the United States, along with the American Society of Civil Engineers, the American Society of Mechanical Engineers, the Institute of Electrical and Electronics Engineers and the American Institute of Chemical Engineers. Today, AIME consists of SME, TMS, SPE and of course, AIST, representing nearly 200,000 of the most influential and innovative figures in engineering and science. It is very easy to see the interconnectivity that AIME offers its four member societies. Our proud history includes the efforts of the foremost leaders in mineral and energy engineering: Henry Krumb, Seeley Mudd, James Douglas, Daniel Jackling, Anthony Lucas, Everette DeGolyer, Henry Doherty and many others. Herbert Hoover, 31st president of the United States, was president of AIME in 1920. I am very proud that, over the 150 years, AIME activities have been and continue to be supported primarily by the return on investment of 40 endowment funds that provide support for forward-reaching programs including awards of excellence, scholarships, grants and support to each member society. During the pandemic, AIME was able to allocate US$250,000 to each society in order to help maintain viability through those challenging days.

AIME leadership was excited to hold its 151st annual board meeting at AIST’s headquarters in Warrendale, Pa., USA, on 4–5 August. Kevin Zeik, AIME president, presided over the meeting. The group had breakfast with AIST staff and were given a tour of AIST’s recently renovated offices. Attendees were impressed by the sleek, industrial and functional spaces. They also appreciated the nod to the past with AIST’s centrally located Brimacombe Board Room. The board continued its important work on optimization of endowment spending, awards and recognition, and operations.

That afternoon the group received an overview of the steelmaking process at U. S. Steel – Mon Valley Works Edgar Thomson Plant. Enduring 125°F temperatures, the group witnessed the processing of products for which Pittsburgh has been historically renowned. They were then treated to stories of the engineering marvels spanning the city’s waterways on the Rivers of Steel Explorer vessel.