Frederick C. Rorick Jr.

Frederick C. Rorick Jr. has dedicated nearly more than 55 years to the steel industry. After receiving his bachelor’s degree in physics, chemistry and mathematics from Dickinson College in 1967, he joined Bethlehem Steel in the Ironmaking Department of its Lackawanna Plant. He moved through positions of increasing responsibility at the Lackawanna, Burns Harbor and Sparrows Point facilities over the next 36 years, making his way up to director of primary operations at Sparrows Point. In 2002 he created Rorick Inc., where he performs consulting services for various steel companies and suppliers internationally with technical and operating issues. Rorick served four terms as secretary of the American Iron and Steel Institute’s Technical Committee on Ironmaking, as well as one term as vice chair and two terms as chair. He is a 25-year lecturer on abnormal and challenging operations and former member of the organizing committee for McMaster University’s intensive ironmaking course. He has authored numerous technical papers on blast furnace operations.
When did you first hear about AISE/ISS?

In 1983, I had just been transferred to a new steel works, following the closure of my former works. My mentor appointed me to the Western States Coke Oven and Blast Furnace Association, and suggested that I should also join the Iron & Steel Society (ISS) of AIME. He suggested that I would absolutely benefit from the exposure and opportunities it offered.

What was your first involvement in AIST?

By 1988 I had again been transferred, and was appointed, again by my mentor, who was now the chief operating officer of the entire Bethlehem Steel Corp., to membership in the AISI Blast Furnace Committee. Over the years I advanced in service, eventually becoming multiple times chair of the committee. I was not an officer in ISS as I had several of my subordinates involved therein. Around the year 2000, the AISI Technical Committees were merged into the AIST Technology Committees, and I immediately became more active in AIST.

How has AIST membership benefited you in your career?

My mentor explained to me that service in the technical organizations offered “opportunities”: opportunity to interact with peers, opportunity to learn, opportunity to teach, and opportunity to bring value to my company. He explained that all we could really expect out of our careers were opportunities. How we managed those opportunities would be the deciding factor in our career path.

How did you enter the steel industry?

I started at Bethlehem Steel in their Loop Course in 1967, eventually being assigned to the Lackawanna Plant near Buffalo, N.Y. Once there I was assigned by choice to the Blast Furnace Department. After a few months, I was moved into operations and began training as a blower foreman, the supervisor of one blast furnace during one shift. Over the following years, I advanced in responsibility until by late 1982 I was superintendent of blast furnaces at the Lackawanna Works, with that plant’s hot end closing in late 1983. Then I was reassigned as assistant superintendent of blast furnaces at Burns Harbor. Around this time, I began to be assigned to special tasks both inside Bethlehem and to other companies to assist with unusual and difficult happenings. I did not know it at the time, but this would serve as the basis for my career after Bethlehem. In 1985, I was reassigned to the Steelmaking Department at Burns Harbor in part because there were bottleneck problems, and there was to be a major expansion with the construction of #2 Caster, ladle metallurgy, hot metal desulfurization, and eventually the elimination of ingot steelmaking. I was reassigned in 1988 to the blast furnaces at Sparrows Point, which had also by that time become a corporate bottleneck, with numerous operational problems at Blast Furnace L. In 1998, I assumed additional responsibility for the idled coke oven works, and in 2001 assumed responsibility for all primary operations. In 2003, Bethlehem completed a bankruptcy restructuring, and I retired. The international consulting firm, Rorick Inc., specializing in unusual and difficult operating problems, was formed with myself as principal. This firm still exists today, 20 years later.

Over the years my involvement in AIST also grew, including multiple terms as chair of the Ironmaking Technology Committee. Among the activities were the initiation and later expansion of cooperative activities with the VDEh German Blast Furnace Committee, the European Blast Furnace Committee, the massive restructuring of blast furnace injectants to replace coke, and the creation and expansion of an operations database, for use internally by the BF operators and for exchange with other operations internationally. By 2014, I retired from direct activity with AIST.

If you were to recommend AIST to a new graduate, what would you tell them?

The key is “opportunity.” If one wishes to expand their horizons and career achievements, the key is receiving opportunities to perform, and demonstrating what you can achieve.