43-year life member

Richard Baum

Richard Baum was born and raised in the Philadelphia suburbs, with a 3-year stay in Florida, with a pleasant but "nothing special" childhood experience. He was involved in sports and athletics through college and then had a unique entrance into steelmaking and engineering. He graduated from Bucknell University with a degree in psychology, spending two months as a "surf bum" in Puerto Rico before finding a "real" job. Through a newspaper ad, he got a job as a production supervisor in a truck trailer plant. He found that he enjoyed the manufacturing environment but realized that an engineering degree would be more valuable. His intention was to go to school part time but a plant closure in a recession changed his path and eventually he entered Drexel University. He had become friends with several metallurgical engineers employed at U. S. Steel – Fairless Works and thus his interest in getting a B.S. degree in materials engineering. Drexel was his choice because of its co-op program, which enabled him to support himself through some lean years as a struggling student. On-campus interviews and a plant visit resulted in starting his career at J&L. He spent five years at J&L, but in 1984 it became clear that the future of the mill was in question as melting and casting ended there in 1985. He left to take a position with the Pferrocal group of Pfizer providing calcium wire solutions to the steel industry. Pfizer morphed into Quigley and then Minteq as he continued his career there until his retirement in 2011. Since then, he has worked part time consulting on sales, marketing and technical support of cored wire injection.

When did you first hear about AISE/ ISS and how? Was there someone who introduced you to the association?

I learned about the ISS shortly after starting my career in the steel industry at J&L Steel in 1979 and in particular as a metallurgist in the BOF shop at Aliquippa Works. At the urging of our chief metallurgist Robert Cryderman, I attended my first annual conference in Toronto in 1981 or 1982. It appears that I had a break of a few years but have been a member of AIST since I believe 1983. The other supervisor who encouraged my early involvement in ISS was John Wallace, superintendent of steelmaking at Aliquippa. Both Bob and John were firm believers in the benefits of gaining industry experience and knowledge outside of the daily activities of one location.

What was your first level of involvement in AIST? How did your involvement progress over the years?

Over the years of my active career ending for the most part when I retired from full-time employment in 2011, I was a regular attendee at both the BOF/Open Hearth and EAF annual meetings (when they were held separately) as well as the Globe-Trotters Section meetings. I transitioned from working in primary steelmaking to technical support and then sales and marketing functions providing cored wire products to the global steel industry. The technical education from these conferences and proceedings along with developing industry contacts from many steelmakers were invaluable in helping to advance my career and technology of integrating cored wire as it grew from a small, specialized niche application to a widely used tool throughout the industry.

Talk about your career path. How did you enter the steel industry? How has the industry progressed from when you started to the present day?

I entered the steel industry directly after receiving my degree in materials engineering from Drexel University in Philadelphia and with the exception of a short stint in rolling operations have been totally involved in the melting, refining and casting of steel for almost 50 years. The changes I've seen have been immense not only for general industry conditions but more specifically in the changing steelmaking technology. On a micro basis I was able as a supplier to learn about open hearth steelmaking – a virtually forgotten method in the 21st century. Ladle furnaces, secondary refining and clean steel practices in general were nonexistent in the early 1980s but are ubiquitous today. Most significant probably, though, is the transformation from ingot pouring of steel, stripping of ingots, reheating in soaking pits and rolling in a slab or blooming mill to now almost 100% continuous casting (with the further quantum leap into thin-slab casting and direct rolling into hot bands). The technical education I received both from technical presentations at AIST national conferences along with informal exchanges of knowledge at these events was invaluable.

If you were to recommend AIST to a new graduate just coming into the industry, what would you tell him/her?

Advice to a new graduate entering the industry would be to take a look at the changes seen in steelmaking over the past decades and try to imagine what could be done in the future to make even more significant improvements. The technical tools now available make the techniques used in the past seem extremely antiquated. What lies ahead over the horizon (what a cliché!) to me is unimaginable. We only had mainframe computers when I started and very rudimentary handheld calculators. The revolutionary growth of computing capabilities along with AI and I don't know what else should exciting to experience. Steel has many unique properties that will allow it to keep its position as a key metallurgical product for the foreseeable future — I wish that I could be a part of it for another 50 years. ✦