# AIST Young Professionals


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### What first interested you about learning more about the steel industry?

I was lucky to learn about the world of metal casting earlier in life than most. In high school, I participated in a summer program for women in engineering at what would become my alma mater, Virginia Tech. During this program, I visited the student foundry on campus. The graduate students and professor helped us to make small sand molds and allowed us to watch them pour the molten iron into the molds, with proper personal protective equipment (PPE) of course. People in our industry often say that the first time you see molten metal you're either terrified or captivated. I was immediately hooked. After my sophomore year at Virginia Tech, I came across a steel company looking for a metallurgy intern. At the time, I had no metallurgy coursework under my belt, but remembering that summer day at the foundry, I thought it would be interesting to see what an actual steel manufacturing facility was like. I spent the summer performing metallography and classifying microstructures, as well as learning about the interactions and recovery of alloys throughout the melting and refining processes. That experience led me to pursue further metallurgical coursework in school, and a career in the industry after graduation.

### Describe the coursework and degrees that you have obtained. Did you participate in any of AIST's programs or attend AIST events as a student?

I earned a B.S. degree in materials science and engineering from Virginia Tech. Virginia Tech is one of only a handful of universities in the United States with a fully functional foundry for student use. I took advantage of two of the metal casting courses offered, as well as a physical metallurgy course which delved into specific microstructural mechanics within all metals. I was honored to receive a couple of AIST scholarships. I had been more involved in a similar professional society that has more of a foundry focus. Since graduating and joining the steel industry, I am happy to say that I have been able to help coax Virginia Tech into joining AIST and attending Southeast Member Chapter meetings. I look forward to encouraging more student involvement in AIST events in the future, so that they may be inspired as I have been!

### Have any AIST programs assisted with your career advancement?

AISTech has been an instrumental event in advancing my understanding of what is going on in the broader industry outside of my facility. Attending the technical presentations last year allowed me to learn about modern casting research and innovations that I could bring back to my own caster team which helped develop our knowledge and bring in new technologies. I have now moved to the ladle metallurgy furnace (LMF), where I am the only metallurgical teammate, which enables me to have more autonomy in the decisions made around innovations in my area. Additionally, my involvement in AIST has led me to become the Southeast Member Chapter Young Professionals chair, which will empower me to promote more young professional and student involvement from my region.

**As a young professional, what have been the most valuable benefits of your involvement with AIST?**

The most valuable benefit of AIST is the networking opportunities by far. In no other place can you meet so many people who are all excited to talk about steel. I have been so humbled to be able to meet extremely experienced and knowledgeable steelmakers, talented engineers, helpful and innovative vendors, and, of course, many other young professionals looking to dive headfirst into our amazing industry. I am very thankful to my colleagues who brought me into AIST and introduced me to leaders in my own company as well as others. Where else can you casually have a conversation with EVPs, CEOs, and presidents of major steel producers and vendors? I have been honored to find amazing friends through AIST, and I look forward to meeting more!

**Have you had any mentors that have assisted with your career development so far? If so, how did you identify them as a mentor, and what impact have they made thus far?**

I have been privileged to have a few notable mentors during my short career thus far; each has served a different and important role for my professional development. One mentor has been beneficial in both my technical education and interpersonal growth. I identified him as a mentor because of our similar personalities and ideologies, and he has helped me so much in understanding the social and political networks of our division, company, and industry. It has also been crucial for me to have a supportive and advocating manager who is a young woman like me. She embodies the vision of succeeding as a woman in this male-dominated industry and has offered me much-needed female perspective and direction. She has given me the necessary tools to turn feedback into positive action, even when it may be uncomfortable. I can't forget the mentor who brought me into AIST and continues to encourage me to reach beyond myself and seek the diverse perspectives of those around me. I am extremely thankful for their mentorship, and I know that these relationships will continue to help my development for a long time.

**What advice would you give to students considering a career in the steel industry?**

The best advice I can give to someone looking to work in the steel industry is to stay curious and never stop learning. This industry is constantly innovating, and it's crucial to keep learning in order to not be left behind. People joining the steel industry right now have a huge advantage because of the new technologies that are being taught and utilized in universities. The fresh eyes and new ideas that come with a young person's perspective are key resources, so take advantage of the wonderful opportunities that come your way! Being able to bring a competitive edge to your profession and constantly educating yourself to keep that edge is so vital.

**What do you find unique and interesting about the steel industry? What do you enjoy the most about it?**

The steel industry is so unique because of the ever-evolving technologies being created, with new things to learn about, and always more opportunities to improve our processes. While many probably think of steel as an antiquated, uniform and polluting industry, it is quite the opposite. The workforce is becoming more diverse in its ideas as well as the people themselves, and unexpected innovations in sustainability, machine learning, and materials science are always progressing this industry. Since our progression is so multifaceted, it requires continuous collaboration between engineers, operators, suppliers, and leaders to make this critical industry stay competitive and relevant in the global economy. While I am just one engineer in just one steel mill, I know that the work I do and the conversations I have contribute to global progress, and I am honored to be a part of that. ✦

**Are you a steel professional age 35 or younger?**

Join the new AIST Young Professionals Membership Committee to expand your network and connect with peers.

For more information, visit AIST.org/membership or contact Lauren Veltre at +1.724.814.3082 or lveltre@aist.org.