EMERGING PROFESSIONALS

VOLUNTEERISM COMMITTEE

Profile of a Volunteer

Stories matter. James Boileau was new to materials when he entered Detroit’s Wayne State University and took an Introduction to Metallurgy course. “I had an excellent teacher with a great collection of stories, each with a lesson built in. He made a complex subject easy to understand,” recalls Boileau. “I changed my major within a month.”

With his bachelor’s degree, he was hired by Ford Motor Co. and given the opportunity to complete a master’s and Ph.D. while working. After 28 years, he is now in Ford’s Research and Innovation Center, conducting research on lightweight automotive components, managing the optical and electrical microscopy labs, and conducting materials analyses to improve vehicle durability.

After joining ASM as a student in 1984, Boileau received several scholarships, made industrial contacts, toured facilities, and learned about potential jobs for his future. After graduation, he attended Chapter meetings until life got busy with four daughters—and coaching lots of soccer. In 2008, Boileau answered the call to join the Detroit Chapter and has served on the executive board ever since.

Now his focus is on supporting students and teachers in the field of materials science. He modernized his Chapter’s college scholarship applications by creating online forms, which boosted the number of applicants from two to 32 in one year. He also serves on a national committee that will be extending scholarships to community college students in 2016. And he has led a creative twist on the Chapter’s ASM scholarships—overseeing the creation and distribution of six grants to provide much needed classroom materials for teachers who attend the local ASM Teachers Camp. In addition, Boileau is teaching materials science at Wayne State and University of Michigan-Dearborn. “To all those who have helped me, I am paying it forward and telling good stories with lessons built in,” he says.

EMERGING PROFESSIONALS

Understanding the Power of Networking
Shane Kennett, Ph.D., P.E., CWI

During graduate school, Ph.D. candidates are tasked with developing new theories and proving new results that push the scientific envelope in their respective fields of study. When students finish their dissertation and decide to transition away from academia, their next major task is to learn how to assimilate into the “real world” which, in some cases, can be a relatively easy task. In the field of engineering consulting, this transition can be challenging due to the diverse nature of problems that are encountered for a wide array of industries. For consulting engineers to grow and be successful, they must be able to build trust with diverse clients who may come from a range of scientific and non-scientific fields. This may come easier for a confident and competent engineer—once they start working on projects.

However, a significant hurdle in the career of a young consultant lies in obtaining new clients that trust him or her with their most important issues. Young engineers are challenged not only by the projects, and at times, rapid turnaround times, but also by having to communicate findings with professionals who work in a variety of industries and/or those who may have vastly different educational or professional backgrounds. Each field tends to have its own terminologies or ways of approaching problems. These are hurdles every engineer will encounter. Effectively working through them will lead to becoming a well-rounded engineer. Professional networking is a key tool to overcoming these hurdles, but effective networking is not taught in graduate schools. Further, it can be lost when an engineer does not engage with professional societies. Because of this, it becomes increasingly important for engineers to become—and remain—active in professional communities while seeking to work across many disciplines. By maintaining relationships made during networking and obtaining a general knowledge of some of the difficulties or successes that colleagues are experiencing, one will continue to grow as an engineer and build a desirable set of experiences and skills. Networking can truly put the young engineer on a path to success.