

## Analice Sowell received the 2018 Kishor M. Kulkarni Distinguished High School Teachers Award at MS&T



“Thank you so much for the opportunity to speak to you today.

First, I want to thank Dr. Kulkarni and his family for establishing this award. This is an amazing honor and I am humbled to be this year’s recipient. Your dedication to pre-college education has a tremendous impact on students and teachers, and we appreciate your support of our efforts and being a part of our team.

To give you a quick background on me, I am a research chemist turned high school chemistry teacher. I worked in new product development and analytical testing services in the pulp and paper industry before I made the change to secondary education. Truth be known, I’ve always wanted to teach, so the transition was an easy one. Currently, I teach a first year Honors Chemistry course and a second-year advanced science elective in Materials Science at an all-boys high school. Usually when I use “teach chemistry” and “at an all-boys high school” in the same sentence, people just stare at me, possibly wondering if I have lost my mind. I promise you that teaching high school boys is not only fun but extremely rewarding.

My journey into teaching Materials Science began about six years ago. Because I work at an independent, college-preparatory school, our administration encourages faculty to develop unique electives in all subject areas for our students. From my undergraduate course of study and my time in industry, I knew materials science was the direction I needed to take for a new course. However, a topic like that is quite overwhelming, particularly the lab aspect, and making the course palatable to advanced high school students seemed like a daunting task. I have been to many professional development opportunities for teaching first year general chemistry but had never really looked for anything in materials science. A Google search lead me to info on the ASM Materials Camps for Teachers. I had to do a double take as I read the info because, in my mind, there was no way that one camp would have everything I needed to start my materials class. In July 2012, I made the trek about 90 minutes south of Memphis to the University of Mississippi. I attended the teacher camp all week and was blown away by the curriculum. It was everything I knew from my background, but in an organized, energizing, and empowering package. I went back to my school confident about launching a course in Materials Science. The camp handbook and sample demonstration materials were life savers that first year. I relied heavily on what I learned in camp to supplement the textbook I was using. I survived the first year of my course, the students seemed to like it, and I received quite positive feedback. But I wanted more. Thankfully, the Year Two materials camp for teachers, designed specifically for people like me with Materials Science courses, reinforced the info from Year One camp and supplemented the previous information with advanced theory. Since the first- and second-year camps, I have even attended a specialty teacher’s camp on additive manufacturing. There is room for so much more, though, and I

keep hoping someone from industry or academia will step forward and help create more advanced specialty camps on other topics.

In closing, I want to thank Debbie Goodwin and Andy Nydum for their time and effort to develop the materials camp for teachers with ASM. Without you, thousands of students across the country would never have been exposed to materials science through their teachers. Thank you to all the master teachers for the Materials Camps, who take time away from their families each summer to help other teachers see the beauty of materials science through the teacher camp curriculum.

Finally, I'd like to thank the ASM Foundation Board of Trustees and members of ASM International for their continued support of this program. I hope you realize the outstanding program you have in the materials camps for teachers. It is a program that has impacted teachers like me, and students like mine, in schools across the country. I hope your support of this program remains steadfast, and I hope you realize the impact it has on future scientists and engineers worldwide."



Kishor & Josie Kulkarni presenting the award to Analice

Analice Sowell  
Teacher, Materials Science & Chemistry  
Memphis University School, Tennessee