Materials Science & Engineering / Metallurgy Grad Seminar

Wednesday, August 22 2018, 4:10-5:00PM, WEB 1230

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How to Lose an Audience in 10 Minutes: Changing the Way We Communicate Science

You've just spent the last year of your life doing research on a topic you're passionate about. You have exciting findings that you are anxious to present to the scientific community. You get your work accepted to a prestigious conference and do your best to condense a year's worth of work into a 12 minute presentation or a 36" by 48" poster. In the middle of a week-long marathon of scientific talks, the day arrives for you to present. You find yourself in a poorly lit symposium room or within a massive exhibition hall of a sprawling convention center. Your audience is broad and heterogeneous consisting of jet-lagged academics, industry participants, policy makers, and fellow graduate students. You need to capture audience attention and interest, but you are competing with email, texts, fatigue, low expectations, and noisy talkers.

This scenario that I have described, though daunting, is the norm for presenting research findings to the scientific community. In this talk, I'll lay out the fundamentals of an effective scientific presentation and provide tips, skills, and training for graduate students of all engineering & science disciplines. Specific topics that I will cover include: how to edit your material and craft a compelling narrative, hallmarks of excellent figures, slides, and posters, how to tailor your message to your audience, and how to be an engaging speaker.

Dr. Sparks joined the Materials Science and Engineering Department at the University of Utah as an Assistant Professor in 2013. He is originally from Utah and an alumni of the department he now teaches in. Before graduate school he worked at Ceramatec Inc. He did his MS in Materials at UCSB and his PhD in Applied Physics at Harvard University in David Clarke's laboratory and then did a postdoc with Ram Seshadri in the Materials Research Laboratory at UCSB. He is currently the Director of the Materials Characterization Lab at the University of Utah. His current research centers on the discovery, synthesis, characterization, and properties of new materials for energy applications. He is a pioneer in the emerging field of materials informatics whereby big data, data mining, and machine learning are leveraged to solve challenges in materials science.