Carnegie Mellon University Materials Science & Engineering

presents

Making a Difference, Starting Today, in Diversity and Inclusion

Dr. Lynnette Madsen Program Director, National Science Foundation and Vice-President, Svedberg Science, Inc.

ABSTRACT: Today, scientific research has become increasingly characterized by team efforts. Strong team formation relies on the ability to identify, attract, and develop talent and to implement practices that facilitate people from different backgrounds and skillsets to work together. To achieve these goals, it is crucial for the entire community (whether individuals are members of underrepresented demographic groups or not) to work on all career levels simultaneously; transitions require particular attention since they are critical points. The result will be a mosaic, not a melting pot, but that is precisely what is needed – a variety of ideas and approaches to solve complex and wicked problems using creative means. Summarized in my talk will be the advice of 100 women that highlight their strategies for success while addressing work-life balance. Following this, I will provide actions that individuals can take to foster diversity. Such actions are magnified through support structures for diversity and inclusion (which will be the subject of a forthcoming article co-authored with Dr. Lisa M. Frehill).

BIOGRAPHY: Dr. Madsen has degrees from the University of Waterloo, Carleton University, and McMaster University, including a Ph.D. in Materials Science. Since 2000, she has been appointed at the National Science Foundation (NSF) as a Program Director in Materials Research. Concurrent appointments during this period include: Research Associate at The National Air and Space Museum of the Smithsonian Institution, Advisor on Strategic Projects in the Office of the Vice Provost for Research at the University of Pennsylvania, and Visiting/Adjunct Associate Professor in Materials Science and Engineering at Carnegie Mellon



University. Previously, she held a faculty position at Linköping University where she was promoted to Docent (Associate Professor), and earlier she held post-doctoral positions at both Linköping University and the University of Illinois at Urbana-Champaign. During the first decade of her career, she worked at Nortel Networks. Dr. Madsen is a Fellow of American Association for the Advancement of Science (AAAS), The American Ceramic Society (ACerS), the American Vacuum Society (AVS), Materials Research Society (MRS) and local organizations. She has been awarded three patents and

published two books, three book chapters/sections, and more than 100 articles. Her independent research has recently focused on broad topics such as commercialization, sustainability, and diversity, equity, and inclusion (DEI). In terms of DEI, she has been recognized by many organizations for her efforts and by the Women in Engineering ProActive Network (WEPAN) for her research. Currently, Dr. Madsen serves on the Advisory Board for the Rosalind Franklin Society and on the Editorial Board for Materials Today.

CMU Remote, 12:00 pm Friday, November 6 , 2020