

Preparing Tomorrow's Scientists and Engineers for the Challenges of the 21st Century

Keynote Speaker

Dr. Sonia Ortega

NSF Graduate-K12 Program Director

Evening Education Session

Sponsored by

IEEE CSS and AACC Technical Committees on Control Education

Chairs: Bozena Pasik-Duncan, University of Kansas/Fahmida Chowdhury, NSF

Thursday, June 11, 2009

6:30 – 8:00 pm

Park View Room

Light supper will be served

This presentation will discuss multiple challenges and opportunities that are presented to young investigators to prepare for careers in science and engineering. How can research and education be integrated? How is interdisciplinary research supported? How do graduate students gain value-added skills while obtaining their degrees? These questions will form the base for this presentation and will use examples from projects supported from various programs at NSF, especially in the Division of Graduate Education.

Dr. Sonia Ortega is a Program Director for the Graduate STEM Fellows in K-12 Education (GK-12) Program in the Division of Graduate Education at the National Science Foundation (NSF). The GK-12 program supports graduate students in science, mathematics and engineering to bring their scientific research to K-12 classrooms and help graduate students communicate science to lay audiences. For the last 20 years Dr. Ortega has been at NSF where she has directed several large and complex programs. She has been involved in programs that span the gamut of education levels and disciplines. Prior to coming to NSF, Dr. Ortega was a Research Associate at Duke University Marine Laboratory. She holds a BS in Biology from the University of Costa Rica, a Masters in Zoology from Duke University, and a Ph.D. in Biology from the University of South Carolina. For three years, while on leave from NSF, she worked as Director of Education and International Programs at the Long Term Ecological Research (LTER) Network Office at the University of New Mexico in Albuquerque. Dr. Ortega has been enthusiastically involved in many committees and organizations aimed at increasing the representation of women and minorities in the sciences. She received the 2008 Distinguished Professional Mentor Award from the Society for the Advancement of Chicanos, Latinos and Native Americans in Science (SACNAS).

This session is open to all participants of the ACC, in particular to the members of Women in Control Group, graduate students and to invited teachers from local high schools. The Control Education Committees believe that these groups can benefit significantly from this important session with the major goal to engage faculty, graduate students and teachers in engineering and science research. A panel discussion will follow with participation of invited NSF GK-12 Fellows from the University of Kansas.