

Preparing Tomorrow's Scientists and Engineers for the Challenges of the 21st Century session was held at the 2009 American Control Conference in St. Louis, MO, June 11, 2009. This presentation discussed multiple challenges and opportunities that are presented to young investigators to prepare for careers in science and engineering. Examples from projects supported from various programs at the National Science Foundation (NSF), especially in the Division of Graduate Education, answered questions on how research and education can be integrated, how interdisciplinary research is supported; and how graduate students gain value-added skills while obtaining their degrees.

Dr. **Sonia Ortega**, NSF Program Director for the Graduate STEM (Science, Technology, Engineering and Mathematics) Fellows in K-12 Education (GK-12) Program, was the keynote speaker. 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. A panel discussion followed with participation of invited NSF GK-12 Fellows from the University of Kansas and Washington University.

This session was open to all participants of the ACC, in particular, to the members of Women in Control Group, graduate students and invited teachers from local high schools. The Control Education Committees believe that these groups can benefit significantly from sessions that engage faculty, graduate students and teachers in engineering and science research.

The session was inspirational, successful and memorable. The overcrowded room brought a double than expected number of participants. The feedback from participating graduate students indicates a strong desire for organizing more sessions, similar as this one, bringing together: faculty, graduate and possibly undergraduate students, teachers and their students, and industry people .

Sponsored by: IEEE CSS and AACC Technical Committees on Control Education
Organizers/Chairs: **Bozenna Pasik-Duncan**, professor of mathematics and courtesy professor of electrical engineering and computer science, University of Kansas
Shirley Dyke, Dicke professor of engineering, Washington University
Fahmida Chowdhury, program director for the Cross-Directorate Activities Program, NSF

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Prepared by Bozenna Pasik-Duncan, Chair, CSS and AACC Technical Committees on Control Education