

Atmospheric Sciences Professor is Keynote Speaker

Dr. Sarah Brooks of the Department of Atmospheric Sciences, College of Geosciences, will be the keynote speaker Saturday January 19th at the Texas Junior Science and Humanities Symposium (JSHS), hosted by the College of Science. Academically elite high school students from across the state will be on campus to present their research projects for the three-day event that kicks off Thursday.

“In my position as director of Educational Outreach and Women’s Programs, I often need to seek out and invite exceptional scientists or engineers to address the young participants of our various outreach programs,” Dr. Nancy Magnussen said. “I try to select speakers that are doing high caliber research that has the potential to be important to our sponsors and to the students.”

Brooks’ presentation will describe the role she and her graduate students will play in a research expedition to Alaska in April. Scientists will study the numerous factors involved in climate change in the Arctic. The Department of Energy’s Atmospheric Radiation Measurement (ARM) program is leading a team of scientists to this field campaign, called the Indirect and Semi-Direct Effect of Aerosols on Climate (ISDAC). Brooks’ participation in the study will involve making airborne measurements of ice cloud nucleation on atmospheric particles.

“Dr. Brooks’ work on aerosols has the potential to be of great importance in the understanding of global warming and its effects on our world,” Magnussen said. “This is obviously a topic that has been debated at length, and Dr. Brooks’ research can perhaps provide the students with some understanding of how research can have a powerful effect on the community and global environment.”

Brooks’ research is focused primarily on chemical and physical processes of aerosol particles in the atmosphere. She works to improve scientists’ understanding of how natural and human-made aerosol particles may influence aerosol/cloud interactions. Brooks received a Presidential Early Career Award for Scientists and Engineers last November, the highest honor given by the U.S. Government to outstanding scientists and engineers beginning their careers.

Students attending the Symposium will present their original research prior to Brooks’ presentation, and an awards ceremony will be held following. Students who are awarded first, second, and third places will receive college scholarships. The first and second place finishers will be invited to participate in the national competition, which will be held this spring in Orlando, Florida.

“Many of the students in this competition will go on to be the scientists and engineers of the future,” Magnussen said. “We need to teach them well and provide them with the best role models available.”

Since its inception in 1958, the JSHS program has been sponsored by the United States Department of Army, joined by the Departments of Navy and Air Force in 1995. Forty-eight regional symposia are held throughout the United States and Puerto Rico.

The primary goal of JSHS is to promote research in the sciences, engineering, and mathematics at the high-school level. For more information on the symposium visit

<http://outreach.science.tamu.edu/tjshs.asp>.