

PEOPLE IN THE NEWS

Elaine Moran

*Acoustical Society of America
Melville, New York 11747*



Rajendra Singh

Rajendra Singh named ASEE's 2013 Outstanding Mechanical Engineering Educator

Rajendra Singh, Professor in the Mechanical Engineering Department at Ohio State University and a Fellow of the Acoustical Society of America, is the recipient of the 2013 Ralph Coats Roe Award by the Mechanical Engineering Division of the American Society of Engineering Educators (ASEE). The award recognizes a mechanical engineering educator who is an outstanding teacher and has made a notable contribution to the profession. The award was presented during the ASEE Annual Conference in Atlanta, Georgia, in June.

The citation submitted with his award nomination reads, "Professor Rajendra Singh thrives in a present-day academic role, yet is also able to meet significant learning needs of engineers who often are far off campus. His pioneering contributions include developing a case-study, team-project approach for distance learning and global education, establishing an NSF (National Science Foundation) center devoted to smart vehicle concepts, launching an innovative senior-level capstone laboratory, and creating a unique undergraduate honors



William J. Murphy

program. He has effectively disseminated engineering knowledge at the intersection of dynamics, vibrations, and machine design by publishing widely, organizing technical conferences, and mentoring students. He also has provided exemplary leadership in professional societies."

William Murphy receives NOISH Bullard-Sherwood Research-to-Practice Award

A project, coauthored by ASA Fellow William J. Murphy, and entitled "Field Attenuation Measurement for Hearing Protection Devices," won the 2013 award in the Technology category for the NIOSH Bullard-Sherwood Research-to-Practice Awards. Other coauthors on the project were M. Stephenson, D. Byrne, and C. Themann. The National Institute for Occupational Safety and Health (NIOSH) presents the Bullard-Sherwood Research-to-Practice Awards to recognize outstanding efforts by its scientists and their partners in applying occupational safety and health research to prevent work-related injury, illness, and death. The award is named for Edward W. Bullard, the inventor of the hard-hat, and for R. Jeremy Sherwood, the inventor of the personal

industrial hygiene sampling pump. Awards are made in three categories: Knowledge, Interventions, and Technology.

William J. Murphy, a Fellow of the Acoustical Society of America, is Co-team Leader, Hearing Loss Prevention Team, National Institute for Occupational Safety and Health in Cincinnati, Ohio. He is a Captain in the U.S. Public Health Service.

Peter Herstein receives National Defense Industrial Association award

Peter Herstein, an Associate Member of the Acoustical Society of America and an NUWC retiree, received the 2013 Vice Adm. Charles B. Martell-David Bushnell Award. The award is made annually by the National Defense Industrial Association (NDIA) Undersea Warfare Division to an individual who has made outstanding technical contributions to the defense preparedness of the United States in the field of Undersea Warfare.

The award citation read, in part: "Mr. Peter D. Herstein's 40 year government career in the field of Undersea Warfare has resulted in many far reaching contributions to scientific research, the development of major technical programs and the formulation of the future visions and requirements that shape the Navy of tomorrow.

"His contributions include improved understanding of environmental acoustics and advances to surface ship, submarine, surveillance and air-deployed systems sonar systems.

"In recognition of his numerous lifelong contributions to maintaining the U.S. Navy's superiority in undersea warfare, the Undersea Warfare Division of the National Defense Industrial Association (NDIA) is proud to present the Vice Adm. Charles B. Martell-David Bushnell Award to Mr. Peter D. Herstein."



(L to R): Ivan Seleznov, Inder Makin, Myles Mitchell

ASA judging team presents prizes at Intel International Science and Engineering Fair

A team of individuals, led by ASA member Inder Raj S. Makin, represented the Acoustical Society of America (ASA) in its role as a Special Awards Organization (SAO), at the Intel International Science and Engineering Fair (ISEF), held in Phoenix, AZ, 12–17 May 2013. The ASA judging team included Inder Makin, Bruce Towe, and Yi Zhou. Inder Makin was Chair of the judging team and presented the awards on behalf of the ASA at the SAO ceremony.

This was the 64th ISEF where more than 1500 high school students (grades 9–12), from around the world were selected as the finalists to present their research in different areas of pure and

applied science. The finalists were competing for approximately \$3M in cash awards as well as other recognition. ASA participated as one of more than 60 Special Award Organizations (SAO), to select winners in the special area of acoustics. Since 1978, ASA has been participating in ISEFs.

Among the more than 1500 finalist projects, a manual and electronic search was conducted to identify various projects related to acoustics. Specific searches with keywords related to specialized areas in acoustics were conducted. A total of 55 projects were identified, Notes taken on all projects were compared as a group and additional interviews were conducted, as the various teams were ranked.

First and second cash prizes of \$1,500 and \$500 respectively, were awarded to two students, while certificates of honorable mention were given to two additional teams. The winner of the first prize was Myles Withay Mitchell, Limavady Grammar School, Limavady, Northern Ireland, for his project entitled, “Misbehaving Waves: The SurReal Thing.” Mr. Mitchell successfully described his experimental technique of building an acoustic array using empty soda cans and a series of microphones as receivers to accomplish focusing of audio sound using time-reversal techniques. He grounded his work on research related to time reversal reported by Mathias Fink et al.

from France. The second winner was Ivan Seleznov, from Specialized School No. 22, Mykolai Ukraine, for his project entitled, “An ‘EXTRA’ Sense: Ultrasound Glove Assisting Spatial Orientation of the Visually Impaired.” This engineering acoustics based project described the development, characterization and evaluation of microcontroller based 40 kHz sources worn as a glove, with the system providing vibratory feedback to the visually impaired to navigate obstacles while walking.

Honorable Mention awards were given to two additional teams. Akshat Boobna, from Amity International School, New Delhi, India, entitled, “Finding Best Speaker Position Using New Algorithms to Determine Acoustic Properties of a Room.” Mr. Boobna demonstrated the use and validation of a robust algorithm to optimize the location of speakers in a room in a day-to-day setting. The software is designed to be implemented using a smartphone application. A duo, Tomohiko Sato and Takahiro Yomono, from Hiroshima Prefectural Fuchu Senior High School, Fuchu-shi, Japan, described, through an interpreter, their mathematical analysis and experimental validation of wave phenomena observed behind a stick-like object moving through water. Their research was entitled, “‘V-shaped Wave’ Generated by a Moving Object: Analyses and Experiments on Capillary Gravity Waves.”

TM
AqFlex : Revolutionary on/off absorption system

- Lowers RT (63 - 1000 Hz) by up to 45% at the push of a button
- α_{on} = app. 0.5 (63 - 1000 Hz) in entire ceiling area. α_{off} = app. 0.0
- For use in music education institutions , performing arts centres, etc
- Complies with the ASTM E 84, NFPA 701 and B,s1- d0 standards

• Detailed information: www.flexac.com

• Strategic support: www.USA.UM.dk

• Patents: EP 1 779 375 B1, JP 2008 510408, US 7905323 etc.

Any kind of acoustics at any time

CONSULATE GENERAL
OF DENMARK