ASEE to Present "President's Award" to Museum of Science President Ioannis Miaoulis and the National Center for Technological Literacy

The American Society for Engineering Education (ASEE) will present its “President’s Award” to Ioannis Miaoulis at a plenary session of the organization’s annual conference in Indianapolis, on Monday, June 16.

ASEE President Kenneth Galloway will present the award jointly to Miaoulis and the National Center for Technological Literacy® (NCTL®) of the Museum of Science, Boston, where Miaoulis is president and director. The first time a museum has been so honored, this award recognizes entities that encourage K-12 students to pursue engineering careers and/or influence public opinion and create recognition of the critical role that engineering plays in today's technology-driven society.

“For many years Ioannis has been a leader in advancing informal science and engineering education,” said Galloway. “He has remarkable insight into young people and how to make engineering ‘come alive.’” Further, Galloway noted that the “NCTL, in a relatively short period of time, has exposed millions of students to engineering concepts, at the very least broadening their education and likely encouraging many of them to consider an engineering career. This follows Ioannis’s impressive career as an innovative educator at Tufts University.”

Ten years ago, Miaoulis launched the NCTL to enhance knowledge of science, technology, engineering and math (STEM) for people of all ages, introducing engineering as early as elementary school and continuing it through high school and beyond. The NCTL works with education, government, and industry to integrate engineering in schools and museums nationwide. The strategy is to reform standards and assessments, develop curricula, exhibits, and programs, offer teacher professional development, and upgrade public perceptions of engineering.

"It's deeply gratifying to me as an educator and engineer that the American Society for Engineering Education is honoring the museum's NCTL," said Miaoulis. "People thought we were crazy to introduce a new discipline in schools nationwide. But engineering is the vital link that brings science and math alive, making them relevant to children who might later pursue careers in these fields and help maintain the nation's leadership in innovation."

Miaoulis, a former dean of Tufts School of Engineering, noted that it was Museum of Science vice president Christine Cunningham, an ASEE Fellow, who introduced the first eight teachers and 200 students to the NCTL's Engineering is Elementary® (EiE®) in 2004. NCTL curricula have now reached an estimated 71,000 teachers and 5.8 million students in 50 states.
Other NCTL milestones:

- The Museum has promoted engineering to over 3 million people via *Star Wars: Where Science Meets Imagination* exhibition, created with Lucasfilm Ltd.
- Its museum-based Design Challenges, conceived by Miaoulis, have engaged 450,000 young visitors in the engineering design cycle.
- Its award-winning EiE curriculum was chosen by Change the Equation as part of President Obama's "Educate to Innovate" campaign to improve STEM education. EiE is also being introduced statewide by Delaware, has been chosen by the Iowa Governor's STEM Advisory Council for the state's STEM Scale-up, and is the model for a European Commission-funded initiative to introduce engineering in primary schools and museums in nine European countries and Israel. Studies reveal positive outcomes for all student demographics.
- The NCTL's Gateway Project has been recognized by the Massachusetts STEM Advisory Council for helping school districts create strategic plans to implement K-12 technology and engineering programs.
- The NCTL built support for the first Engineering Education for Innovation Act, introduced in both chambers of Congress in 2010 and 2011, and for the Educating Tomorrow's Engineers Act in 2013.

More on Ioannis Miaoulis

Miaoulis has published more than 100 research papers and holds two patents. He has been honored with the Presidential Young Investigator award, the Allan MacLeod Cormack Award for Excellence in Collaborative Research, the William P. Desmond Award for Outstanding Contributions to Public Education, Tufts University Alumni Association's Outstanding Service Award, NASA's Exceptional Public Service Medal, and the ASME (American Society of Mechanical Engineers) Ralph Coats Roe Medal. He has co-chaired the Mass. Technology/Engineering Education Advisory Board, serving on the NASA Advisory Council, the NASA Education and Public Outreach Committee, the National Museum and Library Services Board, the Executive Committee of Mass. Governor Deval Patrick's Science, Technology, Engineering and Math Advisory Council, the American Association for the Advancement of Science Committee on Science & Technology Engagement, and the Center for the Advancement of Science in Space (CASIS) Board. He holds a B.S. in mechanical engineering, an M.A. in economics, and a Ph.D. in mechanical engineering from Tufts University. He also received a master’s in mechanical engineering from the Massachusetts Institute of Technology.

Contact:
Nathan Kahl
n.kahl@asee.org
A.J. Gosselin
agosselin@mos.org
617-589-0251