

## Dr. Jeffrey Tsao is Recognized as an Asian-American Engineer of the Year

Dr. Tsao, a Distinguished Member of Sandia's Technical Staff in the Semiconductor and Optical Sciences Department, is one of eight engineers upon whom this award was conferred this year by the AAEYO organization. He received this honor for, "sustained contributions to compound semiconductor materials and device science and exemplary contributions to solid-state lighting technology."

The AAEYO Award is a National Engineers Week Program to recognize the outstanding Asian-American professionals for their leadership, technical achievements, and remarkable public services in the fields of science, technology, engineering, and mathematics (STEM). The annual AAEYO events are supported by industry leaders, national laboratories, technical communities, academia, government agencies, and prominent U.S. companies. Some 600 distinguished guests, corporate executives, and community leaders attended the March 2nd award ceremony.



Dr. Jeffery Tsao.

Dr. Tsao's career has spanned three phases, each lasting about a decade. From 1981 to 1991, he was a research staff starting at MIT-Lincoln Laboratory and moving on to Sandia National Laboratories. During this period he focused on research publishing close to 100 journal articles and a research monograph, "Materials Fundamentals of Molecular Beam Epitaxy."

From 1991 to 2001, he broadened his scope firstly as research manager at Sandia, and secondly, on entrepreneurial leave, as Vice-President of R&D at E20 Communications which is a U.S.-based pre-IPO fiber communications components company. During this phase of his career, he built world-class teams and programs on "smart" compound semiconductor epitaxy and devices for high-speed communications.

Dr. Tsao returned to Sandia in 2001 as research staff, where he currently is with a broader focus, working on white papers and reports with an aim to influence larger national and global research directions. He has helped the DOE Office of Science and Office of Energy Efficiency and Renewable Energy coordinate workshops and roadmaps in various areas of energy science and technology. He is an early pioneer in solid-state lighting, a technology poised to transform how the world consumes 20% of its electricity. Along the way, he has outlined new and counterintuitive ways of thinking about the energy economics of lighting. He continues his career at Sandia National Laboratories as a Distinguished Member of Technical Staff, and Chief Scientist of its Energy Frontier Research Center for Solid-State-Lighting Science.

Dr. Tsao is married to Sylvia and they have two children.

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Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.



*The 2013 Asian-American Engineer of the Year awardees. Sandia's Jeff Tsao is fourth from the right (standing).*