

## Distinguished Lectureship Award on the Applications of Physics

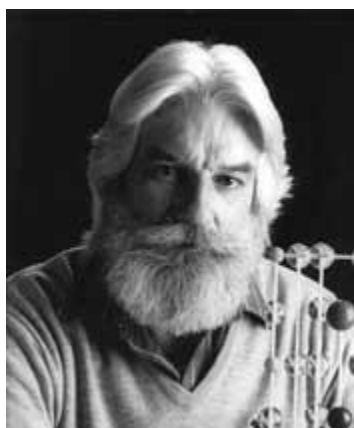
The American Physical Society's Committee on Careers and Professional Development (CCPD) and the Forum on Industrial and Applied Physics (FIAP) seek to recognize and honor physicists in industrial and other non-academic careers for their significant contributions to the advancement of physics of a technical, industrial, or entrepreneurial nature and for their demonstrated ability to give interesting and engaging lectures to both experts and non-experts.

This award will be given for a one year term. The award recipients agree to give a minimum of three lectures over a term of one year delivered at a national APS conference, a sectional APS conference, and other venues, such as physics department colloquia. They should be interactive and engaging, and they should be aimed especially at physicists early in their careers. The Distinguished Lectureship will include a \$5,000 award and a plaque to be presented at an APS conference following the completion of the Distinguished Lectureship term. Travel costs will be reimbursed by APS up to \$5,000.

### 2014 Distinguished Lectureship Award on the Applications of Physics Recipient:

[Paul M. Grant](#)

W2AGZ Technologies



**Citation:** *"For consistently promoting applications of physics and sound science within the broader public sector – encompassing industrial and governmental, as well as primary, secondary, and higher educational institutions and communities worldwide."*

**Background:** Paul Grant attended Oakwood Academy and Wappingers Central High School, near Poughkeepsie, New York, graduating from the latter in 1953. During the spring term of his senior year in high school, he was hired part-time by IBM as a pin-setter in its employee bowling alley, commencing what was to become a 40-year career with the company. Upon graduation he was assigned full-time to Project SAGE, the world's first supercomputer and prototype for NORAD, first as a mail boy, then bench technician and eventually trained as a system support programmer.

In 1956, IBM offered to underwrite his university education while he remained an employee, leading first to a BSEE degree (1960) from Clarkson University and subsequently the AM (1961) and PhD (1965) degrees in Applied Physics from Harvard University. While attending Clarkson, he continued working summers at IBM studying the Hall and magnetoresistive effects as applied to thin ferromagnetic film devices, which formed the central topic of his senior thesis and later resulted in two patents. He also designed and built one of the first thin film evaporation chambers which measured in-situ reflection electron diffraction during film growth (RHEED).

After obtaining his PhD, IBM relocated Dr. Grant to its San Jose/Almaden Research Center in California where he pursued a variety of fundamental material research studies, which included magnetic semiconductors, organic and polymer metals, and the discovery of new high temperature superconductors. He also co-initiated IBM's effort on magneto-resistive read head technology, deployed in hard drives worldwide today.

Upon retiring from IBM (1993), he accepted a position as Science Fellow at the Electric Power Research Institute (EPRI) where, until retiring once more (2005), he funded power applications of superconductivity and other "green energy" technologies.

Dr. Grant has published over 120 papers in scientific peer-reviewed journals, as well as numerous articles on science and energy issues in the popular press. He has written commentaries, book reviews, and essays appearing in *Nature*, *Physics World*, and *Physics Today* as well as advising members of US Congressional Committees on Science and Energy on various policy issues. He is a Senior Life Fellow of the APS, a Fellow of the Institute of Physics, and currently serves on the Committee on Superconductivity at IASS in Potsdam, Germany. He has held a visitor scholar appointment at Stanford University and now functions as a business associate at JPL/CalTech, and as a "due diligence" consultant for Silicon Valley venture capital enterprises. For further background, visit [www.w2agz.com](http://www.w2agz.com).