## Paul Grant '60 (From Clarkson "Notable Knights" Website)



Paul Grant received the BEE degree with great distinction from Clarkson in 1960, leading his class in grade point average, and also was the recipient of the Levinius Clarkson Award upon graduation. Paul is a member of the Clarkson chapters of the Eta Kappa Nu and Tau Beta Pi honor societies. His Senior Thesis addressed the use of the Hall and magnetoresistive effects for read-out of binary magnetic storage, later resulting in two patents forming the scientific foundation for the read-head technology of all "disc drive" devices deployed today. Following Clarkson, he attended graduate school at Harvard, receiving the

AM and PhD degrees in Applied Physics in 1961 and 1965, respectively. After graduation from Wappingers Central School and prior to entering Clarkson, Grant was employed by IBM Kingston for three years, and trained as a support programmer on the SAGE computer. His attendance at Clarkson and Harvard was underwritten by IBM. Upon receiving his PhD from Harvard, he was assigned by IBM to its research facility in San Jose, California. His career at the Almaden Research Center encompassed basic studies on rare earth, organic and polymeric semiconductors, conductors and superconductors as well as managerial and divisional staff duties. He participated in the 1987-88 discovery period of high temperature superconductors and is a co-holder on the international patent covering their preparation and processing.

In 1993, he retired from IBM after a 40 year career to accept a position as Science Fellow at the Electric Power Research Institute (EPRI) in Palo Alto where he funded a wide variety of power applications of wide bandgap semiconductors and high temperature superconductivity. An example of the latter was the first demonstration of a superconducting cable in a US utility (Detroit Edison). He retired from his second career in EPRI in 2005, and now conducts periodic "due diligence" consulting activity in Silicon Valley as W2AGZ Technologies (www.w2agz.com).

Throughout his post-Clarkson career, Grant has authored 15 US and international patents and patent publications, more than 130 papers in peer-reviewed scientific and technical journals, and has made in excess of 250 presentations, many invited, at scientific conferences and academic institutions worldwide. He has been interviewed frequently on national and international TV networks worldwide on the subject of superconductivity and future energy scenarios, appeared on PBS Nova, BBC Horizons and CBS 60 Minutes, as well as by the written press, examples being the New York Times and the London Times. He writes frequent commentary, editorial and review articles for Nature and Physics World. He has advised members of the US Congress, as well as government officials in Japan and China, on energy policy. Among the most recent of his many honors has been the recipient of the first American Physical Society Distinguished Lectureship on Applications of Physics and appointment to the Advisory Board of the Honors Council of Clarkson University.

## Full Profile Follows

Professional: Senior Life Fellow American Physical Society Fellow Institute of Physics (United Kingdom) Senior Member IEEE Member Materials Research Society Science Fellow EPRI (1993-2004) Research Staff Member/Manager IBM (1965-1993) Principal W2AGZ Technologies (2005-Present) Visiting Professor of Materials Science National University of Mexico, UNAM (1990-1993) Visiting Scholar in Applied Physics Stanford University (2008-2008) **Business Associate** JPL/NASA/CalTech (2009-Present)

## Volunteer/Activities:

US National Ski Patrol: Senior/Professional (1963-1984) Co-founder, Alpine Meadows Volunteer Patrol (1965) US National Forest Avalanche Certificate (1967) Paramedic Certification: UCSF Medical School (1970) Alpine Meadows Patrol Leader (1967-1969) Gilroy High School: Led student team developing the "superconductivity levitation kit" (1987) Peer Reviewer: DOE Superconductivity Partnership Initiative (1987-2010) Many More: Visit <u>http://w2agz.com/PMG\_Background/CV/Curriculum%20Vitae.pdf</u> Most Recent: Advisory Board, Honors Council, Clarkson University (2013-Present)

## Education:

College

Clarkson College of Technology, Potsdam, NY, BEE (1956-1960)

Graduate

Harvard University, Cambridge, MS, AM & PhD, Applied Physics (1960-1965) Postgraduate

Imperial College, London (1965)