



THOMAS C. MCGILL

1942-2009

Thomas C. McGill, professor of applied physics, emeritus, passed away on March 19. He was born on March 20, 1942, in Port Arthur, Texas. He received his BS from Lamar State College of Technology in 1964, and his MS and PhD from Caltech in 1965 and 1969, respectively. In 1971, he was the first faculty member hired in the new discipline of applied physics. He was Fletcher Jones Professor of applied physics from 1985 to 1999 and became emeritus in 2008.


A pioneering researcher in semiconductors, he exploited such solid-state phenomena as Schottky barriers, heterojunctions, and superlattices, as well as his vast knowledge of the properties of amorphous materials, to develop devices for applications ranging from infrared detectors and high-speed memory chips to solid-state lighting.

McGill authored or coauthored hundreds of publications, and directed the theses of over 50 PhD students in electrical engineering, physics, and applied physics. He served for nearly 30 years as a consultant to the Defense Science Research Council of the Defense Advanced Research Project Agency, was a member of the congressionally mandated Semiconductor Technology Council, and served as chief of the Naval Operations Executive Panel.

He is survived by his wife, Toby Cone McGill, and two daughters, Angela McGill Avogaro and Sarah McGill. 

TWO DIVISION CHAIRS NAMED

Ares Rosakis, the von Kármán Professor of Aeronautics and Mechanical Engineering, has been named chair of the Division of Engineering and Applied Science, effective May 1. Rosakis, an expert in the ultrafast fracture mechanics in materials ranging from airplane wings to the continental crust, joined the Caltech faculty in 1982. Since 2004, he has served as director of the Graduate Aeronautical Laboratories (GALCIT), where he spearheaded the creation of a new master's degree option in aerospace engineering and oversaw the remodeling of the Guggenheim Aeronautical Laboratory building to house it.

And Jacqueline Barton, the Hanisch Memorial Professor and professor of chemistry, has been named chair of the Division of Chemistry and Chemical Engineering, effective July 1. Barton's research focuses on molecular properties of DNA, such as how electrons can travel along the "rungs" of the DNA ladder, which may have implications for how cells find and repair damage to their DNA; and how small molecules containing metal atoms can recognize and bind to specific sites on DNA, particularly to mismatches that may promote cancer. She has been a Caltech faculty member since 1989. 

HUANG ELECTED AAAS PRESIDENT



Senior Faculty Associate in Biology Alice Huang has been elected president of the American Association for the Advancement of Science for the year 2010–2011. A distinguished virologist, Huang has been a strong advocate for women in science throughout her career. She has also consulted on science policy for various governmental agencies in Singapore, Taiwan, and China. The AAAS is the world's largest general scientific society, with nearly 120,000 individual and institutional members. 