

BIOGRAPHICAL SKETCH

G. P. "BUD" PETERSON

G.P. "Bud" Peterson was appointed as the 11th President of Georgia Tech on April 1, 2009. Prior to his appointment, he served as Chancellor at the University of Colorado at Boulder, Provost at Rensselaer Polytechnic Institute in Troy, New York from 2000 through 2006, and Program Director at the National Science Foundation for the Thermal Transport and Thermal Processing Program (1993-1994). He has held various positions at Texas A&M University, beginning in 1981 as an assistant professor of engineering technology and Halliburton Professor of Mechanical Engineering (1990), the College of Engineering's Tenneco Professor, Head of the Department of Mechanical Engineering (1993-1996), Executive Associate Dean of Engineering (1996-2000), and Associate Vice Chancellor for Engineering for the Texas A&M University System (1996-2000). Prior to his service at Texas A&M, he was a Visiting Research Scientist at NASA-Johnson Space Center in Houston, Texas, Associate Professor and Head of the General Engineering Technology Department at Kansas Technical Institute in Salina, Kansas (1979-1981), and taught mathematics, physics and chemistry at Shawnee Mission South High School in Overland Park, Kansas (1978-1979) and Wabaunsee County High School in Alma, Kansas (1977-1978).

Throughout his career, Dr. Peterson has played an active role in helping to establish the national education and research agendas, serving on numerous industry, government, and academic task forces and committees. He has served as a member of a number of congressional task forces, research councils, and advisory boards, including the Office of Naval Research (ONR), the National Aeronautics and Space Administration (NASA), the Department of Energy (DOE), the National Research Council (NRC), and the National Academy of Engineering (NAE). In addition, he has served as a member of the Board of Directors and Vice President for Education for the American Institute of Aeronautics and Astronautics (AIAA) and is currently serving as a member of the National Science Board, Co-Chair of the Government Relations Committee of the Association of Public and Land-grant Universities (APLU), and as a member of the US Council on Competitiveness.

As Chancellor of the University of Colorado, Dr. Peterson led the development of a new university wide strategic plan, *Flagship 2030* that defined a vision for the university for the next 20 years. In his nearly three years as Chancellor, freshman applications increased by 35%, the number of underrepresented minorities in the freshmen class increased by 38%, sponsored research increased by more than 18% and private philanthropy for the university increased by nearly 80%.

As Provost at Rensselaer, he played a key role in the institutional transformation and the dramatic improvement in the quality, size and diversity of the faculty – overseeing the hiring of nearly 40% of the faculty, increasing the total number of tenured and tenure-track faculty by 20%, and improving the diversity of the tenured/tenure-track faculty by more than doubling the number of under-represented minorities and increasing the number of women by 40%. In addition, during his tenure as Provost, the quality, size and diversity of the student body increased, with the number of full-time Ph.D. students increasing by 25%.

Dr. Peterson's research interests have focused on the fundamental aspects of phase change heat transfer, including the heat transfer in reduced gravity environments, boiling from enhanced surfaces, and some of the earliest work in the area of flow and phase change heat transfer in microchannels. Early investigations focused on applications involving the thermal control of manned and unmanned spacecraft and progressed through applications of phase change heat transfer to the thermal control of electronic components and devices. More recently, investigations have included fundamental applications of phase change heat transfer to the field of biotechnology, including the insitu treatment of cancerous tissue using hypo and hyperthermia and arresting epileptic seizures through the rapid cooling of localized tissue in the brain, which required highly efficient heat dissipation devices, capable of dissipating the thermal energy to the surrounding tissue.

A Fellow of both the American Society of Mechanical Engineers and the American Institute of Aeronautics and Astronautics, Dr. Peterson is the author or co-author of 14 books or book chapters, 180 refereed journal articles, more than 150 conference publications and holds eight patents with two others pending. He is a member of several professional organizations and the recipient of numerous national and international honors and awards for both teaching and research.