



Edward M. Weiss

GERARD M. FAETH

1936–2005

Elected in 1991

*“For seminal contributions to understanding the structure of
combustive and noncombustive sprays.”*

BY C.T. BOWMAN AND W.A. SIRIGNANO

GERARD MICHAEL FAETH, Arthur B. Modine Distinguished University Professor of Aerospace Engineering at the University of Michigan and a principal investigator for a number of combustion experiments on Space Shuttle missions, passed away on January 24, 2005, at the age of 68.

Jerry was born in New York City on July 5, 1936, and grew up in Teaneck, New Jersey. At Union College in Schenectady he played varsity football and earned a bachelor’s degree in mechanical engineering in 1958. He went on to study mechanical engineering at Pennsylvania State University, receiving an MS degree in 1961 and a PhD in 1964. He served on the Penn State mechanical engineering faculty from 1964 to 1985, and then joined the University of Michigan, where he was named Arthur B. Modine Professor of Aerospace Engineering and head of the Gas Dynamics Laboratory. In fall 2004 he was named a Distinguished University Professor, one of the highest honors a faculty member can receive.

During his diverse career he published more than 230 archival journal papers and 200 conference papers, presented more than 200 invited lectures and seminars, and mentored over 50 doctoral students and 20 master’s students. His research was characterized by excellence and originality, and spanned many areas—combustion of fuel sprays, liquid breakup processes in

jets, droplet breakup processes, turbulence properties of jets and plumes, turbulence in multiphase flows, flame structure, particulate formation in flames, heat transfer from combustion processes, fire suppression, and microgravity combustion. His research papers are exceptionally well cited and many are regarded as classical in their areas. In addition, he was editor of major journals in three different fields: *Combustion and Flame*, the *ASME Journal of Heat Transfer*, and the *AIAA Journal*.

Jerry was elected to the National Academy of Engineering in 1991 and a fellow of four technical societies—the American Institute of Aeronautics and Astronautics, American Society of Mechanical Engineers, American Association for the Advancement of Science, and American Physical Society. In 2004 the Combustion Institute awarded him the Alfred C. Egerton Gold Medal for his distinguished and continuing contributions to the field of combustion.

Clearly, his extraordinary achievements were widely recognized and, based on his exceptional energy, practical wisdom, and engaging personality, led to his selection for many leadership positions. He was active in public service, serving as a member or chair of numerous NASA, NRC, and NAE advisory panels. His universities often asked him to lead recruitment searches for high-level positions. He also served as reunion chair for Union College, his alma mater.

Jerry and Mary Ann, his late wife, were an active, visible, and immensely popular couple in social activities associated with scientific conferences. They took great pleasure in traveling to exotic locations together, and retreating each summer to their cottage in Eagles Mere, Pennsylvania, with close friends. They are survived by three daughters, a son-in-law, and six grandchildren.

