

NAME: George Alanson Greene

CLASSIFICATION: Mechanical Engineer

FIELD OF EXPERTISE: Fluid Dynamics, Heat and Mass Transfer (cryogenic and high temperature)

EDUCATION:

1972 - B.E.S., Engineering Science, SUNY Stony Brook, NY

1974 - M.S., Mechanical Engineering, SUNY Stony Brook, NY

1980 - Ph.D., Mechanical Engineering, SUNY Stony Brook, NY

2000 - Elected to Fellow of the American Society of Mechanical Engineers

EXPERIENCE:

1976-Present: Brookhaven National Laboratory. Group Leader of the Experimental Heat Transfer Group. Provide experimental facilities and expertise for investigations into thermal-hydraulics and safety issues for chemical process, power generation, and particle accelerator facilities. These phenomena include boiling heat transfer phenomena, multi-phase flow and heat transfer, molten-metal fluid dynamics, multi-phase metal-water interactions, aerosol behavior, high temperature chemistry, radiation heat transfer and performance of accelerator target materials.

1994-Present: Academic Press, Inc. Associate Editor of the book series Advances in Heat Transfer.

1984-Present: State University of New York at Stony Brook. Adjunct Professor of Engineering in the Department of Mechanical Engineering. Taught undergraduate courses in heat and mass transfer, fluid dynamics, and experimental methods. Supervised the research of thirteen students, including two Ph.D. dissertations.

1965-1970: U.S. Army. Platoon Leader, Executive Officer, and Company Commander of Armored Cavalry Company. Responsible for command and combat operations for a 300-man armored cavalry unit in the Republic of Vietnam.

SELECTED PUBLICATIONS:

Greene, G.A., J.C. Chen, and M. Conlin, "Onset of Entrainment Between Immiscible Liquid Layers Due to Rising Gas Bubbles," Int. J. Heat Mass Transfer (1988).

Greene, G.A., J.C. Chen, and M.T. Conlin, "Bubble Induced Entrainment Between Stratified Liquid Layers," Int. J. Heat Mass Transfer (1990).

Greene, G.A., "Heat, Mass, and Momentum Transfer in a Multi fluid Bubbling Pool," in Advances in Heat Transfer, v. 21, Academic Press, San Diego, CA (1991).

Greene, G.A., T.F. Irvine, Jr., T. Gyves, and T. Smith, "Drag Relationships for Liquid Droplets Settling in a Continuous Fluid," AIChEJ (1993).

Greene, G.A. and T.F. Irvine, Jr., "The Effect of Subcooling on Film Boiling on Vertical Cylinders," 10th IHTC, Brighton, UK (1994).

Greene, G.A., editor, Advances in Heat Transfer in Nuclear Reactor Safety, v. 29, Academic Press, San Diego, CA (1997).

Capobianchi, M., G. A. Greene, T. F. Irvine, Jr. and N. K. Tutu, "A New Technique for Measuring the Fickian Diffusion Coefficient in Binary Liquid Solutions," Int. J. Exp. Thermal and Fluid Science (1998).

Lee, S. R., T. F. Irvine, Jr. and G. A. Greene, "A Computational Analysis of Natural Convection in a Vertical Channel With a Modified Power Law Non-Newtonian Fluid," 11th IHTC, Seoul, ROK (1998).

Greene, G. A., C. C. Finrock and T. F. Irvine, Jr., "Total Hemispherical Emissivity of Oxidized Super-Alloy Inconel 718 in the Temperature Range 300°C to 1000°C," Int. J. Exp. Thermal Fluid Science (2000).

Greene, G. A. and C. C. Finrock, "Vaporization of Tungsten in Flowing Steam at High Temperatures," Int. J. Exp. Thermal Fluid Science (2000).