

Dr. S. Mostafa Ghiaasiaan



Professor S. Mostafa Ghiaasiaan is an internationally recognized expert on thermal-fluid and transport phenomena. He is a professor at the George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology. He received his MSc in nuclear science and engineering from Imperial College, University of London, in 1978; and his PhD in thermal science from UCLA in 1983. From 1983 until 1991 he was employed with the aerospace industry in Southern California. He joined the faculty of Georgia Tech in 1991, as an associate professor. He was promoted to full professor in 2001. His broad areas of research in the past have included transport phenomena in multi-phase flow, change-of-phase heat transfer, transport phenomena in microchannels, and cryogenics and cryocooler science and technology. He is a fellow of American Society of Mechanical Engineers (ASME), a member of the American Cryogenics Society. He is a registered professional mechanical engineer in the State of California. Among his publications are more than 140 peer-reviewed articles, and the following two graduate-level text book:

- Ghiaasiaan, S.M., *Two-Phase Flow, Boiling and Condensation in Conventional and Miniature Systems*, Cambridge University Press, 2008. (ISBN 978-0-521-88276-7.)
- Ghiaasiaan, S.M., *Convective Transport of Heat and Mass*, Cambridge University Press, to appear, December 2010.

Cryogenics/cryocoolers, and cryogenic aspects of thermal control, have been Professor Ghiaasiaan's main topics of focus for the past decade. He directs the Georgia Tech Cryo Lab. His research group has extensively investigated the flow and transport phenomena in the regenerators of Stirling and pulse tube cryocoolers, CFD simulations of cryocooler systems in their entirety, and the miniaturization of pulse tube cryocoolers. He is a member of the International Cryocooler Conference (ICC-16) Board, and has served as the ICC-16 Conference Chair, in 2010, in Atlanta, Georgia.