



**Dr. G. Ali Mansoori** (<http://mansoori.people.uic.edu>) is a professor-emeritus of chemical engineering, bioengineering and physics at the University of Illinois at Chicago. He holds degrees of BSc, MSc and PhD and postdoctoral training in chemical engineering. He has been teaching various university level courses which include (EnrE 100: Energy: Sources, Conversion, Conservation, ChE 201 & EnrE 201: Engineering Thermodynamics, Hon 201: An Introduction to Fossil Fuels, BioE 205: Bioengineering Thermodynamics, EnrE 250: An Introduction to Environmental Pollution Control; ChE 301: Chemical Engineering Thermodynamics, BioE 405: Atomic & Molecular Nanotechnology, EnrE 495: Energy Conversion, EnrE 501: Advanced Thermodynamics, BioE 505: Nanobiotechnology, and other courses in the areas of fluid mechanics, heat transfer, mass transfer, engineering design, irreversible thermodynamics, mixtures, phase transitions, statistical mechanics, transport phenomena and applied mathematics. In addition, Dr. Mansoori has delivered numerous short courses on matters related to energy, nanobiotechnology, nanotechnology, statistical mechanics and thermodynamics at the sites of many companies, professional societies, government laboratories, research centers, NGOs, etc.

Dr. Mansoori has been active in research in the areas of renewable, non-renewable & nuclear energies, thermodynamics, nanotechnology, nanobiotechnology, statistical mechanics, and molecular based study of phase behavior & flow assurance in petroleum and natural gas industries. He has over 650 publications which includes authorship, co-authorship and editorship of ten books (including the present book). He has been a consultant to numerous companies and organizations.

Dr. Mansoori is the founder of the series of conferences on **International Non-Renewable Energy Source Congress (INRESC)**, co-founder of **Fluids and Thermal Energy Conversion (FTEC)** Conferences, founder of annual **Midwest Thermodynamics and Statistical Mechanics Symposium Series**, organizer and main speaker of **Advances in Nanoscience & Nanotechnology**, organizer of over 185 symposium series, workshops and short courses for various professional societies, industrial organizations and academic institutions. He has given over 170 invited seminars at various universities and research centers on the above-mentioned topics.

Dr. Mansoori has served as the editor-in-chief of *Energy Sources Journal* for six year, co-editor of *Journal of Petroleum Science and Engineering* for eight years, honorary editor-in-chief of *International Journal of Nanoscience and Nanotechnology* for fifteen years, and as the series editor of books related to his fields of research, a member of editorial boards of numerous journals the list of which are too many to include here.