Dedication

to

Alex E. S. Green, Ph.D.

(1919–2014)

Graduate Research Professor
Physics and Aerospace & Mechanical Engineering
University of Florida
Gainesville, Florida USA

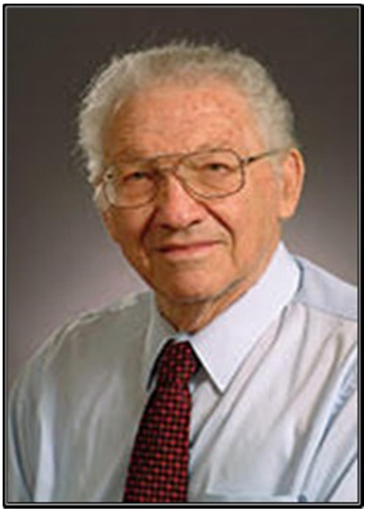

Photo Courtesy of the Green Family

In grateful memory of his selfless contributions of teaching and the advancement of his innovative theory of the Solar Aureole Intensity Measurement along the Almucantar and Sun-Vertical Directions to Determine the Atmospheric Aerosol-Size-Distribution and Scale-Height, respectively, we, the co-authors of this work, dedicate the published results of our efforts herein to Dr. Alex E. S. Green.

Dr. Green held an MS in Physics from Caltech (1941) and a Ph.D. in Physics from the University of Cincinnati (1948). Following faculty positions at the University of Cincinnati, and Florida State University, and a period as Chief of Physics at Convair General Dynamics in San Diego, he returned to academia as Graduate Research Professor at the University of Florida at Gainesville for 40 years. Subsequently, in addition to several entrepreneurial ventures, he continued his activities with the University as Graduate Research Professor Emeritus with the Departments of Mechanical and Aerospace Engineering and Nuclear and Radio-logical Engineering.

Among his peers, colleagues, and students Dr. Green was highly respected as a truly visionary scientist and innovator. Throughout his career he was honored with recognition, receiving the Medal of Freedom in 1947; the War Dept. Citation for Outstanding Overseas Service in WWII; the Florida Academy of Sciences Medal for Outstanding Scientist in 1975; the Governor's Energy Award and the US DOE National Energy Innovation Award in 1988. He was a Fellow of the American Physics Society, as well as being a member of The Optical Society; Phi Beta Kappa; Sigma Xi; World's Who's Who in Science; and Leaders in American Science. He also served as a reviewer for many journals, the most recent of which specialized in advanced thermal processing of materials. We were privileged to honor Dr. Green on the occasion of his 75th birthday with a Festschrift, at which over a dozen of his former grad students presented work that had a direct basis in his theory/teachings.

Dr. Green's most recent research activities included: co-utilization of domestic fuels; alternative fuels; pyrolysis; and gasification. Previously, he conducted research on defense conversion and atmospheric, radiological, atomic, and nuclear physics. His research has been published in over 400 peer-reviewed publications, as well as in over 500 reports and contributed papers, over 100 of them related to pyrolysis.