John W. Daily

Center for Combustion and Environmental Research
Department of Mechanical Engineering
University of Colorado at Boulder
Boulder, CO 80309-0427
(303) 492-7110, (303) 492-2863 FAX
john.daily@colorado.edu
http://spot.colorado.edu/~daily

Dr. Daily is currently Professor of Mechanical Engineering and Director of the Center for Combustion and Environmental Research at the University of Colorado at Boulder. He studied Mechanical Engineering at the University of Michigan (B.S. 1968, M.S. 1969) and at Stanford University (Ph.D. 1975.) Prior to starting college he worked on sports and racing cars, owning his own business. Between the M.S. and Ph.D. degrees he worked as a Heat Transfer Analyst at Aerojet Liquid Rocket Company. After receiving the Ph.D. he was a faculty member at the University of California at Berkeley until 1988, attaining the rank of Full Professor of Mechanical Engineering. From 1988 until 1990 he was Director of the Center for Combustion Research at the University of Colorado. He served as Chair of the Mechanical Engineering Department from 1990 to 1995, then reassumed his position as Director of the Center for Combustion and Environmental Research. He served as Interim Chair of the Mechanical Engineering Department for the 1999/2000 academic year.

Most of his academic career has been devoted to the field of energy, focusing on combustion and environmental studies. He has worked on combustion and heat transfer aspects of propulsion and power generation devices, studying such topics as fluid mechanics of mixing, chemical kinetics, combustion stability, and air pollution. He also works on the development of advanced diagnostic instrumentation (including laser based) for studying reacting flows and environmental monitoring. Most recently he has been working in the areas of biomass thermochemical processing and source characterization, wildfire behavior, the environmental consequences of combustion, optical biopsy, and MEMS applications in combustion and instrumentation. Dr. Daily is a founder of Precision Biopsy Inc., a startup company developing technology for the optical detection of prostate cancer. He has over two-hundred scientific and technical journal and conference publications. He has consulted in the areas of energy systems, engine combustion, product safety, accident reconstruction, fire safety, toxic air contamination and air quality. Dr. Daily teaches both undergraduate and graduate courses in the thermal-sciences, including thermodynamics, heat transfer, energy and power, combustion, direct energy conversion, experimentation and measurement, optical diagnostics and design. He recently has taught courses in chemical kinetics and molecular modeling.

Dr. Daily is an Honorary Member of Pi Tau Sigma, Sigma Xi (past), The Combustion Institute, and a Fellow of The American Institute of Aeronautics and Astronautics (AIAA). He was a 1987 recipient of the Society of Automotive Engineers' Ralph A. Teetor Award for Engineering Educators. For ten years he was a member of the San Francisco Bay Area Air Quality Management District Advisory Council, and was Chair for 1985-1986. He has chaired both the AIAA Propellants and Combustion Technical Committee and the Professional Member Education Committee. He is presently chair of the AIAA Publications Committee, resposible for all AIAA journal and book publications. He served on and chaired the State of Colorado Hazardous Waste Commission for over ten years and was on the State of Colorado Air Quality Control Commission. He is a Registered Professional Engineer in the State of California.