

BIOGRAPHICAL SKETCH
for
HERBERT M. ECKERLIN

(919) 515-5227 (business)
(919) 787-5682 (home)
eckerlin@eos.ncsu.edu

EDUCATION

B.S. (1958) Virginia Polytechnic Institute
M.S. (1968) North Carolina State University
Ph.D. (1972) North Carolina State University

POSITIONS

Professor, Mechanical & Aerospace Engineering, North Carolina State Univ. (1968 – present)
Founder & Principal, Center for Boiler Studies (1979 – present)
Research engineer, Fluidics Research, Corning Glass Works (1965 – 1968)
Boiler Design/Analysis, Combustion Engineering (1960 – 1965)
Boiler Testing/Operation, Virginia Power (1959 – 1960)

ENERGY AND BOILER EXPERIENCE

BOILER EMISSIONS CONSULTANT TO INDUSTRY (1993 – present).

- Directed nationwide boiler emissions testing program *to evaluate the actual emission levels emanating from industrial boiler plants* (compared to AP-42 Emission Factors).

ENERGY/BOILER EFFICIENCY CONSULTANT (1984 – present).

- Directed nationwide boiler test program *to evaluate the losses and costs associated with oil-versus natural gas firing*. A partial listing of clients includes:
 - Domtar-Cornwall Paper Company, Cornwall, Ontario
 - Nova Chemical, Sarnia, Ontario
 - Bowater Corporation, Thunder Bay, Ontario
 - Hiram Walker, Windsor, Ontario
 - Petro-Canada, Oakville, Ontario
 - Transgas, Lisbon, Portugal
 - Metrogas, Santiago, Chile
 - Ford Motor Company, Detroit, MI
 - Atlantic Richfield, Philadelphia, PA
 - R. J. Reynolds, Winston-Salem, NC
 - General Motors, Wilmington, DE
 - Georgia Pacific, Brunswick, GA
 - International Paper, Corinth, NY
 - Anheuser-Busch, Syracuse, NY
 - Miller Brewing Company, Eden, NC
 - Pratt & Whitney, Southington, CT
 - Nestle Foods, East St. Louis, IL

- GE Silicone Products, New York
- McGraw-Hill/Chemical Engineering, New York, NY
- Pacific Gas & Electric, San Francisco, CA
- Mobil Oil, NJ; TX; LA; IL.

SEMINAR DEVELOPER/LEADER (1974 – present).

- Presented over 300 seminars on “Boiler Efficiency” and Energy Conservation” nationally and internationally.

LEADERSHIP OF NCSU ENERGY PROJECTS (1974 – present). Principal Investigator.

- Director, NC Industries of the Future Program. (2001- present).
- Director, Industrial Assessment Center. (1992- present).
- Faculty Chairman, NC Solar Center. (1988 – present).
- Principal Investigator, NCSU Solar House (1980 – present).
- Principal Investigator, Solar Industrial Process Heat (1980).
- Course Director, “Converting Industrial Boilers to Coal Firing” (1982-83).
- Director, NCSU Boiler Efficiency Workshop Program (1976 – present).
- Director, Energy Walk-Thru Program (1975 – 1982). Directed over 1,000 audits. ms.

PROFESSIONAL SOCIETIES

American Society of Mechanical Engineers
 The Society of Sigma Xi
 American Solar Energy Society
 Phi Kappa Phi

AWARDS

American Gas Association “Hall of Flame,” 1994.
 Renew America, INC. National Award for Environmental Sustainability, 1994
 NCSU Alumni Association, “Outstanding Extension Service Award,” 1990.
 NASA – ASEE Summer Faculty Fellowship in Engineering Systems Design, 1974.
 NCSU “Outstanding Extension Service Award,” 1978, 1985, 1989, 1996.
 U.S. Department of Energy “Award for Energy Innovation,” 1984.

PATENTS

Awarded 11 patents in Fluidics and Boiler Design.

REGISTERED PROFESSIONAL ENGINEER IN NORTH CAROLINA