Harry G. Fair

Each year, a special lecture is given in memory of Harry G. Fair, an outstanding OU alumnus. Harry G. Fair was born in Okmulgee, Oklahoma, on June 3, 1916. He received his B.S. in Chemical Engineering in 1939. He joined Phillips Petroleum Company in 1939 and worked his way up to Vice President for Supply and Transportation, with responsibility for world-wide exchange of crude oil and all transportation facilities. In 1966, he joined the M.W. Kellogg Company as Executive Vice President, in charge of all engineering activities and became Executive Vice President of Coastal States Gas Corporation from 1971 until the time of his death on July 27, 1974. Harry G. Fair was active in service to society and to his alma mater. He was a member of a number of professional societies and was a licensed professional engineer.

This lecture is made possible by the Harry G. Fair Memorial Fund contributed by his widow, Jane Swift Fair. Arrangements are made by the School of Chemical Engineering and Materials Science.

Current Position: Thomas R. Briggs Professor of Engineering, Cornell University

Career Highlights: Ph.D. Chemical Engineering, King's College, University of London, 1962. Postdoctoral fellow, University of Florida, 1962-64. Faculty positions, Univ. Florida 1964-76. Thomas R. Briggs Prof. Engineering, Cornell University, 1976- . Director, School of Chemical Engineering, 1983-90. Visiting Professorships: Imperial College of Science & Technology, London 1971-72 (Chemical Eng.) and 1994 (Chemistry); University of Guelph (Physics) 1971, summers 1972, 1973, 1976; Univ. of Kent (Physics), summer 1975; Univ. of Oxford (Chemistry) 1979-80, 1986-87; University of California, Berkeley (Chemical Engineering), 1982; University of Wisconsin, Madison (Chemical Engineering), 1993; Australian National University (RS Chemistry), 1993; Imperial College of Science & Technology, 1994.

Research Interests: Statistical mechanics and molecular simulation of bulk and confined fluids and interfaces; behavior of fluids in porous media, phase transitions, diffusion of fluids.

Honors and Professional Service (1985-present): Guggenheim Fellow, 1986-87; Alpha Chi Sigma Research Award, American Inst. Chem. Engr., 1986; Senior SERC Visiting Fellow, Oxford Univ. 1986-87 and Imperial College, London, 1994; National Academy of Engineering, 1989; Fulbright Senior Scholar, Australian National Univ. 1993-94. Endowed lectureships (last 5 years): Dodge Lecturer, Yale Univ. 1990: Katz Lecturer, Univ. Michigan, 1991; Wohl Lecturer, Univ. Delaware, 1991; Merck Lecturer, Rutgers Univ., 1992; Olaf Hougen Visiting Professor of Chemical Engineering and Lecturer, University of Wisconsin, Madison, 1993; Miles Lecturer, Univ. Pittsburgh, 1994; Merck Lecturer, Univ. Puerto Rico, 1995; Robb Lecturer, Pennsylvania State University, January 28, 1997; Fair Lecturer, University of Oklahoma, 1997.

Keith E. Gubbins

Teaching awards: Sigma Tau-Tau Beta Pi Award for Excellence in Undergraduate Teaching, University of Florida, 1968 and 1974; Tau Beta Pi Award for Excellence in Undergraduate Teaching, Cornell University, 1991; Dean's Award for Undergraduate Teaching, 1992; Class of '79 Honors Award, Cornell University, 1996.

Editorial Boards: *Molecular Physics*, 1978-1987, 1995-present ; *American Institute of Chemical Engineers*, 1988-91; *Molecular Simulation*, 1986-present; *Journal of Chemical Physics*, 1996-; *Adsorption*, 1994-present. Editorships: *Molecular Simulation*, 1990-present (Regional Editor for N. America); book series Topics in Chemical Engineering, Oxford University Press, 1991-present.

Publications: 300 papers in scientific journals; 3 books. Most recent book: K. E. Gubbins and N. Quirke, editors, "Molecular Simulation and Industrial Applications: Methods, Applications and Prospects", Gordon & Breach, London (1996).

You are Cordially Invited
to Attend the 23rd Annual

Harry G. Fair Memorial Lecture

in Chemical Engineering
and Materials Science

April 10, 1997, 3:30 P.M.

The Lecture will be given on campus,
in Sarkeys Energy Center, Room A-235

Coffee and Refreshments will be served

Fluids in Nanospaces: Adsorption, Selectivity and Phase Separation

by Keith E. Gubbins
Cornell University

Fluids confined in nanoporous materials, such as activated carbons, buckytubes, mesoporous zeolites, etc., exhibit many novel properties, and lend themselves to highly selective separations. A detailed molecular understanding of these phenomena is beginning to emerge. Recent advances in molecular theory and simulation of such phenomena will be described. Examples will be given of the use of simulation methods to help design new processes or materials. Topics covered will include the potential of novel materials (buckytubes, MCM-41), optmal designs for mixture separations, and phase separations in porous media.

School of Chemical Engineering
and Materials Science
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The University of
Oklahoma
College of Engineering

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in

Chemical Engineering

1997