



**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.

## **"The Challenge of Separations in Biotechnology"**

by

**E. N. Lightfoot, Jr.**

**Hilldale Professor**

**of Chemical Engineering,**

**University of Wisconsin**

*The challenges provided by newly emerging technologies transcend their immediate importance in providing fresh insights into our professional norms. Biotechnology is no exception, and bioseparations form a particularly interesting example. Separations tend to dominate the costs of manufacturing the products of genetic engineering, and the severe time restraints produced by federal regulatory processes put a heavy premium on rapid development of new processes and equipment. The results of these pressures are a rapidly evolving technology and new insights into the old term "separation and purification". The development of bioseparations will be reviewed, with particular emphasis on relating process economics to underlying transport and reaction phenomena.*



**E. N. Lightfoot**

Dr. E.N. Lightfoot, Hilldale Professor of Chemical Engineering at the University of Wisconsin, has taught there since 1953. He earlier spent three years developing pharmaceutical separations processes at Pfizer in Brooklyn, N.Y. He holds B.S.Ch.E. and Ph.D. degrees from Cornell and a Dr. Tech., h.c., from the Technical University of Norway. His interests have included biologically oriented separations research, with emphasis on application of transport phenomena fundamentals, and most recently, development of more effective adsorptive separations.

He has a broad background in mass transfer operations and in biomedical applications of transport phenomena. A co-author of *Transport Phenomena and Living Systems*, he has participated in over 160 reviewed publications and has lectured extensively in the U.S. and abroad. He is the recipient of the William H. Walker and the Food, Pharmaceutical and Bio-engineering awards of A.I.Ch.E., and was inducted into the National Academy of Engineering in 1979.

He has served as a consultant to NSF, NIH, UNIDO and many major U.S. corporations. He serves on the editorial boards of *Separation Science and Technology* and *Separations Technology*, and is a member of the Science and Technical Advisory Board of the National Fermentation and Bioprocessing Institute.

*You Are Cordially Invited  
To Attend*

The 17th Annual

**Harry G. Fair  
Memorial Lecture**

in

Chemical Engineering  
And Materials Science

**April 4, 1991  
3:30 P.M.**

*The Lecture will be given on campus,*

*In The Energy Center,  
Room M-204*

*Coffee and Refreshments  
will be served*

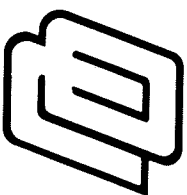
School of Chemical Engineering and Materials Science  
The University of Oklahoma  
The Energy Center, 100 E. Boyd, Room T-335  
Norman, Oklahoma 73019-0628

The University of Oklahoma  
College of Engineering

The  
17th  
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in



Chemical  
Engineering

1991