



CHEMICAL ENGINEERING DIVISION ACTIVITIES

Twelfth Annual Lectureship Award to Elmer Gaden

The 1974 ASEE Chemical Engineering Division Lecturer was Dr. Elmer L. Gaden, Jr., of Columbia University. The purpose of this award lecture is to recognize and encourage outstanding achievement in an important field of fundamental chemical engineering theory or practice. The 3M Company provides the financial support for this annual lecture award.

Bestowed annually upon a distinguished engineering educator who delivers the Annual Lecture of the Chemical Engineering Division, the award consists of \$1,000 and an engraved certificate. These were presented to this year's Lecturer at the Annual Chemical Engineering Division Meeting June 28, 1974 at Rensselaer Polytechnic Institute, Troy, N.Y. Dr. Gaden spoke on "Biotechnology—An Old Solution to a New Problem."

Elmer L. Gaden, Jr., was born and raised in Brooklyn, New York. He attended the Polytechnic Institute of Brooklyn and transferred to Columbia University through enlistment in the naval training program of World War II. He graduated from Columbia during the war and later received the Ph.D. in chemical engineering from the same school.

Professor Gaden worked for Chas. Pfizer & Co., in biological process development, before returning to Columbia. He has had subsequent industrial experience with Biochemical Processes, Inc., a company which he founded and directed from 1958 to 1971, and with Radiation Applications, Inc.

With a primary technical interest in bioengineering, especially the analysis, design, and control of processes based on the activities of microbial populations, Professor Gaden has made important contributions to the understanding of aeration and oxygen transfer and to the kinetic relationships in such processes, microbial process design and control, and air sterilization by filtration. Dr. Gaden has also been the editor of the journal *Biotechnology and Bioengineering* since its inception. In 1970 he was the first recipient of the Food & Bioengineering Award of the AIChE.

Since 1949, Professor Gaden has been a member of the faculty at Columbia University with teaching responsibilities in chemical engineering, bioengineering, and, since 1966, history. He has also been responsible for initiating interdisciplinary undergraduate instruction in "technology and society." From 1960 to 1969 and again from 1971 he has been Chairman of the Department of Chemical Engineering and Applied Chemistry. In 1971 he received the Great Teachers Award and in 1973 the Harold C. Urey Award of Phi Lambda Upsilon.



PREVIOUS LECTURES

- 1963, A. B. Metzner, University of Delaware, "Non-Newtonian fluids."
- 1964, C. R. Wilke, University of California, "Mass transfer in turbulent flow."
- 1965, Leon Lapidus, Princeton University, "Aspects of modern control theory and application."
- 1966, Octave Levenspiel, Illinois Institute of Technology, "Changing Attitudes to Reactor Design."
- 1967, Andreas Acrivos, Stanford University, "Matched Asymptotic Expansions."
- 1968, L. E. Scriven, University of Minnesota, "Flow and Transfer at Fluid Interfaces."
- 1969, C. J. Pings, California Institute of Technology, "Some Current Studies in Liquid State Physics."
- 1970, J. M. Smith, University of California at Davis, "Photo chemical Processing—Photo Decomposition of Pollutants in Water."
- 1971, William R. Schowalter, Princeton University, "The Art and Science of Rheology."
- 1972, Dale F. Rudd, University of Wisconsin, "Synthesis and Analysis Engineering."
- 1973, Rutherford Aris, University of Minnesota, "Diffusion and Reaction in Porous Catalysts—a Chemical Engineering Symphony."