THE ASEE CHEMICAL ENGINEERING DIVISION LECTURESHIP AWARD

Thirty-One Years of Recognizing Outstanding Achievement in Fundamental Chemical Engineering Theory or Practice

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The first time I heard a divisional lectureship suggested was during an informal discussion following a meeting of the AIChE Education Projects Committee at the Institute's 1962 national meeting in Chicago. In addition to this writer, Charlie Wilke and Max Peters were present. The discussion dealt with what could be done to strengthen the program of the Chemical Engineering Division of ASEE and to make membership in the Division more attractive to chemical engineering educators.

A number of suggestions were made, including joint ASEE/AIChE sessions at AIChE meetings, promoting the journal *Chemical Engineering Education,* emphasizing research administration and funding in programs at ASEE annual conferences, and increasing industrial participation.

It was Max Peters who first suggested an annual lectureship with the purpose of recognizing and encouraging outstanding achievement in an important field of fundamental chemical engineering theory or practice. A chemical engineering educator would deliver the lecture as part of the annual program of the Division. The idea was adopted quickly, and the Executive Committee of the Division proceeded to name Art Metzner as the first annual lecturer. The winner received a framed certificate in recognition of the lecture.

The annual lectureship proved to be popular and was well received. Attendance at the 1964 lecture exceeded 150 people. Publicity about the lectureship and each year's lecture was submitted to *Chemical Week, Chemical & Engineering News, Chemical Engineering Progress,* and *Chemical Engineering*, where news items and accompanying photographs of the lecturer were often published.

At the 1965 Annual Conference, the Executive Committee of the Division, under the chairmanship of John West, recommended that the annual lectureship become an award and that an industrial sponsor for the award be sought. This writer was asked to spearhead the effort, and a formal proposal was developed calling for an honorarium of $1,000, reimbursement of travel expenses, $300 for publication of the full text of the lecture in *Chemical Engineering Education,* and reimbursement to ASEE headquarters for the cost of administering the award.

In addition, the proposal identified the following accomplishments that were to be considered by the annual lectureship award committee in selecting the recipient.

1. *Achievement, through formulation or creative application of fundamental theory and principles, or important advances which have been accepted by colleagues and by others in the field of specialization, with promise of making further significant contributions.*
2. *Improvements of lasting influence to chemical engineering education through books, technical articles or laboratory or other teaching equipment, and demonstration of success as a teacher as well as the ability to inspire students to high levels of accomplishment.*
3. *Evidence of the ability to conduct original, sound, and productive research, personally or as a director of a research team, and to evaluate and report the significant results obtained.*
4. *Interest in furthering technical progress in chemical engineering through participation in professional and educational societies.*

The proposal further specified the duties and terms of service of an annual lectureship award committee and the information to be required in a nomination. Finally, it was noted that the award recipient would be required to submit a suitable manuscript based on the lecture to the journal *Chemical Engineering Education.*

Largely through the efforts of Wendel W. Burton, at that time Director of Employment for the 3M Company, 3M agreed to sponsor the award on a continuing basis. Mr. Burton had been active in ASEE for many years, having served most recently as its national treasurer.

In 1965, the Executive Committee of the Division endorsed the overall plan, and the proposal went simultaneously

to Glenn Murphy, ASEE Vice President for the Projects Operating Unit, Harold E. Heath, Chair of the ASEE Awards Policy Committee, and Leighton Collins, ASEE Executive Secretary. By May, 1966, the Division had authorization to proceed, and Octave Levenspiel was named the first 3M Lecturer. A book-size brochure containing information about the award, a list of previous lecturers, and biographical information of the recipient was widely distributed at the Annual Conference and was used in other ways to publicize the award.

The first lectureship award committee was appointed in 1966, and consisted of Robert Beckmann, Robert L. Pigford, and this writer. Over the next few years Joseph A. Bergantz, Andreas Acrivos, Myron Chetrick, and William Corcoran also served on this committee.

In 1973, Wendel Burton asked the Division to suggest ways the lectureship award could be enhanced to insure that its stature be maintained, and the following year a lecture tour by the awardee was implemented. Additional funds were provided by 3M to cover travel and subsistence to deliver the lecture at three universities during the academic year following its presentation at the ASEE annual conference. An additional honorarium of $500 was paid the awardee when the lecture tour was completed.

In 1989 the award was increased to $2,000, with a lecture tour honorarium of $1,000, and every fifth year the lecture has been presented at the ChE Division summer school. 3M continued its sponsorship of the award up to and including the 1991 annual conference.

During 1992 and 1993 the Division continued the award without an industrial sponsor. Expenses and a reduced honorarium were paid to the recipient, using funds from the Division treasury.

Thanks to the efforts of John Friedly, Chair of the Division for 1992-93, and Lewis Derzansky, University Relations Representative from Union Carbide, we will have the Union Carbide Lectureship Award beginning with the 1994 annual conference. The criteria, selection procedure, and responsibilities of the lecturer remain unchanged, the lecture will continue as a major event of the ASEE annual conference, and the full text of the lecture will be published in *CEE*. A lecture tour by the awardee remains as an option open to Union Carbide.

The lectureship award was the first and is still one of the most highly regarded of the twenty-one divisional awards. It is acknowledged as the premier award of the chemical engineering education community in the United States. A significant measure of the importance of the lectureship award lies in the prestige of its recipients. This list is a veritable "Who's Who" of chemical engineering education (see the boxed listing of winners). Twenty of the thirty-one recipients have been elected to the National Academy of Engineering, the highest professional recognition our country confers upon an engineer.

Much of the credit for the long and distinguished history of the award must go to the 3M Company for its encouragement, active participation in Division affairs, and financial support. The award has promoted quality and new advances in ChE education that have benefited the entire profession.

As we look to the future, we must note with approbation the commitment Union Carbide has made to a long-term association with the Lectureship Award. The rapid and challenging changes in science and technology will place increasing demands on chemical engineering education and practice. The lectureship award will continue to play an important role in meeting these demands. ❐

Editor's Note: *The 1992 Award Lecture, given by William N. Gill at the ASEE ChE Division Summer School in June of 1992, appears on the following pages.*

Chemical Engineering Division Lectureship Awardees

1963 Arthur B. Metzner; *Non-Newtonian Fluids*
1964 Charles R. Wilke; *Mass Transfer in Turbulent Flow*
1965 Leon Lapidus; *Aspects of Modern Control Theory and Application*
1966 Octave Levenspiel; *Changing Attitudes to Reactor Design*
1967 Andreas Acrivos; *Matched Asymptotic Expansion*
1968 L. E. Scriven; *Flow and Transfer at Fluid Interfaces*
1969 Cornelius J. Pings; *Some Current Studies in Liquid State Physics*
1970 Joe M. Smith; *Photochemical Processing: Photo-Decomposition of Pollutants in Water*
1971 William R. Schowalter; *The Art and Science of Rheology*
1972 Dale F. Rudd; *Synthesis and Analysis in Engineering*
1973 Rutherford Aris; *Diffusion and Reaction in Porous Catalysts*
1974 Elmer L. Gaden, Jr.; *Biotechnology: An Old Solution to a New Problem*
1975 John M. Prausnitz; *Molecular Thermodynamics for Chemical Process Design*
1976 Abraham E. Dukler; *The Role of Waves in Two-Phase Flow*
1977 Robert C. Reid; *Superheated Liquids: A Laboratory Curiosity and an Industrial Curse*
1978 Theodore Vermeulen; *Dynamics of Runaway Systems*
1979 Daniel D. Perlmutter; *A New Look at an Old Fossil*
1980 Klaus D. Timmerhaus; *Fundamental Concepts and Application of Cryogenic Heat Transfer*
1981 Arthur Westerberg; *Design Research: Both Theory and Strategy*
1982 Lowell B. Koppel; *Input Multiplicities in Process Control*
1983 Warren E. Stewart; *Simulation and Estimation by Orthogonal Collocation*
1984 TW Fraser Russell; *Semiconductor Chemical Reaction Engineering*
1985 Dan Luss; *Analysis and Modeling of Steady State Multiplicities*
1986 Robert S. Brodkey; *The Potential for Image Processing and Analysis in Turbulence Research*
1987 James J. Christensen; *Reflections on Teaching Creativity*
1988 Stanley I. Sandler; *Physical Properties and Process Design*
1989 J.L. Duda; *A Random Walk Through Porous Media*
1990 Brice Carnahan; *Computers in Engineering Education*
1991 Darsh T. Wasan; *Interfacial Transport Processes and Rheology*
1992 Willian N. Gill; *Interactive Dynamics of Convection and Crystal Growth*
1993 Morton M. Denn; *Polymer Flow Instabilities*