LECTURE TOPICS

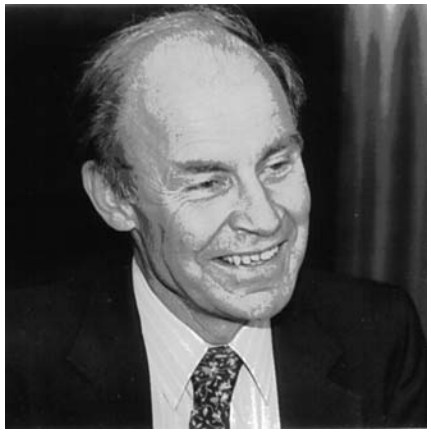
"Dancing with Molecules"

Tuesday, October 26, 1999
"Let There Be Light: Genesis of Nightglow and Meteor Trails"
4:00 p.m., Room 138
Chemistry Building
Michigan State University

Wednesday, October 27, 1999
"Molecular Parables: Pedagogical and Paradigmatic"
8:00 p.m., Room 138
Chemistry Building
Michigan State University

Thursday, October 28, 1999
"Maxwell's Demon: Aligning and Slowing Unruly Molecules"
4:00 p.m., Room 138
Chemistry Building
Michigan State University

BIOGRAPHICAL NOTE



Dudley Herschbach was born in San Jose, California (1932) and received his B.S. degree in Mathematics (1954) and M.S. in Chemistry (1955) at Stanford University, followed by an A.M. degree in Physics (1956) and Ph.D. in Chemical Physics (1958) at Harvard. After a term as Junior Fellow in the Society of Fellows at Harvard (1957-1959), he was a member of the Chemistry Faculty at the University of California, Berkeley (1959-1963), before returning to Harvard as Professor of Chemistry (1963), where he is now Baird Professor of Science (since 1976). He has served as Chairman of the Chemical Physics program (1964-1977) and the Chemistry Department (1977-1980), as a member of the Faculty Council (1980-1983), and Co-Master with his wife Georgene of Currier House (1981-1986). His teaching includes graduate courses in quantum mechanics, chemical kinetics, molecular spectroscopy, and collision theory, as well as undergraduate courses in physical chemistry and general chemistry for freshmen, his most challenging assignment. He is engaged in several efforts to improve K-12 science education and public understanding of science. He serves as Chair of the Board of Trustees of Science Service, which publishes Science News and conducts the Intel Science Talent Search and the Intel International Science and Engineering Fair.

Dr. Herschbach is a fellow of the American Academy of Arts and Sciences, the National Academy of Sciences, the American Philosophical Society, and the Royal Chemical Society of Great Britain. His awards include the Pure Chemistry Prize of the American Chemical Society (1965), the Linus Pauling Medal (1978), the Michael Polanyi Medal (1981), the Irving Langmuir Prize of the American Physical Society (1983), the Nobel Prize in Chemistry (1986), jointly with Yuan T. Lee and John C. Polanyi, the National Medal of Science (1991), the Jaroslav Heyrovsky Medal (1992), the Sierra Nevada Distinguished Chemist Award (1993), the Kosolapoff Award of the ACS (1994), and the William Walker Prize (1994).

Professor Herschbach has published over 350 research papers. His current research is devoted to molecular beam studies of reaction stereodynamics, intermolecular forces in liquids and a dimensional scaling approach to electronic structure.

PREVIOUS LECTURERS

1949	M. A. Lauffer
1950	Milton Burton
1951	Melvin S. Newman
1952	Harvey Diehl
1953	Melvin Calvin*
1954	Richard Dodson
1955	Leon Marion
1956	Joseph J. Katz
1957	I. M. Klotz
1958	John D. Roberts
1959	Henry Eyring
1960	Herbert A. Laitinen
1961	George Watt
1962	Derek H. R. Barton*
1963	Peter J. W. Debye*
1964	Charles Tanford
1965	E. J. Corey*
1966	Manfred Eigen*
1967	Ronald S. Nyholm
1968	Herbert C. Brown*
1969	Harden M. McConnell
1970	F. Albert Cotton
1971	Carl Djerassi
1972	Linus Pauling*
1973	Paul D. Bartlett
1974	Gerhard Herzberg*
1975	William N. Lipscomb*
1976	Leslie E. Orgel
1977	Roald Hoffmann*
1978	William P. Jencks
1979	Ilya Prigogine*
1980	Ronald Breslow
1981	Henry Taube*
1982	R. A. Marcus*
1983	Berni J. Alder
1984	K. Neil Bartlett
1985	Jean-Marie Lehn*
1986	J. Calvin Giddings
1987	Harry B. Gray
1988	Thomas C. Bruice
1989	Richard N. Zare
1990	Ahmed H. Zewail
1991	John A. Pople*
1992	Gerhard L. Closs
1993	John Bercaw
1994	Jerrold Meinwald
1995	Martin Karplus
1996	Paul C. Lauterbur
1997	Graham R. Fleming
1998	Alexander Pines

* *Nobel Laureate*

THE MAX T. ROGERS LECTURESHIP SERIES IN CHEMISTRY AT MICHIGAN STATE UNIVERSITY

The Michigan State University Section of the American Chemical Society has helped sponsor an annual lecture series that brings world-renowned scientists to the campus each year. The lecture series was co-sponsored by the Renaud Foundation for 39 years and, hence, traditionally became known as the Renaud Lecture Series. Although the philanthropic trust of the Renaud Foundation was liquidated, the Chemistry Department and the MSU Section of the American Chemical Society continue this prestigious series of lectures. An anonymous donor has helped spark wide-spread support for the Lecture Series in the name of Max T. Rogers. Dr. Rogers, a physical chemist who served as Professor of Chemistry at Michigan State University for over 40 years, was a special member of the Department of Chemistry and the University. His outstanding contributions in the area of magnetic resonance spectroscopy, and his enlightened view of science, added prestige and distinction to the Department of Chemistry and the University community. It is a privilege for the MSU Section of the American Chemical Society and the MSU Department of Chemistry to continue the lecture series in the name of Professor Max T. Rogers.

MSU SECTION OF THE ACS

The Michigan State University Section of the American Chemical Society was chartered on April 18, 1917. It was first known as the Michigan Agricultural College Section of the ACS. In the succeeding 79 years, the name has changed twice, and the membership has increased from 21 to more than 400. Major activities of the section include participation in the ACS Chemistry Olympiad, National Chemistry Week, a high school chemistry teachers outreach program, sponsorship of academic awards, and this lecture series. Present officers are: Paul Mantica, *Chairperson*; Kathryn Severin, *Secretary*; Robert Maleczka, *Treasurer*; Evelyn P. Jackson, *Councilor*; Susan Master, *Alternate Councilor*; John McCracken, *Past Chairperson*.

50TH ANNIVERSARY OF THE RENAUD/MAX T. ROGERS LECTURESHIP

The MSU Department of Chemistry is proud to present

Professor
Dudley R. Herschbach

Department of Chemistry and
Chemical Biology
Harvard University

The 1999 Distinguished Lecturer
in a series entitled

“Dancing with Molecules”

on

October 26-28, 1999