Nobel Laureate to deliver AU's commencement address
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Dr. Roald Hoffmann, who shared the Nobel Prize in Chemistry in 1981 with Kenichi Fukui for "their theories, developed independently, concerning the course of chemical reactions," will be the speaker for Alfred University's commencement, scheduled for 10 a.m. May 15 in McLane Center on the Alfred University campus. The University will confer an honorary degree -- Doctor of Science and Humane Letters-- on Hoffmann, who is the Frank H.T. Rhodes Professor of Humane Letters and Professor of Chemistry at Cornell University, where he has been a member of the faculty since 1965. "We are delighted that Dr. Hoffmann agreed to deliver the commencement address this year," said Alfred University President Charles M. Edmondson. "It is an honor to have Dr. Hoffman speak to our graduates. Not only is Dr. Hoffmann one of the most-respected scientists of our time, but he is also a gifted writer." "Every chemist is familiar with the Woodward-Hoffmann rules that predict the products of reactions in organic chemistry," said a Science Watch article on Hoffman. "The theory was the result of collaborations between Robert Burns Woodward (1917-1979), the organic chemist, and Roald Hoffmann, the theoretical chemist. Both went on to win Nobel prizes-Woodward in 1965, for his work with natural products, and then Hoffmann in 1981, his prize specifically recognizing the importance of his theory in explaining organic chemistry by the behavior of electrons and the molecular orbitals in which they move."Roald Hoffmann is also a literate chemist, as we can see from his recent book Chemistry Imagined: Reflections on Science. This is a joint publication with the artist Vivian Torrence, and combines essays, poems, and articles with a series of collages inspired by chemistry. Torrence has been a visiting scholar at Cornell University in Ithaca, New York, where Hoffmann is Professor of Physical Science, and her work has been exhibited in art galleries across the United States. Hoffmann's literary achievement shows that chemistry can be a worthwhile, if unexpected, subject for poetry and prose," according to Science Watch. Hoffmann was born in eastern Poland in 1937, just before his country was occupied by the Soviet Union in 1939, and then was overrun by Nazis in 1941. Although Jewish, he and his family survived the Nazi occupation and emigrated to the U.S. in 1949. He attended Stuyvesant High School, and then earned a bachelor's degree from Columbia College in 1958. He attended Harvard University and was awarded an M.A. in physics in 1960 and a Ph.D. in chemical physics in 1962, working under the supervision of Martin Gouterman and William Lipscomb. His research involved applying the theory of molecular orbitals to polyhedral collections of atoms. After earning his doctoral degree, Hoffmann remained at Harvard as a Junior Fellow in the Society of Fellows from 1962-65, beginning the collaboration with Woodward that led to the theory that bears their names. Five papers, published in 1965 when Hoffmann was only 28, quickly established his reputation as a chemist and helped to incorporate the Woodward-Hoffmann theory into the lexicon of organic chemistry. "Applied theoretical chemistry" is the way Hoffmann likes to characterize the particular blend of computations stimulated by experiment and the construction of generalized models, of frameworks for understanding, that is his contribution to chemistry. In more than 450 scientific articles and two books he has taught the chemical community new and useful ways to look at the geometry and reactivity of molecules, from organic through inorganic to infinitely extended structures.In recent times, Hoffmann has looked at the electronic structure of extended systems in one-, two-, and three dimensions. He and his associates have been able to demonstrate that bond strength depends on electron count, important to the current understanding of solid state chemistry. The group has been able to carry through unique comparisons of inorganic and surface reactions.Professor Hoffmann is a member of the National Academy of Sciences, The American Academy of Arts and Sciences, and the American Philosophical Society. He has been elected a Foreign Member of the Royal Society, the Indian National Science Academy, the Royal Swedish Academy of Sciences, the Finnish Society of Sciences and Letters, the Russian Academy of Sciences, and the Nordrhein Westfllische Academy of Sciences. He has received numerous honors, including over 25 honorary degrees. He is the only person ever to have received the American Chemical Society's awards in three different specific subfields of chemistry -- the A. C. Cope Award in Organic Chemistry, the Award in Inorganic Chemistry, and the Pimentel Award in Chemical Education. As well as two other ACS awards. Hoffmann also participated in the production of a television course about chemistry. The World of Chemistry is a series of 26 half-hour programs developed at the University of Maryland and produced by Richard Thomas. Dr. Hoffmann is the presenter or narrator for the series, which has been aired on PBS beginning in 1990, and has been shown widely abroad. Hoffmann has also written popular and scholarly articles on science and other subjects. His poetry has appeared in various literary magazines. Two collections, entitled The Metamict State (1987) and Gaps and Verges (1990), were published by the

University of Central Florida Press; his most recent collection, Memory Effects (1999) was published by the Calhoun Press of Columbia College, Chicago. In 1993 the Smithsonian Institution Press published Chemistry Imagined, which has been described as "a unique art/science/literature collaboration that reveals the creative and humanistic sparks of chemistry." A series of thirty collages by Torrence paired with short essays, personal commentary, and poems by Hoffmann evokes the magic of the molecular science, its historical roots, the richness of modern chemical activities, and the mysterious confluences of science and art. In 1995, Columbia University Press published Hoffmann's The Same and Not the Same. This book points to the dualities that lie under the surface of chemistry, and that endow this seemingly quiet central science with tension, thus making it interesting both to its practitioners and the thoughtful observer. In 1997, W.H. Freeman published Old Wine, New Flasks; Reflections on Science and Jewish Tradition' by Roald Hoffmann and Shira Leibowitz Schmidt. This book looks in a non-confrontational (and witty) way at how science and religion, dealing with the mundane, are both led to eternal and important questions of authority, purity, identity, the natural and the unnatural.A new play, Oxygen, by Carl Djerassi and Hoffmann premiered in the U.S. at the San Diego Repertory Theatre in 2001, and had productions at the Riverside Studios in London, and (in German) in Wrzburg and Munich in fall 2001. The play has also been broadcast by BBC World Service and West German Radio, and has been published in English and in German translation.Hoffman and his wife, Eva, whom he met at a summer school in Sweden, are the parents of two grown children, Hillel and Ingrid.