# Dr. Harold C. Urey has received two of the nation's top awards for scientific achievement

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Dr. Harold C. Urey, Nobel laureate and University of California, San Diego professor of chemistry emeritus, has received two of the nation's top awards for scientific achievement.

The honors, granted Urey on the eve of his eightieth birthday (April 29), came from the National Aeronautics and Space Administration (NASA) and the American Chemical Society (ACS).

In his long career of service to science and society, spanning nearly five decades, Urey has received 30 medals and awards from governments, learned societies and scientific organizations throughout the world, and 16 honorary degrees from universities in the United States and nine from foreign countries.

The latest NASA award, granted to Urey in recent ceremonies in Houston, honors him "For pioneering cosmochemistry theories of the origin and history of the moon, the meteorites, and the planets . . . and for major experimental contributions to the theories of the origin of life on earth and elsewhere in the universe."

Urey also received the ACS's Priestley award, highest honor accorded to a U.S. chemist by the society. It is named after Dr. Joseph Priestley, one of the founders of modern chemistry and discoverer of oxygen.

Urey is a consultant for NASA's Viking mission scheduled to land on Mars on or about July 4, 1976. He is one of six UCSD scientists commissioned by NASA to analyze lunar samples from the Apollo flights. He has conducted research on the evolution of the moon for more than 20 years.

Urey was an Indiana farm boy. 14hen he was six years old, his father died, leaving a small insurance policy for his education. His major education financial support came from public higher education sources.

The taxpayers' investment in Urey yielded great dividends for the United States. Among his major contributions are:

In 1932 he discovered deuterium-- heavy hydrogen-- which may provide a source of inexpensive electrical power through nuclear energy, with less radioactive characteristics than elements such as plutonium.

During World War II, he served as one of three program chiefs in the Manhattan District Project, which conducted research fundamental to the development of the atomic bomb.

During 1945-52 he developed techniques for estimating variations in the earth's climates through the geological ages. He explained theoretically the chemical nature of the origin of the solar system while serving as a Martin A. Ryerson Distinguished Service Professor of Chemistry in the University of Chicago's Institute for Nuclear Studies.

His academic progeny include many prominent scientists. Among these are; Dr. Stanley L. Miller, UCSD, Dr. John S. Lewis, Massachusetts Institute of Technology, Dr. Harmon Craig, Scripps Institution of Oceanography; Dr.

Harrison G. Thode, past-president of McMaster University, Hamilton College, Hamilton, Ontario, Canada; Dr. G. J. Wasserburg, Division of Geological Sciences, California Institute of Technology, Pasadena; and, Dr. Mildrid Cohn Primikoff, School of Medicine, University of British Columbia, Vancouver, B.C.

He received a Ph.D. degree from the University of California, Berkeley at age 30; discovered deuterium at age 38; received the Nobel Prize at age 41; and accepted a NASA medal and the American Chemical Society's Priestley award during the month of his eightieth birthday.

Urey believes that a good education is the best preparation for contributing something worthwhile to society. "The social problems in the United States today," he said, "are not just going to go away. All the people--American Indians, Blacks, Mexicans, Chinese, Japanese, or any other-- are eventually going to be brought into thus society by one method or another. And, we had better try our best to make all of our people the best kind of people we possibly can. We should invest in all kinds of schools. Education is our best hope.`

Urey and his wife, Frieda, have four children and 10 grandchildren. Two daughters Elizabeth Urey Baranger and Frieda Rebecca Urey Brown, and their son, John Clayton Urey, have Ph.D.'s in the sciences; their daughter Mary Alice Urey Larey, has a master's degree in education.

FYI: Formal presentation of the NIASA award was on April 6, 1973, at the Johnson Space Center, Houston. The American Chemical Society's Priestley award was presented at the ACS meeting in Dallas on April 9, 1973.

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