

Paul Crutzen, who shared Nobel for ozone work, has died

January 28 2021, by Frank Jordans and Seth Borenstein



In this file photo dated December 10 1995, showing Dutch Professor Paul J. Crutzen, left, receiving the Nobel prize for chemistry from Swedish King Carl XVI Gustaf, at the Concert Hall in Stockholm, Sweden. According to a statement from the Max Planck Institute for Chemistry in Germany, Dutch scientist Paul J. Crutzen, who won the Nobel Prize for chemistry for his work understanding the ozone hole, died Thursday Jan. 28, 2021, at the age of 87. (AP

photo/Eric Roxfelt, FILE)

Paul J. Crutzen, a Dutch scientist who won the Nobel Prize for chemistry for his work understanding the ozone hole and is credited with coining the term Anthropocene to describe the geological era shaped by mankind, has died.

The Max Planck Institute for Chemistry in Mainz, Germany, where Crutzen was the director of atmospheric chemistry from 1980 until his retirement in 2000, confirmed that he died Thursday at the age of 87.

"Paul Crutzen was a pioneer in many ways," Martin Stratmann, the president of the Max Planck Society, said in a statement. "He was the first to show how human activities damage the ozone layer."

Stratmann said that Crutzen's work helped lay the basis for the worldwide ban on ozone-depleting substances, a rare example of fundamental scientific research leading to a global political decision within just a few years. Thanks to concerted international efforts, the ozone hole over Antarctica has been shrinking steadily.

"Paul Crutzen was a giant among scientists, and his work proves that it is possible to do science at the very highest level, while also attending to the moral, political, and cultural ramifications of your work," said Harvard science historian Naomi Oreskes. "His name and legacy will live on, but his presence will be sorely missed."

Crutzen was awarded the Nobel Prize in 1995 together with American chemist F. Sherwood Rowland and [Mexican chemist Mario J. Molina](#).

"Along with Sherry Rowland, whom we sadly lost some years ago, and

[Mario Molina whom we lost just months ago](#), Crutzen alerted the world to the danger of ozone depletion caused by the pollutants known as chlorofluorocarbons from spray cans," said Penn State climate scientist Michael Mann.



In this file photo dated Thursday December 7 1995, American Nobel Prize for chemistry laureate, Professor Mario J. Molina, center, of MIT, Cambridge, Mass., gestures during a press conference in Stockholm, Sweden, sharing the 1995 Nobel chemistry prize with American Professor F. Sherwood Rowland, left, of the University of California at Irvine, Cal., and Dutch Professor Paul J. Crutzen, right, of the Max-Planck-Institute for Chemistry, Mainz, Germany. According to a statement from the Max Planck Institute for Chemistry in Germany, Dutch scientist Paul J. Crutzen, who won the Nobel Prize for chemistry for his work understanding the ozone hole, died Thursday Jan. 28, 2021, at the age of 87. (AP photo/Martina Huber, FILE)

Mann said Crutzen's coining of the term 'Anthropocene'—based on the ancient Greek word for human—in an article for Nature in 2002 "so elegantly but simply captured the sobering notion that human impacts on our planet can, in just decades, rival the geological forces that led to mass extinctions over the eons."

Crutzen had argued that, because the effects of humans on the environment had escalated so greatly in the past three centuries that global climate could be significantly altered, a specific term should be used to describe the period from the late 18th century to the present.

The term has since gained widespread use in scientific and environmental discourse as a way of reflecting the impact that humans have had on the planet and the daunting challenge posed by man-made climate change.

Crutzen argued that managing these effects "will require appropriate human behavior at all scales, and may well involve internationally accepted, large-scale geo-engineering projects, for instance to 'optimize' climate."

Born in Amsterdam in 1933, Crutzen first trained as an engineer before moving to Sweden in the late 1950s. According to the Nobel Institute, Crutzen got a job as a programmer at Stockholm University's Department for Meteorology despite having no programming experience.

While working at the university he began studying meteorology on the side, acquiring a PhD in the field in 1968. Crutzen subsequently taught and conducted research at the University of Oxford, the National Center for Atmospheric Research in Boulder, Colorado, the University of

Chicago and the University of California.

Crutzen is survived by his wife Terttu, his daughters Ilona and Sylvia, and three grandchildren.

© 2021 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Paul Crutzen, who shared Nobel for ozone work, has died (2021, January 28) retrieved 18 July 2024 from <https://phys.org/news/2021-01-paul-crutzen-nobel-ozone-died.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.