

KURT WÜTHRICH



Swiss Nobel Prize Laureate chemist/biophysicist

Kurt Wüthrich is a Swiss chemist/biophysicist and Nobel Chemistry laureate, known for developing nuclear magnetic resonance (NMR) methods for studying biological macromolecules.

CAREER

Kurt Wüthrich was born in Aarberg. He studied chemistry, physics, and mathematics at the University of Bern before pursuing his PhD at the University of Basel in 1964. After that, he continued postdoctoral research with Silvio Fallab (his former supervisor). Then he started to work at the Bell Telephone Laboratories in New Jersey from 1967 to 1969. During his graduate studies, Kurt Wüthrich started out working with electron paramagnetic resonance spectroscopy.

As a postdoc he began working with the newly developed and related technique of nuclear magnetic resonance spectroscopy to study the hydration of metal complexes. When he joined the Bell Labs, he started studying the structure and dynamics of proteins. After he returned to Zürich, collaborating with his colleagues, they developed the first two-dimensional NMR experiments, and established the Nuclear Overhauser effect as a convenient way of measuring distances within proteins.

In 2002 Kurt Wüthrich received half of the Nobel Prize in Chemistry for his development of nuclear magnetic resonance spectroscopy for determining the three-dimensional structure of biological macromolecules in solution. John B. Fenn and Koichi Tanaka received the other half.

PROFESSIONAL ACHIEVEMENTS

- Head of laboratory at the ETH Zürich
- Head of laboratory at The Scripps Research Institute, in California
- Head of laboratory at the iHuman Institute of ShanghaiTech University
- Foreign Member of the Royal Society
- member of The European Molecular Biology Organization (EMBO)
- member on the USA Science and Engineering Festival's Advisory Board
- supporter of the Campaign for the Establishment of a United Nations Parliamentary Assembly
- Visiting Professor at the University of Edinburgh (1997-2000)
- Honorary Professor at the Chinese University of Hong Kong
- Visiting Professor at Yonsei University
- 1991 - Gross Horwitz Prize from Columbia University
- 1993 - Louis-Jeantet Prize for Medicine
- 1998 - Kyoto Prize in Advanced Technology
- 1999 - Otto Warburg Medal
- 2002 - half of the Nobel Prize in Chemistry
- 2004 - Honorary Doctorate of the University of Valencia
- 2008 - Bijvoet Medal
- 2010 - attended "Science and Engineering Festival's Lunch with a Laureate" program