

Curriculum vitae of Prof. Richard R. Ernst



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Richard R. Ernst was full Professor of Physical Chemistry since 1976. He directed a research group devoted to magnetic resonance spectroscopy, was director of the Laboratory of Physical Chemistry at the ETH Zurich, and retired in 1998.

He was born as a citizen 1933 in Winterthur. He finished 1962 his studies at the ETH Zurich with a dissertation on nuclear magnetic resonance in the discipline of physical chemistry. 1963 he joined Varian Associates as a scientist and developed Fourier-transform NMR, noise decoupling, and several other techniques. 1968 he returned to ETH Zurich, became 1968 Lecturer, 1970 Assistant Professor, 1972 Associate Professor, 1976 Full Professor, and retired 1998. Since 1968, he was head of a research group concentrating on methodological developments in liquid state and solid state NMR. He developed two-dimensional NMR and many novel pulse techniques. He contributed to the development of medical magnetic resonance tomography, and, in collaboration with Professor Kurt Wüthrich, to the development of the NMR structure determination of biopolymers in solution. Later, he was involved in the study of intra-molecular dynamics by NMR.

In addition he was engaged in numerous further activities. He was president of the Research Council of ETH Zurich and he was, among other duties, a member of the Swiss Science Council, of the COST Committee, of the Foundation Marcel Benoist, of the Hochschulrat of the Technische Universität Munich, and Vice-president of the Board of Bruker AG, Fällanden. He is on the editorial board of more than 10 scientific journals.

He received numerous honors, including the **Nobel Prize for Chemistry (1991)**, the Wolf Prize for Chemistry (1991), the Horwitz Prize (1991), and the Marcel Benoist Prize (1986). He received honorary doctor's degrees of ETH Lausanne; Technische Universität Munich; Universität Zurich; University Antwerpen; Babes-Bolyai University, Cluj-Napoca; University Montpellier; Charles University Prague; University of Allahabad; King George University, Lucknow; KIIT University, Bhubaneswar; Ricardo Palma University Lima, Peru; Universidad Nacional de Cordoba, Argentina; and University of Bern. He is a member of the US National Academy of Sciences, of the Royal Academy

of Sciences, London, of the Deutsche Akademie Leopoldina, of the Russian Academy of Sciences, of the Korean Academy of Science and Technology, and honorary member of many further societies.

Today, he is lecturing internationally on subjects within science and on the responsibility of scientists and academic teachers in guiding society towards a future beneficial for all. He is also involved in studies and conservation of Central Asian art. In this context, he became active in Raman spectroscopy for in-situ identification of pigments within ancient paintings.