



新聞稿 PRESS RELEASE

TO NEWS EDITOR
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Nobel-winning Chemist to give Lectures at
The Chinese University of Hong Kong

Prof. Richard R. Ernst of the Eidgenössische Technische Hochschule Zürich, Switzerland, will visit The Chinese University of Hong Kong on Monday, March 13, 1995. Prof. Ernst is well known for his pioneering development of novel nuclear magnetic resonance (NMR) techniques in the study of matter. Beginning in the early 1970's, Prof. Ernst has led in many major advances in the field: Fourier NMR spectroscopy, two- and three-dimensional NMR spectroscopy, solid state NMR methods, etc. Nowadays NMR spectroscopy is an indispensable tool for the structure analysis of condensed matter and has found wide-spread medical applications, such as magnetic resonance imaging (MRI) for the non-destructive examination of organ tissues inside the human body. In recognition of Prof. Ernst's immense contribution in the field, the Nobel Committee awarded him the Chemistry Prize in 1991.

All NMR-based techniques are based on the fact that certain atomic nuclei (such as the hydrogen atom) behave like miniature magnets. When molecules containing such atoms are placed in a strong magnetic field, the nuclei tend to be aligned in the field direction. Subjecting the sample to a radio frequency pulse jolts the nuclei into a disordered arrangement, and as they settle into realignment with the magnetic field, they emit "resonance frequency" signals that provide valuable structural information concerning their relative abundance, location and energy states.

Under the sponsorship of Spectrospin AG, Switzerland, Prof. Ernst will come to Hong Kong in the period March 11-14, 1995. He is scheduled to visit The Chinese University of Hong Kong on Monday, March 13, 1995 and give the following lectures:

1. Title: "Revealing Insights into Molecules, Materials, and Men by Nuclear Magnetic Resonance"

Time: 10:30 a.m.

Place: Lecture Theatre, Shaw College

This lecture is intended for a general audience. Transportation from the University Train Station (UTS) to the Shaw College Auditorium will be provided. Buses leave UTS at 10:00 a.m. and 10:10 a.m.

2. Title: "Intramolecular Dynamics in Liquids and Molecular Order in Solids Investigated by NMR"

Time: 2:30 p.m.

Place: Lecture Theatre, Ho Sin Hang Engineering Building