

CHEMICAL HERITAGE FOUNDATION

KEITH R. JENNINGS

Transcript of an Interview
Conducted by

Michael A. Grayson

at

Leamington Spa
Warwickshire, United Kingdom

on

24 and 25 April 2008

(With Subsequent Corrections and Additions)

ACKNOWLEDGMENT

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Keith R. Jennings

1932 Born in Sheffield, England on 5 December

Education

1956 B.A., Queen's College, University of Oxford,
First Class Honors, Chemistry
1958 M.A., D.Phil., Queen's College, University of Oxford, Chemistry

Professional Experience

1958-1960 National Research Council, Ottawa, Canada
Post-Doctorate, under R. J. Cvetanovic

University of Sheffield
1960-1969 Lecturer
1969-1972 Reader

University of Warwick, Department of Chemistry
1972-1997 Professor of Physical Chemistry
1974-1980 Chairman of Department
1983-1985 Chairman, Board of Science
1983-1986 Chairman of Department
1989-1995 Chairman of Department
1997-present Emeritus Research Professor in Department of Biological
Sciences

Honors

1985 Thomson Medal presented by the International Mass Spectrometry
Congress
1995 Award for Distinguished Contribution in Mass Spectrometry presented by
the American Society for Mass Spectrometry
1996 Visiting Gulbenkian Professor, New University of Lisbon
1997 Honorary D.Sc., University of Lisbon, Portugal
1998 Field and Franklin Award for Outstanding Work in Mass Spectrometry
presented by the American Chemical Society
Aston Medal for Outstanding Contributions presented by the British Mass
Spectrometry Society

Elected Life Member of the British Mass Spectrometry Society

ABSTRACT

Keith R. Jennings begins his oral history discussing his youth in Sheffield, England. With parents supportive of his education, Jennings excelled, earning a spot at the prestigious King Edward VII Grammar School. Upon completing his examinations, Jennings applied to the University of Oxford where he was awarded the Hastings Scholarship to Queen's College. While at Queen's College, Jennings pursued his B.A. with Jack Wilfrid Linnett. After achieving First Class Honors distinction, Jennings continued his research with Linnett to complete an M.A. and D.Phil.

Following his time at the University of Oxford, Jennings conducted post-doctoral research with Robert J. Cevetanovic at the National Research Council in Ottawa, Canada. While Jennings worked with Cevetanovic he became more interested in the burgeoning research field of mass spectrometry. Returning to England after two years in Canada, Jennings began a post at the University of Sheffield, first as a Lecturer and then as a Reader. While at Sheffield, Jennings pursued research in the mass spectrometry of gas kinetics, fluorine compounds, and metastable transitions. He began building his own equipment and became involved in the emerging British mass spectrometry community.

Jennings discusses Ion Cyclotron Resonance research, time dependant ion fragmentation, and collision induced spectroscopy. After moving to the University of Warwick in 1972, Jennings continued his research on fluorinated compounds, metastables, and the fundamental research of gas phase ion chemistry. Additionally, he became interested in the biological aspects of science and began a mass spectrometry research program around peptides. While at Warwick, Jennings spent much time involved in department administration as the Chemistry department's chair. Ultimately he moved into the Biological Sciences department to further pursue his collaboration with Howard Dalton.

Jennings spends much time talking about the development of the mass spectrometry community in Great Britain, especially the contributions of John Beynon and the historical shift when chemists became interested in mass spectrometry after World War II. Jennings also discusses mass spectrometry curricula and his own teaching experiences both in England and abroad. Throughout the interview, Jennings talks about his research, teaching, and personal collaborations with many prominent members of the mass spectrometry community including Michael T. Bowers, Jean Futrell, Michael Barber, and Martin Elliott.

INTERVIEWER

Michael A. Grayson is a member of the Mass Spectrometry Research Resource at Washington University in St. Louis. He received his B.S. degree in physics from St. Louis University in 1963 and his M.S. in physics from the University of Missouri at Rolla in 1965. He is the author of over forty-five papers in the scientific literature. Before joining the Research Resource, he was a staff scientist at McDonnell Douglas Research Laboratory. While completing his undergraduate and graduate education, he worked at Monsanto Company in St. Louis, where he learned the art and science of mass spectrometry. Grayson is a member of the American Society for Mass Spectrometry [ASMS], and has served many different positions within that organization. He has served on the Board of Trustees of CHF and is currently a

member of CHF's Heritage Council. He currently pursues his interest in the history of mass spectrometry by recording oral histories, assisting in the collection of papers, and researching the early history of the field.

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