Preface

Prof. LIU YouCheng

Professor LIU YouCheng is a pioneer of free radical chemistry in China. Born in Shucheng, Anhui Province in 1920, he received his undergraduate education at the National Central University, China and studied as a graduate student on a scholarship from the British Council at the University of Leeds, England, where he received his PhD degree in organic chemistry in 1948 under the guidance of Professor F. Challenger. He then went to the United States and took the position of research associate with Professor B. Riegel in the chemistry department of Northwestern University, Evanston, Illinois until 1951. He then worked at the University of Chicago as a postdoctoral fellow with Professor M. S. Kharasch and thereby began his career in free radical chemistry research. Because of his strong desire to serve his mother country, Dr. Liu made strenuous efforts to return to China, finally succeeding with the help of the Chinese Government in 1954. He accepted the offer from the Ministry of Education to become a chemistry professor at Lanzhou University, Lanzhou, Gansu Province in the northwest region of China in 1955. There, he started his professional career of teaching and research in organic chemistry. After only 2 years, he became the chairman of the chemistry department and remained at that post until 1983, a period of 26 years. During this period, Lanzhou University underwent strong development to become an important educational institution in China. Professor Liu resumed his research in free radical chemistry with only a small group of young colleagues and graduate students and meager facilities in the middle fifties. Through stupendous effort and hard work, they had established an excellent center for free radical chemistry research by the early 1980s.

Professor Liu was elected as a member of the Chinese Academy of Sciences in 1980. In 1985, initiated by Professor Jeffrey K. S. Wan of Queen's University, Canada and Professor Liu, an International Symposium on Free Radical Chemistry jointly sponsored by Lanzhou University and Queen's University was held in Lanzhou with the objective of reviewing and assessing the recent developments in the field. There was a substantial representation from the international community of free radical chemists, including chemists from Canada, the United States, the United Kingdom, Germany, Italy, Japan and Australia, as well as a large number of chemists from China. The plenary lectures were of outstanding quality and published in a special issue of *Research on Chemical Intermediates* (1986, Vol.7), edited by professors Liu and Wan. Dr. Keith U. Ingold wrote a preface for the Special Issue which contains the following paragraph: "The reasons for holding the symposium in Lanzhou included the recognition that China has put very substantial resources into this field of research and that the chemistry department of Lanzhou University has, under Professor Liu's guidance, become the leading institution in China for free radical chemistry. Canada, with its very strong traditions of research in this area, was in a unique position to be a partner in this first China-Canada, interuniversity, cooperative adventure. The Symposium was an unqualified success."

Professor Liu has been an active participant in international scientific conferences and has frequently attended the IUPAC Conference on Physical Organic Chemistry, the Conference on Organic Free Radicals, and the Gordon Conference on Free Radical Reactions. He presented an invited lecture at the 8th IUPAC Conference on Physical Organic Chemistry held in Tokyo in 1986 and the lecture can be found in "Physical Organic Chemistry" published by Elsevier in 1987. In 2004, Professor Liu was the co-chairman of the 17th IUPAC Conference on Physical Organic Chemistry held in Shanghai.

Professor Liu moved to the University of Science and Technology of China in Hefei,

Anhui Province in 1994. In his seventies, Professor Liu maintained an active role in research on electron transfer reactions and mechanisms of hydride transfer from coenzyme NADH models. He went to the laboratory every day and held discussions with his graduate students each week. His group's work on single electron transfer reactions won the First Class Award for the Progress of Science and Technology from the State Commission on Education of the Chinese Government twice, in 1987 and 1995. Most recently, Professor Liu was elected as a Fellow of Royal Society of Chemistry in 2008.

In 2000, a Symposium on Organic Free Radicals was organized jointly by the University of Science and Technology of China and Lanzhou University, and was held in Hefei and celebrated Professor Liu's 50-year engagement in the research of organic free radicals. Over sixty scientists including his colleagues, friends and students participated in the Symposium and several lectures were delivered by prominent experts. A special issue dedicated to Professor Liu on the occasion of his 80th birthday was published in *Research on Chemical Intermediates* (2000, Vol.26, Nos.7-8) with guest editors: Professors Z. L. Liu and M. G. Fan.

Professor Liu has devoted his whole career to teaching

and research in organic chemistry. With over fifty years of professorship, he has trained generations of young chemists, many of whom have become prominent leaders in academic institutions.

On the occasion of Professor Liu's 90th birthday, *Chinese Science Bulletin*, a leading scientific periodical of China, has prepared a special issue in dedication. This issue contains 24 highly prestigious articles written by Professor Liu's former students, friends and collaborators, covering various topics of cutting-edge research in the areas of free radical chemistry and physical organic chemistry. It brings me great pleasure to write this preface and introduce this special issue. Let us all congratulate Professor Liu on his 90th birthday and wish him good health for the years to come.

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