Preface

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The fascinating and rich subject of the thermodynamic and electronic phase behavior of fluid metals and fluid semiconductors at high temperatures and high pressures is of major scientific and technological interest and has therefore been the focus of a great deal of research over the past 50 years. Ever-increasing sophistication in experimental high temperature – high pressure techniques coupled with new theoretical developments has resulted in enhancing our understanding of the behavior of sub- and supercritical metals and semiconductors and extending the useful application of their properties.

The present special issue of the *Zeitschrift für Physikalische Chemie* is dedicated to Prof. Dr. Hirohisa Endo, Professor of Physics at the University of Kyoto, Japan, who inspired and led the subject of fluid metal and semiconductor research for over half a century. On behalf of all contributors as well as his former students, guest scientists and colleagues I consider it as an honor to dedicate this “Festschrift” to my friend Hirohisa Endo on the occasion of his 90th birthday.

Endo’s scientific work has affected the research on electronically conducting fluids in an important way and will continue to do so in the future. The results of 50 years of scientific work are published in an impressive number of original research papers. A particular strength of his approach to research is internationalization. In addition to various scientific collaborations he was spearheading exchange and joint projects with Germany. Many of his students have spent time as post-docs in Germany. Endo has been a remarkably successful educator and can be said to have founded a “school”, many of his students have made major contributions to science and now hold professorships in Japanese Universities.

Hirohisa Endo’s passionate interest in fluid metals continued after his retirement in 1993. Even then, he changed only slightly his research program. He continued to work six days a week and published an impressive number of papers as an “Emeritus”. In this special issue of the *Zeitschrift für Physikalische Chemie*, therefore, we celebrate the life and the work of Hirohisa Endo. The papers to be

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found in this issue cover a multitude of topics in the field of fluid metals and semiconductors, but the work of Hirohisa Endo continues to provide the unifying theme.

I join with his many colleagues and friends in wishing him a joyous “90th birthday”, many more years of scientific productivity and investigation and contentment with his friends and family.