

# P R E F A C E

A new Institute, the Research Institute for Sustainable Humanosphere (RISH) was newly launched at Kyoto University in April, 2004, and formally started its activity as a cooperative research institute in April, 2005 being approved by Monbusho (Japanese Government). It was established by combining and expanding two previously existing organizations, the Wood Research Institute (WRI) and the Radio Science Center for Space and Atmosphere (RASC). The WRI was founded in 1944 to promote research on wood physics, wood chemistry and wood biology. It was re-organized in 1991 to expand its objectives to include global environment protection research, harmonized utilization of wood resources and the establishment of a sustainable society through full use of biomaterials.

The RASC was founded in 1961 as the Ionospheric Research Laboratory (IRL) in the Faculty of Engineering of Kyoto University, and was re-organized in 1981 as the Radio Atmospheric Science Center, an inter-university cooperative research center. The RASC was founded for the study of the middle and upper atmosphere, ionosphere and the magnetosphere. RASC had pursued the studies of the ionosphere via radio technology and sciences such as middle and upper atmosphere (MU) radar, satellite observations of plasma waves and radio science computer simulations. It was further re-organized as new RASC (Radio Science Center for Space and Atmosphere) and expanded its research in applied radio science and technology to include microwave power transmission research for use in the solar power station (SPS) in space and in Equatorial Atmosphere Radar (EAR). In 2003, Kyoto University decided to merge WRI and RASC to form RISH, which took its first steps toward its objectives on April 1, 2004.

The objective of RISH is to promote academic activities and education in the new field of humanospheric science through domestic and international collaborative research programs, and thereby to contribute to both academic and public societies. Humanospheric science is defined as an interdisciplinary field of study which examines the humanosphere, which is composed of four vertical regions of planet Earth in which human activity takes place. These vertically connected regions are the ground human habitat, the forest-sphere (arborsphere), the atmosphere, and space. It is particularly concerned with providing academic and technological solutions to issues which critically affect the viability of Homo sapiens and human civilization such as energy, population, global warming, and resource shortage problems.

In the Wood Research Institute, Kyoto University, a serial publication, "Wood Research", with Japanese and English articles had been issued since 1951 normally once a year. In 1970, an English publication, "Wood Research" and a Japanese one, "Wood Research and Technical Notes" were separately issued, respectively. The former had intended to distribute the results of the studies in the WRI to the world wide community. Emeritus professors, Higuchi, Kishima, Kitao, Maku and Yamada, had especially devoted for the publication. The journal had been published in 129 issues for more than 50 years and significantly contributed to studies on wood science and technologies. The last publications of "Wood Research" and "Wood Research and Technical Notes" were No.90 and No.39 respectively published in 2003. At the reconstruction of the Institute in 2004, the role of the publications have been handed over to a new journal, entitled "Sustainable Humanosphere". In this new publication, to be issued annually, we will report the current research status of RISH, Kyoto University and the new research field of sustainable humanosphere.

I hope, on behalf of our Institute, that all community scientists related to our Research Institute will enjoy our new journals.

Hiroshi Matsumoto, Professor, Director of RISH, Kyoto University