Preface



Institute for Chemical Research at Kyoto University has celebrated its 79th anniversary in October 2005. Initially, the size of the Institute was not substantial and it contained only a limited number of laboratories, but growth soon accelerated. In 1962, the Institute accepted its first graduate students, and, in 1964, a new research-division structure was introduced, establishing the foundation for the present organization. Through radical organizational changes in 1992, and restructuring in 2004, we have finally reached the current large-scale organization of three centers and five research divisions. Under this system, we have three leading-edge centers: the Bioinformatics Center, the International Research Center for Element Science, and the Advanced Research Center for Beam Science. Currently, 104 faculty members and 240 graduate students are engaged in research activities in 31 laboratories supervised by fulltime professors and five laboratories supervised by visiting professors.

Our founding vision is to "Excel in the investigation of basic principles of chemistry and chemical applications." This legacy continues to the present day and describes the essence of our research activities. With this vision in mind, we have entrusted our scientists to choose and pursue research topics at the forefront of advanced chemistry with bottom-up paradigms; this has resulted in substantial contributions to the development of scientific technology. Such accomplishments are proof of our vision of freedom and a bottom-up approach in chemical research.

The research within the Institute encompasses the fields of chemistry, physics, biology, and informatics. The chemical studies core covers fields including physical chemistry, inorganic chemistry, organic chemistry, materials chemistry, and biochemistry. The graduate school to which our laboratories belong spans diverse fields of science, engineering, agriculture, pharmaceutical sciences, medicine, informatics, and human/environmental studies. The labs at the graduate school are spearheading leadingedge research, and yielding outstanding results in their own research areas. The Institute is currently performing research activities either as the head or as a core member of three 21st Century Center of Excellence (COE) projects in the fields of chemistry, physics, and the interdisciplinary area of bioinformatics and pharmaceutical sciences. In addition, we are expanding our global research by pro-actively recruiting researchers and students from abroad and promoting joint research programs with overseas entities. Moreover, we are encouraging community education to communicate the significance and appeal of cutting-edge research through our "Chemical Research for High School Students" and "Open Campus" programs.

Under the recently enacted statute of incorporation of universities, each university realizes the importance of balancing competition and collaboration, and searches for strong liaisons with other universities that create uniqueness within the framework of a competitive environment. We are genuinely pleased to announce the acceptance of a proposal for a Center of Excellence project concerning material synthesis made by the International Research Center for Elements Science at Kvoto University in collaboration with the Research Center for Materials Science at Nagoya University and the Institute for Materials Chemistry and Engineering at Kyushu University; this COE project has initiated active research activities in 2005. These three centers for chemical research, which were established as a direct outcome of the COE program, are willing to share research resources and collaborate, in order to form and maintain an open and interdisciplinary chemical research center. Furthermore, we believe that our plan will become a model for cooperation in science, a desirable outcome of the recent university incorporation.

Whether or not the human race can generate sustainable growth is a key issue of the 21st century. Therefore, in the Institute for Chemical Research, in order to contribute to the future of our society, we encourage our scientists to be actively involved in research projects with bottom-up approach in mind, and to value the emergence of unique interdisciplinary research projects. Upon embracing the second year of incorporation of universities, and to further reinforce the leadership of the Institute, we are pleased to announce the appointments of Prof. Naoki Sato and Prof. Norihiro Tokitoh as Vice Directors. Under this new administration, we shall strive to further encourage the research activities and install effective management at the Institute.

Finally, we appreciate your continued encouragement and support.

January 2006

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ESAKI, Nobuyoshi Director