Preface

Since its initial establishment in 1957, the National Institute of Radiological Sciences (NIRS) has conducted comprehensive research in science and technology related to radiation and human health. In 2001, the NIRS reformed its structure as an independent administrative institution, and began a system to carry out activities according to a 5-year mid-term plan. The fiscal year 2009 (April 2009 - March 2010) was the 4th year of the second mid-term plan (2006 - 2011), and this Annual Report summarizes our research activities and major advances during this period.

The NIRS continues to promote the combined progress of radiation protection and the medical use of radiation. The most remarkable progress was made by designation of NIRS as a collaborating center of the International Atomic Energy Agency (IAEA). The activities as an IAEA collaborating center involve three fields: low-dose radiation effects, charged particle radiotherapy and molecular imaging. Since the NIRS aims to contribute to human health and to secure a safe society through radiological sciences, which corresponds to the main pillars of the IAEA, we would like to focus our maximum efforts towards a common mission. Charged particle therapy for cancer treatment continues to be the major topic in the medical use of radiation. The number of patients treated with this modern technology exceeds 5,000 over the past 15 years, and we celebrated this successful accomplishment in October 2009. The activities in radiation protection and preparation for possible accidents have been strengthened in collaboration with national regulatory agencies and international organizations. In order to establish an efficient system to prepare for emergency radiation accidents, we started the Radiation Emergency Medical Assistant Team (REMAT) in which we send our experts to the site of radiation emergency, particularly in Asian regions, where the number of nuclear power plants is expected to increase rapidly.

The NIRS continues its efforts to establish a solid base as a core institution promoting comprehensive scientific research in a wide range of radiological sciences, and we ask your support to accomplish our mission.

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