

# *Preface*



This Activity Report covers the research activities carried out at the UVSOR facility in FY2012 (April 2011-March 2012).

The UVSOR facility began operation in 1983, making this year, 2013, the 30th year since its launch. Over these 30 years, various new technologies have been developed in the generation and utilization

of synchrotron radiation, and we have eagerly adopted these new technologies, to improve and upgrade the equipment. As a result, even today, the facility is one of the highest performing low-energy synchrotron radiation facilities in the world. In 2003, we made the first major upgrade to the storage ring and started to call it UVSOR-II. In FY2012, we made the second major upgrade. The commissioning was successful. Now we have started to call the machine UVSOR-III. It has small emittance around 15 nm-rad and six undulators. It is operated fully in the top-up mode. A new STXM beam-line, BL4U, was also successfully commissioned, which will be opened for users from June 2013.

UVSOR-III has eight straight sections. Two of them are used for the RF system and for the beam injection. The six of them are now occupied by the undulators. In future, our efforts will go into improving the performance of the light source and upgrading the existing undulators and beam-lines. As its first step, the upgrade of the BL5U is under preparation. The reconstruction work will be done in March 2013.

In March, 2012, Mr. Eiken Nakamura moved to Synchrotron Radiation Research Center at Nagoya University to join construction of a new synchrotron radiation facility, Aichi synchrotron research center. He had been working for about 30 years as an engineer in the facility from the very beginning of its construction. We are grateful for his works devoted for the facility and the users for many years and wish his success in the new facility.

We look forward to more exciting achievements in FY2012 at UVSOR-III. We welcome the opportunity to assist researchers worldwide in utilizing our facility as a prominent international hub for synchrotron radiation research.

April, 2013

Masahiro Katoh  
Director of UVSOR