Preface

This Activity Report covers the research activities carried out at the UVSOR facility in FY2009 (April 2009-March 2010). This is the seventh volume in the new series for the third decade of UVSOR, corresponding to the seventh year of the use of the low-emittance UVSOR-II storage ring. The ring is very stable in operation at the initial beam current of 350 mA for every 6-hour 0.75-GeV full-energy injection and the beam emittance of 27 nm-rad. The ring is in operation in the Top-up mode for 24 hours from Thursday's morning to Friday's morning. All the beam-lines have come to be ready for the Top-up mode until March 2010. In FY2010, the ring will be operated fully in the Top-up mode.

The UVSOR facility is exclusively responsible for the high-brilliant VUV light source as a low-energy third generation ring. There are four 4 m-long long straight sections and four 1.5 m-long short straight sections in the present UVSOR-II ring of 53 m in circumference. We already installed three long undulators at BL3U, BL5U and BL7U and one short undulator at BL6U. The fifth undulator beam-line BL1U will be constructed in FY2010, which will be dedicated to produce the coherent synchrotron radiation, under the Quantum Beam Technology Program of the Ministry of Education, Culture, Sports, Science and Technology (MEXT). Before starting the construction of BL1U, we will reconstruct and upgrade the present BL1A and BL1B at vacant dipole ports in 2010-2011.

In UVSOR, we have four research positions for accelerator physics (1 full prof., 1 assoc. prof., and 2 assist. profs.) and four research positions for photophysics and photochemistry (2 assoc. profs. and 2 assist. profs.). In the accelerator physics division, there was one vacancy for the associate professor. In the photochemistry division, Assist. Prof. Dr. Yasumasa Hikosaka has been promoted as an associate professor of Niigata University last September. Two young researchers have joined the photophysics and photochemistry divisions as assist. profs. this April.

Prof. Nobuhiro Kosugi, who has worked for the UVSOR facility as the Director for 16 years, has been promoted as Deputy Director-General of Institute for Molecular Science. We appreciate all his efforts in many years. I, Prof. Masahiro Katoh of the accelerator physics division, have been promoted as the new director of UVSOR.

We look forward to more exciting achievements in the coming years of UVSOR-II.

April, 2010

Masahiro Katoh
Director of UVSOR