

Preface

This Activity Report covers the research activities carried out at the UVSOR facility in FY2008 (April 2008-March 2009). This is the sixth volume in the new series for the third decade of UVSOR, corresponding to the sixth year of the use of the low-emittance UVSOR-II storage ring. The UVSOR-II ring has been 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. Since last fall, the UVSOR-II has been in operation in the Top-up mode during every Thursday's night to Friday's morning. Most beamlines have been adapted to the Top-up mode. We hope all the other beamlines will be also adapted to the Top-up mode soon and the Top-up mode will be default.



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. We have now started design of the fifth undulator beamline BL1U with a long straight section. The BL1U will be dedicated to produce the coherent synchrotron radiation. This new research project is fully approved by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) under the Quantum Beam Technology Program. Before starting the construction of BL1U, we have to move 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 were two vacancies for 1 associate and 1 assistant professors. Fortunately, this April Dr. Heishun Zen has joined the accelerator division as assistant professor from Kyoto University. On the other hand, in the photophysics division, Assist. Prof. Dr. Takahiro Ito has been promoted as associate professor of Nagoya University this April.

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

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Director of UVSOR