

## 19 Years and 1 month in UVSOR

I moved from KEK Photon Factory to UVSOR in March, 2000. After 19 years and 1 month, I am moving to Hiroshima University in April, 2019.

When I came to UVSOR, the accelerator was very stably operated. However, the machine was already 17 years old. I proposed an upgrade plan and, fortunately, it was approved soon by the efforts of Prof. K. Kaya, Director of IMS and Prof. N. Kosugi, Director of UVSOR at that time. After this upgrade, the emittance was reduced by a factor of 5. The number of straight sections for

insertion devices was increased from three to six. We did not stop. We continued upgrading the machine, introducing new undulators, top-up operation, and so on. By the efforts of the staff members of the facility, particularly those of the technical staff, the accelerator performance has been greatly improved. However, of course, we should not stop. We should step further.

**Masahiro KATOH (UVSOR Synchrotron)**



**2018 Young Scientist Award, The Atomic Collision Society of Japan  
Assist. Prof. Hiroshi Iwayama (UVSOR)****Photoionization and Relaxation Processes of Rare Gas Clusters Irradiated by EUV-FEL Pulses**

Dr. Iwayama has awarded 2018 Young Scientist Award of The Atomic Collision Society of Japan for his pioneering work of interaction of rare gas clusters with intense extreme ultraviolet free electron laser (EUV-FEL) pulses. The Atomic Collision Society of Japan was founded with the goal of promoting the current and future rapid development in atomic, electronic and photonic collision and related science.

Before self-amplified spontaneous-emission FEL succeeded in lasing in EUV regime, the interaction of intense EUV laser pulses with matter is so far only scarcely investigated. To understand the light-matter interaction in the EUV regime, Dr. Iwayama has investigated photoionization and relaxation processes of rare gas clusters irradiated by intense EUV-FEL pulses. Clusters are ideal to investigate the light-matter interaction since their size can be tuned from the molecular to the bulk-like regime and there is no energy dissipation into surrounding media. He measured ions, electrons and photons from the irradiated clusters and found frustration of photoionizations and efficient electron-ion recombination processes. These results are a pioneering works about the interaction of atomic clusters with intense laser pulse in the EUV region.



# Kato Seminar and Farewell Party

