

Contribution ID: 222

Type: Oral presentaion

Status of Ion Sources at the National Institutes for Quantum and Radiological Science and Technology (QST)

Wednesday, 18 October 2017 11:30 (20 minutes)

The National Institutes for Quantum and Radiological Science and Technology (QST) was established in April 2016 based on the merger of several institutes, the National Institute of Radiological Sciences (NIRS), and Takasaki Advanced Radiation Research Institute, Kansai Photon Science Institute, Naka Fusion Institute, Rokkasho Fusion institute formerly affiliated to the Japan Atomic Energy Agency (JAEA). The aims of QST cover a broad range of research and development for the applications of radiation, laser, and plasma. Now QST maintains various ion sources and these ion sources are specialized in various applications through a long history of research and development, such as, heavy-ion radiotherapy, a production of radiopharmaceuticals, life-science studies and industrial applications with ion beam technology, highly-charged heavy ion acceleration from the laser system, neutral beam injectors for fusion plasmas based on negative ion sources, an irradiation tool dedicated to high neutron flux production based on an ECR ion source.

We report the status of our facilities and show considerable scope for expansion of quantum science and technology.

Primary authors: Dr KITAGAWA, Atsushi (QST-NIRS); Mr FUJITA, Takashi (QST); Dr HAMANO, Tsuyoshi (QST); Mr HOJO, Satoru (QST); Dr KATAGIRI, Ken (QST); Dr MURAMATSU, Masayuki (QST); Mr SUDA, Mitsuru (QST); Mr SUGIURA, Akinori (QST); Dr WAKUI, Takashi (QST); CHIBA, Atsuya (QST); Dr ISHII, Yasuyuki (QST); Dr HIRANO, Yoshimi (QST); Dr KASHIWAGI, Hirotsugu (QST); Dr OHKUBO, Takeru (QST); Dr SAITOH, Yuichi (QST); Dr YAMADA, Keisuke (QST); Dr YOSHIDA, Kenichi (QST); Dr KANDO, Masaki (QST); Dr NISHIUCHI, Mamiko (QST); Dr PIROZHKOV, Alexander (QST); Dr SAKAKI, Hironao (QST); Dr HIRATSUKA, Junichi (QST); Dr ICHIKAWA, Masahiro (QST); Dr KASHIWAGI, Mieko (QST); Dr TOBARI, Hiroyuki (QST); Dr UMEDA, Naotaka (QST); Dr WATANABE, Kazuhiro (QST)

Presenter: Dr KITAGAWA, Atsushi (QST-NIRS)

Session Classification: 8th Session

Track Classification: Applications and related technologies