

Report of RCNP workshop

1	Title (both in English for a domestic workshop/conference)	Muon X-ray and gamma-ray spectroscopy — new era of non-destructive element analysis, chemistry and nuclear physics New possibilities for nuclear physics via muon capture reaction
2	List of members of the organizing committee with full name	Megumi Niikura (The University of Tokyo) Shoichiro Kawase (Kyushu University) Shinichiro Abe (JAEA) Akira Sato (Osaka University) Dai Tomono (Osaka University) Kazuhiko Ninomiya (Osaka University)
3	Period of workshop/conference (From dd/mm/yy to dd/mm/yy)	2022/3/24-2022/3/25
4	Venue	Lecture room 1 at RCNP, Osaka University
5	Description o the results	A two-days workshop has been held in 2022/3/24 and 2022/3/25 at RCNP, Osaka Unviersity. Following two independently proposed workshop was organized together; - Muon X-ray and gamma-ray spectroscopy - New possibilities for nuclear physics via muon capture reaction The main goal of the workshop is to get together the users amoun the muon beamline, MuSIC-M1, at RCNP and discuss the current activities and future programs at the facility, which will be soon in re-operation in 2022. The workshop has been take place in a hybrid style (in person and online via Zoom) and 74 participants are registered and join the workshop (10-15 in person and 30-40 online). In the workshop, following topics are discussed; - Muon facilities - Muon induced softerrors on the semiconductor devices - Experimental and theoretical activities about muonic atom and muon capture reaction - Muon induced fusion and fission - Non-destructive element analysis using muon X-ray measurement - Muonic X-ray and gamma-ray detectors and related sciences.
6	URL of the webpage	<a href="https://muon21.rcnp.osaka-u.ac.jp/">https://muon21.rcnp.osaka-u.ac.jp/</a>
7	URL and/or DOI of the (online) proceedings	none