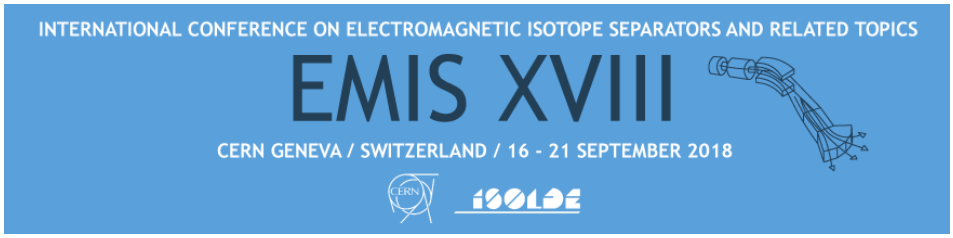

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Status and future plans for MRTOF mass measurements at RIKEN-RIBF

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The Wako nuclear science center (WNSC), a collaboration between RIKEN and KEK, has directly measured the masses of more than 80 isotopes. We have recently performed the first mass measurements of several Md isotopes [1] along with other rare species such as Ac/Ra isotopes [2] using a multi-reflection time-of-flight spectrograph (MRTOF-MS) coupled to the gas-filled recoil ion separator GARIS-II [3]. With the MRTOF-MS coupled to GARIS-II at a new location (RRC accelerator) we will next aim to directly determine atomic numbers and masses of ^{284}Nh and ^{288}Mc. Additionally, we are developing several more MRTOF-MS devices to perform mass measurements of the most exotic species. As part of the SLOWRI facility we will implement MRTOF for both mass measurement and beta-delayed neutron multiplicity studies of value to r-process studies. As part of the KEK Isotope Separation System we are implementing a miniature MRTOF-MS for mass measurements of N≈162 isotopes below Pt. A new MRTOF-MS behind the zero-degree spectrometer at RIBF is also being planned for use in symbiotic operation with other experiments focussing on neutron-rich nuclides. In this contribution an overview of the status and the future plans for low-energy precision mass measurements by WNSC will be provided.

[1] Y. Ito *et al.*, Phys. Rev. Lett., accepted.
[2] M. Rosenbusch *et al.*, Phys. Rev. C, under review
[3] P. Schury *et al.*, Nucl. Instr. Meth. B 335, 39 (2014)

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