



Contribution ID: 35

Type: **not specified**

Investigation of the Activated Areas in the Electrostatic Accelerator Facilities

Monday, 23 September 2019 15:20 (33 minutes)

To identify activated areas in electrostatic accelerator facilities and to develop strategies for safety decommissioning them, four accelerator facilities were selected and the induced activity caused by charged particles and secondary neutrons on the accelerator and its surrounding areas before and after performing experiments was measured. We also measure neutron flux during experiments. Moreover, we compared the monitored neutron flux with the calculated value derived using the Monte Carlo particle and heavy ion transport code system (PHITS) simulation. It was confirmed that the results between calculated data and measured data showed the good agreement with each other. Finally, it was determined that beam line and target area are radioactive and have to be decontaminated. However, it is not necessary to treat the accelerator tank, the surrounding materials, and the building concrete as radioactive materials when decommissioning the facility.

Presenter: MASUMOTO, Kazuyoshi

Session Classification: Session 3