

## **CERN-MEDICIS: Experience of Mass-Separation with Radionuclides towards their Clinical Translation**

*Thursday 28 November 2024 16:15 (1 hour)*

CERN-MEDICIS produces radionuclides by mass separation for biomedical research. The facility exploits targets either irradiated with PS Booster high-energy proton beam or irradiated at cyclotrons and in research nuclear reactors at partner institutes that are part of the MEDICIS Collaboration. The facility extends isotope mass separation techniques towards the reliable and efficient production of radionuclides produced in batches. This triggered PRISMAP “production of radionuclides by mass separation for medical applications” funded as research infrastructure within H2020. The scope of PRISMAP+, as a follow-up programme is under development in the ERVI Roadmap.

In this context, we will report on the operational experience accumulated over the years for mass separation of various and innovative radionuclides. Indeed, radionuclides present large differences in ionization potential, degree of oxidation, volatility, which directly impact the release profile and total efficiency obtained by mass separation at MEDICIS along the past few years.

**Presenter:** STORA, Thierry (CERN)