

# eurorib'10

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## Production and Manipulation of Radioactive Ion Beams

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The preparation and subsequent manipulation of radioactive ion beams is a hot topic of interest for all facilities involved in the study of isotopes far from stability. With ever increasing primary beam intensities, the ability to handle unwanted secondary contaminants is of particular interest. The means to produce the secondary radioactive ion beams in a selective manner relies on novel technologies, often developed at smaller facilities. Complicated experiments often set stringent requirements on the temporal or spatial properties of the beams. Indeed, in the last two years since the previous EURORIB conference (2008), many of the new techniques introduced at that time have now matured and others are presently in the planning stage to be used at future Large Scale Facilities.

In this presentation I will present some of the recent advances and highlights in this important field including: ionization in a chemically selective manner, suppression of abundant contaminants in order to efficiently isolate the rare isotopes, novel techniques to provide high-precision mass separation on short timescales, preparation of low energy ion beams from an initial high energy primary or secondary beam, optical manipulation of ion beams for state-selective preparation and so forth.

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