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# ALISES II source is still alive

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Developments of ECR intense light ion sources is an important research axis of the Laboratory of Study and Development of Accelerator at CEA-Saclay. Starting from the SILHI proton source in the 90's to inject the IPHI accelerator, several SILHI-type sources have been realized and installed for high intensity proton or deuteron accelerators for international projects like IFMIF, FAIR or SPIRAL2. From 2011, we started new R&D program on high intensity ECR compact ion sources with the ALISES source family.
The results obtained with the first ALISES source prototype gave us the main goals for the design of ALISES II source that runs several months on our 50 kV test bench BETSI and was dismounted at the end of 2016 to upgrade the test bench to 100 kV. But this source was never reinstalled and has been replaced by the ALISES III sources that runs on BETSI up to now.
Recently, ALISES II ion source and its equipment is reassembled to be restarted on BETSI for beam characterization before sending it to MIRROTRON factory in Hungary as injector of proton for neutron beam facility. This paper describes the setup on BETSI and proton beam characteristics obtained by emittance measurements, spatial species proportion analysis with Wien filter and current optimization. Installation at MIRROTRON factory is also reported.

## Footnotes

## Funding Agency

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Yes

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