Contribution ID: **102** Type: **Poster (by default)**

Status of the CANREB EBIS at TRIUMF

The CANadian Rare isotope facility with Electron Beam ion source (CANREB) is part of the new Advanced Rare IsotopE Laboratory (ARIEL) at TRIUMF. CANREB can accept stable or rare isotope beams from a variety of ion sources. The injected beams are pulsed using a radiofrequency quadrupole cooler/buncher, and energy adjusted using a pulsed drift tube for injection into an electron beam ion source (EBIS) charge state breeder. The EBIS was designed for a maximum electron beam current of 500 mA at a maximum magnetic field of 6 Tesla. Ions are charge bred to A/q < 7 within 10 ms and extracted at energies up to 14 keVxq. The highly charged ions are A/q-separated using a Nier-type spectrometer before being transported to the linac for post-acceleration. Recent efforts have focused on improving the performance of CANREB systems, including progress in dealing with EBIS technical limitations, and will be presented here.

Funding Agency

Email Address

bschultz@triumf.ca

I have read the Code of Conduct to attend ICIS2023.

Yes

Presenter if not the submitter of this abstract

Primary author: SCHULTZ, Brad (TRIUMF)

Co-authors: CAVENAILE, Mathieu (TRIUMF); CHARLES, Christopher (TRIUMF); AMES, Friedhelm (TRIUMF); KESTER, Oliver (TRIUMF)

Presenter: SCHULTZ, Brad (TRIUMF)

Session Classification: Monday

Track Classification: Radioactive Ion Beam Sources and Charge Breeders