

# **Emittance Measurement of TRIUMF Charge State Booster Using Electrostatic Quadrupole Scan Technique**

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Improving the quality of the extracted multi-ionized beams from the TRIUMF CSB in terms of the beam emittance is as important as improving the efficiency of the breeder, otherwise, the emittance of the charge-bred rare isotope beams (RIB) would grow unnecessarily. At TRIUMF, emittance rigs are not available to measure the emittance of the extracted charge-bred RIBs but electrostatic quadrupole (ESQ) scan technique is being employed to measure the emittance of the extracted RIBs. The results of the measurement will serve as a benchmark against which the simulation results would be compared.