

## REX operation and development in 2006

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The operational experiences from the 2006 measurement campaign with REX-ISOLDE will be presented. This year a number of new beams were accelerated; a record beam energy of 3.1 MeV/u was achieved; successful charge breeding of elements with  $A > 200$  was demonstrated; the ion pulse could be extracted slowly from the EBIS; isobaric separation inside the REXTRAP was proven feasible with a new cooling and excitation scheme; the electron beam current inside the EBIS reached a record value of 460 mA; and the transverse emittance after the linac was accurately measured among other development efforts. The first phase of the REX upgrade is well underway. The Miniball experiment is moved into the new hall extension and modifications of the beamline layout are carried out in order to improve beam quality and measurement conditions at the experimental targets. This is the first step towards a more ambitious upgrade program including a possible superconducting linac for higher beam energies in the framework of HIE Isolde.

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