

ECR Sputter Feed Developments at NSCL

D. Cole G. Machicoane L. Tobos P. Zavodszky

(National Superconducting Cyclotron Laboratory, Michigan State University, East Lansing, MI 48824, USA)

Abstract Production of metallic ion beams in support of the experimental program at the Coupled Cyclotron Facility at the NSCL required the development of ion sputtering feed of metallic molybdenum, nickel, uranium, and zirconium for use with the ARTEMIS ion source. The production of high intensity lower to medium charge state ions required high material consumption, posing some significant difficulties in reliable long term beam stability. Resultant and ongoing hardware and technique developments to resolve these difficulties will be presented in this poster along with interesting effects of the ion source solenoid field polarity on the sputtering process.