

Abstract Submitted
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The development of space plasma testing facility using RF source¹

RICHARD KAMIENESKI, ALEXANDER HYDE, OLEG BATISHCHEV, NU, Boston, MA — A new testing facility is being developed to simulate space and atmospheric plasmas. It utilizes modified helicon plasma source [1] to ionize gases common to space and ionosphere, namely hydrogen, helium, and nitrogen. Emission spectra of ionized gases are analyzed by vacuum spectrometer to understand plasma composition. The design of computerized controls and data acquisition system are discussed.

[1] O. Batishchev, Minihelicon Plasma Thruster, IEEE Trans. Plasma Science, 37 (8) 1563, 2009.

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