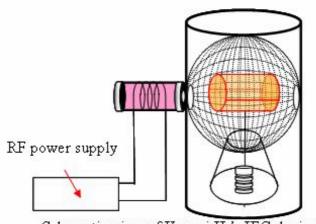
IEC Operation with the Cathode Designed for Extracting Ion from Ion Source Y. Ishikura, N. Yamashita, K. Fukuta, A. Maeda, H. Osawa and M. Ohnishi Kansai University, department of electrical engineering and computer science Yamate-cho, Suita-shi, Osaka, 564-8680, Japan

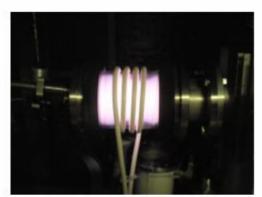
Kansai IEC device has the ion source on the side wall of main chamber. The ion source helps the discharge of lower gas pressure than 1 Pa and enhances the current. The skeleton cylindrical cathodes are designed for extracting more ion beam from the ions source. The three differential sizes of the cylindrical cathode are used for comparing the discharge characteristics. The experimental results of discharge characteristics and neutron production rate with the cathode will be taken at the presentation.



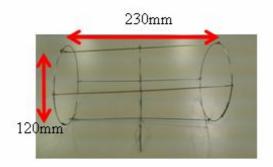


Schematic view of Kansai U.'s IEC device

Appearance



Discharge photo of ion source



The cylindrical shape cathode