

Operation of ECR Ion Sources at the JINR FLNR Cyclotrons*, S.L. BOGOMOLOV, A.A. EFREMOV, V.B. KUTNER, A.N. LEBEDEV, V.N. LOGINOV, N.YU. YAZVITSKY JINR, FLNR - During last three years the FLNR cyclotrons U-400M and U-400 were equipped with ECR-type ion sources: DECRIS-14-2 (Dubna Electron Cyclotron Resonance Ion Source), and ECR4M built at the GANIL. The basic characteristics of the sources and transport beam lines are presented. A wide range of ions of gases, such as He, N, O, Ne, Ar, Kr, and Xe were delivered by the sources and accelerated in the cyclotrons. For production of metal ions the microovens for the evaporation of metal samples were developed. The combination of microoven with hot tantalum sheet inside the discharge chamber allowed to provide the intense beams of ions of metals with relatively low melting point such as Li, Mg, Ca.

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