Heavy Ion Laboratory, University of Warsaw E. Piasecki

Abstract: K = 160 cyclotron facility, available beams, instrumentation and main scientific activities of the Heavy Ion Laboratory, University of Warsaw will be shortly presented. Main instruments:

- 1. Gamma ray, 12HPGe multidetector system OSIRIS II
- 2. GDR multidetector system JANOSIK
- 3. Scandinavian type on line mass separator IGISOL
- 4. Charged particle multidetector system ICARE
- 5. Two universal scattering chambers CUDAC and SYRENA
- 6. Irradiation chambers with target water cooling
- 7. Low background lead shielded HPGe counters

Main activities:

- 1. In- and off-beam γ ray spectroscopy
- 2. Internal conversion β spectroscopy
- 3. Isomeric states α -radioactivity studies
- 4. GDR and isospin mixing studies
- 5. Multiple Coulomb excitations
- 6. Chiral symmetry breaking phenomenon
- 7. Fusion barrier distribution studies
- 8. Scattering and reactions with light ions
- 9. Radiobiological studies
- 10. Irradiations of solid state materials with HI
- 11. Semiconductor detectors development and tests