

The Third Polish Workshop on Heavy Ion Acceleration and its Applications was organized at HIL in March 2007. The participants gained experience in methods of data acquisition and analysis, in operating the cyclotron including the beam diagnostics measurements and in charged particle and gamma-ray detection techniques (see Sec. 11).

HIL staff members are also engaged in supervising MSc and PhD theses – see Part D.

## 11. Polish Workshop on Heavy Ion Acceleration and its Applications

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The workshop was organized by the Heavy Ion Laboratory for the third time on 12-17 March 2007. As in previous years, it was intended for third year physics students interested in nuclear physics. The success of earlier editions of the workshop led to the increased popularity of this event – we received over two times more applications than we were able to accept. Seventeen selected students from four Polish universities (Adam Mickiewicz University in Poznań, University of Silesia, Maria Curie-Skłodowska University in Lublin and University of Szczecin) had an opportunity to attend a series of lectures on topics related to heavy ion physics. The experimental part of the Workshop allowed the participants to get acquainted with HIL infrastructure by performing measurements using dedicated detection set-ups available in the Laboratory.



The programme of the lectures was the following:

- Ion optics (J. Sura),
- Radioprotection at HIL (R. Tańczyk),
- Technique of a gamma-ray analysis (M. Palacz),
- In-beam gamma spectroscopy (Ch. Droste),
- High Temperature Reactor in Poland (L. Pieńkowski),
- Accelerators in cancer therapy (Z. Szefliński).

Students took part in the following experimental tasks:

- Beam focusing in heavy ion acceleration,
- Beam energy measurements based on the Rutherford scattering,
- Determination of cross section in the Rutherford scattering,
- Identification of excited bands in gamma-gamma coincidences,
- Measurements of  $^{137}\text{Cs}$  activity in mushrooms.

Student presentations concluded the workshop. Each group prepared a 20 minutes talk on their measurements and results.