

## **Raising Public Awareness of Nuclear Science in Action**

**L.Dobrzyński**

Department of Training and Consulting, The Soltan Institute for Nuclear Studies, 05-400 Otwock-Świerk, Poland and Institute of Experimental Physics, University of Białystok, Lipowa Str.41, 15-424 Białystok, Poland

*E-mail address of main author: ludwik@ipj.gov.pl*

Department of Training and Consulting was created at the Soltan Institute for Nuclear Studies about 7 years ago. Its main goal consists in dissemination of knowledge of nuclear physics and its applications with special emphasis on the use of radiation in everyday life, its biological effects and the risks connected with the use of nuclear radiation. The second important goal is to counteract social radiophobia. Last but not least, is presentation of the scientific and technological achievements of the Institute. The main target groups are secondary-school teachers and their pupils who in spite of various obstacles in organisation of travels to Świerk, are coming in mass. During last 4 years we accepted more than 20,000 visitors from all over Poland.

In addition to lectures themselves and lectures with experimental demonstrations two permanent exhibitions are displayed permanently. One is called "Nuclear Wastes: Problems, Solutions", the other one is displaying 1:10 model of nuclear power plant (VVER-440-type), both extremely useful in discussing the problems of nuclear wastes, and organisation and use of the nuclear power plants.

Very specific place in the Department is quite unique Laboratory of Atomic and Nuclear Physics, dedicated to secondary schools' students although it is also used by university students and in teachers' trainings. Number of basic experiments from nuclear physics can be carried out by students, so the very basis of atomic and nuclear physics can be learnt on experimental basis. The experimental park can also be used in any professional courses on e.g. radiation protection.

The need of having this type of units at the otherwise research institute is clearly seen by the systematically growing number of visitors, and their demands for educational material. One can also see some direct results: the groups who visited our centre were winning in all-Poland conquest for a project from radioactivity (organised on 100<sup>th</sup> Anniversary of Nobel Prize for Maria Skłodowska-Curie), the schools – after visiting us - try to organise their own minisymposia on the radioactivity, the visitors seem to receive proper message about the real risk connected with nuclear radiation. The latter is judged by the fact that very seldom we encounter typical symptoms of radiophobia after the visit to our Department.

We are strongly convinced that our work will result in an increased interest of students in physics, and may regain the popularity of nuclear physics among the students. This is necessary if the nuclear energy is going to be developed and used safely in the country. We also believe that similar educational centres, if wherever absent, should be organised in other nuclear centres in Europe and all of them should form a network in which new

didactical methods would be worked out and the experience could be easily evaluated and exchanged between the network's partners.

The paper presents motivation, present status, methodology and results of our more than 5-years experience in raising public awareness of nuclear problems in various social groups.