

1st National Conference on article Accelerators and Their Application

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17-28 November 2013- Tehran-Amir Kabir University

تسابق دهنده ها و کاربرد آنها
کنفرانس ملی
اولیه

۶ و ۷ آذرماه ۱۳۹۲ - تهران

PARS ISOTOPE company
شرکت سلولیات و همگامی های طیفی بین المللی
مرکز علوم سلولیات و همگامی های طیفی بین المللی

Iranian Light Source Facility
دانشگاه صنعتی امیرکبیر

شرکت ساخت و توسعه تسابدهنده ها و کاربرد آنها
پژوهشگاه علوم و فنون هسته‌ای

Accelerators science is one the most advanced popular fields of science in the world in such a way that nowadays, many scientific findings are achieved through numerous works on applications and development of accelerators. The most important feature of this science is its multidisciplinary nature. Interconnections of physics, mechanics, electronics, metallurgy, and even civil engineering for the development of accelerators is absolutely evident. Due to the extensive research activities in the field of accelerators and their applications, the first related scientific meeting named “National Conference on Particle Accelerators and Their Applications” with the presence of pundits, professors, and students in two main subjects: “Accelerators Physics and Engineering and Related Instruments” and “Applications of Accelerators in Science, Industry, and Medicine” was held on November, 27 – 28th, 2013. Learning about the research activities conducted for the development and applications of accelerators in Iran’s universities and other scientific institutes and sharing experiences were the major goals of this conference.

“National Conference on Particle Accelerators and Their Applications” was held by the cooperation of AEOI (Atomic Energy Organization of Iran,) Nuclear Society of Iran, Institute of Nuclear Science and Technology, Amirkabir University of Technology, Development and Manufacturing of Accelerators Co., Center for International Scientific Cooperation of the Ministry of Science and Technology, Iranian Light Source Facility, and Pars Isotope Co.

The first day of the conference was held, with noticeable attendance of Iranian professors, researchers and students and some senior directors. Dr. A.A. Salehi, head of AEOI, attended

the opening ceremony and expressed AEOI's support for accelerators research in his lecture mentioning the importance of peaceful advancement in nuclear activities.

At the beginning of the ceremony, after the chairman of Amirkabir University's greeting addressed to the audience, Secretary of Scientific Committee and the Manager of the Conference, presented a detailed review of various types of accelerators and their applications in Iran and the world. He also emphasized on the importance of filling the gap between Iran's prevailing science and technology status and other pioneer countries in this field. Then, Head of the Application Radiation Department of AEOI, pointed out the recent AEOI's activities in the field of accelerators and cited that a comprehensive scheme of work on the development of accelerators has been provided and that some parts of it is now in the development process and some others are finished. In the medical field, design and manufacturing of a baby cyclotron, and a linear electron accelerator is in progress with the aid of Supreme Council of the Ministry of Science, Research and Technology as well as the President's assistance office of technology. In the industrial field, production of a high power accelerator by AEOI was completed on May 2013 and working on the development of low-power industrial accelerators is in progress. In the research fields, an electro static accelerator was manufactured, a number of which have been sold to some Iranian universities.

The other programs specified in the opening ceremony of the conference included reporting on the various national great projects of President's assistance office of Science and Technology by Dr. Rahimi, head of center of president's national major projects, and also reporting on the researches performed by the Institute for Research in Fundamental

Sciences on training personnel specializing in accelerators physics and its accelerators-related projects.

It should be notified that at this conference, 96 out of 130 received papers were endorsed. 18 papers were oral and others were presented as posters. Furthermore, outstanding papers of the conference are now being published by Iranian Journal of Physics Research.