

Efforts in improvement of nuclear knowledge and information management in Croatia

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The IAEA (Vienna, Austria) as an autonomous intergovernmental organization was authorized for exchange of technical and scientific information on peaceful uses of atomic energy and established International Nuclear Information System (INIS) in 1970 as an international bibliographic database in the nuclear field and in nuclear related areas. Today INIS is big technological and science information system with 129 Members, including Croatia which joined INIS in 1994. Countries at different levels of technological development could derive benefits from the output products but most of members are developing countries, in which the economic growth is expected. Use of energy sources according to demands for sustainable development will be critical problem in future. Nuclear energy is probably not the best and only solution but as a major energy source it is very important for future energy systems. Applications of nuclear and radiation techniques in different areas (medicine, agriculture, water resource and radioactive waste management...) also contribute to sustainable development. The use of nuclear technology relies on the accumulation of knowledge in nuclear science and technology, including both technical information in documents and databases, and knowledge in human resources (scientists, researchers, engineers and technicians). Nuclear knowledge and information exchange are important for process of decision making on all issues connected with the full cycle of using nuclear technologies. So, the IAEA started to support and to help all Members in systematic knowledge preservation and information exchange wanting to transfer the practical experience to the younger generation and to archive important information from this segment.

Croatia is strongly involved in all activities in knowledge and information management. Croatian Radiation Protection Association, incorporated into International Radiation Protection Association, is a public organization with the purpose of promoting and developing scientific, educational and cultural activities in the field of radiation protection and related fields of science.

The aim of the Croatian Nuclear Society is to improve science and procedures by the peaceful use of nuclear sciences, technologies, and the appropriate security, as well as to introduce the public with the need and specialities of using nuclear technology.

The Croatian Society of Nuclear Medicine and the Croatian Energy Association work with similar goals as previous societies: to improve the general knowledge in society of the benefits of nuclear science and technology and their applications in related fields; to promote all scientific and professional activities by organization and participation on international meetings and conferences; to work on popularization of nuclear science, its

results and applications through organization of popular lectures, editing of publications and participation in manifestations of broader social importance.

Croatian Young Generation Network (YGN) as a part of Croatian Nuclear Society was founded in 1999 with goals of attracting young people, education and training of the young experts, knowledge and experience transition between the generations, international contacts and engagement in the international projects, encouraging young experts to join conferences, workshops and seminars, students involvement in the YGN activities and popularization of the nuclear studies among the students.

During almost 10 years Croatian membership in INIS was established as a decentralized system following in this way the INIS philosophy. This decentralized approach to input and output was selected because it represents the most comprehensive coverage of nuclear literature including effective handling of information and the most satisfactory services for users of the INIS Database (DB). Since 1994 input submitting in Croatia was continuous with significant increase of input records satisfying in the same time all requests of INIS Secretariat. Two years ago Croatia got Internet Access to the IAEA INIS Database for Universities of INIS Members free of charge providing us with information 24 hours a day, 7 days a week. This year Croatia joined group of INIS Members which work on voluntary input in INIS DB contributing and improving quality and quantity of the database.

Croatia involved in regional technical co-operation project in Europe supported by IAEA. In the field of nuclear techniques for humanitarian demining, device known as PELAN (Pulsed Elemental Analysis with Neutrons) was developed by the laboratory in the USA and showed positive results. As Croatia is country infested with landmines (about 600 000 landmines), an intense effort is taking place for the demining of the country. In 2002 field testing started in order to evaluate PELAN performance and capability in near to realistic conditions.

Last year the Governments of the Republic of Croatia and the Republic of Slovenia signed Agreement on the regulation of the status and other legal relationship, connected with investments in the Nuklearna Elektrarna Krsko, d.o.o., its exploitation and decommissioning opening possibilities for giving grants to the students and young scientists in the field of nuclear technology from the NE Krsko.

Thanks to development and application of new information technologies within INIS information management framework, all Members, including Croatia, improve the collection, production and dissemination of nuclear knowledge and information.