



Contribution ID: 201

Type: Oral presentation

#10-201 The European Nuclear Experimental Educational Platform –ENEPP: Progress, Prospects and Remote Education Capabilities

Wednesday, June 23, 2021 11:20 AM (20 minutes)

The European Nuclear Experimental Educational Platform –ENEPP is currently being established by five European educational / research organizations in the framework of a Horizon 2020 project, initiated in 2019. The ENEPP partner institutions are the Jožef Stefan Institute (JSI) in Ljubljana, Slovenia, the Slovak Technical University (STU) in Bratislava, Slovak Republic, the Czech Technical University (CTU) in Prague, Czech Republic, Technische Universitaet Wien (TU Wien) in Vienna, Austria and the Budapest University of Technology and Economics (BME) in Budapest, Hungary. ENEPP is intended as an open educational platform, offering experimental hands-on educational activities at the ENEPP partner institution facilities: four research reactors and one Radiation Physics Laboratory.

ENEPP educational activities will be offered in different formats: group educational activities (“package” and “custom” courses) and individual activities, and are targeted at university students at the bachelor, master and Ph.D. educational levels and young professionals in the nuclear field wishing to deepen their knowledge and gain valuable practical experience in nuclear facilities.

This paper gives an overview of the ENEPP project activities and the progress achieved so far, highlighting the experimental capabilities which will be offered. In the first implementation phase, ENEPP will be based on a comprehensive set of experiments which constitute the basics in Reactor Physics and Nuclear Engineering curricula, e.g. approach to criticality, reactor response to changes in reactivity, neutron flux mapping, as well as more specific experiments focusing on particular aspects –investigated phenomena, types and working principles of detectors, etc., e.g. neutron emission rate measurements with the manganese sulphate bath technique, radiation measurements with semiconductor detectors. Subsequently, novel education activities will be introduced and implemented in ENEPP, following scientific development in nuclear science and technology and nuclear instrumentation detectors, stemming from research activities. Attention will be devoted to the development and optimization of remote education capabilities at the ENEPP partner institutions, of particular relevance during the current Covid-19 pandemic which is responsible for major changes in education activities worldwide.

Primary authors: RADULOVIC, Vladimir (Jožef Stefan Institute); JAZBEC, Anže (Jozef Stefan Institute); Dr SNOJ, Luka (Reactor Physics Division, Jožef Stefan Institute, Ljubljana, Slovenia); Prof. HAŠČIK, Jan (Slovak Technical University in Bratislava); Dr VRBAN, Branislav (Slovak Technical University in Bratislava); Dr ČERBA, Štefan (Slovak Technical University in Bratislava); Dr LÜLEY, Jakub (Slovak Technical University in Bratislava); Dr OSUSKY, Filip (Slovak Technical University in Bratislava); Prof. SKLENKA, Lubomir; Prof. MIGLIERINI, Marcel (Czech Technical University in Prague); Mr NOVÁK, Ondřej (Czech Technical University in Prague); Prof. BOECK, Helmuth (Technische Universitaet Wien); Dr CAGNAZZO, Marcella (Technische Universitaet Wien); Dr VILLA, Mario (Technische Universitaet Wien); Prof. CZIFRUS, Szabolcs (Budapest University of Technology and Economics); Dr TORMÁSI, Attila (Budapest University of Technology and Economics)

Presenter: RADULOVIC, Vladimir (Jožef Stefan Institute)

Session Classification: 10 Education, Training and Outreach

Track Classification: 10 Education, Training and Outreach