Neutrons for the next decade and beyond



Contribution ID: 13

Type: Oral

The Eastern European Cooperation in Fast Neutrons and ADSS Related Research

Wide fast neutron research cooperative network is being developed between the Czech Republic, Ukraine, Republic of Armenia, and Indian universities in last five years. All has begun in JINR Dubna, however, at the moment local facilities are used for the research. The point of cooperation were Accelerator Driven Subcritical Systems, and the medium to high energy nuclear data (cross-section, fission yields etc.) needs. At the moment we are focused on cross-section measurement at Indian facilities (3 to 20 MeV), at CANAM in Rez (20 – 45 MeV), with proposals to iThemba and RCNP (up to 400 MeV). We are preparing to use photonuclear accelerator driven neutron sources (Uzhorod's microtron & Yerevan's synchrotron) and spallation targets for validation experiments. Unfolding tools and variable neutron detection systems are also of our interest. We would like to contribute to the discussion of fast neutron facilities needs from ADSS community point-of-view.

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