RERTR 2018 – 39TH International Meeting on
Reduced Enrichment for Research and Test Reactors

November 4-7, 2018
Sheraton Grand Hotel and Spa
Edinburgh, Scotland

Back in Line: WWR-SM research reactor operation, Plans for the future

S. A. Baytelesov
Institute of Nuclear Physics of the Academy of Sciences of Uzbekistan
N. R. Maksumov
Institute of Nuclear Physics of the Academy of Sciences of Uzbekistan

Corresponding author: baytel@inp.uz

Abstract

Brief information about the work at the Institute WWR-SM research reactor site performed in the framework of the RERTR program. In the course of this work, the required documents for the reactor core conversion have been prepared, necessary neutron-physical and thermal hydraulic calculations, as well as calculations of emergency situations and reactor failure when using LEU fuel has been done. The process of conversion was gradual, with a step by step replacement of the HEU fuel by the LEU fuel and took 1.5 years. The conversion was carried out for the first time and in compliance with all international standards and norms.

Also provides information about WWR-SM research reactor background, reactor utilization, nuclear science and technology, neutron beam applications, industrial and radioisotopes production and irradiation technology; research reactor networks and coalitions; strategic and business plans and OMARR (Operation and Maintenance Assessment for Research Reactors) mission and conclusions described in this paper.