

# Europe's Nuclear Science Lab

The mission of the Institute for Transuranium Elements (ITU) is to provide the scientific foundation for the protection of the European citizen against risks associated with the handling and storage of highly radioactive material. ITU's prime objectives are to serve as a reference centre for basic actinide research, to contribute to an effective safety and safeguards system for the nuclear fuel cycle, and to study technological and medical applications of radionuclides/actinides.

ITU works very closely with national and international bodies in the nuclear field, both within the EU and beyond, as well as with the nuclear industry. In addition

to playing a key role in EU policy on nuclear waste management and the safety of nuclear installations, ITU is also heavily involved in efforts to combat illicit trafficking of nuclear materials, and in developing and operating advanced detection tools to uncover clandestine nuclear activities. ITU provides the expertise and access to the necessary special handling facilities for the study of the actinide elements. This is of relevance for issues related to nuclear power generation and radioactive waste treatment and disposal, but also for the advancement of science in general. Another key role is in the study and production of radionuclides used in the treatment of cancer.