**Radioanalytical and emergency preparedness activities at STUK**

Valtteri Suorsa, Kaisa Vaaramaa, Pia Keski-Jaskari1

*1 STUK* (*Radiation and Nuclear Safety Authority in Finland), Measurements and Environmental Surveillance*

STUK is the corresponding authority in Finland for radiation and nuclear safety. Our mission is to promote and supervise the safe use of radiation and nuclear energy. Our duty is to provide expert knowledge and special services regarding the radioactivity and radiation safety to ensure the overall security of society.

Measurements and environmental monitoring unit corresponds of the radiation measurements (field and laboratory) performed at STUK. The laboratory is an accredited testing laboratory (T167, ISO/IEC 17025:2017). The fields of testing include gamma-spectrometric analyses of different objects (e.g., environmental and industrial samples, direct measurements of people), radiochemical analyses, ICP-MS analyses, airborne Rn measurements and sampling for the environmental surveillance of radioactivity.

STUK provides testing services for both internal and external customers. The major surveillance programs consist of the environmental radiation monitoring in the vicinities of the Finnish nuclear power plants, and the monitoring of environmental radiation in Finland. In addition, laboratory radioactivity analyses are provided for e.g., CTBT (comprehensive Nulear-Ban Treaty), citizens and industry (e.g., building materials, mining products).

Besides the routine analyses, the laboratory serves as the national emergency preparedness laboratory which corresponds of providing radioactivity analyses for the base of decision-making during a possible radiological emergency.

This poster focuses on the radioanalytical laboratory and emergency preparedness activities at STUK. It discusses major surveillance programs conducted in Finland and provides an overview of the different analytical services and capabilities of the laboratory.