Improving the Radiological and Nuclear Security at the Waterworks Level: the TAWARA\_RTM Solution

**Seminarium Departamentu Aparatury i Technik Jądrowych**

 Prof. Marcello Lunardon, University of Padova

**Data:** 2017-03-09 11:30

**Miejsce:**budynek fizyki, sala 153

**Abstract:**

A complete platform to control in real time the quality of the tap water with respect to the radioactivity content will be presented. The platform, developed within the TAp WAter RAdioactivity Real Time Monitor (TAWARA\_RTM) EU-funded project, can provide a real time measurement of the activity in the water (measuring the gross alpha and beta activity) to verify whether the distributed water is within the limits set by the EU legislation reaching thresholds that require rapid actions.

The TAWARA\_RTM platform consists of a three-device inspection system:

* an early-warning device to monitor significant changes of the radioactive content of the raw water;
* a fast alarm device for crossing thresholds that require rapid actions at the tap water distribution point;
* a spectroscopic investigation to determine the nature of the contaminant and help the choice of the appropriate and effective.

A dedicated ICT infrastructure has been developed to operate the system and manage the alarms that may occur during operation. The tests of the integrated system have been carried out in summer 2016 at North Water Plant of the Warsaw Waterworks.

Zapraszają:

* dr Jacek Rzadkiewicz
* dr Agnieszka Syntfeld- Każuch
* dr hab. Sławomir Wronka, prof. NCBJ