

Soggetto coordinante	Università di Padova
Titolo del progetto	TAp WATER RAdioactivity Real Time Monitor
Acronimo	TAWARA_RTM
Descrizione del progetto	TAWARA_RTM project aims at developing a complete platform to control the quality of the tap water with respect to the radioactivity content. The platform will 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 far from the limits set by the EU legislation (see Directive 98/83/CE of the European Council) reaching thresholds that require rapid actions. In case of an alarm due to an activity in the water larger than the defined thresholds, a warning message is sent to the water plant management to verify the need of stopping the water distribution. At the same time, a second part of the system is activated, to determine the nature of the contamination by gamma ray spectroscopy, defining the nature of the contamination and the corresponding counter-measures.
TA/SG	TA 6
Riferimento Bando	Call FP 7 - 2012
Valore del progetto	€ 3.600.000.00
Pubblicazioni	<p>1) High rate read-out of LaBr(Ce) scintillator with a fast digitizer <i>Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, Volume 678, 21 June 2012, Pages 83-87</i> L. Stevanato, D. Cester, G. Nebbia, G. Viesti, F. Neri, S. Petrucci, S. Selmi, C Tintori (TA6_TRL_110-3)</p> <p>2) Radiological risks from irradiation of cargo contents with EURITRACK neutron inspection systems <i>Radiation Physics and Chemistry, In Press, Corrected Proof, Available online 11 April 2012</i> E. Giroletti, G. Bonomi, A. Donzella, G. Viesti, A. Zenoni (TA6_TRL_110-1)</p> <p>3) On the use of a (²⁵²Cf-³He) assembly for landmine detection by the neutron back-scattering method <i>Applied Radiation and Isotopes, Volume 70, Issue 4, April 2012, Pages 643-649</i> N. Elsheikh, G. Viesti, I. ElAgib, F. Habbani (TA6_TRL_110-1)</p>

	<p>4) Special nuclear material detection with a mobile multi-detector system <i>Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, Volume 663, Issue 1, 21 January 2012, Pages 55-63</i> D. Cester, G. Nebbia, L. Stevanato, G. Viesti, F. Neri, S. Petrucci, S. Selmi, C. Tintori, P. Peerani, A. Tomanin (TA6_TRL_110-1)</p> <p>5) Light output of EJ228 scintillation neutron detectors Original Research Article <i>Applied Radiation and Isotopes, Volume 69, Issue 2, February 2011, Pages 369-372</i> L. Stevanato, D. Fabris, Xin Hao, M. Lunardon, S. Moretto, G. Nebbia, S. Pesente, L. Sajo-Bohus, G. Viesti (TA6_TRL_110-1)</p> <p>6) A proton recoil telescope for neutron spectroscopy Original Research Article <i>Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, Volume 613, Issue 1, 21 January 2010, Pages 58-64</i> A. Donzella, M. Barbui, F. Bocci, G. Bonomi, M. Cinausero, D. Fabris, A. Fontana, E. Giroletti, M. Lunardon, S. Moretto, G. Nebbia, M.M. Necchi, S. Pesente, G. Prete, V. Rizzi, G. Viesti, A. Zenoni (TA6_TRL_110-1)</p>
<p style="text-align: center;">Curriculum</p>	<p>Giuseppe Viesti</p>