



Workshop

“Application of Analytical Methods to Measure Metabolites in Marine Environment”

Thursday 21 July 2016

Aula seminari, Dipartimento di Chimica, University Roma II “Tor Vergata”

PROJECT OVERVIEW

The increasing demand by citizens and environmental organizations for the protection, preservation and possible restoration of the marine environment has made seawater protection one of the urgent priorities of the EU. At the same time, the Blue Growth Strategy aims to support the growth of maritime activities in a way that is compatible with environmental sustainability. The SMS project will promote the development of novel sensing devices for marine environmental protection. SMS is expected to have a major impact on marine water end-users and relevant stakeholders.

Running from December 1st 2013 to August 31st 2017, “Sensing toxicants in Marine environment makes Sense using biosensors” (SMS) European research project (<http://www.project-sms.eu>) will deliver a novel automated networked system that will enable real-time in-situ monitoring of marine water chemical and ecological status in coastal areas by the detection of a series of contaminants. The pollutants specifically targeted by the project have been indicated as having priority for quality control of seawater. They cover a wide spectrum of regulated chemicals that have detrimental effects on the marine environment such as toxic algae, antifouling pesticides, flame retardants and pharmaceuticals that will be measured using innovative probes.

The main intention of the workshop is to present the advance of scientific and applicative results of SMS project as well as to provide an opportunity to enhance the interaction between scientific community and end-users operating in coastal monitoring.

WORKSHOP AGENDA

10.00 - 10.15: Welcome and introduction (*G. Palleschi, University Roma II - Project Coordinator*)

Automated methods for Methabolites detection in marine environment:

10:15 - 10:30: Sulphonamide determination using an automated micro Loop Flow Reactor analyzer (*A. Amine, Hassan II University, Casablanca, Marocco*)

10.30 - 10.45: Okadaic acid determination using an automated micro Loop Flow Reactor analyzer (*K. Petropoulos, University Roma II*)

10.45 - 11.00: Lab-on-a-chip device for toxic algal detection in marine environments (*C-L. Manes, Microbia Environnement*)

Coffee break

Other automated methods under development:

11.30 - 11.45: Development of immunoassay-based method for PBDE determination in seawater (*A. Chalupniak, ICN Barcellona*)

11.45 - 12.00: Method of analysis for the detection of Saxitoxin and domoic acid in sea water: advancement and perspective (*A. Porchetta, University Roma II*)

Automated water quality coastal monitoring system:

12.00 - 12.15: Prototype for automatic water sampling and preconcentration (*B. Danielsson, Acromed*)

12.15 - 12.30: Data management and planned field experiments on a coastal buoy and floating platforms (*L. Sanfilippo, SYSTEA SpA*)

12.30 - 13.00: Opportunities and perspectives for application of the automated methods in aquaculture and coastal areas monitoring (*A. Gunatilaka*)

13.00 - 13.30: Discussion and conclusions (*G. Palleschi, University Roma II - Project Coordinator*).

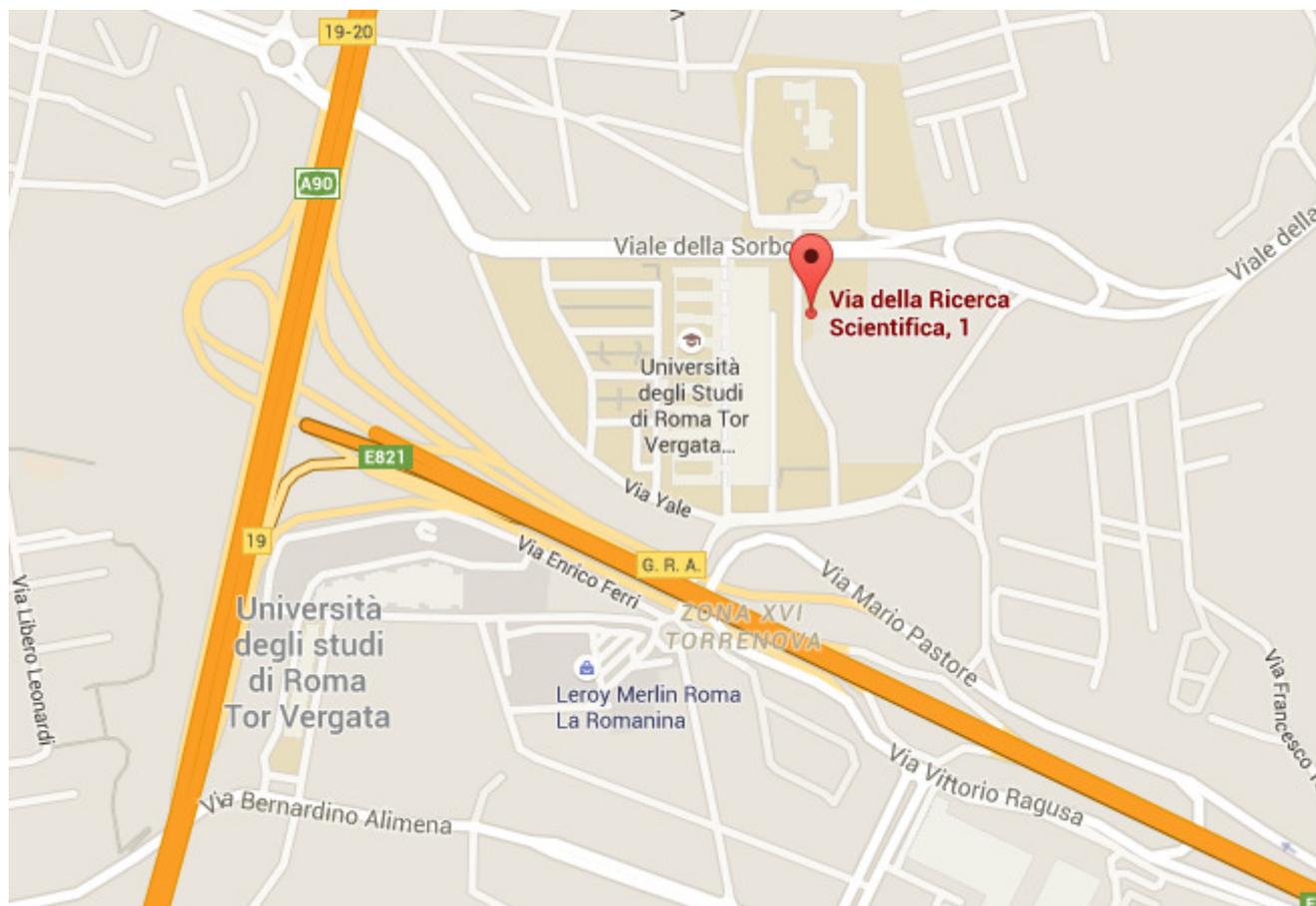
13.30 - 14.30: Lunch



14.30 - 16.00: Demonstration of the equipment and of the methods in the analytical laboratory of University Roma II

Workshop venue:

Via della Ricerca Scientifica 1, ROMA



Workshop language:

The language of the workshop will be English.

Organization contact at the venue:

Luca Sanfilippo: +39-335-6355495



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 613844.