



INTERNATIONAL SUMMER SCHOOL "MRI, RAMAN and Food Technologies"

June 11-15, 2012 - Alghero, Sardinia, Italy

Porto Conte Ricerche organized the International Summer School on MRI, RAMAN and Food technologies in cooperation with Regione Sardegna.

The School Program is intended to offer an overview of modern imaging methods and techniques related to food technologies, and how they can be applied. The program will integrate a **"hands-on" experience** with key lectures on the basic theory underlying MRI and RAMAN spectroscopy techniques and experimental design, integrated by case-study lectures illustrating their practical applications. Students will have the opportunity to experience some of the **cutting edge techniques** that Laboratories at Porto Conte Ricerche have to offer, including: sample preparation, relaxation weighted MRI sequences, diffusion weighted MRI, obtainment of parametric relaxation maps, cell labeling with MRI contrast agents, spectroscopic fingerprinting-based Raman imaging, Surface-enhanced Raman scattering, FT-Raman spectroscopy.

The course is intended for international students with little experience in MRI and RAMAN Imaging who aim at a comprehensive overview of the typical imaging analysis workflows, including practical approaches and data analysis. Individuals who may primarily benefit from this course include: **PhD students and post-doctoral fellows, imaging core users**, other researchers who are considering incorporating imaging protocols into their own research. Technologists with a scientific and professional experience are welcomed.

Fluency in English is a requirement for application.

Speakers:

Nils Kristian Afseth – (Nofima – Norwegian Institute of Food, Fisheries, and Aquaculture Research, Osloveien 1- Norway) John Van Duynhoven – (Wageningen University – The Netherlands) Joseph Irudayaraj – (Agricultural & Biological Engineering, Purdue University - West Lafayette – USA) Francesco Moneta – (Bruker Italia) Diego Sali – (Bruker Italia) Enzo Terreno – (Department of Chemistry and Molecular & Preclinical Imaging Centers University of Torino – Italy)

Lab activities:

Roberto Anedda – MRI Lab, Porto Conte Ricerche Gilberto Mulas - MRI Lab, Porto Conte Ricerche Massimo Piccinini – RAMAN Lab, Porto Conte Ricerche

A designated Poster Session will take place at the end of the Summer School, followed by "**The Best Poster Award**" for the best poster presented.

Dealine for application: April 30, 2012.

The Location and the Course Venue are unique: the Research Centre is located in one of the most enchanting spots of Alghero's Coral Riviera on Sardinia's North-West Coast. The Research Centre provides state-of-the-art facilities and technology platforms, meeting and conference rooms, a cafeteria, and an on-site guest house, all located in a beautiful Natural Park Area, walking distance from the Mediterranean sea shore. Cultural and social activities are going to take place during the Summer School, such as: walk into Grotte di Nettuno, guided tour to the ruins of a Roman villa built on the sea shore and to a pre-historical archaeological site "Nuraghe Palmavera". The medieval town of Alghero, founded by Catalans, will be also visited during the Course.

Please have a look at the pictures and additional information on the Course and Location on <u>www.portocontericerche.it</u>, <u>www.biotechsummer.it</u>.

Course Venue and Contacts *Porto Conte Ricerche* Research Centre, Tramariglio, 07041 Alghero (SS), Italy phone + 39 079 998400 fax + 39 079 998 567 mail: summerschool@portocontericerche.it