Istituto di Chimica dei Composti Organometallici

ICCOM Firenze incontra ICCOM Pisa

Venerdì 1° Giugno 2018
Alle ore 11:00

presso Aula 2
Area della Ricerca CNR, Via Madonna del Piano 10 – Sesto F.no

Il Dr. Stefano Legnaioli di ICCOM-Pisa terrà il seguente seminario:

"Spectroscopic techniques for the characterization of materials in cultural heritage "

Dr. Francesco Vizza
ICCOM-CNR

Abstract:

The complexity of the problems related to the wide variety of materials used in the field of Cultural Heritage and the degradation these materials often can suffer does not allow to select a single methodology that can be used in a standard way for this kind of analysis. The study, in fact, may occur at various levels, even if, it is often preferred to perform the analysis employing techniques that are, as far as possible, non-destructive or micro-destructive. Optical techniques are widely diffused and extremely well established in the field of Artworks diagnostics because of their effectiveness and safety. The purpose of this talk is giving an overview of the last developments of the activities of the Applied Laser and Spectroscopy (ALS) Laboratory in this field, introducing the basics of the used methodologies (LIBS, XRF and Raman Spectroscopy) together with some case studies.

Biographic sketch:

Stefano Legnaioli: Master's degree in Physic, Ph.D. in Chemistry, researcher at the Italian National Council for Research - Institute for the Chemistry of OrganoMetallic Compounds since 2008. He is co-author of more than 100 peer reviewed papers (h-index: 29 source Scopus), and has participated in various national and international conferences. Based on the classification of the European Research Council, its research activity can be classified within the following sectors: PE2, PE4, SH5_1, SH6_1.

His research experience lies in the filed of laser spectroscopy, particularly LIBS (Laser Induced Breakdown Spectroscopy), Raman, SERS, XRF and Multispectral Imaging techniques. The fields of application concern the analysis of materials, environmental protection, the study and conservation of cultural heritage. Over the years he has shown special aptitude for laboratory activity, both in the development of new instrumentation and in measurement procedures and data processing with chemometric techniques.

Ability to team up with the group and project management, strengthen by coordination of the projects both at the national and international level (MIUR PRIN, PARFAS, PARFESR, FP7) responsible for the research unit of MIUR – FOE 2012 "SM@RTINFRA"; FP7 "SHREDDERSORT", PON 2012, ENEL Contract.

He is the ICCOM delegate of the "Technologies for Cultural Heritage" activity (ICCOM-TEBEC), elected member of the Council of the Institute, from 2010 to 2015 he was responsible for the MD.P03.035.001 module "Optical spectroscopies for the characterization of materials"; member of the dissemination group of the ICCOM section of Pisa. He is a member of the "Areaperta" committee that organizes cycles of scientific-themed seminars for the CNR Research Area of Pisa.