Cycle of lectures

Prospecting, characterizing, dating
ARCHEOMETRIC METHODS FOR ARCHEOLOGICAL SCIENCES

Archeometric methods appear in the field of archaeology for quite some years. What are the tools of this dispicline supporting archeological science? What does it bring to the knowledge of the Cultural Heritage?

Geophysics applied to archaeology for revealing ancient sites needs to have some basics in electrical, magnetic and electro-magnetic prospection, plus Radar, Lidar and satellite possibilities to detect the nonvisible vestiges from the past.

Observing and analysing the ancient materials has become essential to better know their provenance, the way they were made, the way they were abandonned and eventually reused, and sometimes restored. What physics and chemistry can bring to these topics (observing and analysing)? Why do we use X rays, light, electrons and other ion beams for this ?

Dating ancient materials takes part of the characterization process. The chronological field have been so well developed techniques that it needs a special focus. Many methods exist where radioactivity (C14; U/Th; etc), solid state physics (Luminescence), chemistry, have found new applications.

Invited Lecturer

Prof. Rémy Chapoulie

Head of Laboratories
IRAMAT-CRP2A & ARCHEOVISION

Tuesday **9 October 2018**
h 15:00-18:00
Aula C - Dipartimento Scienze della Terra
Via Santa Maria, 53
Prospecting: Applied Geophysic
electric, magnetic, electro-magnetic, RADAR, LIDAR, satellitar prospections

Wednesday **10 October 2018**
10:00-13:00
Sal 1 - Dipartimento Civilità e Forme del Sapere
Via dei Mille, 19
Ancient material characterization
microscopy and spectroscopic methods

Thursday **11 October 2018**
10:00-13:00
Sal 1 - Dipartimento Civilità e Forme del Sapere
Via dei Mille, 19
Dating archeological objects
from luminescence to C-14 dating

Rémy Chapoulie *is University Professor of Physics in Archaeometry. He is head of the laboratory IRAMAT-CRP2A (Institut de recherche sur les archéomatériaux-Centre de rechercheen physique appliquée à l'archéologie) UMR 5060 CNRS at Bordeaux and of the laboratory Archeovision (UMS 3657 CNRS), involved in 3D virtual reality. Member of the scientific advisory board of the Cluster of excellence called LabEx des Sciences Archéologiques de Bordeaux, his main research activities currently concern the multiphysical study and archaeometry of ceramics and pigments from pre-Columbian Peru, the taphonomy of decorated prehistorical caves from Dordogne (France), and also the archaeometric study of antique marble from northern Spain, Portugal and the south-west of France, the archaeological and archaeometrical investigation of Roman amphorae, lithic materials (provenance, sourcing and distribution) in Corsica, the study of Japanese prints and more recently the French faïence of Bordeaux manufactory of the 19th c. One of his major and present interests lies in the development of mobile analytical systems for in situ measurements.*

In the framework of:

Erasmus+

In Supremæ Dignitatis 1343
Dipartimento di Scienze della Terra
Università di Pisa

Dipartimento di Civiltà e Forme del Sapere

Progetto di Eccellenza
Dip. Civiltà e Forme del Sapere

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