



1st IPERION-CH TRAINING CAMP

HERITAGE SCIENCE IN PRACTICE

14th-18th November 2016 at Heritage School of Nájera (Spain)

Organized by Spanish National Research Council (CSIC) and Spanish Cultural Heritage Institute (IPCE), Madrid, Spain

Second announcement and registration

The Spanish National Research Council (CSIC) and the Spanish Cultural Heritage Institute (IPCE) organize the **1**st **IPERION CH Training Camp** to be held at Heritage School of Nájera (Spain) from **14**th-**18**th **November 2016**.

IPERION CH (www.iperionch.eu) is a consortium that brings together major centres of research in Heritage Science, including outstanding research institutes, as well as prestigious research laboratories and conservation centres in both museums and universities. It consists of 23 partners from 12 Member States plus one in the US, together with a large network of affiliations and collaborations. Its high status is supported by the significance of their facilites and their scientists' and experts' international reputation for cutting edge research, combining high level technical expertise with outstanding historical and archaeological knowledge of cultural heritage materials of all types

The Training Camp will offer the opportunity of a hands-on training on the functioning of the MOLAB platform (The MObileLABoratory) of IPERION-CH, which gives access to an impressive collection of advanced mobile analytical instrumentation for non-invasive measurements on precious, fragile or immovable objects, archaeological sites and historical monuments. The MOLAB allows its users to implement complex multi-technique diagnostic projects, facilitating the most effective in situ investigations. This Training Camp will offer practical training on the use of MOLAB, and will introduce trainees and students to how science can contribute to the identification and evaluation of conservation issues posed by all kind of movable and immovable artefacts (paintings, metal/alloys, textiles, architectural painted decorations, monuments, sculptures etc.).

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Approach

This Training Camp is part of the overall activities foreseen within the IPERION-CH Work Package 10 on Training and Education which is aimed at organizing training and educational activities in order to develop highly skilled professionals in the wider Cultural Heritage community. In fact, WP10 will try to foster cooperation between the academic community and the conservation and research institutions. Both Training Camps and Doctoral Summer Schools, addressed towards potential users of the IPERION CH trans-national access (TNA) will allow the advances in knowledge, methodologies and instrumentation achieved by CHARISMA and IPERION CH to be transferred back to an academic environment and to the researchers of the future. Overall, WP10 aims to create models for multidisciplinary and sustainable academic education and training initiatives and at shaping new professional profiles and skills for the Cultural Heritage sector.

The Training Camp will be based in a problem-solving approach. Through the use of innovative mobile laboratory equipment, best practices and applied methodological procedures will be transferred directly to new potential users, trainees, students and SMEs. Different real case studies will be addressed, comprising a diversity of materials, types of objects, conservation problems and historical questions. These case studies will be addressed in small (5 people max.) groups by the use of different combined MOLAB techniques, with direct interaction with the scientist responsible for each technique, encouraging thorough discussions and constructive debate amongst the participants.

After a short theoretical introduction to the different case studies and techniques, the Training Camp will be structured around 5 days of practical analytical sessions, and group discussions about the results and conclusions obtained.

Who should attend the Training Camp?

The IPERION-CH Training Camp is aimed to professionals in the field of Cultural Heritage (either individuals or teams from public and/or private institutions) who are interested in approaching and developing studies on conservational and analytical problems. Some examples of the questions to be approached would be clarifying art-historical and archaeological questions (technology, execution techniques, dating, under-drawings in paintings etc.), assessing of the state of conservation of artefacts, determination and testing of optimal preservation strategies to slow down alteration processes, monitoring of conservation treatments, risk assessment, etc. It is specifically aimed at young researchers.

Thanks to the small number of participants an intensive interaction with the scientists and colleagues will be encouraged. Participants must be keenly motivated to actively partake in the discussions, and must attend the Training Camp for its whole duration. All sessions will be conducted in English and therefore fluency in written and spoken form is essential. A certificate of attendance will be provided to all participants.

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The venue

The *Escuela de Patrimonio Histórico de Nájera* (Nájera Heritage School) is located in the Monastery of Santa María la Real of Nájera, an estate under the Spanish Ministry of Education, Culture and Sport ownership. The city of Nájera is situated in the region of La Rioja, 27 kilometres from Logroño. It is one of the main stop-overs on the Pilgrim's Route to Santiago de Compostela.



The main functions assigned to the Heritage School of Nájera are the organization and delivery of specific courses for professionals in the conservation and restoration of cultural property, in which the principles, methods and criteria for intervention in cultural heritage are spread; The programming of training on heritage aimed at different educational and professional levels; The exchange of knowledge with institutions of the European Union and other countries; and



realization of activities to deepen the study, development and dissemination of the European Landscape Convention of the Council of Europe and to promote studies aimed at training technicians, according to the recommendations of the European Union and UNESCO.

The monastery of Santa María la Real is an iconic monument in the Camino de Santiago, with historic and patrimonial conditions that grant it the category of Item of Cultural Interest. It was built in the 11th century, founded by King García Sánchez III of Navarre, with significant modifications in the 15th century. Its fortress-like external appearance contrasts with the ornamental beauty of the so called cloister of the Caballeros (knights), because of the large number of nobles buried there. The church houses a magnificent piece of carving in the

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choir, a brilliant high reredos with a Romanesque image of Santa María La Real, the Royal Pantheon of the Kings of Navarre, bearing the tombs of some thirty monarchs; the mausoleum of the Dukes of Nájera and, in the crypt, the cave where, according to legend, the Virgin appeared before King Don García, who ordered the construction of the site. Facing the monastery is the Historical-Archaeological Museum of Nájera, with sections on prehistory, Roman and medieval periods, ethnography and painting, as well as varied material from the Nájera region of historical and archaeological value. Also of interest is the Santa Cruz parish church and its lantern resting on pendentives, situated in Plaza de San Miguel.

Description of the MOLAB platform



MOLAB enables European users to develop and pursue their research under conditions that ensure the complete safety of the Heritage objects under examination. Indeed, MOLAB investigations are performed in situ without the need to move fragile artworks or precious archaeological pieces to a laboratory and using only non-invasive techniques, i.e. without any sampling or contact with the surface. MOLAB also allows immovable

objects like sculptures, monuments and historical buildings to be studied without any sampling. The full list of techniques/instruments offered by MOLAB with the respective providers, description of the techniques and some examples of successful application can be found in the IPERION CH website: http://www.iperionch.eu/-/molab

Benefits of the mobile high-performance MOLAB platform include:

- The possibility to carry out measurements otherwise impossible for users
- Promotion of the exploitation of non-invasive techniques;
- Increased scientific examinations of works of art and diffusion of the findings
- Establishment of positive interactions among the different professional figures participating in the research, contributing to create a common language and promoting multi- and inter-disciplinarity.

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The following MOLABs will be available in the Training Camp

- MOLAB 1: CNR, Consiglio Nazionale delle Ricerche CNR-ISTM, CNR-INO with linked third parties UNIPG, LABDIA, Perugia-Firenze, IT.
- MOLAB 4: FORTH, Foundation for Research and Technology-Hellas, Heraklion, GR.
- MOLAB 5: RWTH, Aachen University, Aachen, DE.

A full description of the techniques in each MOLAB and their specifications is available at http://www.iperionch.eu/molab-providers

Additionally, demonstrations of in-situ electrochemical impedance spectroscopy (EIS) and V.A.R.I.M (*Visión Artificial aplicada a la Reflectografía de Infrarrojos Mecanizada*) will be carried out.

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Preliminary programme

Lectures will start on Monday 14th November at a 13:00h, and will end on Friday 18th November at about 13:00h.

Monday, 14th November

12:00-13:00: Registration

13:00-14:00: Welcome and opening of the course

14:00-15:30: Lunch

15:30-18:30: Presentation of techniques: fundamentals and theory

Tuesday, 15th November

Students will be divided in 4 groups, and assigned to different case studies that will be studied by the different MOLABs.

9:00-11:00: Practical session. Analysis of cases studies with MOLABs

11:00-11:30: Break

11:30-13:30: Practical session. Analysis of cases studies with MOLABs

13:30-15:00: Lunch

15:00-17:30: Practical session. Analysis of cases studies with MOLABs

17:30-18:30: Demonstration of in-situ EIS (Groups 1 & 2) and VARIM (Groups 3 & 4)

Wednesday, 16th November

9:00-11:00: Practical session. Analysis of cases studies with MOLABs

11:00-11:30: Break

11:30-13:30: Practical session. Analysis of cases studies with MOLABs

13:30-15:00: Lunch

15:00-17:30: Practical session. Analysis of cases studies with MOLABs

17:30-18:30: Demonstration of in-situ EIS (Groups 3 & 4) and VARIM (Groups 1 & 2)

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Thursday, 17th November

9:00-11:00: Practical session. Analysis of cases studies with MOLABs

11:00-11:30: Break

11:30-13:30: Practical session. Analysis of cases studies with MOLABs

13:30-15:00: Lunch

15:00-17:00: Preparation of results for presentation (by groups)

17:00: Visit to La Rioja winery

Friday, 18th November

9:00-11:30: General discussion and presentation of results

11:30-12:00: Break

12:00-13:00: Closing session and certificates delivery.

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Practical information

Fees

The cost of the course is covered by the IPERION CH project, but a fee of **75** € will be paid by students to cover course materials and social activities.

Travel expenses and any subsistence and hotel accommodation expenses are not included and will be met by the participants.

Travel and accommodation

Information on accommodation can be found in the La Rioja Touristic info webpage: http://lariojaturismo.com/en/community/larioja/resource/najera/97ce7df3-b9c9-4a50-8891-5350011749c8; and Najera City Council website (In Spanish): http://www.najera.es/turismo/alojamientos-y-restaurantes.html

The organization strongly recommends contacting the hotels for the reservations as soon as possible.

Nájera is connected with Madrid, Logroño (the capital of La Rioja region), and nearby capitals such as Pamplona, Burgos and Zaragoza, by bus. PLM Autocares (http://plmautocares.com/) offers 2 daily direct trips Madrid-Nájera: departures from Madrid to Nájera are at 7:30 and 15:00, and departures from Nájera to Madrid are at 8:55 and 17:55.

Complete information on all bus connections with other capitals can be found (in Spanish) in the Nájera Council Website: http://www.najera.es/turismo/c%C3%B3mo-llegar.html.

Registration

Due to the practical character of the course, registration is limited to **20 participants**. Attendees will be selected by the Training Camp Organization from the candidate applications based on merits, background and other criteria.

Deadline for submission of the registration form is October 15th

Selection and payment instructions will be communicated to applicants on October 19th

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Direction of the Training Camp

Dr. Emilio Cano (CENIM-CSIC) and Dr. Enrique Parra (IPCE-MECD)

Organizing committee:

Dr. David M. Bastidas (CENIM-CSIC)

Dr. Cecilia Frosinini (OPD, IPERION Task 10.2 leader)

Mrs. Teresa García Cifuentes (IPCE-MECD)

Dr. María Martín Gil (IPCE-MECD)

Prof. Rocco Mazzeo (UNIBO, IPERION WP10 leader)

Mrs. Miriam Pérez-Alocén (free lance restorer)

Mrs. Blanca Ramírez Barat (CENIM-CSIC)

Mrs. Rocío Salas (IPCE-MECD)

Organized by:











Registration form

Return the completed form along with a short CV, **before October 15**, to: david.bastidas@cenim.csic.es,

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Profession:								
Educational backgro	ound:							
	Title	University	Mark	Date of award				
Undergraduate (Degree, Bachelor)								
Graduate (Master)								
Motivation to attend the course (max. 200 words):								