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haute école neuchâtel berne jura arc conservation - restauration neuchâtel

CHANGE

Cultural Heritage Analysis for New GEnerations

OBJECTIVES

This objective will be reached through the research projects carried out by each Early Stage Researchers (ESR) hosted by the 9 beneficiaries, collaborative work between the ESRs and between them and the beneficiaries / partners. The UR-Arc CR researchers will play a central role as workpackage leaders (Dissemination, exploitation and communication of results), experts in the analysis and conservation of heritage artefacts and supervisors of ESR 11 and ESR 15.

PROGRAM

The Conservation Research Unit at Haute Ecole Arc (UR-Arc CR) is one of the beneficiaries of a Marie Skłodowska-Curie Innovative Training Networks (ITN CHANGE – www.change-itn.eu, grant agreement No. 813789) funded by the EU under the Horizon 2020 programme.

Multi-modal imaging techniques, together with more traditional analytical methods, will be used to assess and monitor any change occurring to cultural heritage artefacts during their exposure to the atmosphere and due to conservation treatments. The main objective of CHANGE is in fact to track the modifications of artworks over time. This work will be carried out within an interdisciplinary consortium from 8 EU countries involving 5 Cultural Heritage (CH) and 4 Information & Communication Technologies (ICT) beneficiary institutions as well as 9 CH, ICT and industrial partners.

ESR 11 will focus on the study of the formation of metal soaps on painted metals. The research team involved will develop a methodology based on multi-modal analyses for the assessment of the different factors related to the degradation processes of polychrome metallic artworks.

ESR 15 will focus on imaging techniques used to detect and monitor in a non-invasive way either the early stage formation of oxide films and patina on historical metal artefacts or ageing of a superficial varnish covering them in combination with existing invasive techniques such as electrochemical/spectroscopic studies and examination of materials on cross-sections.

FUNDING

EU H2020 programme

PROJECT LEADER

Norges Teknisk-Naturvitenskapelige Universitet (NTNU).

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ESR supervisors and co-supervisors :

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BENEFICIARIES

NTNU; Warsaw University of Technology; Ministry of Culture, Center for research and restoration for French Museum-C2RMF at Louvre, Paris; University Bourgogne Franche-Comté; University of Oslo; Cyprus University of Technology; HES-SO; University of Amsterdam; Swiss National Museum.

PARTNERS

The National Museum of Art, Architecture and Design, Oslo; Norsk Elektro Optikk AS; Museum of King Jan III's Palace at Wilanow, Warsaw; CNRS; Germolles Ducal Palace in Burgundy; 7Reasons Medien GmbH; AICON 3D Systems GmbH; the Rijksmuseums and Institut National du Patrimoine.

DURATION

2019-2023

Hes·so
Haute Ecole Spécialisée de Suisse occidentale