

Session

Entry ID: 212

Title: **Novel technologies for on-site and remote collaborative enriched monitoring to detect structural and chemical damages in cultural heritage assets**

Description (250-300 words required)

What if EU citizens could collaborate with scientists in the preservation of cultural heritage? Could conservation professionals be provided with actionable technologies, skills and frameworks that upgrade their efficiency? Europe's cultural heritage is a rich and diverse melting pot of traditions, monuments and communities where we have boiled our identity, well-being and sense of belonging. Nonetheless, in recent years, we have witnessed a series of natural and human-induced disasters that threaten it. Improving cultural heritage resilience to climate change and anthropogenic hazards requires a shift in conservation practices towards more holistic ones. The Horizon Europe funded project ChemiNova aims to develop an intelligent computational system that goes beyond current technologies to improve the conservation, analysis and monitoring of European cultural heritage assets. Using a myriad of data, it will tackle structural and chemical damages, focusing on two specific human-induced threats: climate change and civil conflicts. With this session, we plan to present first activities of the European research team and we would like to encourage other scientists, researchers and tech-affine companies to present their work, dedicated to the described topics. By this, we would like to increase the scientific exchange between the project group of 12 partners with all those interested and related to the topics preservation, monitoring, 3d-modeling and collecting data of cultural heritage sites at any scale, from entire buildings to fine collections.

Motivation:

Our motivation is to increase the outreach of our project. In addition, we encourage international scientist, companies and stakeholders of cultural heritage sites to participate at and contribute to the main objectives of the ChemiNova project. These are the long-term preservation of our cultural heritage to persisting against the changing exterior conditions caused by climate change related effects as well as other hazardous events.

Target Audience:

Scientists, researchers and companies, active in the field of preservation of cultural heritage at any scale, from entire sites to dedicated collections; experts in monitoring, 3d-documentation, analysis and material research; shareholders and people in charge of cultural heritage sites and museums.

Keywords (3-5 keywords required):

climate change, civil conflicts, preservation, 3D models,