

# AURORA

Artwork Unique RecognitiOn and tRacking through chemical encoded data, miniaturized devices and blockchain alliance

## European Project AURORA introduces revolutionary tool for protecting Cultural Heritage

With the Kick-off Meeting held in Budapest (Hungary) on January 18<sup>th</sup> and 19<sup>th</sup> and lasting for at least 3 years, the European Project AURORA has announced the **development of a ground-breaking solution for preserving and protecting cultural heritage around the world**. With the increasing threat of looting, smuggling, illicit trade, and man-made deliberate destructions, **AURORA aims to safeguard unique cultural identities and legacies for future generations**.

The value of cultural heritage has significantly increased in recent years, with art trade and related illegal activity volumes continuing to grow. Unfortunately, this has also resulted in an increase in theft and counterfeit objects. Interpol data from 2020 reports that Europe accounts for 77% of total stolen objects and 66% of total counterfeit objects across the world. **AURORA's mission is to create a cultural heritage preservation and protection tool that employs a cost-effective solution to track artworks' position and transactions** and assess their authenticity quickly. The tool is designed for stakeholders operating in the field of artifacts management and protection, including art dealers, curators, museum managers, auction houses, policy makers, logistics services, and law enforcement agents.

AURORA's non-destructive solution combines a multidisciplinary set of excellences in materials science, miniaturized components, and digital technology. The tool will create a **nanotechnological chemical marker and an embedded wireless tracking device, converging in a blockchain and IoT-based digital tool called the AURORA digital tool**. This tool allows stakeholders to implement countermeasures against artwork illicit activities through portable devices such as smartphones.

The AURORA system is designed with features suited to the art market, including non-invasiveness, low cost, long-term stability, confidentiality, and data security. It will create an effective artwork digital identity by analysing art piece deep layers chemical composition, insensible to superficial alterations. This permanent and unalterable data will improve cultural heritage management by establishing a stable physical-to-digital identity connection.

AURORA's results will be assessed by specific validations executed by relevant partners belonging to several cultural institutions. **AURORA's implementation does not require specific equipment or competencies, fostering a technological democratization between art institutions**. It will allow for the valuation of local cultural heritage and emphasize the interactions and reciprocal contamination between local cultural identities. The provided solution will be a significant step forward in protecting cultural heritage worldwide. Its effectiveness and ease of use will make it a valuable tool for stakeholders across the art world, from curators and museum managers to law enforcement agencies.

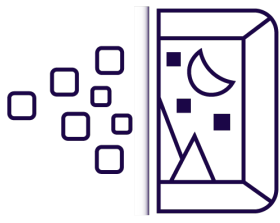
*Placed under the aegis of the European Research Executive Agency (REA), the AURORA Project was funded with 3,466,354 Euros and will make use of the contribution of 9 partners from Italy, Belgium, Ireland, Bosnia Herzegovina, Hungary and Ukraine.*

For more information on the AURORA project, visit the website at [www.aurora-euproject.eu](http://www.aurora-euproject.eu)



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## Project Details

<b>Project number:</b>	101094245
<b>Project title:</b>	Artwork Unique RecognitiOn and tRacking through chemicAl encoded data, miniaturized devices and blockchain alliance.
<b>Project acronym:</b>	AURORA
<b>Topic:</b>	HORIZON-CL2-2022-HERITAGE-01-07
<b>Type of action:</b>	HORIZON Research and Innovation Actions
<b>Granting authority:</b>	European Research Executive Agency
<b>Project starting date:</b>	1 January 2023
<b>Project duration:</b>	36 months
<b>EU Contribution:</b>	€ 3,466,354

**PARTNERS:** TECHEDGE SPA | BEWARRANT | WARRANT HUB SPA | CONSORZIO INTERUNIVERSITARIO PER LO SVILUPPO DEI SISTEMI A GRANDE INTERFASE | UNIVERSITY COLLEGE CORK – NATIONAL UNIVERSITY OF IRELAND, CORK | OTID SRL | MIRABILE ANTONIO | MAGYAR NEMZETI MUZEUM | UDRUZENJA BALKANSKA MREZA MUZEJA | LVIV POLYTECHNIC NATIONAL UNIVERSITY.

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