Introducing STARC: Science and Technology in Archaeology Research Center

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The Cyprus Institute

The Cyprus Institute (2005) is an not-for-profit, independent educational and research institution based on interdisciplinarity and an issue-based approach to research (as opposed to the traditional, academic discipline-based one)

At the Cyprus Institute, activity is organized in Research Centers:

- Energy, Environment and Water *EEWRC*
- Science and Technology in Archaeology STARC
- Computation-based Science and Technology CaSToRC



STARC

 The Science and Technology in Archaeology Research Centre – STARC (2007), is devoted to the development, introduction and use of advanced scientific technologies in the domains of CH. The geographical focus of STARC is Cyprus and the Eastern Mediterranean / Middle East region. •STARC is open for collaborations and joint activities with archaeological research teams and heritage professionals, based on distinct but converging research goals.









Institutional Partnerships

- Municipalities of Pafos and Geroskipou
 MoU on the provision of facilities, infrastructure and local support
- ARU (Archaeological Research Unit, University of Cyprus)
 Scientific Collaboration
- C2RMF (Center for Research and Restoration of Museums of France)
 - MoU on Scientific Collaboration





International Collaborations

- University of Illinois, USA
- Penn State University, USA
- MIT, USA
- Ministry of Culture, Italy
- Israel Antiquities Authority, Israel



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The Topics

The scientific themes on STARC research agenda relate to the basic mission of the Center, and currently are:

- Material and Natural Sciences Applications
 - Archaeometallurgy
 - Bioarchaeology
 - Digital Heritage
- Heritage Documentation and Semantics
 - Archaeological records
 - Data acquisition (2D-3D) and management
 - GIS and remote sensing
 - Standards and digital libraries
- Visualization and Heritage Communication
 - Underwater Archaeology Technology
 - Diagnostic Analyses for Conservation and Preservation





Our People

Franco Niccolucci: Professor, Chair of the Governing Board of STARC. Mathematician. Research interests: Cultural data organization and semantics.

Sorin Hermon: Research Coordinator. Archaeologist. Research interests: Visualization methods, communication of Cultural Heritage, Prehistory of the Levant

Kirsi Lorentz: Research Coordinator. Archaeologist. Research interests: Archaeological Sciences, Physical Anthropology, Bioarchaeology
Denis Pitzalis: Researcher. Computer scientist. Research interests: 2D-3D data acquisition and analysis, data organization
Nikolas Bakirtzis: Researcher. Art and Architecture historian. Research interests: Medieval architecture and archaeology
Loukas Kalisperis, Marinos Ioannides: Professors with joint or part-

time appointments





Our Approach

- COLLABORATION, not competition
- ENHANCEMENT, not overlap
- OPENNESS, not insulation
- REGIONAL, not (only) Cyprus specific
- FOCUSED, not generic
- INTERDISCIPLINARY CO-OPERATION, not services





Research Activities

- Funded projects
 - EU
 - National
 - Private
- Self-funded and co-funded projects
- Outreach initiatives
- Publications





The Projects

- Funded research
 - EU-funded projects on digital libraries
 - EDLocal: standards for digital content
 - ATHENA: standards for digitizing museum collections
 - EU-funded action on research infrastructure
 - STACHEM: survey of research infrastructures on archaeological sciences, digital heritage and underwater archaeology in the Eastern Mediterranean
 - Marie-Curie grant
 - TIEM: IT-enabled survey of Medieval Architecture in Cyprus and the Aegean Islands in the light of contemporary written sources
 - EU-funded project on 3D visualization for CH
 - 3D-COFORM: collections of 3D digital replicas of cultural objects
 - RPF: STAR-LAB, a mobile laboratory





Thank you!

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