

## Project Review

### INNOVATIVE SYSTEMS OF SCIENTIFIC INVESTIGATION AND INTEGRATE CONSERVATION FOR THE VALORISING AND TREASURING CULTURAL HERITAGE

CNCISIS Programme, Project IDEI code ID\_423 (2007 - 2010)

The project is dealing with new aspects regarding the modern methodology of integrated conservation of cultural heritage, a highly interdisciplinary field, which covers the following priority objectives: selection of representative casuistry for the cultural assets (types of materials and artifacts, based on certain criteria, classification systems, oldness, conservation state, intervention priorities etc.), use of modern non-invasive procedures for sampling and samples processing; elaboration of new authentication methods and investigation of conservation state using innovative systems of co-assistance and corroboration between interdisciplinary technique; obtaining and characterization of new materials for active preservation (treatments) and restoration; studies of compatibility of new materials with old traditional techniques and intervention compatibilization; use of innovative systems for monitoring the evolution of conservation state during exhibition and after interventions; study of modern procedures and methods for exhibition, valorization and treasuring of artifacts; use of modern system of archaeological investigation and management of archaeological discoveries, of warehouses and collections. The results will point out five objectives: valorizing and treasuring of cultural heritage; highlighting innovative contributions of the Romanian research school and academic research trends of contemporary ideas on the development of multifunctional systems with multiple users; creation of a body of experts in scientific interdisciplinary investigation with major involvement of young researchers; development of material and instrumental endowment with advanced technologies; participation as partners in European programmes and professional networks at a world wide level. The results will be disseminated through a website, publication in ISI reviews, patenting inventions, technological transfer and participation to international scientific meetings.

#### Project activities:

- Establish criteria for ranking and classifying on types of materials and supplies, based on oldness, patrimony value, conservation state, priorities and methodology of intervention or integrative approach of conservation science;
- Development groups or levels of priority on the conservation state extended to all movable and immovable goods;
- Establishing the main routes traveled by the movable and immovable goods from their manufacturing to display or when museum exhibiting;
- Establishing systems of attributes allowing authentication of art work;
- Establishing chemical and physical-structural characteristics with chronological evolution of manufactured old type of materials;
- Elaboration of new authentication methods by co-assistance and corroboration system between interdisciplinary techniques;
- New materials and technologies for wood treatment and other organic polymeric materials (natural or artificial) with multiple action: insectofungic, fier and waterproof treatments; New materials and technologies for structural elements consolidation, polychrome layers and finishing surfaces consolidation and repatination and protection by dyeing;
- Compatibilization of some pigments and binders for painting, mosaic and stained glass, consolidants, putties and varnishes, organic systems for multiple action treatments of preservation for organic materials;
- Modern systems of museum exhibiting, transport and safe deposit;
- New approaches regarding superior valorisation and treasuring of movable and imovable goods.
- New systems for discovering archaeological sites;
- Managing and re-evaluation of large collections in deposits and archaeological materials, resulted after total exhaustion by excavations forced of future building sites.

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