



***Ph.D. School in Chemical Sciences
Cycle XXXVIII***

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Research project title : Development and application of innovative chemical methodologies for diagnosis in cultural heritage

Key words: Cultural heritage, diagnosis, protein, proteomics

Research project abstract: The development and the application of innovative chemical methodologies to cultural heritage diagnosis is aimed at contributing to preserve our tangible treasures for future generations. The knowledge of the materials constituting artistic objects and archaeological findings and their degradation processes at the molecular level by means of methodologies that are more and more reliable, sensitive and minimally invasive is a challenging issue to safe fruition of our cultural heritage. Specifically, this project will face the issue of developing and applying new analytical methodologies to analyze and characterize proteins in artistic and archaeological objects within the wider aim of a global chemical analysis of the components (organic and inorganic) of works of art and historical findings and their deterioration processes in indoor and outdoor environments.