



## MARIE SKŁODOWSKA-CURIE INDIVIDUAL FELLOWSHIPS 2018

### **EXPRESSION OF INTEREST FOR HOSTING MARIE CURIE FELLOWS**

## **HOST INSTITUTION**

School of Sciences and Technology | VICARTE - Glass and Ceramic for the Arts

### **RESEARCH GROUP AND URL**

VICARTE – Glass and Ceramic for the Arts www.vicarte.org

### **SUPERVISOR (NAME AND E-MAIL)**

Márcia Vilarigues mgv@fct.unl.pt

#### SHORT CV OF THE SUPERVISOR

I work in the field of Conservation and Restoration of Cultural Heritage in the area of Technical Art History and Materials Degradation. My research motivation focuses on the preservation of our material cultural history and on enriching the knowledge of our shared past through the history of historical objects.

I started to work in this field as a result of my PhD, where I focused on the degradation mechanisms of medieval stained glass. My research reaches far wider than my direct scientific community due to the use of glass in several fields of material science, in particular materials for optical and electronic devices and vitrification of radioactive waste

Since 2011, I have been the Director of the Research Unit VICARTE - Vidro e Cerâmica para as Artes, (www.vicarte.org), devoted to the promotion of transdisciplinary research applied to glass and ceramics, focusing on the intersections between art and science, stimulating sharing of knowledge, experiences and methodologies. As an Assistant Professor of the Conservation Department of Universidade NOVA de Lisboa, I was responsible for the conception of the courses Introduction to Conservation Sciences and Collection Care (in collaboration with museums, palaces and archives around Lisbon). I am also responsible for the Analytical Method for Cultural Heritage course. I have been the principal supervisor of more then twenty MSc theses and several PhD theses in conservation and restoration.

Currently, at the national level I am regarded as a leader in research for historic glass and stained glass, and my work is recognized by the scientific community worldwide. In developing my research, I have established national and international collaborations, in particular with the Imperial College of London, and University College of London, U.K., the Institut de Recherche sur les ArchéoMATériaux, CNRS, France, the Vitrocentre Romont, Switzerland, and in Portugal, the Centro de Ciências e Tecnologias Nucleares, Direcção Geral do Património Cultural, Parques de Sintra-Monte da Lua, SA, and the Fundação Calouste Gulbenkian.

## **5 SELECTED PUBLICATIONS**

- "Pigments, vinegar and blood: Interpretation and reproduction of medieval glassy materials from the Manuscript H-490 of l'École de Médicine of Montpellier University", T. Palomar, R.J. Díaz Hidalgo, M. Vilarigues, International Journal of Applied Glass Science https://doi.org/10.1111/jiag.12354
- "Swiss stained-glass panels an analytical study", A. Machado, S. Wolf, M.L. Coutinho, L.C. Alves, I. Katona-Serneels, V. Serneels, S.Trümpler, M. Vilarigues\*. Microscopy and Microanalysis. http://dx.doi.org/10.1017/S1431927617000629





- "The effect of three luminescent ionic liquids on the glass surface first step to stained glass cleaning",
  J. M. Delgado, D. Nunes, E. Fortunato, C.A.T. Laia, L. Branco, M. Vilarigues\*, Corrosion Science.
  http://dx.doi.org/10.1016/j.corsci.2017.01.027
- "Cobalt blue Reproduction and characterization of blue enamel recipes from The Handmaid to the Arts by Robert Dossie", A. Machado, M. Vilarigues\*, Glass Technol.: Eur. J. Glass Sci. Technol. A, 57 (4), pp. 131–140 (2016). http://dx.doi.org/10.13036/17533546.57.4.027
- "Provenance studies on façon-de-Venise glass excavated in Portugal". I. Coutinho, T Medici, LC Alves, B. Gratuze, M Vilarigues, Journal of Archaeological Science: Reports. Vol 7, pp 437–448 (2016). http://dx.doi.org/10.1016/j.jasrep.2016.03.019

### PROJECT TITLE AND DESCRIPTION

# Object biographies: Making History through Objects

The Research Unit VICARTE – Vidro e Cerâmica para as Artes (Glass and Ceramic for the Arts, wwww.vicarte.org) is devoted to the promotion of transdisciplinary research applied to glass and ceramics, focusing on the intersections between art and science, stimulating sharing of knowledge, experiences and methodologies. The mission of VICARTE is to promote excellence in glass and ceramics studies at national and international level. The research at VICARTE connects the present and the past, by studying traditional and historical practices, by developing new materials and by exploring different artistic concepts.

Within the research activities planned we seek for candidates interested in working the History and Conservation of Glass and Ceramic Cultural Heritage.

We are particular interested in the study and critical analysis of how historical glass and ceramic has developed over time, including raw materials, production and practices, use, commercial routes and cultural interactions. This research will analyze the choices behind the production, shapes and uses of the objects to construct a bigger narrative from individual microscale stories.

Furthermore we are focus on the study of corrosion mechanisms, both outdoor and indoor, and development of new and sustainable products and methodologies to prevent the deterioration of objects and the loss of cultural value.

The collections to be studied include scientific instruments from Museu da Ciência, Universidade de Lisboa (UL); Hand painted glass slides for Magic Lanterns of Cinemateca Portuguesa- Museu do Cinema and MIMO and every day functional and decorative objects from national and international archaeological assemblages.

Historical production techniques will be studied, combining the analysis of historical materials with the making of reproductions in controlled conditions. We will identify chemical compositions and possible raw materials, place and time of production, as well as the specialization involved in the making. Archaeometric study of individual objects will be complemented with exploration of key documents with high impact on the history of production. We will follow the evolution of the recipes for glass and ceramics production, relating them with technology, chemistry and material science. This will be carried out in close collaboration with the RUs C2TN and IEM, CNRS-Orléans and ERC project Artechne.

Furthermore we will use the produced samples to continue the significant advances on the understanding of glass and glazed surfaces and their degradation and develop conservation measures.

# SCIENTIFIC AREA(S) WHERE THE PROJECT FITS BEST

Chemistry (CHE) • Social Sciences and Humanities (SOC)