

Study Group / Task Force Name: " Analytical Chemistry in Archaeology and Cultural Heritage "

Study Group / Task Force Members and Affiliations:

Prof. Miltiades (Milt) Karayannis, University of Ioannina, Greece
Prof. Alan Townshend, University of Hull, United Kingdom
Prof. Ioannis Stratis, Aristotelian University of Thessaloniki, Greece
Prof. Koen Janssens, University of Antwerpen, Belgium
Prof. Megan McClain, University of Manchester, United Kingdom

Objectives:

- 1) To demonstrate the importance of Analytical Chemistry in the collection of scientific information, which are valuable to Archaeologist and Art Historians, to study and authenticate archaeological objects and works of Fine Art.
- 2) To propose the proper analytical methods, techniques and procedure for the study of archaeological samples and fine art objects
- 3) To endorse the collaboration of Analytical Chemists between the European Countries and other scientific organizations.

Activities and Outputs in 2015-2016 (e.g. reports, publications, seminars, meetings):

Publications:

K. Janssens :

K. Trentelman, K. Janssens, G. Van der Snickt, Y. Szafran, A.T. Woollet, J. Dik, Rembrandt's An Old Man in Military Costume: the underlying image re-examined, Appl. Physics A – Materials Science & Processing, **121** (2015) 801-811. DOI: [10.1007/s00339-015-9426-3](https://doi.org/10.1007/s00339-015-9426-3)

P. Ricciardi, S. Legrand, G. Bertolotti, K. Janssens, *Macro X-ray fluorescence (MA-XRF) scanning of illuminated manuscript fragments: potentialities and challenges*, Microchemical Journal, **124** (2016) 785–791. DOI: 10.1016/j.microc.2015.10.020

K. Janssens, G. Van Der Snickt, M. Alfeld, P. Noble, A. van Loon, J. Delaney, D. Conover J. Zeibel, J. Dik, *Rembrandt's 'Saul and David' (c. 1652): Use of multiple types of smalt evidenced by means of non-destructive imaging*, Microchemical Journal, **124** (2016) 515-523. DOI: [10.1016/j.microc.2016.01.013](https://doi.org/10.1016/j.microc.2016.01.013)

G. Van der Snickt, A. Martins, J. Delaney, K. Janssens, J. Zeibel, M. Duffy, C. McGlinchey, B. Van Briel, J. Dik, *Exploring a Hidden Painting Below the Surface of Rene Magritte's Le Portrait*, Applied Spectroscopy, **70** (2016) 57-67. DOI : [10.1177/0003702815617123](https://doi.org/10.1177/0003702815617123)

Meetings:

Miltades I.Karayannis,

“The Use of Instrumental Analysis for Investigations in Archaeology and History of Arts: Some Cases with Exceptional Interest for the Society”, 9th Intern. IMA Conference, 20-24 Sept. 2015, Kalamata Greece.

Ioannis Stratis,

“Contribution of Analytical Chemistry in environmental and cultural physical sciences”, 9th Intern. IMA Conference, 20-24 Sept. 2015, Kalamata Greece

K. Janssens :

Co-Organisation of the EUChems meeting “Chemistry in Cultural Heritage 2016”, Brussels, 6-8 July 2016
<http://org.kikirpa.be/chemch2016/>

Activities planned for 2016-2017:

Report submitted by: Milt.I. Karayannis

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