

# Proceedings of the 5<sup>th</sup> GLASSAC International Conference

# GLASS SCIENCE in Art and Conservation 2017

An international conference devoted to the applications of science to glass art and the conservation of glass artifacts



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# Índice

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## Acknowledgments



## TECHNICAL ART HISTORY

Tale of two industries: The manufacture of bottle and window glass in England from the 17<sup>th</sup> to the 20<sup>th</sup> centuries . . . . . **9**

Cobalt and potassium structure and degradation pathways in painted works of art . . . . . **11**

Renaissance Venetian enamelled glass. An analytical investigation to understand their technology and to distinguish genuine from copied artefacts . . . . . **14**

Overview of glass chemistry and technology in late antique Cyprus . . . . . **16**

The use of glass in medieval pigment making . . . . . **19**

Hispano-Moresque architectural glazes in the context of medieval glass technology . . . . . **22**

Investigating a Byzantine technology: experimental replicas of Ca-phosphate opacified glass . . . . . **25**

Thermal properties of the modernist enamels and stain glasses from the city of Barcelona . . . . . **26**

## GLASS IN ARCHITECTURE

The creative process of applying grisaille in stained glass . . . . . **31**

Stained glass iconostasis: fragile 'Munich Glass' in Ukraine . . . . . **34**

New development: mouth blown UV protective window glass . . . . . **37**

Glass as an artistic material on exterior façade in 21<sup>st</sup> century architecture . . . . . **41**

Architectural glass in the 18<sup>th</sup> to 20<sup>th</sup> centuries in Iran . . . . . **43**

The detriments of the contemporary stained glass from Estonia . . . . . **46**

Scottish medieval monastic and ecclesiastical window glass . . . . . **48**

## ART

Glass: the medium and the metaphor The crossover approach of the glass museum GlazenHuis . . . . . **51**

Glass sculptures meet public in public spaces . . . . . **53**

Glass foam works created from recyclable glass bottles, conservation vessels and waste glass paints . . . . . **55**

Production and application of ceramic decal technology on vitreous substrate . . . . . **58**

Reflection and illusion in glass art; mastering artist Jin Hongo and his works . . . . . **61**

The contribution of the science of glass to the artistic expression . . . . . **63**

A glass garden . . . . . **64**

Coloring studio glass by metal oxides . . . . . **65**

'Inside Painting' suggested as a new model for contemporary glass art . . . . . **66**

Red glass revisited – a short review of the work made in Vicarte Laboratories . . . . . **67**

## ARCHAEOLOGY AND ARCHAEOOMETRY

Vidros da terra - Glass from the Earth The contribution of archaeology to the history of Medieval and Early Modern glass in Portugal . . . . . **70**

Origins of stained glass in the great east window of York Minster, UK . . . . . **72**

Analytical investigation of 14<sup>th</sup> century stained glass windows from Santa Croce Basilica, Florence. Glass types and weathering phenomena . . . . . **73**

Study of Picenes Beads from two Iron Age necropolises . . . . .	<b>76</b>	Organic Surface Coatings on Medieval stained glass and microbiological investigation . . . . .	<b>112</b>
Glass recycling in the first millennium AD: a spatial-temporal approach . . . . .	<b>78</b>	POST-ROMAN GLASS IN THE IBERIAN PENINSULA <i>Vidro pós-romano na Península Ibérica</i> <i>Vidrio post-romano en la Península Ibérica</i>	
Archaeovitreological analysis by PIXE/PIGE of glass fragments from Miranduolo, Chiusdino, Italy . . . . .	<b>80</b>	The glass from Recópolis: an analytical approach . . . . .	<b>116</b>
Analytical investigation of Renaissance Venetian enamelled glass. Potential and limits of portable X-ray fluorescence. . . . .	<b>82</b>	Caracterización y comercialización del vidrio en la periferia de al-Andalus (Ciudad de Vascos, Toledo) . . . . .	<b>118</b>
Preliminary non invasive study of Roman glasses from Jesolo (Ve), Italy. . . . .	<b>85</b>	Chemical characterisation of Islamic glass from Silves' Castle (Portugal) . . . . .	<b>120</b>
Chemical and textural investigation of the glass tesserae from the baptistery of Tyana (Khemerisar) - Turkey . . . . .	<b>86</b>	The al-Andalus Glass Project: Production and Invention in Medieval Iberia . . . . .	<b>122</b>
<b>CONSERVATION</b>		Aproximacion al contenido de un unguentario andalusí por GC-MS (Albalat, Extremadura, s. XII) . . . . .	<b>124</b>
Conservation of glass at the Corning Museum of Glass: training and future developments . . . . .	<b>89</b>	Medieval Glass from Santarém (14 <sup>th</sup> -15 <sup>th</sup> centuries) . . . . .	<b>125</b>
Maintenance and safeguarding of stained glass windows . . . . .	<b>91</b>	Beber a la Moda: copas, tazas y otros materiales arqueológicos en Mallorca (1500-1700) . . . . .	<b>126</b>
Thermographic analysis of glasses, enamels and grisailles from stained glass windows . . . . .	<b>94</b>	Vidros, do século XVI, do Poço-Cisterna de Silves . . . . .	<b>128</b>
Final results of analysis of a 15 <sup>th</sup> century stained-glass panel "The Throne of Grace" from the Dominican Monastery in Kraków, Poland . . . . .	<b>97</b>	Potassium-rich glass in Lisbon in the 18 <sup>th</sup> century . . . . .	<b>129</b>
Surface roughness impact on medieval stained glass alteration . . . . .	<b>100</b>	Vidro e sociedade. A vidraria da estação arqueológica do palácio dos marqueses de Marialva nos sucessivos contextos sociais, laborais e económicos sucessivamente documentados (séc. XVII – início do séc. XIX) . . . . .	<b>132</b>
Corrosion patterns of a historical glass collection from Greece . . . . .	<b>103</b>	The vase offered to D. Amélia de Orléans by Émile Loubet . . . . .	<b>133</b>
Research of a chemical treatment based on zinc salts for ancient glass objects sensitive to atmospheric degradation in museums . . . . .	<b>106</b>		
Protecting historic window glass in Scotland - a look at planning application approval rates over a 10 year period . . . . .	<b>109</b>		
19 <sup>th</sup> century stained-glass windows of two mausoleums from Belém do Pará, Brazil: a characterization study . . . . .	<b>110</b>		



## Aproximacion al contenido de un unguentario andalusí por GC-MS (Albalat, Extremadura, s. XII)

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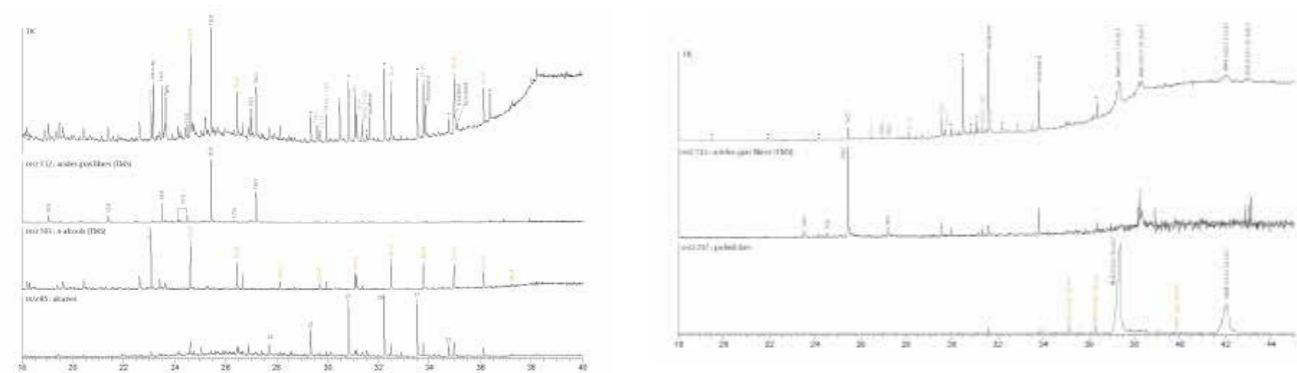
**Área de interés:** Arqueometría

### Resumen

La aplicación de técnicas analíticas al estudio de los vidrios andalusíes se encuentra todavía en una etapa incipiente. Aunque nuevos resultados obtenidos en el marco de recientes proyectos de investigación están arrojando luz sobre sus características tecnológicas y composicionales, poco sabemos sobre lo que contenían los recipientes de vidrio, utilizados principalmente en contextos domésticos. Más allá de las hipótesis que pueden plantearse en base a fuentes textuales e iconográficas y en la correlación morfológico-funcional, es posible aplicar el método de cromatografía en fase gaseosa (método separativo) acoplada a la espectrometría de masa (método estructural) para tratar de determinar su contenido. Esta técnica, cuando se aplica con un protocolo de doble muestreo, permite obtener información sobre los residuos orgánicos conservados bajo forma soluble (lípidos, aceites, resinas, ceras, etc.) e insoluble (marcadores de frutas como el ácido tartárico de la uva o fermentación alcohólica para el vino).

Exponemos aquí los resultados de un análisis realizado sobre el fondo de un unguentario hallado en el yacimiento de Albalat (Romangordo, Extremadura), y procedente de un contexto arqueológico fechado en época almorávide, primera mitad del s. XII. Su análisis ha permitido invalidar la hipótesis inicial según la cual este frasco podía haber contenido algún líquido, tal vez un perfume. A pesar de la conjunción de varios factores adversos (ausencia de residuos visibles sobre las paredes internas, concentración muy débil de materia orgánica conservada y presencia de numerosas contaminaciones postdeposicionales), el análisis orgánico ha identificado compuestos naturales: una base grasa constituida por productos lácteos, aceite de oliva y cera vegetal, junto con marcadores de una grasa subcutánea y/o de una piel sebácea de origen animal (**Fig. 2**). Estos productos apuntan a la composición de un bálsamo, sin poder determinar una finalidad cosmética o terapéutica.

**Palabras clave:** GC-MS, Al-Andalus, Albalat, Unguentario, Bálsamo



**Fig. 1** Cromatogramas de los dos extractos (primer lipídico a partir del sedimento y de residuos sólidos y segundo a partir del lavado de las paredes con solvente).

## Medieval Glass from Santarém (14<sup>th</sup>-15<sup>th</sup> centuries)

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**Field of interest:** Archaeology

### Abstract

Archaeological excavations in Santarém identified a few dozen storage pits filled with domestic garbage in the late 14<sup>th</sup> and 15<sup>th</sup> centuries. Associated to these contexts hundreds of material culture elements were found such as pottery, metals and some glass objects.

Medieval glasses can be associated to different forms such as goblets, beaker shaped vessels, and bowls and what seem to be fragments of bottles. Decorations vary from concentric lines around the object's body to small dots and different colours.

The origin of these objects is yet under discussion since we have no information about the production of glass in medieval Santarém. However the resemblance of such glasses with Lisbon production may in fact indicate the acquisition in Portugal's capital. Other objects are similar to European productions.

This poster is the first news of these discoveries as well as the first approach to the consumption of medieval glass in Santarém aiming to understand what type of objects were being consumed by medieval populations.

**Keywords:** Glass, Decoration, Middle Ages



Glass vessels from Santarém

### References

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