

# BROMECC

Bulletin of  
Research  
on Metal  
Conservation

*Keeping you up to  
date on research  
between the  
ICOM-CC Metal  
Working Group's  
Triennial meetings*



For those unfamiliar with the Bulletin of Research on Metal Conservation, BROMECC is an online publication which keeps the metals conservation community updated on research activities between the ICOM-CC Metal Working Group's Triennial meetings.



International Conference  
on Metal Conservation  
16 - 20 September 2013



## Online publication of metals conservation:

- Research abstracts
  - Calls for collaborations
  - New, ongoing and finalised projects
  - Implementation of research into conservation practice
- General information
  - Future conferences and workshops
  - Announcements
  - Websites
  - National Contact Persons and email addresses

Information published by BROMEC mostly includes abstracts which summarize the activities from any stage of the research process. Information on upcoming meetings and useful websites is also published.

You'll also find the current contact details for your National Contact Persons.

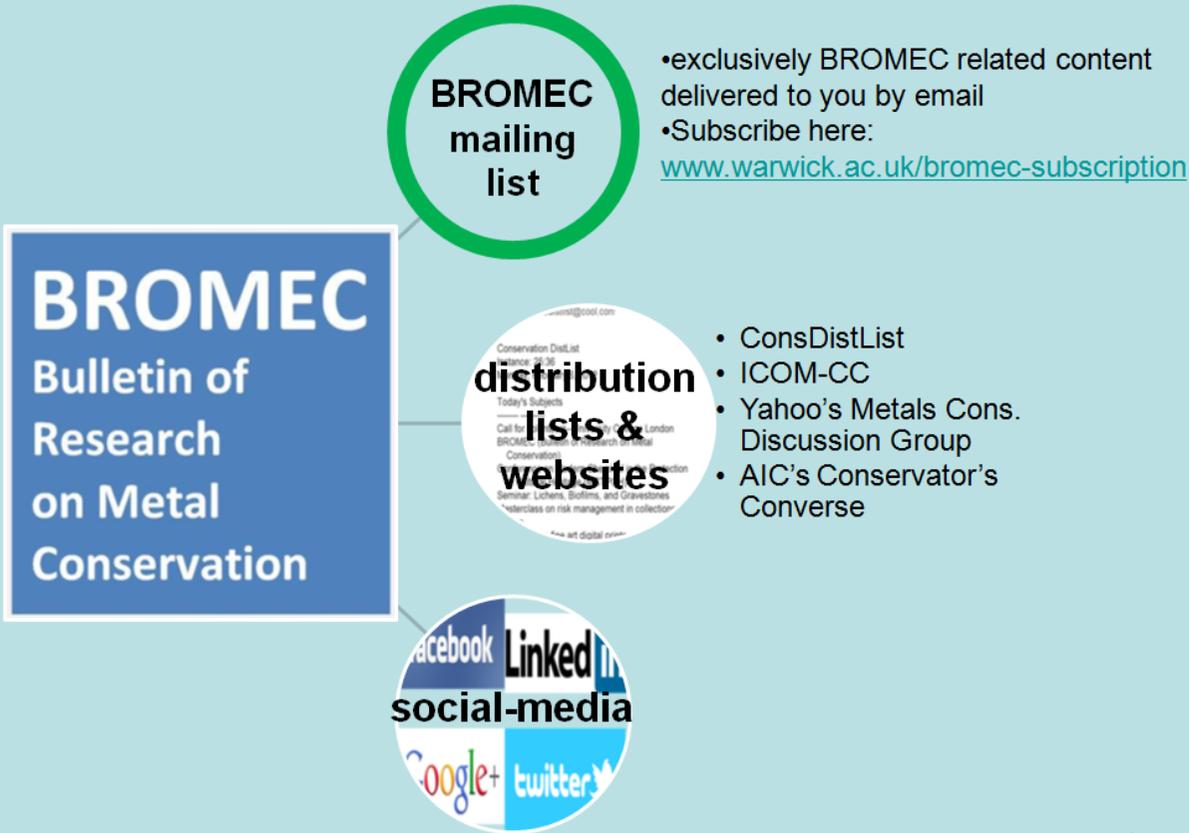
# Open access to all BROMECC editions:

[www.warwick.ac.uk/bromec](http://www.warwick.ac.uk/bromec)

The screenshot shows the Warwick University Department of Physics website. At the top, there is a navigation bar with 'WARWICK' on the left, 'Text only | Sign in' in the middle, and 'Physics More...' on the right with a search box labeled 'Search Physics'. Below this is a dark blue banner with 'Department of Physics' in white. A red navigation bar contains links: 'Prospective Students', 'Current Students', 'Research', 'People', 'News & Events', 'Physics A to Z', and 'Outreach'. Below the red bar is a brown bar with 'Condensed Matter Physics > Analytical Science Projects > BROMECC > BROMECC 34 English BROMECC 34 Français BROMECC 34 Español'. The main content area features the title 'BROMECC - Bulletin of Research on Metal Conservation'. Below the title are three featured issues: 'BROMECC 32 Boletín de Investigación en Conservación-Restauración de Metal' (March 2011), 'BROMECC 33 Bulletin de Recherche sur la Conservation-Restauration du Métal' (January 2012), and 'BROMECC 34 Bulletin of Research on Metal Conservation' (April 2013). Each issue has a corresponding image and an 'Editorial' link.

Open access to all prior issues continues to be available via the University of Warwick website, while the Yahoo Groups and ICOM-CC websites provide access for subscribed members only.

# BROMECC updates; for the reader or contributor



Currently you can receive calls for contributions or publication notices, either by:

- email, following subscription at this website, OR
- various distribution lists & websites, OR
- social-media networks

It might be of interest that social media, particularly LinkedIn and Facebook, have recently increased subscriptions from conservation professionals; most notably in Iran and Egypt.

However, for the most efficient and ongoing means of notification, we recommended subscribing to the BROMECC mailing list, which currently delivers to 1080 email addresses.

Submissions made  
in either English,  
French or Spanish



Translated and  
published in the 3  
official languages  
of ICOM

### BROMECE 32

Boletín de Investigación en Conservación-  
Restauración de Metal



### BROMECE 33

Bulletin de Recherche sur la Conservation-  
Restauration du Métal



### BROMECE 34

Bulletin of Research on Metal Conservation



Marzo 2011

#### Editorial

El BROMECE 32 presenta principalmente investigaciones de post grado, un sector en la investigación de la conservación-restauración esencial, que no sólo proporciona una formación para los conservadores-restauradores y científicos de la conservación, sino que también hace una importante contribución para la comprensión global de la investigación en nuestro campo. La investigación de post grado en conservación de metales es apoyada por el BROMECE mediante su difusión internacional, y alienta a los directores y a sus estudiantes a presentar sus mejores trabajos este ámbito internacional. En este número se presentan cuatro nuevos proyectos de investigación y un proyecto en desarrollo. Dentro de los nuevos proyectos de investigación, se están investigando opciones de tratamientos para sanear los hornos de material compuesto metálico-orgánico que estaban sumergidos, excavados en un área urbana de Berlín como parte de unas prácticas de restauración en conservación y restauración. Desde el

Janvier 2012

#### Editorial

Ce numéro du BROMECE contient un large éventail de thèmes de recherche sur la conservation des métaux en Europe et au Moyen-Orient. Ces activités de recherche persistent malgré une économie mondiale « malade » et d'importantes tensions politiques régionales ; de récentes nouvelles des contacts nationaux mettent en évidence des coupures budgétaires sévères et la fermeture de centres de formation en conservation et d'instituts de conservation en Hongrie, au Royaume-Uni et en Roumanie (notamment, le National Research Laboratory for Conservation and Restoration of Movable National Cultural Heritage). Il serait intéressant de mesurer combien la recherche a été, ou sera, affectée sur ces différents continents.

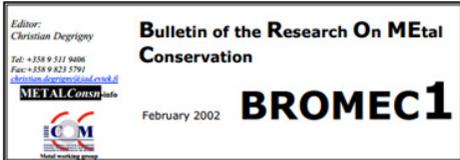
April 2013

#### Editorial

This edition highlights innovative European research addressing some common challenges which confront metallic heritage collections. More particularly when options for analysis, conservation or restoration of metal composite artefacts are restricted. The abstracts emphasize a range of approaches for ancient and modern metals concerning marine, terrestrial or atmospheric environments. In the light of decreasing funding avenues, the resourcefulness demonstrated by the research abstracts – whether it is financial, organisational or collaborative – is noteworthy. All projects featuring in BROMECE provide funding information, giving potential researchers some ideas of how to source their own financial support.

In this edition, research on in situ or post-excavation conservation treatments for iron- or copper alloy organic composite archaeological artefacts feature twice. The

Contributors to BROMECE can make submissions in either English, French or Spanish. These are reviewed and translated by the BROMECE team.



**Editorial**

After the announcement of the publication of the BROMECC some months ago, here is the first issue. Just before Christmas, my task has been to promote the bulletin and to find correspondents in different countries. Until now countries represented are in the European Community but we hope that other countries will be included in the next issues.

For those disinterested in the progress of the conservation community on the progress of research in the field of metal conservation, the projects presented can be implemented in research in conservation laboratories. Short studies conducted by conservation students from other fields (archaeology, chemistry, physics) are welcome. Because the outcomes of such works are rarely published, the BROMECC could be the medium to promote them.

The BROMECC is structured around four themes:

- research projects already achieved with outcomes currently applied in the field but which need optimisation
- ongoing research projects
- new research projects
- other information (seminars, workshops, web-sites) specific to the conservation of metals

All the data given in the bulletin are provided by the editor and the correspondents from the following countries (e-mail addresses and phone numbers are given at the end of the bulletin):

- **Belgium:** Patrick Storme, conservator and lecturer at the Hogeschool Antwerpen, Royal Academy of Fine Art, Antwerpen and Gilberte Dewaeckel, conservator at IRPA (Institut Royal du patrimoine artistique), Bruxelles
- **Denmark:** Karen Steemann Petersen, conservator, The National Museum of Denmark, Copenhagen
- **Germany:** Gerhard Fagerer, head, study program "Object Conservation", Staatliche Akademie der Bildenden Künste, Stuttgart



April 2013

**Editorial**

This edition highlights innovative European research addressing some common challenges which confront metallic heritage collections. More particularly when options for analysis, conservation or restoration of metal-composite artefacts are restricted. The abstracts emphasize a range of approaches for ancient and modern metals concerning marine, terrestrial or atmospheric environments. In the light of decreasing funding avenues, the resourcefulness demonstrated by the research community is worthy. All projects presented in this issue are the result of international research. The first is a newly launched Greek-French project. Another French project studies a particular corrosion of bronzes excavated from a river. It highlights the importance of controlling and maintaining relative humidity during conservation and museum display. Four innovative projects from Switzerland outline the application of diagnostic, electrochemical and microbiological techniques for material analysis or conservation-restoration treatments. Two of these again focus on problems resulting from organic-composite and/or multi-component metal objects. The title image depicts the application of a tool under development: an electrolytic pen for locally removing tarnish from gilt silver. Finally a consortium from the Czech Republic is analysing the composition and corrosion of excavated archaeological silver. This will be followed by reproduction of this jewellery by contemporary silversmiths.

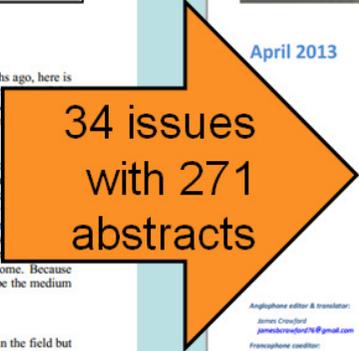
New details for upcoming conferences are given for: Iron and Steel 2013: Rust, Regeneration and Romance; the 7th International Congress on the Application of Raman Spectroscopy in Art and Archaeology (IRAA 2013); the 18th International Conference on Ancient Bronzes; BUMA VIII: International Conference on the Beginning of the Use of Metals and Alloys; Big Stuff 2013; and ICOM-CC's Metal 2013. Notably, early (i.e. discounted) registration for Metal 2013 is open until the end of June and accommodation information for the conference in Edinburgh is now online.

New announcements include a PhD thesis on the dechlorination of marine archaeological iron (see also BROMECC 29 and 32) and an introduction to the ICOM-CC Enamel Working Group.

New links for website resources include the American Institute for Conservation (AIC) Metals Conservation Wiki, presentations from Big Stuff 2007, the British Museum's Library Catalogue, and abstracts from last year's Bronze Conservation Colloquium.

We hope you find this edition informative and enjoyable!  
James Crawford

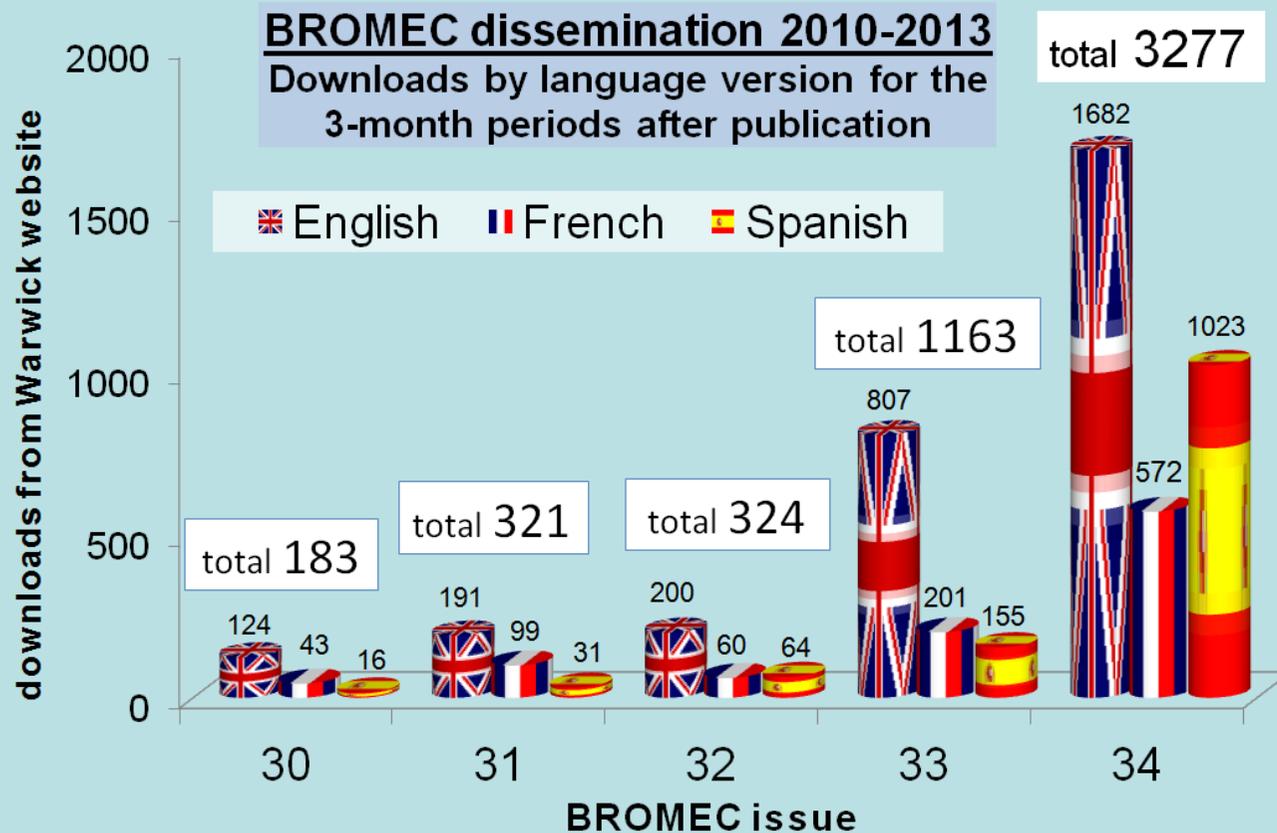
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Since its creation by Christian Degryng, BROMECC has - over the last 11 years - published 34 issues including 271 abstracts.

And BROMECC continues to evolve thanks to the support made by a collective of active conservators and conservation scientists. Several of the past and present team members are of course here this week.

Today, more than ever before, this international collaboration between a group of volunteers - some of whom have never meet in person - has been making the most of a virtual office-space. With this in mind, I'd like to take this opportunity to express our gratitude to Emilio Cano for his contributions to BROMECC from 2009, until just several months ago. Emilio was particularly influential, not only on the revised format of BROMECC - which you can see here on the right - but also towards streamlining our unseen editing and translating processes, with so-called "cloud computing".



While much effort has gone into the simultaneous and tri-lingual production of BROMECC since 2009, more recently efforts have gone into increasing dissemination beyond the usual outlets. Efforts have been rewarded with significant improvements in the download statistics for all 3 language versions of BROMECC.

It is clear that the ever-changing landscape of the various networks on the internet will be critical for furthering efficient dissemination of research published by BROMECC.

# What next for BROMECC?

- Further online promotion of BROMECC in Latin America, with a view to publishing submissions made by Hispanophones
- November 2013: call for contributions to BROMECC 35

So, what next for BROMECC, until we meet again at Metal 2016?

Well, for all at BROMECC, our online dissemination of metals conservation research will continue, especially with a view to receiving contributions from Hispanophone researchers studying or working in Latin America.

While, perhaps of interest to you, your colleagues or students... the call for contributions to the 35th edition of BROMECC will be made in November.

# Adios, au revoir & bye for now!

...from the BROMECC team of the  
2011-2014 triennial

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So adios, au revoir & bye for now!