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# NETWORKING PROFESSIONALS WORKING ON THE CONSERVATION OF METAL ARTEFACTS: A POSSIBLE ROLE FOR THE ICOM-CC METAL WORKING GROUP

C. Degrigny

ABSTRACT

The ICOM-CC Metal Working Group has played an active role in the last ten years to disseminate information on research and conservation of metal artifacts. Its triennial METAL conferences are unique occasions for professionals working in the field to present and discuss their latest results. Still most conservation scientists and conservators ignore most of the research performed worldwide on a regular basis. Some professionals are not even aware that they are working on similar research themes.

Recently the ICOM-CC Metal Working Group has designed new tools to favour the networking of professionals and improve the exchange of information and ideas. Teamwork is possible through the activities carried out by subgroups. The BROMEC, a news bulletin published every quarterly, briefs on the latest research work carried out in the field of metal conservation. Furthermore all BROMEC issues are available on the ICOM-CC website. As yet, no survey has been performed to assess the impact of the research bulletin on the metals conservation community. However, authors contributing to BROMEC have indicated that on several occasions they were approached by other professionals working in the field who asked them to answer queries regarding work presented in the bulletin.

This paper gives an overview on the new policy of the ICOM-CC Metal Working Group and some projects presented in BROMEC issues. In the latter case, topics dealing specifically with research on metallic alloys and their conservation will be used to illustrate the impact of networking on the better exchange of information and ideas.

KEYWORDS

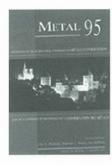
Network, dissemination, tools.

#### INTRODUCTION

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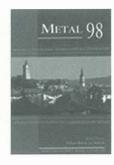






Fig. 1 Frontpages of the four METAL proceedings. From left to right: METAL 95 in Semur-en-Auxois (F), METAL 98 in Draguigan (F), METAL 2001 in Santiago de Chile and METAL 04 in Canberra (Australia).

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# THE METAL WG WITHIN ICOM-CC

The ICOM-CC Metal working group is one of the most significant working groups within ICOM-CC. The directory has more than 750 members (2/3 are conservators and the remainder are mainly conservation scientists) with only 150 ICOM-CC voting members, Friends and Student-Friends of ICOM-CC. These professionals are spread over 59 countries (mostly from European countries).

In the past ten years the ICOM-CC Metal wg has been very active in disseminating research performed in metal conservation through the publication of the METAL proceedings [1–4].

The ICOM-CC website (www.icom-cc.org) is a useful support for on-line dissemination of information. The Metal wg has its own homepage (http://icom-cc.icom. museum/WG/Metals/) where general information on our different activities is provided. This homepage is regularly updated (at least every 3 months).

# RESEARCH IN METAL CONSERVATION

Research in the field is mainly performed by conservation scientists and conservators. Funds come from governments, research institutions, foundations and more recently the European Commission (mainly since 1991).

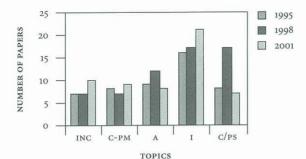


Fig. 2 Topics covered during the three METAL conferences from 1995 to 2001.

When looking at the topics published in METAL proceedings from 1995 to 2001, between the following fields: *in-situ* conservation (INC), characterisation and properties of metals (C-PM), alteration (A), intervention (I) and coatings / protection systems (C/PS), the intervention on artefacts is the one that has received most attention [Figure 2].

The problem as regards these proceedings is that they only give a partial vision of all the work performed worldwide. Indeed they do not reflect the ongoing research performed by corrosion scientists, metallurgists, environmental engineers who usually publish in scientific journals that are not easily accessible to conservators. Collaborations between conservation professionals and pure scientists do not show up as well as the financial support they benefit from.

Based on these facts, we decided a few years ago to set up new communication tools within the Metal wg that would be used to sustain a more permanent activity. Our efforts went in three specific directions: a better networking of the members, the creation of the BROMEC bulletin and the formation of sub-working groups.

## A NEW ROLE FOR THE ICOM-CC METAL WG?

Networking professionals The updating of the directory is a recurrent task (at least every three months). This directory can be consulted on the Metal homepage of the ICOM-CC website. Because the Metal wg is quite large we decided some months ago to set-up a network of active members at national level (national correspondents) whose task was to promote the development of the BROMEC. With time, they became essential members of the Metal working group. Today they continue gathering information on research performed in their country, but they have other tasks such as the updating of the directory of national members and the distribution of any information to the latter sent to them by the wg coordinators. Furthermore, they are often consulted about activities developed within the Metal wg. For that reason the national correspondents have become recently the national representatives of the Metal wg coordinator.

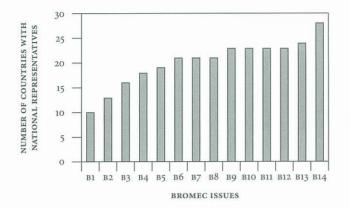


Fig. 3 Progression
with time of the
number of
countries having
a national
representative.

The number of national representatives has been increasing regularly since November 2002 when BROMEC 1 was first published [Figure 3] to reach today the number of 28. Once again European countries are the most largely represented.

Delegation of tasks is essential for the future of the working group and national representatives play a major role in this area.

Three Sub-Working Groups have been set-up recently. They are voluntary initiatives from some members who wanted to develop a specific theme within the activities of the Metal wg. Sub-wg coordinators are specialists of the field and their task is to set up activities within their Sub-wg and report of their development to the other members of the Metal wg.

The three Sub-wgs are the following:

- · Archaeological Iron After Excavation (AIAE)
- · Preventive Conservation of Metals in Museums (PCMM)
- · Use of Electrochemical Techniques In Metal Conservation (EThIC)

The different activities (News, Tasks) of the Sub-wg can be found on the Metal home-page of the ICOM-CC website. The triennial METAL conference in Canberra was the occasion for the Metal wg members to discover what each Sub-wg is actually doing through the Sub-wg sessions.

Informing The BROMEC (Bulletin of the Research On MEtal Conservation) has been set up to give the Metal WG members a global perspective of the research performed in the field. To achieve this it is needed to continuously update the members on current work (fundamental and applied), to list the national and international teams working on the diagnosis of archaeological and historic metals, new tools to

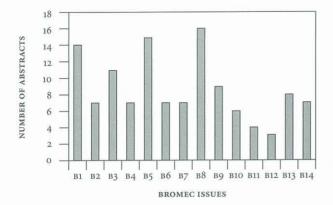


Fig. 4 Number of abstracts per issue of the BROMEC.

stabilise them and the effect of environmental parameters to assure their long-term conservation and to inform them on collaborative work between the professionals involved (contract, common programmes, PhDs...) and the funding available.

The bulletin is published every three months in the form of abstracts that present past, current and future research projects in the field. Partnerships within projects are specified as well as the way the latter are funded. General information (websites, forthcoming conferences) related to metal conservation can be found at the end of each issue. The BROMEC is published in English and we are trying to have it translated in French and Spanish.

The number of abstracts varies according to each issue [Figure 4]. They are more numerous during the northern hemisphere's academic year (B1 & B5: February 2002 & 2003, B8: November 2003) than outside (May and August issues). All BROMEC issues can be consulted on the Metal homepage of the ICOM-CC website. Although there is, at present, no search tool, each abstract can easily be found under the section abstracts per topics (listing of abstracts).

As an illustration of the information provided by the BROMEC issues, we have listed the number of abstracts on metallic alloys. Figure 5 shows that by far most research concentrates on iron (37 out of 83 abstracts) and copper based (21) alloys. As regards the research performed on iron, some countries are more active than others: France (11), Finland and Denmark (5 each), Malta (4) and Czech Republic (3), Netherlands, UK and USA (2) and finally Greece, Italy, Spain and Swiss (1). Once again this vision is partial since the knowledge on current research depends on how active the national representative is. Furthermore some conservation professionals consider that it is more useful to publish their work than to update their colleagues on a regular basis through the production of an abstract.

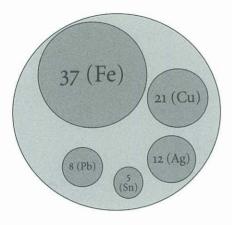


Fig. 5 Distribution between the different metals of BROMEC abstracts related to metallic alloys issues.

Topics that are mostly developed on iron are the following:

- · Preventive conservation (*in-situ* conservation of artefacts, post-excavation behaviour and protections)
- Investigation (non-invasive examination, understanding of manufacturing techniques, understanding of active corrosion and analyses)
- · Intervention (chemical, electrochemical, hydrogen plasma, thermal, case studies, mass treatment and composites)

### FUTURE PERSPECTIVES?

As yet, no survey has been performed to assess the impact of the research bulletin on the metals conservation community. However, authors contributing to BROMEC have indicated that on several occasions they were approached by other professionals working in the field who asked them to answer queries regarding work presented in the bulletin.

Sustaining the activities of the Metal wg has a price. As time passes the workload of the coordination becomes difficult to manage. It is essential that more and more people get involved in the different tasks currently performed by a few volunteers. Already James Crawford has recently joined the editing team of BROMEC. More active national representatives are needed too.

It is our hope that in the future the Metal wg continues to occupy its pro-active position within ICOM-CC. Many signs show that we are on the right track, but we absolutely need to consolidate the existing infrastructure and activities.

# CONCLUSION

In October 2005 the accessibility to the ICOM-CC website (and the Metal homepage) will be restricted to the ICOM-CC voting members, the Friends and Student-Friends of

ICOM-CC. Since this population covers only 1/5 of the total number of the current Metal wg membership we might wonder how the Metal wg is going to continue working.

Definitely some changes in the organisation of ICOM-CC are needed to sustain the activities of some of the wgs such as the Metal wg.

#### ACKNOWLEDGEMENTS

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#### BIOGRAPHIC NOTE

Christian Degrigny obtained his engineering degree from the National School of Electrochemistry and Electrometallurgy in Grenoble in 1985, and later received a Ph.D. in analytical chemistry from the University of Paris VI (1990). He has conducted research in various conservation laboratories: Valectra group at Electricité de France, Conservation Annex of the Australian War Memorial, Laboratories ART Métal and Arc'Antique where he specialized in the development of electrolytic treatments in conservation. He then moved to Finland to coordinate training programmes at the Conservation Department at EVTEK - Institute of Art and Design. In 2003 he moved again to Malta to work as the head of the Diagnostic Science Laboratories at the Malta Centre for Restoration.

Since 2002 he is the coordinator of the ICOM-CC Metal wG and has been very active in promoting worldwide networking in metal conservation.

As a partner in different EU or international projects (COST Actions, INCO-MPCI PROMET, IAEA regional projects) he has been trying to use the funding possibilities of these projects to create bridges and meeting opportunities (training schools, workshops, seminars) to enlarge the skills and knowledge of conservation professionals. Currently he is a freelance expert, lecturing in different conservation schools (Oslo, La Chaux de Fond (CH), Amsterdam, Malta) and contributing to different EU projects (PROMET, COST D42). He is as well a member of the working group of Synchrotron SOLEIL / Cultural Heritage. Very recently he moved back to France to start with a colleague a cultural and scientific project at Château de Germolles, the only remaining palace of the Dukes of Burgundy (14th c.) in France. One of the objectives of the project is to setup summer schools, workshops dedicated to conservation professionals and (of course) related to a multidisciplinary approach of conservation.