

# HMS NEWS

## Historical Metallurgy Society 66 Summer 2007

### HMS Annual Conference 2007

#### METALS AND METALWORKING IN IRELAND

Dublin, 14–16th September 2007

This year's Historical Metallurgy Society conference is being run in conjunction with the Mining Heritage Trust of Ireland and will be based in the National Museum in Dublin, by kind invitation of its Director, Dr Patrick Wallace. There will be visits guided by four of the Museum's curators to both the Archaeological collections at Kildare Street and the Decorative Arts and History collections at Collins Barracks. In addition there will be two half-day lecture sessions at Collins Barracks with a wide range of papers on all aspects of metals and metalworking in Ireland, from the earliest times to the more recent past. On the Friday and Monday there will be optional visits to historic mining sites near Dublin, organised by the Mining Heritage Trust of Ireland.

Accommodation has been arranged in Trinity College Dublin, which is in the centre of the city. Non-residents can join us for dinner on both Friday and Saturday evenings.

The early evening lectures on Friday will be in the National Museum in Kildare Street, which is close to Trinity College. They will provide an introduction to the subject matter of the conference and be followed by a wine reception. On Saturday morning we return to the Museum in Kildare Street to visit the archaeological collections. Highlights are the Bronze Age gold, the Treasury with its many Early Christian metal artefacts, and the Viking and medieval galleries with displays including a wide range of metal objects and evidence for metalworking. On Saturday afternoon there will be the first lecture session at Collins Barracks. On Saturday evening there will be a series of short members' talks at Trinity College before we adjourn to the bar. On Sunday morning we return to Collins Barracks for a second lecture session, followed by a buffet lunch and visits to the museum's collections, which include coins, pewter, Georgian silver, military items and the 'What's in store' visible storage display of over 16,000 objects including metalwork and scientific instruments. There may be an opportunity to see Viking metalworking finds from Dublin in the stores.

The lecture programme is being finalised and will be posted on the HMS website at the end of July. A downloadable registration form can also be found on the website (<http://hist-met.org/conf2007.html>).

For further details of the conference please contact the organiser:

Justine Bayley, English Heritage, Fort Cumberland, Eastney, Portsmouth PO4 9LD

Email: [justine.bayley@english-heritage.org.uk](mailto:justine.bayley@english-heritage.org.uk)

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### Chairman's Piece

*Tim Young*

I would like to take this opportunity, as the incoming chairman of the society, to write a few words of introduction and personal comment. Firstly I would like to state my appreciation to Bob Smith who has chaired the society through the last four years, a period which has seen HMS as a confident, active, respected and diverse society. That diversity within HMS is present within the areas of interest, of activity and of background of the membership, and is reflected by the wide range of activities undertaken by the society. This is well illustrated by the three HMS meetings that I have attended over the last 9 months: the 2006 Conference in the Forest of Dean, the symposium on Iron Age iron-smelting arranged by the Archaeology Committee in the autumn of 2006 and the 2007 Spring Meeting in Penryn, Cornwall. The annual conference always attracts a broad cross-section of the membership and the quiet, leafy seclusion of Dean favoured this traditional, genteel style of HMS meeting, with its thematic presentations, members' talks, a memorable fieldtrip and the usual late-night discussions in the bar. The conference, organised by Ian Standing, was in the best traditions of HMS conferences with early metallurgy co-existing as a recreational activity for some, but a profession for others. The Iron Age symposium, convened by Sarah Paynter, was, in complete contrast, an opportunity for a small focused group of slag specialists to present and brainstorm on-going work on a particular timely subject. Finally, the Penryn meeting, organised by Gill Juleff and Jens Anderson, showcased the academic research being undertaken by Exeter University archaeologists and earth scientists from the Camborne School of Mines in the southwest, as well as allowing members to see aspects of the newly-designated Cornwall and West Devon Mining Landscape World Heritage Site. These meetings were all so different and yet I would hate to be asked to indicate which I had enjoyed the most, or which had been most beneficial to me as a professional archaeometallurgist!

The diversity of both its members and activities is one of the real strengths of HMS, and something to be cherished and nurtured. It is not, however, a static property and HMS has evolved continuously since its inception. A glance through old issues of the newsletter quickly shows by how much the activities undertaken by the society and its members have changed over the years. The effort of the society in its early years was often focused on getting early metallurgy taken seriously, particularly in terms of conservation issues at industrial sites and in raising the awareness of metallurgy within archaeology. Since those early days, the increasing professionalization of archaeology, the increased prominence of archaeological science and the increased role for the heritage sector within the planning process has addressed many of those concerns. HMS can be proud of its undoubted success in raising awareness in the heritage professions, both directly through, for instance, the Archaeological Datasheets and indirectly through other organisations (for instance the English Heritage Guidelines for Archaeo-metallurgy). It should also take no little credit for the increased level and quality of archaeometallurgical teaching in our universities.

In recent decades, however, the decline of traditional manufacturing in Britain has led to a decreasing pool of people who have developed an interest in early metallurgy from their involvement in the modern industries; people who have formed traditionally a mainstay of the HMS membership. This leaves the society with the paradox of an increasingly high-profile role for archaeometallurgy, but at the same time with a membership demographic that is aging and with overall numbers beginning to fall. As it has done throughout its history, the society must continue to evolve to address these issues. Council has already acted to appoint Eddie Birch as Membership Development Officer, but expect to see more activity in this area, and it is likely that every opportunity will be taken for canvassing the opinions of the membership on the way forward for both for the recruitment and retention of new members. The success of HMS in raising the profile of metallurgy in heritage issues has also had the result that there is now more research, investigation and presentation of early metallurgy than ever before, but that much of this work is necessarily undertaken by heritage professionals who are not archaeometallurgical specialists. How will the society rise to the challenge of continuing to engage with and to support those people whose work impinges on archaeometallurgy, but who are unlikely to be able to justify becoming members?

The coming years present significant challenges to the society, but it can face them with confidence. *Historical Metallurgy* continues to grow in stature as a respected publication. The future meetings programme of the

Society looks extremely exciting, including the first annual conference outside the UK (Dublin, September 2007), but also with a whole host of other events, both alone and in collaboration with other organisations. I look forward to these events with eager anticipation and hope to see many new faces at them, alongside those more familiar ones who always make HMS meetings such a pleasure.

Tim.Young@GeoArch.co.uk

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## 2007 AGM and Spring Meeting

*David Dungworth*

This year the AGM which was combined with a Spring Meeting was held in Cornwall (Figure 1). The Spring Meeting included several papers on metallurgical themes relevant to the South West and fieldtrips to several mining sites. The AGM, meeting and fieldtrips were organised by Jens Andersen (Camborne School of Mines), Gill Juleff (University of Exeter) and Ainsley Cocks (Cornwall County Council).



*Figure 1: The University of Exeter, Cornwall campus (photo by Chris Leather)*

At the Annual General Meeting Tim Young was elected Chairman (see Tim's piece in this Newsletter), Mike Cowell was re-elected Treasurer, and David Crossley was re-elected as co-editor of the Society's Journal. Three ordinary members of council stepped down (Paul Belford, Gill Juleff and Eddie Birch) and three new members were elected (Robert Smith, Roger Doonan and David Dungworth). Council approved the appointment of new accountants (Sally Monks, Broom, Bedfordshire).

The Spring Meeting which followed the AGM had four papers of direct relevance to the South West. The first paper on the *Exmoor Iron Project* was presented by *Gill Juleff* and *Lee Bray*. Before the Exmoor Iron Project (often referred to in short hand as ExFe) started in 2001 almost nothing was known of the pre-19th century ironworking in this area. To date ExFe has included four-and-a-half years of fieldwork which sought to

integrate several strands of investigation: landscapes, sites, materials, artefacts and laboratory analyses. The excavations and other fieldwork have concentrated on a number of different areas: Horner Wood, Dulverton and Sherracombe Ford. The Horner Wood area has provided abundant evidence for post-medieval woodland management, charcoal burning and water-powered smelting and smithing. Investigations in the Dulverton area have included the medieval stone-built furnaces at Shircombe Slade, and the curious late Roman ironworking at Blacklake Wood. The excavations at Blacklake Wood recovered numerous fragments of blooms as well as a large lump of slag (the 'frozen contents of a furnace'). While fragments of bloom are not unknown from bloomery smelting sites, these were the intended product and the vast majority were taken away. At Blacklake Wood the smelters seem to have carelessly discarded many fragments of the very thing they had been trying to make. The large lump of slag from one furnace does not seem to be a furnace bottom but instead is virtually the entire contents of a small shaft furnace which solidified before the smelt was completed. While the reasons why the smelt was abandoned are unclear (and may never become clear), the preservation of this slag provides a new insight into early bloomery smelting. Sherracombe Ford (Figure 2) was a Roman iron smelting site and its excavation provided a showcase for the ExFe project. The site(s) consist of platforms partially dug into the hillside and partially resting on dumped material (mainly slag heaps). The excavation of several platforms uncovered several furnaces, a smithing floor and extensive slag heaps.



Figure 2: ExFe excavation at Sherracombe Ford in 2003

The ExFe fieldwork phase has applied two techniques to slag heaps to reveal aspects of ironworking as a rural industry: quantitative test pit sampling and deposit characterisation. The test pit sampling provides quantitative data on the composition of the slag heaps; the first results suggest that many traditional (e.g. Henry Cleere's) estimates of the slag density in slag heaps are

substantially too high. The deposit characterisation follows on from the work by Henry Cleere in the Weald and seeks to classify groups of contexts by the sorts of activities that produced them: the preparation of raw materials (e.g. ore roasting), furnace construction, smelting, and furnace destruction/rebuilding. The cyclic nature of the activities (and the resulting stratigraphy) offer the chance to understand social and economic aspects of early iron manufacture.

Website: [www.sogaer.ex.ac.uk/archaeology/research/rxiron.shtml](http://www.sogaer.ex.ac.uk/archaeology/research/rxiron.shtml)

*Peter Claughton and Chris Smart* gave a paper on the *Silver Mines at Bere Ferrers*, Devon. Initially argentiferous galena outcrops were directly exploited by the Crown but after the mid fourteenth century they were granted on lease to outside interests. Adits were driven from the 13th century to assist with the draining of the mines and allow the recovery of ores from below the water table. By the 15th century water-powered pumping was in use to allow the mining of the deeper ores. The development of smelting techniques during and after the medieval period allowed the re-smelting of earlier slags and so these are now virtually unknown. On going landscape survey, supplemented with GPS terrain modelling, is starting to characterise the Bere Ferrers landscape. The existing landscape is being compared with early maps (e.g. Tithe Maps) to reveal those mining elements which pre-date the 19th century. Website: [www.sogaer.ex.ac.uk/archaeology/research/rbereferrers.shtml](http://www.sogaer.ex.ac.uk/archaeology/research/rbereferrers.shtml)



Figure 3. The QEMSCAN (Photo: Camborne School of Mines)

The work of the *Camborne School of Mines (CSM)*, in particular the state-of-the-art scientific equipment, was described by *Jens Andersen*. Jens admitted that the CSM was no longer at Camborne (it is now at the Cornwall Campus of the University Exeter near Falmouth) and is no longer exclusively a school of mining. The CSM has weathered the changing fortunes of mineral exploitation in Britain and beyond and now provides training on a diverse range of topics including the exploitation of

sustainable energy sources. The CSM has a suite of laboratories which house some impressive analytical instruments. The star attraction (for me) in the laboratories was the QEMSCAN (Figure 3) which consists of a scanning electron microscope (SEM) with four energy dispersive X-ray detectors (conventional SEMs have only one). The extra X-ray detectors allow the rapid collection of large quantities of data and make it possible to assemble large, detailed maps showing the distribution of different elements in a sample. The data is used to determine mineral compositions for the various inclusions present. The QEMSCAN has already been applied to a range of archaeological material. The QEMSCAN has been used to examine a fragment of the smithing floor from Sherracombe Ford. This proved to be a highly heterogeneous sample which seems to contain relatively little evidence for smithing (e.g. hammerscale). Fragments of slag present might be smelting slag in the strictest sense or possibly slag extruded during bloom consolidation.

Website: [www.uec.ac.uk/csm/](http://www.uec.ac.uk/csm/)

The final paper of the Spring Meeting was given by *Ainsley Cocks* of Cornwall County Council's World Heritage Site (WHS) team. He described the work of the team which had led to the inscription of the *Cornwall and West Devon Mining Landscape* as a WHS on the 13th July 2006. This WHS was formed by the cultural tradition of hard-rock mining that contributed to the development of the Industrial Revolution. The WHS also has a global dimension as the hard-rock mining technology developed in the South west was exported to many other parts of the world (e.g. South Africa, Australia and Mexico). The WHS, which consists of ten separate landscape elements spanning 1700–1914, including mines, smelting sites, iron foundries, chapels, agricultural landscapes connected to mining. The WHS team has been working closely with a range of interested groups to develop a management plan which will ensure that historic remains are treated sympathetically.

Website: [www.cornishmining.org.uk](http://www.cornishmining.org.uk)

After the lectures we had a tour of the CSM facilities, including the state-of-the-art laboratories. That evening we were treated to a boat trip along the Fal river which ended at the Pandora Inn (Figure 5) where the conference dinner was held. The dinner was delicious and the company convivial (I especially enjoyed learning that one of Gill ancestor's had been born in a mine!). Eventually we squeezed ourselves into taxis and were whisked back to Falmouth where subjects metallurgical and non-metallurgical were discussed over drinks until late.



Figure 5. *The Pandora Inn, Restronguet*

The following morning we re-assembled at the CSM for the fieldtrip. The first site we visited was Rosevale Mine at Zennor. There is very little recorded history for this mine before the 18th century. It was worked on a small-scale by local miners during the 18th and 19th centuries but ceased activity about 1840. The mine was re-opened for a few years just before the First World war but the documents which survive indicate that while the mine yielded some tin this never balanced the cost of mining the ore.

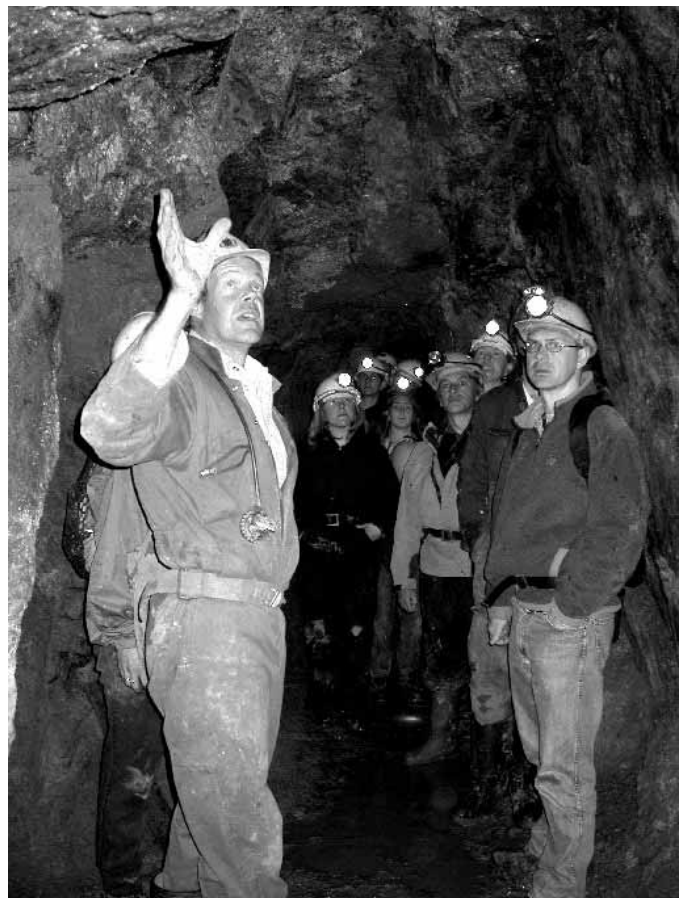


Figure 6. *Tony Bennett explaining mining features underground at Rosevale Mine*

Rosevale mine is now privately owned and has been restored and preserved as a typical Cornish Mine. Our two guides were Tony Bennett (Figure 6) and Mike Shipp. The principal under-ground workings consist of two horizontal tunnels driven along a tin lode, named the Red Lode. The mine is self-draining and has natural ventilation throughout the year. After being kitted out with hard hats and mining lamps, we entered the mine along the lower of the tunnels and were shown a variety of mining features. Perhaps my favourite moment was deep in the mine where Tony lit a candle and asked us to turn off our electric lamps so we could appreciate the amount of light provided by a single candle. Once we had switched off our lamps and our eyes became accustomed to the dark we could see that a single candle actually provides substantial illumination. Tony then blew out the candle so we could fully experience the darkness and we waited to see who would turn their light back on first. We then climbed 27m up ladders in the main stope to the higher tunnel and made our way outside. I had been a little nervous about the idea of going underground but I found it great fun and one of the many high-points of the conference.

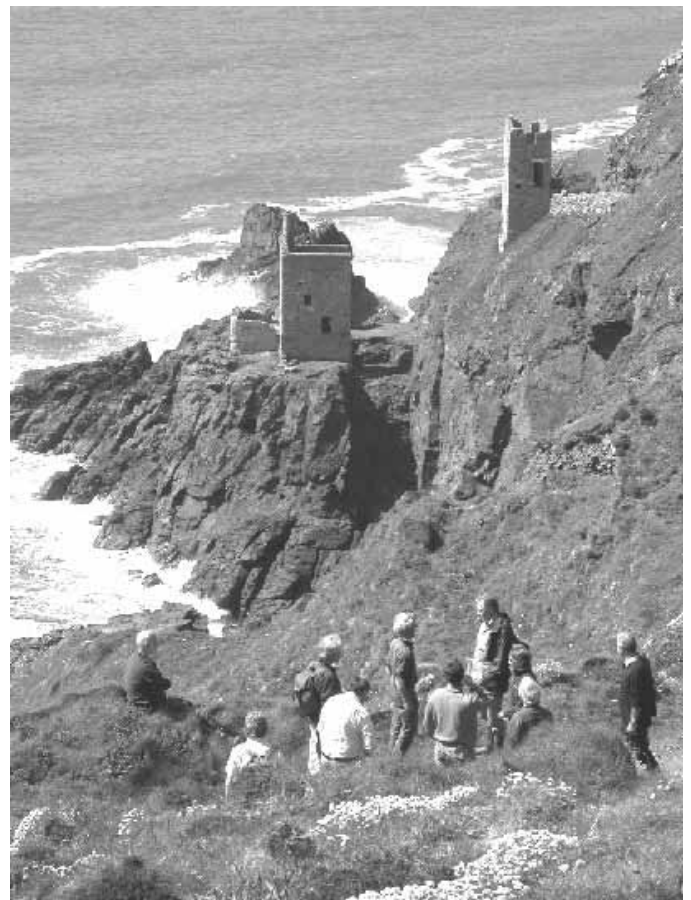


*Figure 7. Replica water-powered stamping mill at Geevor*

We then made our way to Geevor Mine. Geevor tin mine has included a variety of different mines over the centuries. Mining companies were often formed by the amalgamation of separate but adjacent mines which are known by many different names. Mining had started by the end of the 17th century but ceased shortly after 1837. Mining commenced again in 1851 and by 1860 undersea exploration was being carried out. In April 1867 miners in the inland section accidentally broke into the flooded workings of an adjacent mine, an incident which cost the lives of five miners. Although the mine expanded over the next decades operations closed again in 1891. Geevor worked intermittently from 1892 to 1904. In 1905 the West Australian Gold Fields Company Limited

acquired the mine and introduced electric power. The mine continued through most of the 20th century due to the discovery of fresh reserves of ore. The drop in price of tin in the 1980s led to the collapse of the mining company and the production stopped in 1990. In 1991 the pumps were switched off and the underground working flooded. The Geevor Tin Mine Heritage Centre opened in August 1993 and is now the largest preserved mining site in the country. Bill Lakin was our guide and he showed us through the surviving surface remains which included a winding house and extensive ore processing plant (some of which he was able to demonstrate). The lunch provided was highly appropriate — a large Cornish pasty!

We then made our way to the mines at Botallack where Adam Sharpe showed us and members of the Cornwall Archaeological Society several mining features including an area with apparent fire-setting, the engine houses on the cliffs overlooking the sea (Figure 7), and the restored arsenic calciners. The weather was excellent and we could even see the Scilly Isles off in the distance. This was certainly one of the most best meetings I have ever attended; the range of presentations, social events and field trips provided a stimulating and enjoyable experience. Thanks to the conference organisers Gill Juleff, Jens Andersen and Ainsley Cocks.



*Figure 4. Historic mining landscape at Botallack*

## Crucible Furnace at Mowbray St, Sheffield

Rowan May and Anna Badcock

ARCUS have recently completed a mitigation excavation at a former engineering and tool works in Mowbray Street, Sheffield. The site is being developed by Nu Build Ltd.

Documentary research has shown that the site was still a greenfield site in 1808, lying adjacent to the River Don. By 1851, a 'refinery' was located in the area, although the plots to the west and east were still undeveloped yards. The 1849 trade directory listed Joseph Hoult Dixon, silver and gold refiner on nearby Harvest Lane, likely to be the occupant of the refinery.

In the 1860s, W.K and C. Peace were listed at the Eagle Works on this site. This firm were steel, file, edge-tool and cutlery manufacturers and merchants. The Eagle Works were shown on the 1890 OS map, by which time the works had been enlarged from the original refinery, although some of the buildings had been retained. By that date the adjacent plots had been developed. The Union Foundry to the east was occupied by the Oxley Brothers, iron founders and engineers, and the works to the west housed John Nicholson and Sons, steel manufacturers.

The firm of W.K and C. Peace remained at the Eagle Works until the mid-20th century. The buildings remained relatively unchanged between 1890 and 1930, although a small addition had been made to the southern block by 1930. The firm were still listed at the works in 1944, but by 1954 the occupants were Crownshaw, Chapman and Co Ltd, saw manufacturers.

In 1965, it appeared that several firms were sharing the works, which were no longer shown on maps as the 'Eagle Works'. Longbro Tools Ltd, spanner manufacturers, and Beckerlegge (Standswell Tools) Ltd, Harper and Schofield Ltd, and the Albion Twist Drill and Tool Co Ltd, were all listed in trades directories as engineers' tool manufacturers at this site.

Excavation revealed a sequence of structural remains relating to the former Eagle Works and later modification to it. The main features of interest were the remains of a 6-hole crucible furnace, part of an early-20th century furnace (possibly an open hearth furnace) and a single, large grinding wheel trough.

The crucible furnace was relatively well preserved. The vaulted cellar roof survived, as did the majority of the crucible holes. The fire-clay lining of the holes was mainly intact, and fire-bars were still *in situ* in several of

them. Interestingly, the crucible holes had been numbered on the stanchions in the cellar (Figure 2), a feature that has not been previously observed in Sheffield.

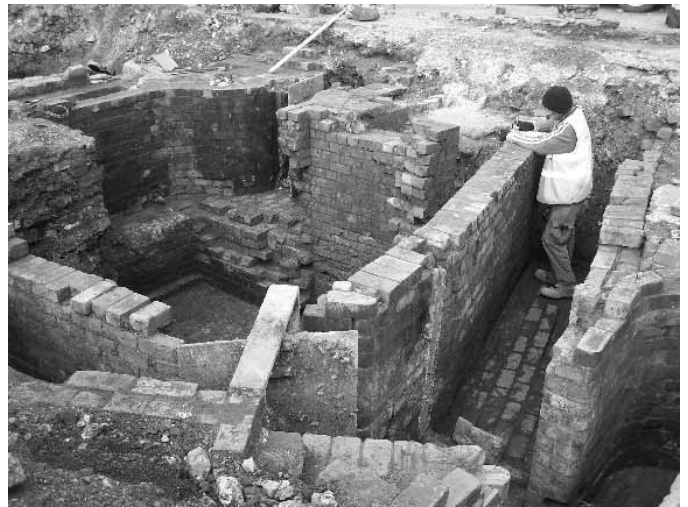


Figure 1. Flues with a door for controlling air flow in the foreground

The cellar had been truncated by the convoluted flues of the later furnace, which presumably replaced the crucible furnace. A complex system of flues was recorded, and two iron pivoting doors indicated that the movement (and mixture) of air and gas through the structure could be carefully controlled. Unfortunately, the furnace itself fell outside the development area, so more detailed interpretation of this structure is difficult. The remains of a large, 20th century grinding trough was also recorded. The trough had been back-filled with the remains of several different grinding wheels. A solid lump of rusted swarf (the grinding residue) had accumulated at one end. Two large iron hooks which would have held the horsing chains were still present within the trough.



Figure 2. The numbered stanchions

## **HMS Day Meeting 2007**

Changing technology in medieval and post-medieval metalworking

Bradford

10th November, 2007

The aim of the meeting is to discuss the evidence for the evolving metalworking technologies of the medieval and post-medieval periods. Papers on iron smelting, blacksmithing and artefact technology are welcome. The period considered is 1000–1650.

Offers of papers should be sent to: Gerry McDonnell, Division of Archaeological, Geographical and Environmental Sciences, Bradford University, Bradford, West Yorkshire, BD7 1DP

Tel: 01274 233535

Email: [j.g.mcdonnell@bradford.ac.uk](mailto:j.g.mcdonnell@bradford.ac.uk)

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## **HMS Day Meeting 2008**

19th-century Ironmaking

Sheffield

18th April 2008.

### **CALL FOR CONTRIBUTORS**

The spring workshop provides a forum to discuss recent and ongoing investigations into all aspects of archaeometallurgy. This year, the theme is 19th-century ironmaking. The development of coke blast furnaces into the early 19th century is fairly well understood, but what about the archaeology and archaeometallurgy of hot blast, and particularly the massive 19th century development of the forge and foundry sectors - how do we best approach excavation and analysis on these sites? And how do we understand the often 'difficult' evidence that we uncover? 20-minute papers will be presented, with plenty of time for general discussion about current approaches, new discoveries, scientific techniques, and archaeological fieldwork. The workshop is open to all, and we hope that most of those actively involved in the subject will take part.

The workshop will be held in the Humanities Research Institute at the University of Sheffield. Further details about the programme, venue etc will be available on the HMS website, and circulated more widely, from August onwards. The anticipated cost will be in the region of £20.

If you would like to present a short paper, please contact Anna Badcock, ARCUS, Westcourt, 2 Mappin St, Sheffield S1 4DT. Tel: 0114 2222957

Email: [a.badcock@sheffield.ac.uk](mailto:a.badcock@sheffield.ac.uk)

## **HMS Annual Conference 2008**

Metals in Musical Instruments

Oxford

12th–14th September, 2008

**ANNOUNCEMENT AND CALL FOR PAPERS**

The 2008 HMS Conference will be entitled 'Metals in Musical Instruments' and held in Oxford, 12–14 September 2008. The conference will be based in the Holywell Music Rooms, the oldest surviving purpose built concert hall in Europe. As well as a full lecture program there will be concerts on the Friday and Saturday evenings, themed to the conference, and opportunities to see "behind the scenes" at the Bate Collection of Historical Musical Instruments.

You will see a call for papers elsewhere in this Newsletter which will give you some idea of what the programme will cover. We are pleased to have been able to find a coherent theme on end uses of metals.

While we shall do everything possible to keep the price of the conference down, such a full and varied program in a major city does not come cheap. We expect the full residential fee to be of the order of £200 and the 'day fee' for those organising their own accommodation to be around £60. As in any ancient city, car parking can be a nightmare; however Oxford has an excellent bus service.

This conference is going to be something out of the ordinary and we hope as many of you as possible will be able to come. We shall be asking for expressions of interest soon in order to match the accommodation and the Saturday program as closely as possible to your requirements.

If you have any queries, or would like to know more about the conference, please contact Eddie Birch on 01226 370331 or email [eddiebirch@btopenworld.com](mailto:eddiebirch@btopenworld.com).

We invite offers of papers, for the conference which will cover:

- Metallurgy and metals used in instruments
- Metal working techniques, including influence on design of instruments
- Makers and their techniques
- Archaeology of metal musical instruments

Case studies will be welcome.

Offers of papers, together with a title and 150 word abstract, should be sent no later than 31 January 2008 to Dr Louise Bacon, Horniman Museum & Gardens, 100 London Rd, Forest Hill, London, SE23 3PQ.

E-mail: [lbacon@horniman.ac.uk](mailto:lbacon@horniman.ac.uk)

## The Minds behind the Metal: accessing past metallurgical experience

Society for American Archaeology (SAA) meeting,  
Vancouver, Canada (26th–30th March 2008).

CALL FOR PAPERS!

This symposium aims to promote the potential of archaeometallurgy in addressing problems of social complexity and cultural development in the past. Although metals have long been of archaeological interest, archaeometallurgy has in the past been regarded as distinct from the general field of archaeology. Nevertheless, more recent archaeometallurgical approaches have sought to complement scientific and technical understandings of past technologies with a more thorough appreciation of the interrelated human aspects. This paradigmatic shift is providing a solid framework within which to reconstruct the full *chaînes opératoires* of metal production and use within wide-ranging physical and social environments. Through the application of advanced analytical techniques, many aspects of past societies are now being addressed, allowing greater understanding of how metals were produced, utilised and regarded within past communities.

This symposium aims to encourage: further discourse and connections between archaeometallurgical practices, and to promote more open communication between archaeometallurgists and other archaeological disciplines. This session should interest those working in metallurgical field survey, experimental archaeometallurgy, slag/technical ceramics analyses and finally those analysing finished metallic artefacts.

If you wish to be considered for the session please send a short 100 word abstract by the Friday 17th August to Claire Cohen [c.cohen@ucl.ac.uk](mailto:c.cohen@ucl.ac.uk).



HMS Spring Meeting at Geevor Mine

## HMS Website updated

Over the summer I have taken on the task of updating the HMS website. The style has changed and some of the content has been updated. There are pages which cover the main activities of the society including, conferences, day meetings, publications, etc. Details of the various conferences and meetings of the society are included. The address of the society's website remains unchanged: [hist-met.org](http://hist-met.org).

Click on the links below

- [About HMS](#)
- [Meetings](#)
- [Publications](#)
- [Conservation](#)
- [Resources](#)

The Historical Metallurgy Society is a dynamic and exciting international forum for exchange of information and research in historical metallurgy. For over forty years we have covered all aspects of the history of metals and associated materials from prehistory to the present. Our members' interests range from processes and production through technology and economics to archaeology and conservation.

The Society holds several **conferences and meetings** each year which showcase the latest research, and explore a wide range of metallurgical landscapes and locations. Members receive a scholarly **journal**, a newsletter.

The Society's **datasets** provide practical help to those excavating and recording the archaeological remains of early metalworking.

We provide small **grants** for research and travel.

The Society takes an active role in the **conservation** of metallurgical sites.

**Experimental Archaeology**      **Sulfur Analysis**      **Metallurgy**

Enquiries other than membership should be addressed to the Honorary General Secretary:  
Mr. Peter Hutchison, 22 Easterfield Drive, Southgate, Swansea, SA3 2DB.  
Telephone: 01792 233223.

As the Society is a Company limited by guarantee (No 1442508), every member has a liability, in the event of the Society having to be wound up, of £1 (one pound sterling). The Society's registered address is 1, Carlton House Gardens, London SW1 5DB. The Historical Metallurgy Society Ltd. is a registered U.K. Charity (Number 279314).

Please email me if you have any ideas, comments, etc,  
[david.dungworth@english-heritage.org.uk](mailto:david.dungworth@english-heritage.org.uk)

While submissions to the Newsletter are welcome at any time, if you want to have something in a specific issue of the newsletter then it needs to be with me by the following deadlines.

**1st March,**                      **1st July**                      **1st November**  
Contributions can be sent in any format (hand-written, typed, email, floppy disk, CD-ROM, etc).

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