

# Chemical Intelligence

Newsletter of The Society for the History of Alchemy and Chemistry  
No. 4 November 2010

**75 years** after its founding, SHAC has become a truly international organisation, with members in over 30 countries. While celebrating past achievements at this month's Anniversary Meeting, 'The History of the History of Chemistry', the Society also looks forward to a busy and exciting future. As the International Year of Chemistry, it is fitting that 2011 will be marked by an unprecedented number of alchemical and chemical-themed conferences, workshops and projects. As may be seen from the 'Calls for Papers' section below, there are plenty of opportunities to get involved. SHAC offers research and conference grants to postgraduates and early career scholars based anywhere in the world, and there is still time to enter essays for the 2011 Partington Prize. We hope that you can join us for the 'Future of the History of Chemistry'!

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## 1. Calendar

### 1.1 SHAC meetings

19 November **75th Anniversary Celebratory Meeting**  
*The Royal Institution, Albermarle Street, London*

The Meeting to celebrate the 75th anniversary of the founding of the Society will be held at the Royal Institution on Friday, 19 November 2010.

12pm: AGM

12.30pm: Tour of the Royal Institution by Professor Frank James

1.30pm–6pm: **'The History of the History of Chemistry'**

- Bill Brock (University of Leicester), 'Exploring early modern chymistry: the first decade of the Society for the History of Alchemy and Chemistry'
- Frank James (Royal Institution), 'The Two Cultures and the history of chemistry'
- Marcos Martínón-Torres (University College London), 'Recent developments in the history of alchemy'
- Marco Beretta (Università di Bologna), 'The changing role of history in the identity of continental chemistry'

- 'The Good Old Days?': panel discussion with Maurice Crosland, Colin Russell and David Knight, chaired by Hasok Chang

6.15pm: Reception in the Royal Institution Museum

7pm: Public Lecture by Simon Schaffer (University of Cambridge), 'The Unfortunate Chemist – Tribulations of chemical philosophy in an Age of Revolution' (sponsored by SHAC and the Royal Institution)

8pm: Dinner at the Royal Institution's restaurant, Time and Space

Registration fee for the meeting, reception and public lecture: £15 for SHAC members; £20 for non members. Accompanying persons: £10 (reception and public lecture); £5 (lecture only). Dinner £35 per person (including wine).

A registration form can be downloaded from [http://www.ambix.org/index.php?option=com\\_content&view=article&id=60&Itemid=31](http://www.ambix.org/index.php?option=com_content&view=article&id=60&Itemid=31). For more information, please contact the Hon. Secretary, Georgette Taylor: [g.taylor@ucl.ac.uk](mailto:g.taylor@ucl.ac.uk).

## 1.2 SHAC-supported events

November – **AD HOC Reading Group**  
April 2011

AD HOC started life in London in 2004 as a monthly reading and discussion group, organised by Hasok Chang. This autumn the basis of the group has expanded, with parallel series of meetings held at UCL and Cambridge. While our main focus is on history, we also pay attention to philosophical, sociological, public and educational dimensions of chemistry. Over the past years our meetings have been attended by a variety of scholars, ranging from advanced undergraduates to teaching staff in both science studies and chemistry, and often attracting visitors from other parts of the UK and abroad. With the expanded geographical basis we hope to stimulate a higher volume and broader range of activities, while maintaining the group's informal and friendly ethos. For more information, including the programme and details of readings, please visit our website, [www.hps.cam.ac.uk/adhoc](http://www.hps.cam.ac.uk/adhoc). To join the mailing list, contact the group's secretary, Stephanie Seavers ([stephanie.seavers.09@ucl.ac.uk](mailto:stephanie.seavers.09@ucl.ac.uk)).

### **AD HOC (Cambridge)**

*5pm–6.30pm (Wednesdays, fortnightly during term), Department of History and Philosophy of Science, Free School Lane, Cambridge CB2 3RH*

This autumn, our theme is 'Between alchemy and chemistry'. Next term we will focus on 'Building blocks of chemistry', with meetings on 19 January, 2 February, 16 February, and 9 March.

1 December 'Newton's alchemy'  
Introduced by Peter Jones (King's College, Cambridge) and John Young (HPS, Cambridge). Hands-on session at King's College Library, examining some of Isaac Newton's alchemical manuscripts (please e-mail Stephanie Seavers in advance to book a space at this session).

## **AD HOC (London)**

6pm–7.30pm (Tuesdays, monthly), Room 216, Foster Court, University College London

Our autumn theme is 'Sites of eighteenth-century chemistry'. In the New Year we will investigate the theme of 'Organic chemistry', with meetings on 11 January, 8 February, 1 March and 5 April.

7 December 'Chemistry and coffee houses'

November – **'Chimie et alchimie: continuités et ruptures'**

May 2011 3pm–6pm, Salle Corbin (locaux de STL, bâtiment B), Université de Lille 3, Villeneuve d'Ascq (métro Pont-de-bois), Lille

UMR 8163 'Savoirs, Textes, Langage' (CNRS, universités de Lille 3 et de Lille 1): Séminaire 'Histoire de la chimie aux XVII<sup>e</sup> et XVIII<sup>e</sup> siècles' (responsables: Bernard Joly et Rémi Franckowiak).

Il est désormais acquis que l'alchimie, jusqu'à la fin du XVII<sup>e</sup> siècle, était l'autre nom de la chimie et que les conceptions ésotériques, spirituelles et symboliques de l'alchimie sont pour une bonne part des constructions de l'occultisme du XIX<sup>e</sup> siècle et de ses prolongements psychologiques, ésotériques et poétiques au XX<sup>e</sup> siècle. Les travaux développés depuis une dizaine d'année en se basant sur cette hypothèse ont permis de restituer à l'alchimie de la Renaissance et du XVII<sup>e</sup> siècle sa dimension véritablement chimique, et par conséquent scientifique.

Demeurent pourtant bien des obscurités et des malentendus, qui témoignent de la complexité de la situation. Deux séries de faits semblent ne pas se laisser réduire aux analyses qui viennent d'être évoquées; ils tiennent l'un et l'autre à un usage parfois déroutant du terme alchimie.

D'une part, il semble que l'alchimie ait parfois désigné, dès le XVII<sup>e</sup> siècle, des doctrines qui, débordant les frontières du pan-chimisme de certains alchimistes comme Pierre-Jean Fabre, relevaient davantage de la théosophie ou d'une philosophie de la nature toute imprégnée de thèmes empruntés à la pensée hermétique de la Renaissance: en quel sens, par exemple, John Dee, Robert Fludd ou Jacob Boehme étaient-ils des alchimistes, comme le prétendaient déjà certains de leurs contemporains? N'est-ce pas cette prétention à faire de l'alchimie une clé pour construire de manière hardie et souvent confuse des philosophies nouvelles qui donna aux alchimistes une mauvaise réputation chez de nombreux penseurs du XVII<sup>e</sup> siècle, à commencer par les cartésiens? D'autre part, les chimistes de la fin du XVII<sup>e</sup> et du début du XVIII<sup>e</sup> siècle se réclamaient volontiers d'une chimie enfin débarrassée des erreurs d'une chimie du passé qu'ils nommaient alors alchimie, tout en maintenant dans leurs doctrines et leurs pratiques de nombreuses leçons de cet héritage qu'ils récusait. Mais pourquoi cette chimie périmée s'est-elle malgré tout prolongée au XVIII<sup>e</sup> siècle dans des formes de plus en plus éloignées de la pratique de laboratoire et de la conceptualisation scientifique, comme l'illustrent le *Dictionnaire mytho-hermétique* de Dom Pernety ou certains articles de dictionnaires ou encyclopédies?

Nous n'aurons pas la prétention de résoudre ces énigmes, mais plus simplement d'en clarifier les termes par une étude comparative des diverses

doctrines que l'on a rattachées à l'alchimie à la fin de la Renaissance et au XVII<sup>e</sup> siècle, et par l'examen des usages des termes «chimie» et «alchimie» au XVIII<sup>e</sup> siècle, notamment dans les travaux de l'Académie royale des sciences et dans les ouvrages encyclopédiques des Lumières.

23 November 'Travaux sur la renaissance à la fin de la Renaissance: l'apport de la chimie'

- Rémi Franckowiak (UMR STL, Université de Lille 1), 'Chimie et renaissance de l'homme intérieur chez Blaise de Vigenère'
- Didier Kahn (CNRS, UMR 8599), 'La palingénésie chez Paracelse et Joseph Du Chesne'

14 December 'Les débordements théoriques de la chymie au XVIIe siècle'

- Bernard Joly (UMR STL, Université de Lille 3), 'Que reste-t-il de la chimie dans les élaborations pan-chymiques de Pierre Jean Fabre?'
- Jennifer Rampling (University of Cambridge), 'Patronage, polemic and the place of English alchemy in early modern Europe'

18 January 'Les curiosités de la chymie dans la première moitié du XVIIe siècle'

- Hiro Hirai (Radboud Universiteit Nijmegen), 'Les "Curiositez Inouyes" (1629) de Jacques Gaffarel et la philosophie chymique de la Renaissance' (sous réserve)
- Bernard Joly (UMR STL, Université de Lille 3), 'La chimie comme domaine d'interrogation des Questions inouyes pour Marin Mersenne'

15 February 'Chimie et alchimie selon les philosophes à l'âge classique'

- Solange Gonzalez (CNED), 'Chimie et alchimie selon les cartésiens à la fin du XVIIe siècle'
- François Pépin (Université de Paris-Ouest), 'Fontenelle, Diderot et la place de l'alchimie dans l'épistémologie historique de la chimie: repoussoir, moment nécessaire ou pensée féconde?'

22 March 'Souvenirs de l'alchimie dans la chimie du XVIIIe siècle'

- Christine Lehman (Université de Paris-Ouest), 'Les recherches sur la nature des métaux au XVIIIe siècle en France, réminiscence du vieux rêve alchimique'
- Luc Peterschmitt (UMR STL), 'L'alchimie et chimie chez Boerhaave: quelle place pour l'erreur en chimie?'

12 April 'Chimie, alchimie et minéralogie'

- Antonio Clericuzio (Università di Cassino), 'Chimie et science de la terre dans la seconde moitié du XVIIe siècle'
- Bernard Joly (UMR STL, Université de Lille 3), 'La minéralogie d'Etienne de Clave: chimie ou alchimie?'

10 May 'Lavoisier et l'alchimie'

- Marco Beretta (Università di Bologna/Institute and Museum of History of Science, Florence), 'Lavoisier and alchemy: the conservation of matter and the struggle against transmutation'

- Bernadette Bensaude-Vincent (Université de Paris-Ouest/IUF), à propos de la publication de l'ouvrage de John McEvoy, *The historiography of the chemical revolution* (Pickering and Chatto, 2010), un bilan historiographique (participation à confirmer).

February –  
May 2011 **Oxford History of Chemistry Seminar 2011**

Convenors: Pietro Corsi, John Christie, Robert Fox, Muriel Le Roux, John Perkins, Viviane Quirke. Further details, including directions, can be found at <http://www.history.ox.ac.uk/hsmt/histchem>.

9 February 'Forensic chemistry and medicine in nineteenth-century France & Britain'  
*3pm–5pm, Oxford Brookes University, Buckley Building, Headington*

- José Ramon Bertomeu (University of Barcelona), 'Sense and sensitivity: toxicology and normal arsenic in nineteenth-century France'
- Cassie Watson (Oxford Brookes University) 'Forensic medicine and chemistry in nineteenth-century Britain: theory and practice'

23 February 'New Researchers: apothecaries in early modern Europe'  
*3pm–5pm, History Faculty, George Street*

- Valentina Pugliano (Oxford University), 'Between albarelli and vipers: the intellectual life of the sixteenth-century apothecary connoisseur'
- Samir Boumediene (Ecole Normale Supérieure, Lyon), 'Europeanizing American remedies: the preparation of drugs in apothecaries' back-shops in the seventeenth and eighteenth centuries'

2 March 'The search for natural products in the twentieth century'  
*Maison Française d'Oxford (time to be confirmed)*

A showing of the film *L'if aux frontières de la vie/The yew, beneficial poison*, will be followed by a discussion with the director, Jean-Luc Bouvret. Bouvret's film won first prize in the 'Mutualités' section of ImagéSanté, at the 2010 International Health Film Festival, Liège.

9 March 'Physical chemists'  
*3pm–5pm, History Faculty, George Street*

- Bill Brock (University of Leicester), 'The nine lives of Sir William Crookes'
- Brigitte van Tiggelen (Memosciences, Louvain), 'Walter and Ida Noddack-Tacke, a collaborative couple in chemistry'

28 May 2011 **'Alchemy and chemistry: continuities and fractures'**  
*10am–5pm, Oxford Brookes University, Buckley Building, Gypsy Lane, Headington, Oxford*

A colloquium to mark the collaboration of the Oxford History of Chemistry Seminar (University of Oxford History Faculty, Maison Française d'Oxford, Oxford Brookes University, SHAC), Séminaire 'Histoire de la chimie aux XVIIe et XVIIIe siècles' (Université de Lille 1 et 3), and AD HOC (Department of History and Philosophy of Science, University of Cambridge).

For further information, or if you are interested in participating, please contact John Perkins at [jperkins@brookes.ac.uk](mailto:jperkins@brookes.ac.uk).

4–5 July 2011 **Sites of Chemistry, 1600–2000 conference:  
'Sites of eighteenth-century chemistry'**

Further details available in section 6 (News and Resources).

### 1.3 Other activities worldwide

18–20 November **4th International Conference of the European Society for the History of Science: 'The Circulation of Science and Technology'**  
*Institut d'Estudis Catalans (IEC), Barcelona*

The European Society for the History of Science exists to promote European cooperation in the field of History of Science, broadly construed. The conference is intended to stimulate studies and debates about the dissemination of science and technology: first, the circulation of ideas, theories, methods and practices; second, of objects, instruments, machines, artefacts, seeds, plants, minerals, drawings, illustrations, inscriptions, and paintings; third, of texts: manuscripts, printed books, textbooks, journals, letters, book notes; fourth, of scientists and technicians around the world in 'grand tours', trips for leisure, lecturing, business and industrial espionage; and fifth, of information about institutional organization, transmission of knowledge and the influence of local contexts, among others.

The programme includes a large number of papers and sessions relevant to the history of alchemy and chemistry. The full programme is available at: <http://taller.iec.cat/4iceshs/documentacio/Schedule01.pdf>.

Hosted by Societat Catalana d'Història de la Ciència i de la Tècnica (SCHCT)  
More information available from the website: <http://taller.iec.cat/4iceshs/>.

29 November **Royal Society of Chemistry Historical Group:  
'Celebrating the History of Chemical Information'**  
*10.30am–5pm, RSC Chemistry Centre and Geological Society Theatre,  
Burlington House, Piccadilly, London W1J 0BA*

The meeting is in association with the RSC Chemical Information and Computer Applications Group (CICAG) and CSA Trust  
Celebrating the History of Chemical Information

- Doug Veal (CICAG), 'The Contribution of the RSC'
- Bill Town (President, Kilmorie Consulting), 'The Language and Symbolism of Chemistry'
- Engelbert Zass (Head of the ETH Zurich Chemistry Biology Pharmacy Information Centre), 'The Chemical Literature'
- Phil McHale (Vice president, Market and Corporate Communications Elsevier MDL), 'Chemical Structures'
- Helen Cooke (Business Consultant, Proprietary Information Access, GlaxoSmithKline, Philadelphia), 'Databases'
- Alexander Lawson (Director of R&D, Elsevier Properties SA, Neuchâtel), 'Data'
- Peter Willett (Department of Information Studies, University of Sheffield), 'Chemoinformatics'
- Bobbie Glen (Unilever Centre for Molecular Science Informatics, University of Cambridge), 'The Future'
- Discussion and Conclusions

All registration will be done by the Treasurer of CICAG, Dr Diana Leitch ([diana.leitch@googlemail.com](mailto:diana.leitch@googlemail.com)); address 11 Wingate Drive, Didsbury, Manchester M20 2RT; tel. and fax 0161 445 9461. The cost will be £30 (includes meeting fee and lunch, morning and afternoon tea and coffee). To register for the meeting please send a cheque payable to RSC-CICAG to Dr Leitch.

2010–2011 **L'Association des Chimistes de Louvain (ACL) Journées de conférences: 'Eléments d'histoire de la chimie'**  
*2pm, Université catholique de Louvain, Louvain-La-Neuve, Belgium*

Organisé par Mémosciences et la Société Royale de Chimie. Les conférences ont lieu dans la salle Couvreur de l'Ecole de pharmacie de l'UCL, site de l'hôpital St Luc à Woluwé. Elles sont gratuites et ouvertes à tous. Renseignements complémentaires et inscription: [info@memosciences.be](mailto:info@memosciences.be).

17 November 'Principes d'équilibre?'

- Michel Letté (CDHTE/CNAM, Paris), 'Henry Le Chatelier (1850–1936) et la rationalisation'
- Paul Depovere (UCL/Université Laval, Canada), 'Fritz Haber: la destinée tragique d'un héros'

24 November 'Médecine du passé'

- B. Lengelé (UCL), 'Grandeur et Servitudes du Soleil. Récit anecdotique de la santé du roi Louis XIV et des malades du grand siècle'
- M. Jaminon (Maison de la Science/ULg), 'Molière au théâtre, les médecins à la ville': Parcours virtuel dans l'exposition présentée en 2010 par la Maison de la Science

23 February 'Du bon usage des analyses chimiques alimentaires'

- Patrick Arpino (ENCPS/CNRS, Paris), 'Voici 20 ans: Perrier ou l'analyse qui fit pschitt!'
- Alfred Bernard (UCL), 'Histoires extraordinaires d'intoxication alimentaire'

23 March 'Les voies de transmission de l'alchimie'

- Matteo Martelli (Humboldt-Universität Berlin), 'L'alchimie grecque et son développement historique: des origines égyptiennes aux premières traductions syriaques'
- Sébastien Moureau (Université Nancy2, F/UCL), 'La transmission de l'alchimie arabe au monde latin (XIIIe–XIVe siècles)'

4 May 'L'énergie nucléaire: Guerre et Paix' (*Université de Mons*)

- B. Mahieu (UCL et Mémosciences), 'La bombe atomique : arme secrète de l'Allemagne nazie en 1945?'
- G. Van Goethem (Commission Européenne), 'Génération IV en fission nucléaire: toujours plus de sûreté et de sécurité (non-prolifération)'

4–5 October  
2011

**Colloquium and Exhibition: 'La chimie au lendemain des révolutions:  
Gay-Lussac et l'après-Lavoisier**

*Ecole Polytechnique, Paris*

**Le colloque** sera centré sur la période 'après-Lavoisier', c'est-à-dire la période immédiatement postérieure à la 'révolution chimique' coïncidant exactement avec la révolution qui entraîna des changements radicaux de régime politique (république, empire) dans lesquels de nombreux chimistes ont joué un rôle majeur; mais des changements aussi dans les institutions scolaires et la pratique de la recherche en science. Cette période est celle où se forge l'image du Lavoisier, 'martyr' et fondateur de la chimie. C'est celle aussi où des voies non empruntées par Lavoisier seront développées pour constituer les bases de la chimie du XIXe siècle (proportions chimiques, électrochimie, ...), mais également celle où s'exacerbent les antagonismes nationaux y compris dans la chimie, où la chimie se professionnalise et s'enseigne à tout niveau, et où l'industrie chimique prend son essor. Il s'agira dans ce colloque, au centre duquel sera placée la figure de Gay-Lussac (1778–1850), qui réunit à elle seule toutes les différentes facettes de l'activité chimique d'alors, de revisiter la notion de révolution chimique, de s'intéresser à l'apport des acteurs de la science de la première moitié du XIXe siècle à la formation en chimie comme discipline moderne, avec ses lieux d'enseignement, de recherche, de communication et de diffusion. Par ce colloque, nous souhaitons également inspirer des contributions originales favorisées par la numérisation du fonds Gay-Lussac, de ses notes de travail mais aussi de ses cours sur le site <http://numix.sabix.org/gaylussac.html>.

La création de l'Ecole polytechnique illustre le rôle des savants dans la France révolutionnaire et tout particulièrement un nombre important de chimistes: Lamblardie, Fourcroy, Guyton de Morveau, Prony, Berthollet, Chaptal, Vauquelin et Hassenfratz. Des élèves chimistes ont laissé des archives à l'Ecole: Biot (X 1794), Desormes (X 1794), Regnault (X 1830) mais surtout Gay Lussac (X 1797). Gay-Lussac intègre en tant qu'élève l'Ecole Polytechnique en 1797. Il en sortira en 1800, avant d'y revenir à partir de 1802 comme répétiteur de chimie, puis comme professeur de chimie de 1810 à 1840. Une centaine de cours de chimie et la collection de chimie du XIXe siècle (300 flacons) témoignent des cents premières années de l'enseignement de la chimie à l'Ecole : Guyton de Morveau, Fourcroy, Berthollet, Gay Lussac (X 1797), Thénard, Dumas, Pelouze, Regnault (X 1830), Frémy, Cahours (X 1833), etc.

**L'exposition** reposera sur l'exceptionnelle collection de l'Ecole Polytechnique: les archives, la bibliothèque historique, les appareils et les produits chimiques d'époque. Ce patrimoine forme une image exceptionnelle de la chimie, de son enseignement et de sa recherche de la fin du XVIIIe siècle et des premières décennies du siècle suivant; image vivante puisque cette collection ressuscite presque Gay-Lussac dans ses 43 années passées dans l'Ecole, avec un éclairage à la fois sur l'homme et sur le chimiste dans son laboratoire. L'organisation de l'exposition s'appuiera sur les compétences du Centre de Ressources Historiques de l'X, et prendra place dans les locaux de l'Ecole. L'exposition coïncidera avec les Journées du Patrimoine durant lesquelles l'Ecole polytechnique ouvre traditionnellement aux visiteurs ses locaux, voire ses laboratoires de recherches. C'est ainsi une plongée tout à fait remarquable dans l'histoire de la chimie qui est proposée au large public, avec une mise en perspective directe sur la chimie telle qu'elle se pratique aujourd'hui. Contact: Dr Remi Franckowiak ([remi.franckowiak@univ.lille1.fr](mailto:remi.franckowiak@univ.lille1.fr))

## 2. Calls for papers

18–20 May  
2011

**Proposition de session pour le congrès SFHST de Nantes (2011)**  
**Présentée par Bernard Joly et Rémi Franckowiak:**  
**'Alchimie, chimie, littérature et poésie'**

De la Renaissance, où elle s'appelait alchimie, jusqu'au XXI<sup>e</sup> siècle, la chimie entretient avec les arts, et en particulier avec la littérature et la poésie, des rapports singuliers, que l'on ne retrouve sans doute pas lorsqu'il s'agit des autres disciplines scientifiques. L'absence de formalisme mathématique, la nécessité de recourir à un vocabulaire qui exprime les multiples aspects d'une matière polymorphe, sans cesse changeante et difficilement pénétrable, ont favorisé l'emploi d'allégories et de métaphores auxquelles les artistes ont été sensibles. La littérature, en particulier, semble entretenir avec l'alchimie et la chimie des relations d'autant plus privilégiées qu'elles sont réciproques: la chimie fait de la littérature quand le roman et la poésie se laissent envahir par des thèmes chimiques et alchimiques. Tandis que l'alchimiste devient un personnage récurrent de la littérature occidentale depuis le XVII<sup>e</sup> siècle, et que les transformations de la matière inspirent le travail du poète, chimistes et alchimistes n'hésitent pas à mettre en scène leurs opérations et leurs substances, en dramatisant la dangereuse recherche des puissances cachées au cœur de la matière, en romançant le récit de leurs découvertes, en présentant leurs doctrines sous des formes tout autant symboliques que conceptuelles.

La présence de l'alchimie et des alchimistes dans la littérature et la poésie a certes fait l'objet de nombreuses études contemporaines, mais toujours marquées par cette erreur historique d'interprétation qui conduit à considérer l'alchimie comme relevant de l'occulte et de l'ésotérique, et non pas de la science. La dimension essentiellement chimique de l'alchimie et des effets littéraires et poétiques qu'elle produit s'est trouvée de ce fait systématiquement négligée, ce qui limitait considérablement la recherche des liens subtils et puissants qui se tissent entre la science et les arts dans le cas particulier des relations entre alchimie, chimie et littérature. Un congrès d'histoire des sciences et des techniques semble alors constituer le moment privilégié pour reprendre l'ensemble de ces problématiques dans un contexte nouveau, où les historiens des sciences et des techniques pourront inviter des spécialistes de la littérature et de la poésie pour construire ensemble des approches nouvelles de ces relations riches et complexes entre le travail du laboratoire et la construction d'instruments, la conceptualisation des processus intimes de la matière et des éléments et l'élaboration d'écrits qui visent aussi bien à dire la richesse de la nature que les innombrables effets qu'elle produit dans l'imaginaire.

2011, année internationale de la chimie, sera ainsi l'occasion de tisser de nouveaux liens entre la science et la littérature, par le moyen de leur histoire. Quatre ateliers pourraient être organisés dans ce cadre:

- Analyses littéraires des textes alchimiques et chimiques
- Thèmes alchimiques, appareils chimiques et personnages de chimistes dans la littérature
- Les rêveries alchimiques et les constructions ésotériques comme genre littéraire
- Rêveries poétiques de la matière et des éléments: Bachelard et la poésie

Chaque atelier pourra regrouper 4 à 6 communications. Pour cela, il vous suffit de m'adresser ([bernard.joly@nordnet.fr](mailto:bernard.joly@nordnet.fr)), avant le **1er décembre 2010**, votre titre et votre résumé (environ 800 caractères) avec copie aux organisateurs du congrès: [sfhst.nantes2011@gmail.com](mailto:sfhst.nantes2011@gmail.com).

6–8 June  
2011

**7th Laboratory History Conference**  
*Katholieke Universiteit Leuven, Belgium*

The 7th Laboratory History Conference will be held in Leuven from 6 to 8 June 2011: the first Laboratory History Conference to be staged in Europe. Earlier conferences have been organized in Baltimore (2009) and Brookhaven (2010). The conference will be hosted by the Research Unit 'Cultural History after 1750' at KU Leuven (<http://www.arts.kuleuven.be/culturalhistory/>).

The aim of the conference is to investigate the history of the modern laboratory in relation to its institutional environment, ranging over national styles of research, different disciplines and both formal and informal functions. We welcome contributions that address such topics as the early modern laboratory; the laboratory in the colonial and developing world; field stations, observatories, research vessels and other non-traditional laboratories; the practice of testing, measuring and quality control; biomedical laboratories and clinics; virtual laboratories and the cultural representation of the laboratory. We are also interested in papers that discuss strategies for documenting the history of the laboratory, such as oral sources, archives, photography, and 'born digital' records.

Contributions should not exceed 25 minute presentations, in order to provide ample space for discussion and commentaries. Participants wishing to present a paper should send a 200 word abstract to [labhist7@arts.kuleuven.be](mailto:labhist7@arts.kuleuven.be) before **15 January 2011**. Acceptance of the papers will be announced in early February.

For further information, please contact Prof. Geert Vanpaemel or Eline Van Assche at [labhist7@arts.kuleuven.be](mailto:labhist7@arts.kuleuven.be).

7–9  
September  
2011

**Society of Glass Technology Annual Conference**  
*Lady Margaret Hall, Oxford*

The Society of Glass Technology will hold its annual conference at Lady Margaret Hall, University of Oxford from 7–9 September 2011. The conference will include a History and Heritage Session dedicated to the History of Glass, its chemistry, and its manufacture. Further details are available at the Society's website: <http://www.Oxford2011.sgthome.co.uk/>

We are currently organizing a panel concerning the history of glass, composed of Vera Keller (University of Oregon), Anna Marie Roos (University of Oxford), and Dedo von Kerssenbrock-Krosigk (Museum Kunst Palast, Dusseldorf). We are seeking another panellist to give a 20-minute paper. If interested, please contact Anna Marie Roos at [anna.roos@history.ox.ac.uk](mailto:anna.roos@history.ox.ac.uk).

16–18  
September  
2011

**The 8th International Conference on History of Chemistry (8th ICHC):  
'Pathways of Knowledge'**  
*University of Rostock*

Preliminary Call for Papers: provisional deadline **4 February 2011**.

In September 2011, the 8th International History of Chemistry Conference will be held at Rostock, Germany. A former member of the Hanseatic League, Rostock is a major seaport in the Baltic, and it has seen the movement of people, goods and ideas over the centuries.

Reflecting the spirit of its location, the theme of the conference is 'Pathways of Knowledge': how chemistry has travelled north to Scandinavia and south into central Europe, east to Russia and west to the Atlantic nations and the Americas. And of course, the reverse movements, and the transfer of chemistry further afield. There is also the specific issue of the European periphery, the transfer of new chemical ideas to the edges of Europe. How did this movement take place? It compasses the movement of chemists between countries both in terms of travelling to visit other chemists, chemistry students travelling to other countries for a better education, and both voluntary and 'forced' emigration (to escape oppressive regimes or expulsion). It involves the transfer of ideas through letters, lectures, monographs, papers and textbooks. In more recent times, it includes electronic transfers of ideas via e-mail and the internet. It embraces technology transfer in the chemical and pharmaceutical industries including the role of patents in both promoting and hindering transfer. It considers the movement of chemicals, chemical instrumentation and processes between countries. It covers international conferences, exchanges between national organisations (scientific academies and chemical societies) and the development of international organisations. Then there is role of language – were languages a barrier to these movements, were some languages particularly associated with chemistry, did the act of translation change the meaning? While the delineation of the processes whereby these exchanges of people and ideas took place is of considerable interest, the conference will focus on how these transfers changed chemistry and assisted its development.

The Programme Committee welcomes proposals for individual papers of twenty minutes duration or sessions (chair and 3 or 4 papers) from historians and chemists, graduate students and independent researchers. Each participant can submit only one proposal. Both paper and poster sessions are planned. The proposals submitted will be considered by the committee for both types of sessions as appropriate. Proposals for individual papers must include a one-page summary (maximum 500 words) outlining both the content and the argument of the proposed paper, and a one-page CV, including current postal and e-mail addresses. Proposals for complete sessions must include a description of the session that explains how individual papers contribute to an overall theme (maximum 400 words), the names and paper titles of the presenters. Each presenter in the session should also submit a one-page summary (maximum 500 words) outlining both the content and the argument of the proposed paper, and the chair and each presenter a one-page CV, with postal and e-mail addresses.

All proposals should be submitted by e-mail to the Chair of the Programme Committee, Dr Peter Morris. All proposals must be single-spaced, left-aligned (including the title) and in Times New Roman, font size 12 points. The margins of the A4 page should be 30 mm (1.2 inches) all round. The title should be all caps and in bold, followed by a blank line by the speakers' names and their affiliation, and their e-mail addresses in round brackets, and after another blank line by the summary. Paragraphs should not be indented but separated by blank lines. Pictures must not be used. Equations and graphics should be avoided but if used should be inserted into the main text. References should

be avoided, but if used should be in 11 point font in Chicago Manual style (see, for example, the *Ambix* webpage for details).

For further details please contact Peter Morris: [peter.morris@nmsi.ac.uk](mailto:peter.morris@nmsi.ac.uk).

21 Sept.  
2011

**Second SHAC Postgraduate Workshop on the History of Alchemy and Chemistry: 'The material culture of chemistry'**

*Department of History and Philosophy of Science, Free School Lane,  
Cambridge CB2 3RH*

Full details in section 4.1, below.

22–24  
September  
2011

**'Alchemy and Medicine from Antiquity to the Enlightenment'**

*CRASSH and the Department of History and Philosophy of Science, University  
of Cambridge*

Alchemists pursued many goals, from the transmutation of metals to the preservation of health and life. These pursuits were continually informed and modified by medical knowledge, while alchemical debates about nature, generation, and the achievability of perfection in turn impacted on medicine and natural philosophy. Alchemical texts circulated in print and manuscript; in courts, in households, and in the marketplace, both reflecting and contributing to debates about the body and the natural world. Alchemy was studied by physicians, clerics, natural philosophers, merchants, artisans, and aristocrats; some drawn toward theoretical speculation, others towards empirical practice.

This three-day international conference, held at Peterhouse, Cambridge, will investigate these interactions, from alchemy's development in late antiquity to its decline throughout the eighteenth century. It will ask how alchemical and medical ideas changed over time, how they reflected the experience of individual readers and practitioners, and the extent to which they responded to significant currents in intellectual, political, religious, and social life. Participants will be encouraged to consider alchemical and medical texts, images, objects, practices and practitioners over different periods and from a range of perspectives, including such key interdisciplinary themes as the relationship between court and city, print and manuscript, and theoretical and practical knowledge.

Confirmed speakers include: Chiara Crisciani (Pavia), Andrew Cunningham (Cambridge), Hiro Hirai (Nijmegen), Didier Kahn (Paris), Bruce T. Moran (Nevada), William R. Newman (Indiana), Michela Pereira (Siena), Lawrence M. Principe (Baltimore), Nancy Siraisi (New York), and Emma Spary (Cambridge).

Proposals for 20–30 minute papers are welcomed. The participation of postgraduate students and junior researchers is particularly encouraged. Topics might include, but are not limited, to:

- Transmission of alchemical and medical knowledge
- Elixirs and the prolongation of life
- Paracelsus, Van Helmont and their followers
- Shared ingredients, methods and apparatus
- Medical practitioners as alchemists
- Use of medical concepts in alchemy (and vice versa)
- Medicine, alchemy and patronage
- Iatrochemistry vs. medical orthodoxy

- Charlatanry and fraud
- Books, recipes, and secrets

Abstracts of 200–300 words, accompanied by a one-page CV, should be sent to Jennifer Rampling ([jmr82@cam.ac.uk](mailto:jmr82@cam.ac.uk)) by **31 March 2011**.

Organised by Jennifer Rampling, Peter M. Jones and Lauren Kassell (Department of History and Philosophy of Science, Cambridge), and supported by the Centre for Research in the Arts, Humanities, and Social Sciences (CRASSH).

27–29 April 2012 **‘Hazardous Chemicals: Agents of Risk and Change (1800–2000)’**  
*Kerschensteiner Kolleg, Deutsches Museum, Munich, Germany*

The Research Institute of the Deutsches Museum, the Department of History at Maastricht University and the Rachel Carson Center for Environment and Society are planning a joint workshop on the history of hazardous chemicals.

Chemistry is undoubtedly a science with a great social and economic impact. During the past two centuries millions of new substances have been described, and thousands of them have become novel industrial products. In several cases the scale of production, together with by-products and wastes, has led to previously unknown effects on human health and on the environment. Growing awareness of the impacts of hazardous substances on the economy, society and the environment has stimulated new scientific insights, discussion of risk perception, and new legislation. Advances in analysis and detection of chemicals have played a large role in this respect. Since the 1960s, industrialized countries have adopted a framework for assessing and regulating toxic chemicals that remains in force today. By this means attempts have been made, with varying degrees of success, to control individual pollutants using scientific and technical tools, including risk assessment, toxicological testing, epidemiological investigations, pollution control devices, trace measurements, and waste treatment and disposal technologies.

The present workshop will focus on the interaction between (a) the growing presence of hazardous substances in the economy and the environment, and (b) the cultural, scientific, regulatory and legal responses by modern society to these hazards. In each paper a specific chemical, or group of related chemicals, will take centre stage: from the start of its industrial production, via the proliferation of its uses, and the discovery of its effects on workers, consumers and/or on the biosphere, to attempts to control its emission and use, including the development of alternative products. The workshop will focus in particular on the history of specific chemicals which have had a profound impact on the way in which ecological and health effects have been perceived. Using a ‘biographical approach’ it will trace the entire ‘life history’ (production, use, problems, risk assessment, management strategies, and disposal) of those hazardous substances, culminating at the point at which legislative controls or alternative technical pathways were finally established. The focus will be on the main period of chemical industrialisation (ca. 1800–2000). The conference language will be English.

Papers with a global, international or national outlook are preferred to regional or local studies. Since the approach to this topic is interdisciplinary, chemists, toxicologists, historians of science and medicine, environmental historians, sociologists and scholars, active in environmental organisations, etc., are all

invited to participate and to contribute a paper. Papers that satisfy the final reviewing procedure will be published in a volume with the working title *Hazardous chemicals: Agents of risk and change (1800–2000)*. The Rachel Carson Center will cover the travel cost and accommodation expenses for all participants invited to deliver a paper. Further details are available at the STEP website, <http://147.156.155.104/?q=node/81>.

An abstract of the proposed paper, of approximately 600–800 words, as well as a CV, should be sent to the three organizers of the workshop: Ernst Homburg ([e.homburg@maastrichtuniversity.nl](mailto:e.homburg@maastrichtuniversity.nl)), Elisabeth Vaupel ([e.vaupel@deutsches-museum.de](mailto:e.vaupel@deutsches-museum.de)) and Paul Erker ([Paul.Erker@carsoncenter.lmu.de](mailto:Paul.Erker@carsoncenter.lmu.de)) before **1 July 2011**. Papers will be pre-circulated and should be received no later than 1 February 2012.

## 3. Prizes, grants, fellowships

### 3.1 SHAC grants and prizes

#### The Partington Prize 2011

Deadline for entries: **31 December 2010**

The Society for the History of Alchemy and Chemistry has established the Partington Prize in memory of Professor James Riddick Partington, the Society's first Chairman. It is awarded every three years for an original and unpublished essay on any aspect of the history of alchemy or chemistry. The prize consists of five hundred pounds (£500).

The competition is open to anyone with a scholarly interest in the history of alchemy or chemistry who, by the closing date of 31 December 2010 has not reached 35 years of age, or if older has completed a doctoral thesis in the history of science within the previous three years. Scholars from any country may enter the competition, but entries must be submitted in English and must not have been previously submitted to another journal. The prize-winning essay will be published in the Society's journal, *Ambix*. One hard copy of the entry, word processed on one side of the paper, should be submitted, along with a copy of the entry on disc. We prefer files to be in Microsoft Word XP, if possible. Essays must be fully documented using the conventions used in the current issue of *Ambix*. Essays must not exceed 10,000 words in length, including references and footnotes. All entries must be submitted with a word count.

All entries should be sent to John Perkins, Hon. Treasurer, Centre for Health, Medicine and Society, Oxford Brookes University, Gipsy Lane, Headington, Oxford OX3 0BP, with the words 'Partington Prize' written clearly on the envelope. Each entry should contain a **separate** title page giving the author's name, institution, postal address, e-mail address and date of birth (and if relevant the date of completion of their thesis). The author's name and contact details **must not** appear on the pages of the essay as the identity of the author will not be made available to the judges. Essays (no more than one from each competitor) must be received no later than 31 December 2010.

The decision of the judges appointed by the Council will be final. The Society reserves the right to divide the prize between two or more entries of equal merit, or not to award a prize should no essay be deemed of suitable standard.

The name of the winner will be announced by 30 April 2011, and all essays will be returned to competitors soon after that date.

### **Society for the History of Alchemy and Chemistry Award Scheme 2010**

Three Subject Development Awards were made in 2010. These were awarded to:

Hasok Chang (University of Cambridge/UCL)

Support to expand AD HOC, the history of chemistry reading group, to include parallel series of meetings in Cambridge and London. The award includes travel bursaries for student members who wish to attend meetings at both sites.

Peter Forshaw (University of Amsterdam)

Support for hosting an ESSWE thesis workshop in Amsterdam: 'Alchemy: between science and religion'.

Leslie Tomory (independent scholar)

'Progressive enlightenment: the origins of the gaslight industry, 1780–1820': support towards the cost of image reproductions for his forthcoming book.

### **Society for the History of Alchemy and Chemistry Award Scheme 2011**

#### **Award Scheme**

Two types of award are available: support for research into the history of chemistry or history of alchemy by New Scholars and support for Subject Development of either history of chemistry or history of alchemy.

The **New Scholars** Award is open to postgraduate students (both masters and doctoral students) and those who have obtained a PhD within five years of 1 January of the year in which the application is made. Awards will cover research expenses, including travel, accommodation, subsistence, the reproduction of documents, and library fees. In addition, post-graduate students may apply for the costs of travel to conferences and accommodation, but only in order to give a paper.

**Subject Development** awards will be made to support activities including, but not limited to, seminars, workshops, colloquia, lecture series, conference sessions, conferences, exhibitions and outreach activities that support either the history of chemistry or history of alchemy as academic subjects.

The Award Scheme is competitive and is open to all members of the Society, both in the UK and abroad. Awards do not have to be held in the UK. Applications can be made from 1 March of each year, with a closing date of 31 May. Application forms will be available from February 2011. Please contact the Hon. Secretary, Georgette Taylor ([g.taylor@ucl.ac.uk](mailto:g.taylor@ucl.ac.uk)) for further information.

#### **Development Fund**

In addition to the Award Scheme, support may be available on an ad hoc basis for events which further the history of chemistry or history of alchemy. Enquiries should be made to [g.taylor@ucl.ac.uk](mailto:g.taylor@ucl.ac.uk).

## 3.2 Other prizes, grants and fellowships

### 2010 Liebig-Wöhler-Freundschaft-Preis

The 2010 Liebig-Wöhler-Freundschaft-Preis, awarded by the Göttinger Chemische Gesellschaft in association with the Wilhelm Lewicki Stiftung, has been presented to Horst Remane, Professor of the History of Science at the Martin-Luther-Universität Halle-Wittenberg in Leipzig, for his many contributions to the history of chemistry over the last thirty years. He is probably best known to British historians for his papers on the history of chemical education, Emil Fischer and other organic chemists, and for the beautifully illustrated book on scientific postage stamps that he compiled with Hans Wussing, *Wissenschaftsgeschichte en miniature* (Berlin, 1989).

### 2011 Edelstein Award

As the result of changes in funding, the Edelstein Award of the History Division (HIST) of the American Chemical Society will not be awarded in 2010. From 2011 the Award will be sponsored by Vera Mainz, Gregory Girolami, and the Chemical Heritage Foundation, and will be renamed The HIST Award for Outstanding Achievement in the History of Chemistry, established by Sidney M. Edelstein, with support from Vera Mainz and Gregory Girolami and the Chemical Heritage Foundation. Details of nominations for the 2011 Award will be available shortly on the HIST website,

### Long and short term fellowships, Chemical Heritage Foundation, Philadelphia

The Chemical Heritage Foundation (CHF), an independent research centre and library in Philadelphia, Pennsylvania, USA, would like to encourage applications for long-term and short-term fellowships in residence at CHF for the academic year 2011–12. These fellowships are for scholars working in some area of the history of science, technology, medicine, or industry in all periods and geographical areas. We offer 9 Month Postdoctoral Fellowships of \$43,000 (+\$2,000 research & travel allowance); 9 Month Dissertation Fellowships of \$25,000 (+\$1,000 research and travel allowance); and Short-Term (2–4 month) Fellowships of \$3,000 per month.

The research collections at CHF, where the chosen fellows will be in residence throughout their fellowship period, range from the fifteenth century to the present and include approximately 10,000 rare book volumes, significant archival holdings, thousands of images, and a large artefact and fine arts collection, supported by over 100,000 reference volumes, monographs, and journals. The collections include many areas of particular strength, including alchemy, mining and metallurgy, dyeing and bleaching, balneology, gunpowder and pyrotechnics, gas-lighting, books of secrets, inorganic and organic chemistry, biochemistry, food chemistry, and pharmaceuticals. Short term fellows are encouraged to demonstrate the relevance of the CHF library collections to their research. Recipients of all fellowships are expected to participate in and make a contribution to CHF's intellectual life.

The deadline for applications, to be completed online, is **15 February 2011**. Fellows will be selected by a peer review selection committee. For further information, please see: <http://www.chemheritage.org/research/fellowships-and-travel-grants/beckman-center-fellowships>, or e-mail: [fellowships@chemheritage.org](mailto:fellowships@chemheritage.org).

## Travel grants, Chemical Heritage Foundation, Philadelphia

The Beckman Center for the History of Chemistry at CHF offers grants to cover travel and accommodation expenses for researchers who wish to use its collections for short-term research (periods of up to one month) on the history of the chemical and molecular sciences. Travel grant recipients have access to the collections of the Othmer Library and are encouraged to use CHF's oral history materials and its collection of art, artefacts, archives, and images. Travel grants are \$750 per week and are intended to help defray the costs of travel and accommodation.

Travel grant applicants must reside more than 75 miles from Philadelphia to be eligible. No more than one travel grant per person per fiscal year (1 July to 30 June) can be awarded. Grants must be taken within one year of the award or the grantee must request an extension or reapply.

There is no deadline for travel grant applications. Applications can be submitted at any time and are assessed by an internal CHF review committee. A travel grant application must contain:

- A research proposal that also details how the applicant will make use of CHF's collections (one page)
- A curriculum vitae (up to three pages)
- One reference letter (applicants are responsible for references submitting letters directly to CHF via the e-mail address below)

Travel grant applications must be submitted electronically, as Word or PDF files, to: [travelgrants@chemheritage.org](mailto:travelgrants@chemheritage.org).

## 4. SHAC Graduate Network

The SHAC Graduate Network aims to stimulate research into the history of alchemy and chemistry worldwide, by providing research training, grants and networking opportunities for postgraduate students and postdoctoral researchers working in these fields. As part of this scheme, postgraduates and early career researchers are eligible to apply for grants towards the cost of research (the **New Scholars** Award, section 3.1 above). The Society also organises an annual workshop for students and junior scholars, focusing on methods, sources and approaches in the history of alchemy and chemistry (see below for details of the 2011 event).

### New SHAC student representative

From November 2010, Stephanie Seavers takes over from Jenny Rampling as student representative on the Council of SHAC, and coordinator of the SHAC Graduate Network. She writes:

"I am a postgraduate student in the history department at University College London, researching metallurgy, alchemy and the art-nature debate in the Middle Ages. Though I am a recent convert to the history of alchemy and chemistry, I have taken a keen interest since commencement of my PhD, and have recently taken over from Rosie Coates as membership coordinator for the AD HOC reading group for the History of Chemistry. As student representative I hope to continue Jenny's excellent work in fostering communication among students and early career researchers. In particular, I'd like to encourage more students to make full use of the funding opportunities available through SHAC."

If you have any questions about the Graduate Network, and the opportunities available for students and early career researchers interested in the history of alchemy and chemistry, please contact Stephanie at [stephanie.seavers.09@ucl.ac.uk](mailto:stephanie.seavers.09@ucl.ac.uk).

#### 4.1 Graduate Network events

16–18  
September  
2011      **8th International Conference on History of Chemistry (8th ICHC):  
'Pathways of Knowledge'**  
*University of Rostock*

Advance notice: SHAC will offer five bursaries, each of £100, to postgraduate students who are attending the 8ICHC in Rostock, Germany, in order to present a paper. Applications for bursaries can be made once the Call for Papers has closed (see section 2 above). Further details will be available in the May 2011 issue of *Chemical Intelligence*.

21 Sept.  
2011      **2nd SHAC Postgraduate Workshop on the History of Alchemy and  
Chemistry**  
*Department of History and Philosophy of Science, Free School Lane,  
Cambridge CB2 3RH*

##### **Call for papers: 'The material culture of chemistry'**

The SHAC Graduate Network organises an international workshop every year to provide training on research skills and methodology for graduate students and early career researchers, and to showcase their work. The 2011 workshop investigates 'The material culture of chemistry'. The day will include a session on historical replication of experiments, and the opportunity to examine primary sources in King's College Library, including some of Isaac Newton's chemical manuscripts.

Proposals are also sought for a panel of 15-minute presentations on topics related to the material culture of chemistry in any historical period. Abstracts of c. 200 words should be sent by e-mail to Jennifer Rampling ([jmr82@cam.ac.uk](mailto:jmr82@cam.ac.uk)) by **1 June 2011**. Presenters should be current postgraduate students or junior researchers (within 3 years of completion of the PhD).

The workshop is free of charge, and bursaries are available towards the cost of travel and accommodation. Further details will be available in the May 2011 issue of *Chemical Intelligence*.

The workshop immediately precedes the international conference *Alchemy and Medicine from Antiquity to the Enlightenment* (22–24 September 2011). Workshop participants are encouraged to stay in Cambridge for the conference, and to submit abstracts for conference presentations (see Call for Papers above).

#### 4.2 Other graduate events

13–14  
January  
2011      **'Theories and Methods: Literature, Science and Medicine'**  
*University of Manchester and University of Salford, Manchester*

The AHRC has funded a two-year doctoral training programme to teach the 'Theories and Methods' of projects that connect literature, science and

medicine. The application form and programme for the fourth event programme has now gone online at <http://www.litscimed.org.uk/page/event4>. The first day will cover 'The Philosophy and Sociology of Science', while the second will concentrate on 'Poetry and Science'. The teaching team includes: Hasok Chang (Cambridge), John Holmes (Reading), Sharon Ruston (Salford), James Sumner (Manchester), Stephanie Snow (Manchester), and Michael Whitworth (Merton College, Oxford).

Day 1 – University of Manchester, Centre for the History of Science, Technology and Medicine. Lectures, workshops, and seminar discussion of key theorists in the philosophy and sociology of science, such as Kuhn, Popper, and Feyerband.

Day 2 – University of Salford. Lectures, seminars, and group work on poetry written by scientists and poetry informed by science from the eighteenth to the twenty-first centuries.

Application forms must be submitted by **1 December 2010** and we aim to let the successful applicants know they have a place by 8 December 2010. There are only 20 places. Accommodation and food will be provided for all students at this event and there will be bursaries for travel.

## 5. Reports

### 5.1 SHAC events

**9 June 2010:**

**Journée d'étude sur la chimie et l'alchimie au XVII<sup>e</sup> siècle  
(Colloquium on seventeenth-century chemistry and alchemy)**

On Wednesday 9 June, The Society for the History of Alchemy and Chemistry held a meeting at Université de Lille 3, Villeneuve d'Ascq, Lille. The event marked the second leg of a two-part, collaborative colloquium organised by SHAC and UMR 'Savoirs, Textes, Langage' (CNRS, universités de Lille 3 et de Lille 1). At the first meeting, held in June 2009, scholars from Lille visited London to present their work on 'Chymistry and Mechanism in the Seventeenth and Eighteenth Centuries'. In June 2010, five British and American scholars visited Lille to give papers on 'Seventeenth-Century Chemistry and Alchemy'.

The first paper was given by Jennifer Rampling (University of Cambridge/Scaliger Instituut, Universiteit Leiden), entitled "'Which masters call sericon": the evolution of an alchemical practice, 1471–1678'. Dr Rampling traced the history of a mysterious alchemical substance, 'sericon', in order to examine one problem faced by historians of alchemy – the difficulty of isolating and tracking changes in alchemical ideas, practices and nomenclature over time. Sericon is named as the main ingredient in several fifteenth-century English recipes for the 'vegetable stone', an alchemical product capable of preserving and restoring health, and (following further procedures) able to transmute metals. However, both the identity of sericon, and the alchemical practice it represented, were reinterpreted between the fifteenth and seventeenth centuries. In the *Medulla alchimiae* (1476) of George Ripley, and other works of the same period, sericon denotes red lead, which is dissolved in wine vinegar. Throughout the sixteenth century, 'sericonian' alchemy continued to be read as a process using lead and vinegar. However, competing interpretations also

evolved, as early modern readers, struggling with the precise nature of 'sericon', tried other readings: verdigris, minium of copper, or – most commonly – antimony.

The shift is apparent in two interpretations of the same alchemical poem, the *Vision of George Ripley*. The first, made in 1577 by Samuel Norton, gives a standard sericonian reading using red lead and vinegar. The second, made in the 1650s by the Bemuda-born alchemist George Starkey, interprets the process very differently. Rather than a recipe for the vegetable stone, Starkey describes a mineral elixir, made using antimony and used for transmutation. Dr Rampling argued that such textual transmutations reveal the attempts of later practitioners to make practical sense of authoritative sources. Over time, the original practice of sericonian alchemy was eclipsed by other methods and materials. This eclipse is one reason why we find few traces in modern scholarship of either sericon or the vegetable stone.

Next, Peter Forshaw (Universeit van Amsterdam) introduced the complexities of 'Early modern alchemy and cabala'. From the late fifteenth century, a Christianized version of Cabala circulated in Europe through the works of Giovanni Pico della Mirandola and Johannes Reuchlin. This approach was taken up by a number of alchemical writers during the sixteenth and seventeenth centuries, who were interested in its value as an exegetical technique. Whereas Christian interpreters sought to discover additional layers of meaning in scripture, leaving the text itself intact, Jewish Kabbalists transformed the written text by breaking it down into its component parts, then recombining the Hebrew letters (or even parts of letters) according to established methods. For alchemists, these techniques offered a new approach to decoding impenetrable alchemical texts. Indeed, the breaking down and reconstitution of language was seen as analogous to the alchemical reduction and recombination of elements and qualities. Several works attributed to Paracelsus praise Cabala (or 'Gabala') as a key to understanding alchemy, perhaps in response to the supposed Mosaic basis of Cabala, which invested the system with a scriptural authority lacking in the 'pagan' works of Aristotle and Galen. Dr Forshaw explained how alchemical writers, including Bernard Georges Penot and Heinrich Khunrath, employed *Gematria*: a Cabalistic exegetical technique whereby the numeric values assigned to each Hebrew letter are manipulated in order to imbue words, and even whole texts, with numerical significance. Such letter-play assigned complex levels of meaning to alchemical terms, such as 'Azoth' and 'Elixir'. However, such usage was attacked by the great critic of alchemy, Thomas Erastus, who held Cabalistic techniques to be appropriate for interpreting scripture, but diabolical in Paracelsian chemistry.

Dr Forshaw argued that the source for many other writers was the Venetian Giovanni Agostino Pantheo, or Pantheus. Pantheus attempted to distinguish various types of metallic transmutation, employing Cabalistic-style techniques to create a 'higher' manifestation of alchemy, outlined in his *Voarchadumia* (1530). Pantheus' works were admired by many later practitioners, including John Dee, Khunrath, Oswald Croll, and Michael Maier. However, Dr Forshaw noted that there is little support for Cabala being employed in 'spiritual alchemy'. More often, cabalistic techniques were used for calculating the values of alchemical terms and various quantitative aspects of practice (weights, relative proportions, even dimensions of apparatus); for establishing a philological basis for practical processes; for decoding and encoding terms; and even composing Cabalistic enigmas to tease readers.

The final paper of the morning session was delivered by Stephen Clucas (Birkbeck, University of London), on 'Margaret Cavendish's materialist critique of Van Helmont'. Although the chymical philosophy of Jan Baptista van Helmont attracted both support and criticism throughout the seventeenth century, the critique of Margaret Cavendish,

Duchess of Newcastle, has been little studied. Her engagement with Van Helmont takes place in the *Philosophical Letters* (1664), a work in which Cavendish appears to shore up her own, rather suspect philosophical orthodoxy by attacking the “presumption” of other contemporary philosophers. Dr Clucas argued that Cavendish’s critique of Van Helmont was therefore strategically useful: through Van Helmont she was able to attack both opponents of her own materialist position, and a figure associated with the Puritan movement. Her comments can be usefully compared with those of Robert Boyle. Like Boyle, she criticised Van Helmont’s “strange terms and unusual expressions” as impediments to clear understanding, and disliked his theory of active chemical principles (such as “Gas” and “Archeus”) which lacked corporeal substance. Such immaterial principles were unnecessary in Cavendish’s vitalist conception of an animate, yet material, nature, while for Boyle they could be replaced by corpuscular parts. However, Boyle and Cavendish differed over Van Helmont’s view that chymistry could create new substances. While Boyle accepted this possibility, Cavendish did not. In her view, actions of art differed from actions of nature: the productions of art were therefore both different and inferior.

Although Cavendish’s own natural philosophical account of an animate, eternal matter was theologically unorthodox, she also criticised Van Helmont’s chymical principles as potentially blasphemous. For instance, his belief that voids could be created from and reduced to nothing seemed to challenge God’s creation of the world *ex nihilo*. Cavendish contrasted Van Helmont’s interpretations of scripture with her own religious orthodoxy, as distinct from the “philosophical liberty” she enjoyed when writing on natural philosophy. In distinguishing between theology and natural philosophy (a distinction which Van Helmont transgressed), Cavendish therefore sought the freedom to be both “a good Christian, and a good Natural Philosopher.” Dr Clucas argued that her critique should therefore be seen as part of a wider polemical project, positioned in a period, following the Restoration, when religious orthodoxy was at a premium.

After lunch, Anna Maria Roos (University of Oxford) gave a paper titled ‘Chemical mechanisms of fossilization in the Royal Society’. In the late seventeenth century, the origins of fossils were discussed by members of the Royal Society, including Robert Plot and Martin Lister. These men argued that forms similar to living beings could be created within rock by the generative power of nature, without any organic origin – for instance, by the existence of mineral-generating ‘seeds’ within the atmosphere.

Dr Roos suggested that these seminal theories were derived from earlier theories of saline chemistry developed by Jan Baptista Van Helmont, for whom salts provided the formative principle of materials. Several influential French chemists, including Joseph Duchesne, had posited the existence of a universal, formative salt responsible for generating minerals. Opinions varied as to this salt’s identity, contenders including nitre, sal ammoniac, and, above all, vitriol derived from pyrites. Lister noticed that pyrites was present in Yorkshire limestone, and in the fossils of that region, and speculated whether pyrites might therefore provide the germinating seed of the ‘formed stones’. In Lister’s theory, volatile salts, generated from pyrites, interacted in the air with intermediary substances (neighbouring minerals, or plant and animal remains), sometimes taking on the form of animals or plants. This theory contradicted that of Van Helmont, who had argued for a water-based formation of minerals. However, Lister’s friend Robert Plot was more receptive to Van Helmont’s theory, suggesting that ‘formed stones’ might grow from salt-containing mineral seeds in either water, earth or air, possibly aided by astrological influences. Different salts engendered different forms: thus the spiral shape of an ammonite might result from the interaction of two salts growing in different directions. Dr Roos concluded by noting that, although both Lister and Plot believed that fossils had mineral rather

than organic origin, their differing attitudes towards Helmontian saline theories reveal both the complexity of this issue, and the importance of salt in seventeenth-century theories of the generation and transformation of minerals.

Lawrence Principe (Johns Hopkins University, Baltimore) concluded the meeting with a paper titled, 'Turning Experiments into Theories: The Evolution of Wilhelm Homberg's *Essais de chimie*'. The major work of Wilhelm Homberg, chief chymist of the Académie Royale des Sciences around 1700, is his influential chemistry course, the *Essais de chimie*. By studying versions of the *Essais* prepared at different times, scholars can gain insight into how Homberg's theoretical views suggested, and were modified by, programmes of experiment. Professor Principe discussed four versions of the *Essais*. The best known is that published in the *Mémoires de l'Académie Royale des Sciences* between 1702 and 1709. However, the manuscript transcript of Homberg's original presentation to the Académie shows the extent to which Homberg's views changed before publication: changes which, Professor Principe argued, are related to the experiments Homberg carried out after his presentation, from 1702 onwards. Two more versions were uncovered by Professor Principe in a St Petersburg archive: one, the final, unpublished version of the *Essais*, written towards the end of Homberg's life; the second, an earlier version which Professor Principe dated to around 1694 or 1695.

In the early version, Homberg describes four chymical principles of animal and vegetable substances: oil, salt, earth, and water, plus another three for minerals: the Paracelsian 'tria prima' of mercury, salt, and sulphur. Of these, Homberg seems to have considered salt to be the most important, and many of his experiments in the late 1690s involve analysis of various salts – probably influenced by Van Helmont. However, by 1699 he had concluded that volatile salts could not be reduced into water, and subsequently moved away from his earlier, Helmontian approach. In his 1702 account, oil has been removed as a principle of animal and vegetable substances, Homberg concluding on the basis of his analyses that oils were in fact composed of salty, earthy and watery parts. He therefore replaced salt with sulphur as the only activating principle in matter, probably as the result of experiments held between 1702 and 1704. Homberg seems to have started investigating the sulphur principle after noticing that a gigantic burning lens, purchased by his patron, the Duc d'Orléans, turned white metals gold. In 1705, Homberg declared that the active sulphur principle in its free state was light itself, which could be manipulated chemically using the burning lens. In the final version of the *Essais*, sulphur dominates as the only active principle, and Homberg has also added another passive principle, air. By identifying the sulphur principle as light, and adding air, Homberg therefore included within chymistry subjects usually viewed as part of physics: pneumatics, optics, and acoustics.

Jennifer Rampling

**9–11 July 2010:**

**International workshop: 'On the Fringes of Alchemy'  
(Central European University, Budapest)**

This international workshop consisted of six sessions, each focusing on a particular period or disciplinary question in the history of alchemy.

The first session was dedicated to medieval alchemy, and, in particular, the interactions between alchemy and various religious traditions, including Christianity and Islam. The opening paper was delivered by the Danish scholar Aksel Haaning from Roskilde. He gave a summary of the various meanings gold assumed in religious

contexts, how gold came to signify 'spiritual gold,' and, in an abstract sense, God Himself, in the understanding of some late medieval authors. Haaning argued that alchemy became the key to the spiritual understanding of the Bible, and that the concept of Nature also changed through the influence of alchemical writings. Nature could be read just like the Bible, and it could even illuminate. Next, Graziana Ciola, a doctoral candidate from Pavia University, gave a paper on one of the most important alchemical authors, the Franciscan Johannes de Rupescissa. Through his example, Ciola emphasised the link between alchemy and prophecy, and showed how Rupescissa's was the first systematic attempt to bring these two, apparently unrelated fields, together. The Franciscan believed alchemy to be a weapon against the infidel, giving it a fairly novel understanding. The Antichrist was understood by him as another kind of plague which needed a potent drug to fight it, to keep the just, the 'chosen ones' alive, while allowing the infidel to die. Finally, the Arabist Gabriele Ferrario, a research fellow from Cambridge, analyzed in detail the alchemical poem by Ibn Arfa' Ra, an eleventh-century Arabic author who set out to achieve nothing less than the description of all existing things, including the bodies (metals) and spirits (volatile ingredients), all crucial in alchemical operations.

Session Two was dedicated to the connections between alchemy, art, medicine, and material culture. The first paper in this session was presented by the archaeologist Ana-Maria Gruia who studied a series of peculiar stove tiles from East-Central Europe. These tiles were almost exclusively excavated at sites of monasteries, such as Klasterisko in today's Slovakia, and occasionally from the remains of private habitations, such as the house of the goldsmith in Targu Trotus, Moldavia. The symbolism of these tiles is often ambiguous and Gruia concluded that it was almost impossible to say with certainty whether they really represented alchemical symbols and operations. The art historian Berit Wagner from Frankfurt next focused on the *Kunstammer* of Rubeus from Antwerp, an admirer of Paracelsus who was well informed about Rosicrucian activity in his city. He claimed to have found the philosophers' stone in his brush and paint. The last paper in this session was given by Ilona Fekete, a doctoral candidate at Oxford/Budapest. She presented the main work of the Upper-Hungarian Johann David Ruland, the *Pharmacopoea Nova*, and the peculiar discipline of "filth pharmacy." Ruland was a close relative of the two Martin Rulands, father and son, whose alchemical dictionary is well known to scholars of alchemy. D. Ruland's professor at university was none else that the famous physician, Daniel Sennert, and both believed that precious medical ingredients could be derived from human waste.

Session Three began with the paper of Jennifer Rampling, postdoctoral research fellow at Cambridge University. She argued that it was John Dee and his odd companion, Edward Kelley, who introduced certain works of George Ripley, the English alchemist, to Central European readers. In the course of their travels, accompanied by part of Dee's enormous library, they enjoyed the hospitality and acquaintance of various local aristocrats and intellectuals. Rampling showed that the influence of Kelley seems to have convinced Nicolaus Maius to translate Ripley (whom Dee even mentioned in his diary) into Latin. The second speaker in this session, Hermann Stockinger from Vienna, analyzed the library catalogues of the monastery of Schlierbach in Upper Austria. On the basis of their holdings of roughly 45,000 books, a third of which date from the seventeenth century, Stockinger concluded that despite prohibitions from their superiors, the monks there were very much interested in, and perhaps even practiced, alchemy. The last speaker on the first day of the workshop, Émilie Granjon from Belgium/Canada, spoke about the *Physicae et theologiae conclusiones* of Otto Vaenius (1621). Through her analysis of this text, Granjon showed how Vaenius' way of expression is permeated by Paracelsian vocabulary. Again, this paper provided good example of the flexibility of disciplinary

borders, since this particular author linked alchemy to theology: throughout his work, Vaenius used alchemical terminology for Biblical exegesis.

Session Four on the second day of the workshop was dedicated to the interactions between alchemy and mining in early modern Central Europe. The first speaker, Rudolf Werner Soukup from Vienna, dealt with an interesting term, the 'Mercurius Solis', often encountered in early modern texts, yet without being clearly defined. Among the many meanings, one of the most probable is as a description of the metallic essence of all metals. The second paper was presented by John Norris, an independent scholar from Prague/Luxembourg, who provided a brief survey of 'Hungarian vitriol', an ingredient widely praised by early modern alchemical authors. Norris identified this Hungarian vitriol with green and blue vitriol derived from the mining regions of Upper Hungary (Selmezbánya, Körmöcbánya) which were especially rich in copper. Their special colour and characteristics made them the stuff of legend in the sixteenth century, as Norris pointed out on the basis of his analysis of sixteenth- to eighteenth-century mining literature. The last speaker in this session was Dóra Bobory, organizer of the workshop, who presented some little known source materials: 'alchemical petitions' written by Italian experts to the Hofkammer of Austria. The petitioners claimed to be in possession of marvellous new methods for intensifying mining production, a major interest of sixteenth-century mine owners in the region. Bobory showed that the Italians almost never succeeded in obtaining the support and the fabulous dividends they aimed at, because their methods systematically failed the scrupulous tests the local mining experts exposed them to. They used alchemy to tickle the curiosity of potential commissioners and claimed secret knowledge that average mining experts did not possess.

Session Five was dedicated to Scandinavian alchemy. Susanna Akerman spoke of the possible connections of the Polish alchemist Sendivogius to Sweden. She proposed that the famous scholar may not only have visited Sweden, but he may also have influenced Queen Christina. The second paper was read by Christer Böke, an independent scholar from Stockholm who focused on a little known figure, Arnold Otto Paykull, a soldier of Latvian origin who was sentenced to death following a military failure. This seventeenth-century soldier claimed to know the secret of making gold, and left both a manuscript describing his process, and alchemical coins made to prove his expertise. Böke's contribution was particularly interesting because he set out to test the processes he found in contemporary recipes, seeking to identify the material used by Paykull and others.

The sixth and last session again explored the "peripheries" of alchemical interest in Europe, and concluded with the possible explanations of alchemy's fast decline in the eighteenth century. The first speaker, Rafał Prinke from Poland, gave us an exciting overview of alchemy in the Polish-Lithuanian Commonwealth. He showed that while there was little interest in alchemy in Russia before the eighteenth century, since Orthodox Christianity was more 'Platonic' oriented, there were numerous practitioners and theoreticians of the art in the region he focused on. He enlisted various instances from legal cases against alchemy to interesting individuals, some searching for the secret of the philosophers' stone, others patronizing the alchemical activities of John Dee and Edward Kelley. The final paper was delivered by Carl-Michael Edenborg from Sweden. He surveyed the reasons for the growing criticism against alchemy in the eighteenth century, and provided an interesting conclusion. He argued that alchemy was not criticized primarily on scientific grounds, but for the anti-social ambitions, anti-communicative practices, and anti-modern views of alchemical practitioners, and the view that they were a danger to society.

All the papers were followed by lively discussion, and the relatively small number of participants allowed for a familiar atmosphere where everyone's opinion could be heard and debated. The proportion of senior and junior scholars proved very fortunate, and instead of a clash of generations, all expressed a wish to cooperate and share their knowledge.

Dóra Bobory

### **23 July 2010:**

#### **'The practice of medieval and early modern alchemy' (BSHS Annual Conference, Aberdeen)**

SHAC sponsored a themed panel on 'The Practice of Alchemy in Medieval and Early Modern Europe' at the British Society for the History of Science Annual Meeting, held in Aberdeen. This interdisciplinary panel included four presentations, each considering a different aspect of medieval and early modern alchemical activity, and the challenge of reconstructing its practices from surviving evidence.

Jennifer Rampling (History and Philosophy of Science, Cambridge) began by introducing the problem of how to unearth practice from primarily textual sources, a difficulty faced not only by historians of science, medicine and technology, but also by the alchemists themselves. She explored some of the ways in which alchemical terminology changed over time, as successive readers attempted to reinterpret their encoded source materials in light of both practical experience and the close reading of texts. As a case study, she focused on fifteenth-century recipes using 'red lead', a term commonly interpreted as a code name for antimony ore by sixteenth-century practitioners. For instance, the *Vision* attributed to George Ripley was variously interpreted as an alchemico-medical recipe using red lead, and as an allegory for metallic transmutation using antimony.

The next two papers explored the operative dimensions of alchemy by focusing on its intersection with the related disciplines of metallurgy and medicine. Stephanie Seavers (History, UCL) spoke about the assaying techniques used to evaluate the outcomes of alchemical experiments. Medieval metalworkers knew that the external appearance of a metal could not always be relied upon, and therefore used assaying techniques as the only reliable method of establishing its composition. For alchemists, however, assay was necessary to show that transmuted gold was just as good as 'natural' metal. Stephanie argued that, by claiming to change the internal properties of metals as well as their external appearance, alchemists challenged medieval notions of authenticity, which relied on a distinction between nature and artifice.

Anke Timmermann (English Language, University of Glasgow) spoke about alchemy and medicine. Alchemy had many applications in medical diagnosis and therapy, yet the influence of Paracelsus on chemical medicine from the late sixteenth century tends to distract scholarly attention from earlier engagements with alchemical medicine, witnessed in hundreds of anonymous manuscripts from the fifteenth and sixteenth centuries. These manuscripts point to the "everyday adaptation" of alchemical texts for medical purposes, yet information about their scribes and readers is scarce. Historians of alchemy must therefore consider alternative approaches to biographical and institutional histories when assessing the use of alchemy in medical practice.

Finally, Marcos Martín-Torres (Archaeology, UCL) revisited the question of sources by considering material evidence for a range of chemical practices, revealed using archaeological techniques. Reviewing the findings of recent excavations of early

modern chemical laboratories, he sought to integrate these results with text-based studies (for instance, on early modern 'matter theories') by identifying common threads. Rather than focusing on alchemy simply as gold-making, Marcos discussed alchemy in relation to other important techniques, including the manufacture of brass (a 'new' metal which did not fit into existing schemes), and glass (a substance whose similarity to precious stones raised questions of authenticity). He argued that examination of such chemical activities, which were shared by a wide range of practitioners, enables historians to make connections between isolated case studies, and to identify broader themes in the history of alchemy and early chemistry.

The panel was chaired by Stephen Clucas (Birkbeck, University of London), who led a lively discussion, in which panellists responded to questions and comments from an audience of historians of science, technology and medicine working across a very wide range of topics and periods.

Jennifer Rampling

## 5.2 Reports on SHAC Award Scheme 2009–10

### SHAC New Scholars Award:

#### 'The History and Scientific Development of Green Chemistry'

Through the support of the New Scholars Award 2009 (The Society for the History of Alchemy and Chemistry), in conjunction with The Pieter Langerhuizen Stipendium (The Royal Dutch Society of the Sciences), I have been able to investigate the archives of the Chemical Heritage Foundation (Philadelphia, PA), the American Chemical Society (Washington, DC) and the Royal Society of Chemistry (London, UK). In my PhD project, I investigate the (scientific) development of the chemical community in relation to environmental problems and the public image. According to the chemical community in modern society, public understanding of chemistry is poor and is mostly associated with the (supposed) polluting activities of the chemical community, which results in a negative image of chemistry. Consequently, the chemical community changed significantly, e.g. new journals, terminology and networks. I attempt to gain a better fundamental insight in these responsive changes.

Therefore, I carry out a comparative analysis of the development of 'green chemistry' in the USA and Europe. Both continents have been shown to be the most significant contributors to the scientific output of green chemistry. Since the 1990s the term green chemistry has been growing in scientific articles, particularly in comparison with other environmentally related terms of the chemical community.<sup>1</sup> Consequently, I assume that the analysis of green chemistry provides a better understanding of the chemical community, from which the chemical community might benefit with regards to policy issues like the environment and the public image. Through visits to the archives, I obtained new valuable research results that improve my PhD project. For example, within the Royal Society of Chemistry (RCS) the Green Chemistry Network was founded in conjunction with an RSC journal. This journal, *Green Chemistry*, now belongs among the most important chemistry journals, but no such ACS journal was launched within ACS. This might imply a difference in scientific recognition of green chemistry within chemical societies.

Overall, I am grateful to The Society for the History of Alchemy and Chemistry, because this award was very helpful to my PhD project.

J. A. (Arjan) Linthorst  
Department of History, Maastricht University  
Descartes Centre for the History and Philosophy of the Sciences and the Humanities,  
Utrecht University

#### References:

1. J. A. Linthorst, "An Overview: Origins and Development of Green Chemistry", *Foundations of Chemistry* 12.1 (2010), 55–68.

## 6. News and resources

### Sites of Chemistry, 1600–2000

SHAC is sponsoring a four-year project to investigate the sites where chemistry has been practiced since 1600. The Wellcome Trust has awarded £11,000 to fund the first two years of the project.

From its immediate origins in the seventeenth century, chemistry has been practiced in a wide range of physical spaces and places, from the princely court to the apothecary's shop, from the learned society and the lecture theatre to the university research laboratory, from the craftsman's workshop to the industrial R and D laboratory. In each of these, and in many other locations and at different times, chemical practice (which includes research, teaching, studying, industrial application and routine analysis, and theoretical debate) has been set within differently structured physical and social spaces and carried out by various actors for different ends. A growing number of scholars have explored particular examples of the various sites of chemistry, but so far little attempt has been made to exploit the opportunities that these studies present for comparative analysis, for exploring the development of chemistry outside the major and well known institutions, or for exploring the development of chemical practices over the long term. As an experimental science the most important site for chemistry was and is the laboratory and our understanding of its critical development into the knowledge factory in the nineteenth century is still dependent on the groundbreaking work of J.B. Morrell in the 1970s, in particular his "The Chemist Breeders: The Research Schools of Liebig and Thomas Thomson," *Ambix* 19 (1972), 1–58. A number of recent studies have pointed to the wider contexts of this evolution and suggest that it is time for a re-examination of this influential interpretation.

This series of two-day annual conferences from 2011 to 2014 will bring together a number of historians in order to explore the physical spaces and places where chemistry has been practiced from the seventeenth to the twentieth century. Each year will focus on a different century (broadly defined), beginning in July 2011 with the eighteenth century, the nineteenth century in June 2012, the twentieth century in June 2013 and returning to the seventeenth century in 2014. This chronological ordering will avoid a clash with a number of international events on alchemy and chemistry in 2011, and more importantly will coincide with an exhibition project on early modern chemistry in the seventeenth century basement laboratory in the Museum of the History of Science in Oxford.

The work presented and discussed at each annual conference will provide the opportunity to explore and compare (both geographically and temporally) particular sites of chemistry. The conferences will also provide the opportunity to explore the wider social, economic, political and cultural contexts for chemistry and the wider

forces and influences that were at work on it. This will be done through detailed examination of the physical and social sites where chemical actors encountered and engaged with those operating in these wider spheres, whether they were other scientists, political figures, bureaucrats, administrators, industrialists, craftsmen, physicians or engineers.

The immediate focus of each conference will be on microhistories, comparative analysis and developments over the short to medium term. Papers from each annual conference will be published as special issues of the journal *Ambix*. At the end of the project a collection of commissioned essays exploring developments over the long-term and in geographical breadth will be published as *Places and Spaces: Historical Perspectives on the Practice of Chemistry*. The papers on chemistry and medicine will be published as *Chemical Spaces and Medical Practices, 1600–2000*.

The emphasis will be mainly, but not exclusively, on chemistry in Europe. The organizers are particularly keen for graduate students and new researchers to participate in the project.

The first conference, on eighteenth-century sites of chemistry, will be held at the Maison Française d'Oxford, 4–5 July 2011.

The project is run by a coordinating committee: Antonio Belmar (Alicante), Marco Beretta (Florence), Ernst Homburg (Maastricht), Muriel Le Roux (Paris/Oxford) and John Perkins (Oxford). The committee is supported by a steering group: Bernadette Bensaude-Vincent (Paris), José Ramon Bertomeu (Barcelona), Ana Carneiro (Lisbon), John Christie (Oxford), Stephen Johnston (Oxford), Bernard Joly (Lille), Ursula Klein (Berlin), Peter Morris (London), Faidra Papanelopoulou (Athens), Larry Principe (Johns Hopkins), Viviane Quirke, (Oxford), Carsten Reinhardt (Bielefeld), Lissa Roberts (Twente) and Geert Vanpaemel (Louvain).

For further information contact John Perkins, [jperkins@brookes.ac.uk](mailto:jperkins@brookes.ac.uk), and Antonio Belmar, [belmar@ua.es](mailto:belmar@ua.es).

### **Back issues of *Ambix* available online**

The digitisation of the back issues of *Ambix* from Volume 1 (1937) is now complete and they are available to members of the Society to read or download from the IngentaConnect website. Access to them is via the 'Member's Services' page on the Society's website at [www.ambix.org](http://www.ambix.org). This page may be accessed from the home page via a username and password which have been e-mailed to members. If you have any problems or wish to enquire about membership please contact the Hon. Treasurer, John Perkins, [shacperkins@googlemail.com](mailto:shacperkins@googlemail.com).

## **6.2 Other news**

### **Bulletin for the History of Chemistry**

Paul R. Jones, who has edited the Bulletin since 1994, is to be succeeded by Carmen J. Giunta from January 2011. Articles for publication in the Bulletin should be sent in future to Professor Carmen at the Department of Chemistry, Le Moyne College, Syracuse, NY.

## Chemical Heritage Foundation: new appointments

Carin Berkowitz has recently joined the Chemical Heritage Foundation (CHF) as the Associate Director of the Beckman Center. Carin received her Bachelor Degree from Johns Hopkins University in 2001 and her PhD in Science and Technology Studies from Cornell University in 2010. Her dissertation is titled 'Medical Science as Pedagogy in Early Nineteenth-Century Britain: Charles Bell and the Politics of London Medical Reform'. She was the recipient of the American Association for the History of Medicine's 2010 Shryock Medal for the best graduate student paper in the history of medicine. In her position at CHF, she will be overseeing the fellowship program and related activities.

Michal Meyer has been appointed as editor in chief of *Chemical Heritage* magazine and executive producer of the *Distillations* podcast. In this role, she will be responsible for day-to-day operations and strategic planning for the magazine and the podcast as well as leading efforts to reach new audiences with stories from the history of the chemical and molecular sciences. Michal recently earned a doctoral degree from the University of Florida at Gainesville. Her work experience includes serving as a writer and editor at The Jerusalem Post, managing editor of the History of Science Society (HSS) Newsletter and webmaster of the HSS site. She has also worked as a meteorologist both in New Zealand and Fiji.

### 6.3 Notices of books

**Frank A. J. L. James, *Michael Faraday: A Very Short Introduction***  
(Oxford University Press, 2010)

Faraday is one of the few scientific figures of whom most people have heard. He always appears in the top ten of opinion polls asking respondents to name a scientist and during the 1990s he received the ultimate British accolades of appearing on the Bank of England £20 note and having an outdoor statue in London.

His inventions of the electric motor, transformer and generator mean that he is seen as the 'father' of electrical engineering, while his formulation of the field theory of electro-magnetism was the foundation for Albert Einstein's work, as he fully acknowledged. Furthermore, Faraday's image has also been used by politicians, such as the Prime Ministers Ramsay MacDonald and Margaret Thatcher, for their own purposes. This book explains why Faraday was so successful in his scientific career at the Royal Institution and why he is so well known in such different contexts

ISBN 978-0-19-957431-5

(<http://ukcatalogue.oup.com/product/9780199574315.do?keyword=faraday&sortby=bestMatches>)

**Roy MacLeod, *Archibald Liversidge, FRS: Imperial Science under the Southern Cross*** (Sydney University Press and Royal Society of New South Wales, 2009)

This is the first sustained 'life and times' of perhaps the most influential Anglo-Australian mineralogical chemist and chemical geologist of the nineteenth century, who travelled from the East End of London to Sydney, via the Royal School of Mines, the Royal College of Chemistry, and Cambridge, to become a leading figure in colonial New South Wales. The book describes his contributions to public science, civic culture, and higher education, and to constituting the communities and networks that become characteristic of late Victorian imperial science.

**Simon Werrett, *Fireworks: Pyrotechnic Arts and Sciences in European History***  
(University of Chicago Press, 2010)

A history of fireworks and the relationships between pyrotechnists and natural philosophers from the sixteenth to the nineteenth centuries, 'Fireworks' is available from the University of Chicago Press from June 2010. The book traces the early alchemical history of pyrotechnics in renaissance Europe and the influence of fireworks on seventeenth-century mechanical philosophy, meteorology and experimental science. Subsequent chapters follow pyrotechnists as they travelled about Europe in the eighteenth century, inspiring new ideas about, among other things, the electric fire and volcanoes. The book presents a geographical perspective on relations of art and science and compares these relations in three cities – London, Paris, and St. Petersburg – in the seventeenth and eighteenth centuries.

**Announcing a new series from Ashgate Publishing Company:  
Material Readings in Early Modern Culture**

Series Editors: James Daybell, University of Plymouth; and Adam Smyth, Birkbeck College, University of London.

This series provides a forum for studies that consider the material forms of texts as part of an investigation into early modern culture. The editors invite proposals of a multi- or interdisciplinary nature, and particularly welcome proposals that combine archival research with an attention to the theoretical models that might illuminate the reading, writing, and making of texts, as well as projects that take innovative approaches to the study of material texts, both in terms the kinds of primary materials under investigation, and in terms of methodologies. What are the questions that have yet be to asked about writing in its various possible embodied forms? Are there varieties of materiality that are critically neglected? How does form mediate and negotiate content? In what ways do the physical features of texts inform how they are read, interpreted and situated?

Consideration will be given to both monographs and collections of essays. The range of topics covered in this series includes, but is not limited to:

- History of the book, publishing, the book trade, printing, typography (layout, type, typeface, blank/white space, paratextual apparatus)
- Technologies of the written word: ink, paper, watermarks, pens, presses
- Surprising or neglected material forms of writing
- Print culture
- Manuscript studies
- Social space, context, location of writing
- Social signs, cues, codes imbued within the material forms of texts
- Ownership and the social practices of reading: marginalia, libraries, environments of reading and reception
- Codicology, palaeography and critical bibliography
- Production, transmission, distribution and circulation
- Archiving and the archaeology of knowledge
- Orality and oral culture
- The material text as object or thing

Proposals should take the form of either 1) a preliminary letter of inquiry, briefly describing the project; or 2) a formal prospectus including: abstract, brief statement of your critical methodology, table of contents, sample chapter, estimate of length, estimate of the number and type of illustrations to be included, and a CV.

Please send a copy of either type of proposal to each of the two series editors and to the publisher: Dr James Daybell (james.daybell@plymouth.ac.uk); Dr Adam Smyth (adam.smyth@bbk.ac.uk); Erika Gaffney, Publisher (egaffney@ashgate.com).

## 7. Membership

### New members

The Society for the History of Alchemy and Chemistry warmly welcomes the following new members:

Dr Antonio Belmar (University of Alicante)  
Dr José Ramon Bertomeu Sanchez (University of Valencia)  
Paul Ferguson (Jersey)  
Prof Marcia Ferraz (Pontifica Universidade Catolica de Sao Paulo)  
Angela Ghionea (Purdue University)  
Tony Hutchins (Wellington, New Zealand)  
Dr Michael Jewess (Oxford)  
Prof Ursula Klein (Max Planck Institute for the History of Science, Berlin)  
Michael Koltsov (National University of Kyiv-Mohyla Academy)  
Stieneke Kruyer (University of Amsterdam)  
Irena McCabe (University College London)  
Hilde Norrgrén (Oslo University)  
Dr Rafał Prinke (Akademia Wychowania Fizycznego, Poznan, Poland)  
Alexis Smets (Radboud University, Nijmegen)  
Dr Alexey Sotnikov (Warsaw University of Life Sciences)  
Dr Brigitte Van Tiggelen (Memosciences, Louvain)  
Samuel Ziegler (Deakin University, Australia)

### Joining SHAC

The Society for the History of Alchemy and Chemistry has a longstanding tradition in the field, organising colloquia, publications and promoting the interdisciplinary study of the history of alchemy and chemistry from its early beginnings to the present. The Society offers support to its members, including an award scheme, regular meetings and events, graduate network, and the triennial Partington prize for original academic writing on any aspect of the history of alchemy and chemistry. It offers a forum for advertising forthcoming events, both within the United Kingdom and internationally, and its website provides a portal to resources relating to the history of alchemy and chemistry.

Members receive the Society's journal *Ambix*, the leading scholarly journal in the field of history of alchemy and chemistry. *Ambix* is published by Maney Publishing and appears three times a year. Members will also receive the Society's newsletter, *Chemical Intelligence*, twice yearly.

Application forms and membership information may be found on the Society's website, [http://www.ambix.org/SHAC\\_Join\\_Us.htm](http://www.ambix.org/SHAC_Join_Us.htm).

For all membership questions, please contact the Hon. Treasurer:

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## Further Intelligence

For queries regarding the content of *Chemical Intelligence*, or to suggest material for inclusion in future issues, please contact the Editor:

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