The New Editor Speaks

2013 is by any standards, a lucky year for the history of alchemy and chemistry.

Great things are happening for SHAC and Ambix. Under the energetic and watchful guidance of new Editor, Dr Jennifer Rampling, our very own Chemical Intelligence alumna, Ambix is moving from three to four issues a year. This means there are more opportunities for you to bring out those articles you mulled over in your head and always wanted to write.

Yet more things are being produced in our alchemical laboratory, and while we are all waiting for the philosophers’ stone to materialise, our impatience will surely be satisfied by a dose of great alchemical translations, part of the new series Sources in Alchemy and Chemistry under the general editorship of Jenny together with Lawrence M. Principe. SHAC’s great founding fathers would be pleased to hear that Pseudo-Democritus’ Philosophia kai Mystika will finally see an annotated English translation.

While we are at the topic of new developments, you may have noticed the new SHAC Website (there’s a capture of it below).

It’s all lively on the meeting scene as well. Following our successful Spring Meeting on early alchemy in March 2013, we are looking forward to no less than three SHAC-sponsored panel sessions at ICHSTM in July 2013. ICHSTM is a juggernaut of an event that will include more than 2,000 participants. We are also cooking up interesting sessions of the Postgraduate Workshop in October and our autumn general meeting in November on ‘Chemists and Their Books.’

For those of you eager to apply for grants and prizes, the good news is there are two whose deadline is still ahead (the SHAC Award Scheme, deadline 31 May 2013, and Partington Prize, 31 December 2013), the bad news is, the rest are passed. There’s always next year.

On that positive note, I will conclude by saying that I hope you will enjoy Chemical Intelligence’s new look.

Jo Hedesan
NEW CHEMICAL INTELLIGENCE TEAM

Beginning with this issue, a new team of editors has taken over, comprised of Dr Jo Hedesan and Ignacio Suay Matallana. They wish to warmly thank the previous Editor, Dr Jennifer Rampling, for her support, smooth handing-over process and helpful critiquing of the draft of the current issue.

Jo Hedesan is currently Cantemir Junior Fellow at Oxford University. She has recently finished her Ph.D. at the University of Exeter, with a dissertation on ‘Christian Philosophy’: Medical Alchemy and Christian Thought in the Work of Jan Baptista Van Helmont (1579-1644). Jo’s research interests are early modern alchemy, with an emphasis on Paracelsianism, Helmontianism, and medical and Christian alchemy. She is particularly interested in exploring the complexity and influence of alchemical ideas and philosophies in the seventeenth and early eighteenth century medicine, natural philosophy and religious thought. Jo is responsible for subsequent issues of Chemical Intelligence, so please contact her with any items of news, at georgianahedesan@yahoo.com.

SHAC is also delighted to welcome Ignacio Suay Matallana (Instituto de Historia de la Medicina y de la Ciencia ‘López Piñero’ – CSIC-UV, Spain) into the newly created role of Assistant Book Reviews and Newsletter Editor. Ignacio is a Ph.D. candidate in History of Science at the University of Valencia, where his research interests include history of chemistry, expertise in chemical analysis in the nineteenth and twentieth centuries, and scientific instruments. He is providing valuable assistance to the Ambix Book Reviews Editor, José Ramon Bertomeu, and together with Jo will scour the globe for chemistry-related news and information for the newsletter. He can be contacted at igsuayma@alumni.uv.es.

UPCOMING SHAC EVENTS

Keynes Library, Birkbeck College, University of London

Every year, the SHAC Graduate Network organises an international workshop to provide training on research skills and methodology for graduate students and early career researchers. This year the theme of our workshop will be ‘Alchemy and Chemistry in Context’ and will explore the extent to which chemical knowledge has been shaped by its social, economic, religious and cultural contexts, across a range of historical periods – from medieval alchemy to the chemical industry.

We would now like to invite 15-20 minute presentations on topics related to the theme in any historical period. To present, please submit an abstract of about 200 words by e-mail to the lead organiser, Jo Hedesan, georgianahedesan@yahoo.com by 30 June 2013. Presenters should be current postgraduate students or junior researchers (within 3 years of completion of the PhD).

Topics might include:
- Alchemy and chemistry within society
- Patronage and support
- Impact of alchemy and chemistry on culture or society
- Social, cultural and economic influence on alchemical and chemical theory and practice
- Alchemy and chemistry’s interaction with other disciplines

The Workshop is free of charge. Bursaries are available towards the cost of travel and/or accommodation for accepted presenters in the first instance. For further details and other queries, please contact the lead organiser, Jo Hedesan at georgianahedesan@yahoo.com.
The Autumn meeting of SHAC will be held on Saturday 9 November at the Royal Institution, Albemarle Street, London. It is a joint meeting with the Bolton Society of the Chemical Heritage Foundation, Philadelphia, on the theme ‘Chemists and Their Books’. The SHAC Annual General Meeting will take place during the course of the day. To register for the meeting, please contact the Honorary Secretary, Anna Marie Roos at aroos@lincoln.ac.uk.

The Bolton Society and HIST members will continue the meeting in Cambridge on 11 November and Oxford on 12 November, with full programmes of papers and visits. Members of these bodies will be circulated with details by the Bolton Society Chief Bibliographer, Gary Patterson, email gp9a@andrew.cmu.edu. SHAC members will be most welcome to join in on these days. They are invited to register their interest for these additional days by contacting the Chairman of SHAC, Dr Robert G W Anderson, Honey Hill House, Honey Hill, Cambridge CB3 OBG; e-mail rgwa2@cam.ac.uk.

Papers Offered:

- **Frank James (Royal Institution of Great Britain)**
  ‘The Royal Institution and its Library’

- **Ron Brashear (Chemical Heritage Foundation, Philadelphia)**
  ‘Collecting Chemical Knowledge’

- **William H Brock (Emeritus, University of Leicester)**
  ‘Liebigiana: Liebig Collectors and Bibliographers’

- **Elizabeth Clarence (School of Chemistry, University of Edinburgh)**
  ‘Arthur Conan Doyle and the Chemistry of Sherlock Holmes’

- **Ned Heindel (Lehigh University)**
  ‘Chemistry and the Occult, Old and New, in Pennsylvania Dutch Care Books: the Pferd Artz and Haus Artz in the 18th and 19th Centuries’

- **David Knight (Emeritus, University of Durham)**
  ‘Chemists and Books of Natural Theology’

- **Pierre Laszlo (Emeritus, Ecole Polytechnique, Paris)**
  ‘Marginalia, Historians and Historians of Chemistry’

- **Gary Patterson (Carnegie Mellon University)**
  ‘H C Bolton and the Bibliography of Alchemy’

- **Peter Reed (Independent, Leominster)**
  ‘Robert Angus Smith and his Library’

- **Ronald Smelzer (Independent, Princeton)**
  ‘Color Illustration – How and Why – in 19th Century Chemical Texts’

- **Anke Timmermann (Medizinische Universität Wien)**
  ‘Cataloguing Alchemical Images’

- **James R Voelkel (Chemical Heritage Foundation, Philadelphia)**
  ‘Lemery’s Cours de Chymie in its many editions’
SHAC-SPONSORED MEETINGS

**AD HOC History of Chemistry Reading Group**  
*Cambridge and London*

AD HOC is a history of chemistry reading group with parallel series of meetings held in UCL and Cambridge, organised by Hasok Chang, Jenny Rampling, Chiara Ambrosio, Emma Tobin and Matthew Paskins. 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. Travel bursaries are also available for student participants. 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, please contact Matthew Paskins at adhochistory@gmail.com.

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

For the Easter Term, the Cambridge-side AD HOC programme has been offering a four-session graduate seminar on the philosophy of chemistry led by Hasok Chang. This is intended to provide an introduction to some key issues in the field, especially for those whose primary interests are in related fields such as the history of chemistry, the philosophy of physics or biology, and chemistry itself. Philosophical issues will always be formulated and illustrated through episodes from the history of chemistry, especially from the 18th century onward.

The following three questions are running themes for all sessions. (1) How do general epistemological and metaphysical issues in the philosophy of science apply to chemistry? (2) How does chemistry relate to other sciences? (3) How can the history and the philosophy of chemistry interact productively?

Meetings are held on **Mondays, 5.00–6.30pm in Seminar Room 1**. Part III, MPhil and PhD students in the Department are especially welcome to attend this seminar, but it is open to everyone. Readings will be announced and made available in time for each meeting.

- **3 June**  
  Scientific method in chemical practice

**AD HOC (London)**  
6pm–7.30pm (Mondays, monthly), University College London

This year’s London meetings will focus on the theme of ‘Theory Choice in Chemistry’, with the aim of producing a short publication on this topic. Each session will be led by a specialist in a different historical period.

- **10 June**  
  Irena McCabe (UCL): 19th Century Physical Chemistry
- **8 July**  
  TBA
SHAC-SPONSORED MEETINGS

24th ICHSTM Symposium: ‘Reworking the History of Chemistry: Practice, Visualization and Exchange’  
Centre for the History of Science, Technology and Medicine (CHSTM), University of Manchester, UK

This symposium, co-organised by SHAC, the Chemical Heritage Foundation, and the Forum for the History of the Chemical Sciences, asks how chemical knowledge is shaped and put to work through interactions between conceptual, practical, economic and political change. Each panel addresses an exciting and developing area in the historiography of chemistry.


Practice: Recovering Early Alchemy and Chemistry

- Matteo Martelli (Humboldt Universität zu Berlin), ‘At the origins of Graeco-Egyptian alchemy: chromatic transformations between medicine and dyeing processes’
- Donna Bilak (Bard Graduate Center, New York), ‘The allegorical laboratory: process and technology in Michael Maier’s alchemical emblem book, Atalanta fugiens (1617)’
- Cesare Pastorino (The Newton Project, University of Sussex), ‘Theory, practice and knowledge production in an early Stuart mining enterprise’

Chair and Commentator: Jennifer Rampling (University of Cambridge)

Visualizing: The Matter of Form in Modern Chemistry

- Alan Rocke (Case Western Reserve University), ‘Visualization and representation in nineteenth-century chemistry’
- Ann E. Robinson (University of Massachusetts Amherst), ‘A part yet apart: the placement of the rare earths and actinides in the Periodic Table’
- Michel Morange (Ecole normale supérieure), ‘Twentieth-century molecular visualisations in biology’

Commentator: David Knight (Durham University)

Chair: Robert G.W. Anderson (Clare Hall, Cambridge)

Exchange: Global Histories of Chemistry

- Gabriele Ferrario (University of Cambridge), ‘From overseas: lapis lazuli, ultramarine blue and their journey through centuries and cultures’
- Yoshiyuki Kikuchi (International Institute for Asian Studies), ‘Making chemical technology travel: book illustrations and the teaching of chemical technology worldwide in the mid-nineteenth century’
- Anna Geltzer (Wesleyan University), ‘Competing rationalities: Soviet-American cooperation in cancer drug development’

Commentator: Matthew D. Eddy (Durham University)

Chair: Ron Brashear (Chemical Heritage Foundation)

Organised by Jennifer Rampling, Carin Berkowitz and Matthew Eddy on behalf of the CHF, FoHCS and SHAC.
The University of Edinburgh appointed its first professor of chemistry in 1713. The present School of Chemistry at Edinburgh has organized a conference which will consider the first hundred years of research and teaching of the subject. This will be held at the Royal Society of Edinburgh, 22–26 George Street, on 24 October 2013. Further details and registration can be found at http://www.rse.org.uk/events/event.php?id=330. The RSE events team can be e-mailed at events@royalsoced.org.uk or called on 0131 240 2780.

There will be a reception for delegates on the evening of 23 October in the University Library, George Square, which hosts the exhibition, ‘Edinburgh 300: Cradle of Chemistry’, http://www.rse.org.uk/851_RelatedEvents.html, which runs from 2 August to 2 November. This site also gives details of ‘A Musical Celebration of Chemistry’, a concert of music by Julian Wagstaff which includes the first performance of his short opera celebrating chemistry at Edinburgh University, and which will take place at the Assembly Rooms, 54 George Street, Edinburgh, on the evening of 24 October. The programme of papers of the meeting is as follows:

- **John Henry (University of Edinburgh)**, ‘Science in the Athens of the North: The Development of the Sciences in Enlightenment Edinburgh’
- **John C Powers (Virginia Commonwealth University)**, ‘Leyden Chemistry in Edinburgh: Herman Boerhaave, James Crawford and Andrew Plummer’
- **Georgette Taylor (UCL)**, ‘From Plummer to Cullen: Novelty in Cullen’s Chemical Pedagogy’
- **John R R Christie (University of Oxford, Warwick and Leeds)**, ‘Professors and Students in the Age of the Chemical Revolution’
- **Matthew Daniel Eddy (University of Durham)**, ‘How to See a Diagram: Joseph Black and the Visual Anthropology of Chemistry’
- **Tom Addyman (Addyman Archaeology)**, ‘Materia Chemica: Excavation of the Early Chemistry Stores at Old College, University of Edinburgh’
- **Robert G W Anderson (Clare Hall, Cambridge)**, ‘Thomas Charles Hope and the Legacy of Joseph Black’
- **Andrew Alexander (University of Edinburgh)**, ‘A Golden Cage, but will the Birds Sing?: Alexander Crum Brown (1838-1922)’
- **Peter Morris (Science Museum, London)**, ‘Joseph Black’s Final Home’
- **A D Morrison-Low (National Museum of Scotland)**, ‘Surviving Eighteenth-Century Chemical Apparatus in the National Museums of Scotland’
- **Hasok Chang (University of Cambridge)**, ‘Afterword’
SHAC-SPONSORED MEETINGS

Sites of 20th-Century Chemistry

Uppsala University, Sweden

This conference, the third in the series, *Sites of Chemistry 1600-2000*, will be held in Uppsala on Wednesday, 21 August 2013. Please note the change in location and the change in date. It will now be held in the same venue as the 9th ICHC conference which follows immediately after. For further information please contact the organisers, John Perkins, jperkins@brookes.ac.uk, and Antonio Belmar, Belmar@ua.es.

The project *Sites of Chemistry, 1600-2000* investigates the multitude of sites, spaces and places where chemistry has been practiced since the beginning of the seventeenth century. It is part of a series of four annual conferences, each devoted to a particular century. Selected papers from each conference will be published in special issues of *Ambix*, and two volumes of essays will be published at the end of the project. The project is supported financially by the Wellcome Trust for the History of Medicine and sponsored by SHAC. Full details on the general project, as well as on the past conferences on Sites of Chemistry in the eighteenth and nineteenth centuries (Oxford, 2011; Valencia, 2012) are available at www.sitesofchemistry.org.

Accepted Papers:

- **Ana Carneiro & Isabel Amaral (New University of Lisbon, Portugal),** ‘The Institute Rocha Cabral, 1925-1950s: The transformation of a private biomedical research space’
- **Daniele Cozzoli (Pompeu Fabra University, Spain),** ‘From the forest to the laboratory: Daniel Bovet’s research on curare, 1940s-60s’
- **Ute Engelen (University of Mainz, Germany),** ‘Chemical companies and chemical spaces in the Mainz region after World War II’
- **Ernst Homburg (University of Maastricht, the Netherlands),** ‘The United Nations as a site of chemistry: the example of the CFCs’
- **Yoshibi Kikuchi (International Institute for Asian Studies, the Netherlands),** ‘Evolving networks of the sites of chemistry in Meiji and Taisho Japan, 1868-1926’
- **Erik Langlinay (EHESS, France),** ‘Cultures of work in French chemical factories, 1900-1930’
- **Muriel Le Roux (Ecole Normale Supérieure, Paris, France),** ‘From science to industry: the sites of aluminium in France from the 19th century to the 20th’
- **Jean Pierre Llored (Ecole Polytechnique, Paris, France),** ‘Epistemological shifts and chemical sites: the example of nanochemistry’
- **Robin Mackie and Gerrylynn Roberts (Open University, UK),** ‘Where British chemists worked, c. 1900-1970’
- **Peter Morris (Science Museum, UK),** ‘Symbol of Change: the Central Chemical Laboratories at Oxford, 2004’
- **Daniel Normark (Karolinska Institute, Sweden),** ‘Heterogeneity and inexactitude: “Lab 60” at the Karolinska in the transformation from medical disciplines to the modern biomedical complex’
- **Peter Reed (Leominster, UK),** ‘The Central Chemical Laboratory at Widnes goes to war, 1914-18’
- **Thibaut Serviant-Fine (University of Lyon, France),** ‘Sites and circulations: the chemistry of antimetabolites in the laboratory and in the clinic, 1940-1960’
The next issue of *Ambix* will be the first of four annual special issues devoted to the project on the *Sites of Chemistry, 1600–2000*, which comprises a series of conferences investigating the wide and diverse range of physical spaces and places where chemistry has been practised. The project was launched with the conference ‘Sites of Chemistry in the Eighteenth Century’ held in Oxford at the Maison Française in July 2011. Four of the 22 papers presented there make up the first of the special issues, guest-edited by John Perkins.

- **John Perkins (Oxford),** ‘Introduction’
- **Ursula Klein (Berlin),** ‘Chemical Experts at the Royal Prussian Porcelain Manufactory’
- **Simon Werrett (London),** ‘Green is the Colour: St Petersburg’s Chemical Laboratories and Competing Visions of Chemistry in the Eighteenth Century’
- **Elena Serrano (Valencia),** ‘Chemistry in the City: The Scientific Role of Female Societies in Late Eighteenth-Century Madrid’
- **Peter Konečný (Regensburg),** ‘Sites of Chemistry in the Schemnitz Mining Academy and the Eighteenth-Century Habsburg Mining Administration’

---

**Sources of Alchemy and Chemistry**

SHAC is proud to announce the launch of a new series of monograph-length volumes: *Sources of Alchemy and Chemistry*. This series will provide critical editions and English translations of some of the foundational texts in the history of alchemy and early chemistry: sources that have previously been inaccessible to all but a handful of scholars owing to a lack of modern editions. The series will be overseen by an international editorial board, under the general editorship of Professor Lawrence Principe (Baltimore) and Dr Jennifer Rampling (Cambridge).

The series begins this year with one of the earliest known chemical texts: the *Four Books of Pseudo-Democritus*, edited by Dr Matteo Martelli (Berlin). Although the original work, dating from the first century, has not survived in its entirety, the *Four Books* can be reconstructed from later Greek and Syriac compilations – allowing important insights into some of the earliest recorded practices in western chemistry. This volume will be followed in 2014 by *The Book of Alums and Salts*, pseudonymously attributed to the Persian polymath Al-Razi. Dr Gabriele Ferrario (Cambridge) will present Arabic and Hebrew editions of this practical treatise, which exerted strong influence on the western alchemical tradition.

The series includes editions of works in Greek, Syriac, Arabic, Hebrew and Latin, all with English translation and commentary. Each volume will showcase the best and most up-to-date scholarship on early chemical writings, offering new insight into the origins of alchemy, chemistry and chemical technology. This exciting development has been made possible through the generosity of a private donor, which allows us not only to commission the best available scholarship, but also to provide these issues of *Sources* free of charge to members of the Society and *Ambix* subscribers.

**The first issue will be published later this year, and distributed alongside *Ambix* as part of your subscription.**
NOTE: Appearance in this list does not preclude review in a subsequent issue. Please note that some of these books have already been given for review. Anyone wishing to act as a reviewer of any of the books should contact Ambix reviews editor: José-Ramón Bertomeu-Sánchez (bertomeu@uv.es).

<table>
<thead>
<tr>
<th>Title</th>
<th>Editors/Authors</th>
<th>Pages</th>
<th>ISBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seneca e le scienze naturali</td>
<td>Edited by MARCO BERETTA and FRANCESCO CITTI</td>
<td>273, 9 illus., index. Casa Editrice Leo S. Olschki: Firenze. 2012. (29 €)</td>
<td>978-88-222-6189-2</td>
</tr>
</tbody>
</table>
**BOOKS RECEIVED FOR AMBIX REVIEW**


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 2013, has not reached 35 years of age, or if older has been awarded 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*.

Entries should be submitted electronically as e-mail attachments. We prefer files to be Microsoft Word (93–2013), although these may be accompanied by a PDF version if desired. 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 The Hon. Secretary, Dr Anna Marie Roos, at aroos@lincoln.ac.uk, with the words ‘Partington Prize’ in the subject heading. Two documents should be submitted: the first, 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 the award of the Ph.D.). The second should be the essay. 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 midnight GMT on 31 December 2013. 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 2014.

The Society for the History of Alchemy and Chemistry invites applications for its award scheme for 2013 by 31 May 2013. 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 post-graduate 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 of up to £1000 will be made to cover research expenses, including travel, accommodation, subsistence, the reproduction of documents, and library fees. Applications may also include the costs of reproducing images for publication. The scheme will not fund the purchase of equipment or course fees.

In addition, post-graduate students only may apply for the costs of travel to conferences and accommodation, but only in order to give a paper. The scheme will not pay conference registration fees.

The **Subject Development** awards of up to £1000 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. Please note that awards do not have to be held in the UK.

Only members of the Society, both those in the UK and those overseas, may apply. Members must be in good standing at the time of making an application, and, if successful, throughout the period of an award. You can download the application form from [http://www.ambix.org/shac-award-scheme-2013/](http://www.ambix.org/shac-award-scheme-2013/).
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, p. 11 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. The Call for Papers for this year’s Workshop is advertised on page 2.

If you are a postgraduate student or junior researcher interested in the history of alchemy or chemistry, you are invited to join our online Graduate Network group, which publicises announcements and hosts discussions related to the fields. Should you wish to join, please send an e-mail, mentioning your name, affiliation and brief interest, to: shac_graduate_network-subscribe@yahoogroups.co.uk. Please note that you do not need to be a member of SHAC to become part of the Graduate Network.

If you have any other 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 the current SHAC student representative, Jo Hedesan, at georgtanaheidesan@yahoo.com.

From now on, in each issue we will introduce a current member of the Graduate Network, allowing them to present themselves, their work and their views on the challenges facing students and early career researchers to the other SHAC members and readers of Chemical Intelligence. In this issue, we introduce Ms Rachel Dunn, who will be known to many readers for her contributions to the annual Integrated HPS workshop, and who, we hope, will present at this year’s Postgraduate Workshop.

Graduate Network Showcase

Rachel Dunn
Durham University

Self-Introduction: I am a part-time PhD student in the Department of Philosophy at Durham University. I began my doctoral studies in 2009 and my working title is: Seeing and Believing: John Dalton and the Visual Culture of Experimental Science in British Dissenting Academies, 1770-1840. My research interests lie mainly in the history of science, visual culture, teaching in British dissenting academies and the industrial heritage of the North East. I am also interested in public engagement and am a Public Engagement Ambassador for the National Co-ordinating Centre for Public Engagement and occasionally teach at the North East Centre for Lifelong Learning. I have published articles based on my Masters thesis, completed book reviews and an entry for a forthcoming encyclopedia on the American Enlightenment.

For further information my personal webpage is: http://www.dur.ac.uk/r.l.dunn.

What is the greatest challenge you are facing as a postgraduate student?

As a self-funded part-time student the greatest challenge for me is combining employment with my studies. As I have had periods of unemployment, it is often difficult to fund research trips, so I have found good project management invaluable to make the most of archival visits. I have been fortunate to be granted several small bursaries over the period of my PhD, including a Van Mildert College Postgraduate Bursary, that have helped financially.
The Netherlands Organisation for Scientific Research (NWO) has awarded a grant of €43,000 to support the establishment of an international research network focused on ‘sites and networks of chemistry, 1760-1840.’ During this period chemistry underwent three far-reaching changes: 1) conceptual transformations, including those associated with Lavoisier; 2) discipline construction and the institutionalisation of research and teaching; 3) developing a leading role in many of the key industries, and agriculture, during the first phase of industrialisation. The first two have often been uncritically conflated, whereas, beyond relying on a historically faulty notion of ‘applied science’, historians have generally failed to explore the interactions between these conceptual and disciplinary transformations and the role of chemistry and chemists in technological change and industrialization, yet the same chemist actors were often involved in all three. This has limited our understanding of the processes whereby chemistry was constructed as a discipline and contributed to innovation in key sectors in early industrialisation, and the wider economic, political and social contexts in which they took place.

The project addresses this failure by exploring the sites where chemistry was practiced during this period, and the networks of actors (chemists, entrepreneurs, artisans, financiers, functionaries, politicians, etc.), instruments and materials that developed around these sites and linked them. This approach will enable a micro-historical analysis of how the practice of chemistry shaped and contributed to material and knowledge production. A wide range of sites will be analysed, drawn from across Europe and its (former) colonies so as to trace chemistry’s trans-national networks, as well as to realise the project’s comparative dimension.

For further details on the project or the first workshop (see below) please contact the co-ordinators, Lissa Roberts, l.l.roberts@utwente.nl and John Perkins, jperkins@brookes.ac.uk.

The network is holding its first workshop in Leuven on May 31/June 1. The programme is:

**Friday, May 31**

**Chemistry and Innovation**

- **Lissa Roberts (Twente, the Netherlands):** ‘Returning to the Scene: The Leblanc Process and C.C. Gillispie’s “Natural History of Industry”’
- **Robert Anderson (Cambridge, UK):** ‘Academe and Industry in Eighteenth-Century Scotland’
- **Peter Jones (Birmingham, UK):** ‘Bringing Chemistry to bear on Agriculture, 1760-1840’
- **Marie Thébaud-Sorger (Paris, UK):** ‘Managing Energy in the Industrial Enlightenment: Gas Technologies in European Towns, between Scientific Theories and Micro-inventions’
- **Andreas Weber (Twente, the Netherlands):** ‘Searching for Surrogates: Paper and Ink in the Netherlands, 1780-1830’
- **Peter Konečný (Regensburg, Germany):** ‘Designing and Building Sites for Born’s Indirect Amalgamation Process in the Habsburg Monarchy, 1785 – 1800’

**Sites, Networks and Circulations**

- **John Perkins (Oxford, UK):** ‘Introduction’
- **Christine Lehman (Paris, France):** ‘The Great Investigation in the Mineral Kingdom by the Academicians of the Académie Royale des Sciences of Paris between 1772 and 1774: Shared Curiosity and Communal Work’
- **Corinna Guerra (Naples, Italy):** ‘Mount Vesuvius as a Site of Chemical Theory and Practice’
- **Frank James (London, UK):** ‘Humphry Davy at Work’
- **Sacha Tomic (Paris, France):** ‘Status and Role of French Pharmacist-Chemists in the History of (Organic) Chemistry in the Early 19th Century’
- **Jose Ramon Bertomeu & Mar Cuenca (Valencia, Spain):** ‘Chemistry in French and Spanish Courts around 1840: Spaces, Actors, Sources & Circulations’
OTHER MEETINGS

Situating Material and Knowledge Production  (continued)

**Saturday, June 1**

**Recycling**

- **André Guillerme and Sabine Barles (Paris, France)**: ‘Recycling wastes in France (1760-1840): a starter to industrialization’
- **Simon Werrett (London, UK)**: ‘A cracking history of recycling’
- **Joppe van Driel (Twente, the Netherlands)**: ‘The fat of the land: material cycles in the late eighteenth-century Dutch oeconomy’
- **Matthew Eddy (Durham, UK)**: ‘The Devil’s Dye: Recycling matter through colonial networks’

---

**Seminars organised by François Pépin CERPHI (UMR 5037) and Centre Cavaillès (groupe du CIRPHLES –USR 3308)**

16h-18h., ENS, 29 rue d’Ulm (3e ét.), 75005, Paris, France

**June 5**

**Friday**

François Pépin (CERPHI et Centre Cavaillès)

‘La chimie et l’empirisme de l’opération : quelques perspectives chimiques sur l’épistémologie empiriste à l’âge classique (XVIIe-XVIIIe siècles)’.

---

‘One Hundred Years of the Bohr Atom, 1913–2013’ International Conference

**Royal Danish Academy of Sciences and Letters, H.C. Andersens Boulevard 35, Copenhagen, Denmark**

This international history of science conference is organized by the Niels Bohr Archive. The conference will be held in the traditional meeting room of the Royal Danish Academy of Sciences and Letters, near Tivoli in central Copenhagen. It was in this room that Niels Bohr led the meetings – with an interruption during the Second World War – as President of the Academy from 1939 until his death in 1962. The arrangement is covered in part by a generous grant from the Carlsberg Foundation. Attendees will receive more detailed information about the conference after 15 May.

Further information, including the preliminary programme and abstracts for the talks, and details on how to register, may be found at: [http://www.nba.nbi.dk/bohratom100yrs.html](http://www.nba.nbi.dk/bohratom100yrs.html).

As there are only a limited number of seats, a prompt response is highly recommended.
OTHER MEETINGS

ESSWE4: ‘Western Esotericism and Health’
Gothenburg, Sweden http://conference.esswe.org/

The European Society for the Study of Western Esotericism (ESSWE) is a learned society, established in 2005 to advance the academic study of the various manifestations of Western esotericism from late antiquity to the present, and to secure the future development of the field. Every second year ESSWE organises an international conference, and this year’s conference in Gothenburg is the fourth conference.

Issues relating to health can be seen as an intrinsic part of the field of esotericism, but surprisingly little attention has been given to how health is understood and construed in esoteric discourses. The conference thus fills an important lacuna in the study of Western esotericism. Over 100 papers by both senior and junior scholars will deal with such diverse topics as esoteric notions and discourses on health, sexuality and well-being, ‘occult’ causes for disease, ‘occult medicine’, notions of therapeutic benefits of magic and meditation, alchemical approaches to health, alternative forms of medicine, etc.

There are several talks that can present interest for students of alchemy, including:

- Peter J. Forshaw’s (University of Amsterdam, the Netherlands) keynote lecture “Medicina Hermetica’: The Early Modern Promotion of a Hermetic Way to Health’
- Rafał T. Prinke (Eugeniusz Piasecki University, Poland): ‘Paracelsian vs. alchemical medicine: The case of a 16th c. alcoholic treated by Oswald Croll and Michael Sendivogius’
- Mike A. Zuber (University of Amsterdam, UK): ‘Health and Disease in the Alchemical and Theosophical Fringe of Pietism’

International Society for the Philosophy of Chemistry Summer Symposium
Communication Tower (Complejo Cultural de la Torre de las Telecomunicaciones), Montevideo, Uruguay

The Organizing Committee of the International Society for the Philosophy of Chemistry invites you to participate in its Summer Symposium 2013. The ISPC-SS2013 will be held in Montevideo, Uruguay, supported by the Universidad de la República, Uruguay, Facultad de Humanidades y Ciencias de la Educación and Facultad de Química (Universidad de la República, Uruguay). The official language of the symposium will be English.

Following the traditions of the Symposium, sessions will be devoted to specific key topics within the field of the philosophy and history of chemistry:

- Chemistry in the nineteenth century
- Chemistry and society
- What do orbitals mean to chemists?
- Modeling and structure in chemistry
- Is chemistry the fundamental science? Relationships with other disciplines

Further information will be available soon on the symposium website: http://ispc2013.fq.edu.uy/

Keynote speakers:
Hasok Chang (Cambridge University, UK).
Catherine M. Jackson (Notre Dame University, USA).
OTHER MEETINGS

ICHSTM (The 24th International Congress for the History of Science, Technology, and Medicine)
Centre for the History of Science, Technology and Medicine (CHSTM), University of Manchester, UK

In addition to the SHAC-sponsored Symposium outlined above, the ICHSTM congress includes several other sessions relevant to the history of alchemy and chemistry. We are including below the ones that might be of interest.

**T162. Aspects of the History of Modern Chemistry**

- **Alexander Rodny (Russian Academy of Sciences, Russia):** Этапы становления и развития профессионального сообщества химиков (‘Stages in the formation and development of the professional community of chemists’)
- **Thibaut Servant-Fine (Université Claude Bernard, France):** ‘Putting biochemistry to work: the case of the Woods-Fildes theory’
- **Nurit Kirsh (Bar-Ilan University, Israel):** ‘The second scientific career of Chaim Weizmann: a continuation or a new beginning?’
- **Nuno Figueiredo (University of Lisbon, Portugal),** ‘Under the carbon spell: aspects of the history of boron hydrides, 1916-1941’

Chair: TBA

**S104 Symposium: Materials and Chemistry from Bench to Brand and Back**

Sponsoring body: DHST Commission on the History of Modern Chemistry

It has become almost commonplace since the 19th century to emphasize how much chemists shape matter and build new materials, not only to enhance natural knowledge, but also in the hope of improving the human condition. By creating new, hopefully useful substances, chemists have established a role, not only in science and technology but also as architects of both matter and society. Less often stressed is how materials may in turn shape chemists and their science, both by creating or reorganizing disciplinary fields, communities, instrumental consensus and experimental practice and objects, and by initiating new behaviours in society and consumption or adding to the ever growing number of synthetics.

**S104-A. Early Synthetic Materials**

- **Pierre Laszlo (École polytechnique, France):** ‘Cellophane and viscose, from a multi-faceted chemical, with focus on their European origins’
- **Joris Mercelis (Ghent University, Belgium):** ‘Handling fundamental uncertainty: Bakelite and Baekeland in industry and academia’
- **Augustin Cerveaux (Independent scholar, France):** ‘From purity to permanence: branding and analysing paints in America, circa 1880-1920’

Chair: *Masanori Kaji (Tokyo Institute of Technology, Japan)*
Commentary: *Jeffrey Johnson (Villanova University, USA)*
ICHSTM (The 24th International Congress for the History of Science, Technology, and Medicine)
Centre for the History of Science, Technology and Medicine (CHSTM), University of Manchester, UK

**S104 Symposium: Materials and Chemistry from Bench to Brand and Back (continued)**

**S104-B. Late Advanced Materials**
- **Pierre Tessier (Université de Nantes, France):** ‘Chemical identities and non-oxide glasses in the late-twentieth century’
- **Cyrus Mody (Rice University, USA):** ‘An historical alternatives approach to the materials of microelectronics’
- **Matthew N. Eisler (University of Virginia, USA):** ‘The uses of technofutures: the lithium economy, distributed industrialization, and the managing of power source heterodoxy’

Chair: **Ernst Homburg (University of Maastricht, Netherlands)**
Commentary: **Patrick McCray (University of California, Santa Barbara, USA)**

**S104-C. Infrastructure, Instruments & Ideas**
- **John SMITH (Lehigh University, USA):** ‘The development of polymer science and engineering in the United States’
- **Hyungsub CHOI (Seoul National University, Republic of Korea):** ‘Creating a built environment for interdisciplinary research: materials science in the Cold War United States’
- **Mari Yamaguchi (University of Tokyo, Japan):** ‘The direct observations of phthalocyanines: milestones in enhancing microscopic resolution’

Chair: **Yasu Furukawa (Nihon University, Japan)**
Commentary: **Jody Roberts (Chemical Heritage Foundation, USA)**
S104 Symposium: Materials and Chemistry from Bench to Brand and Back (continued)

S104-C: Modelling Natural Materials

- Mathias Grote (Technische Universität Berlin, Germany): ‘Fermenting a ‘biopolymer’: visions of engineering a biological material in the 1980s’
- Sacha Loeve (Université Paris 1 Panthéon - Sorbonne, France): ‘Point, line, plane: a trajectory of carbon’

Chair: Brigitte Van Tiggelen (Independent scholar, Belgium)
Commentary: Nathalie Jas (French National Institute for Agricultural Research, France)

Symposium organisers:
Pierre Teissier (Université de Nantes, France)
Brigitte Van Tiggelen (Independent scholar, Belgium)

S054. Alchemy: the Relationship between Working and Knowing from Late Antiquity to the Seventeenth Century

July 27

- Hariclia Brecoulaki (National Hellenic Research Foundation, Greece): ‘Murex Purple and the enduring potency of a symbolic colour: transmutative, magical and apotropaic virtues’
- Vangelis Koutalis (National Hellenic Research Foundation, Greece): ‘Knowledge and labour in the alchemical lectures of Stephanus of Alexandria’.
- Gianna Katsiampoura (National Hellenic Research Foundation, Greece): ‘Michael Psellus: a discussion about the substance of alchemy’s techniques in eleventh-century Byzantium’
- Hsiao-Yun Sherry Cheng (National Tsing Hua University, Taiwan): ‘The Chinese ‘Diagram of the Supreme Ultimate’ (Tai ji tu) in an Islamic alchemical treatise: a re-examination’
- Sébastien Moureau (Université catholique de Louvain, Belgium): ‘Mercure et Hg: rapport entre les propriétés physiques et chimiques du mercure et les théories du mercure dans l’alchimie arabe et l’alchimie arabo-latine’
- Rémi Franckowiak (Université Lille 1: Sciences et Technologies, France): ‘Alchemists at the service of economic development of France in the eighteenth century’

Chairs:
Rémi Franckowiak (Université Lille 1: Sciences et Technologies, France)
Gianna Katsiampoura (National Hellenic Research Foundation, Greece)

Symposium organisers:
Rémi Franckowiak (Université Lille 1: Sciences et Technologies, France)
Gianna Katsiampoura (National Hellenic Research Foundation, Greece)
In recent decades, many historians have tried to recreate past scientific experiments and technologies. From medieval alchemy to the Difference Engine, re-enactment is used to recover tacit knowledge, mobilise historical scientific instruments and test modern assumptions about early scientific practice. But what exactly does the success or failure of re-enactment teach us? How do we access knowledge about experiments described in past texts? How should historians handle seemingly absurd experimental claims by past scientists? And if past experiments can be replicated, is it legitimate for historians to vary or extend those experiments to learn more? This workshop, organised by the BSHS, explores such historiographical and methodological issues by examining recent attempts to recreate past science.

Panel 1:
- **Hasok Chang (University of Cambridge, UK)**
  ‘Learning new science from old experiments’

- **Jennifer Rampling (University of Cambridge, UK)**
  ‘Practically making the philosophers’ stone: recreating impossible experiments’

- **James Sumner (University of Manchester, UK)**
  ‘Public engagement in the pub; or, nineteenth-century nostrums in present-day pints’

Chair: **Roland Wittje (University of Regensburg, Germany)**
Commentator: **H. Otto Sibum (Uppsala University, Sweden)**

Panel 2:
- **Laurence Totelin (Cardiff University, UK)**
  ‘Tacitly Yours: What I have Learned from Cleopatra and her Sisters’

- **Haileigh Robertson (University of Leeds, UK)**
  ‘Replicating early modern experiments with gunpowder’

- **Roland Wittje (University of Regensburg, Germany)**
  ‘Beyond the linguistic turn: replicating historical experiments and material cultures of science’

Chair: **Jennifer Rampling (University of Cambridge, UK)**
Commentator: **Peter Heering (University of Flensburg, Germany)**

Workshop Organisers:
**Hasok Chang (University of Cambridge, UK)**
**Jennifer Rampling (University of Cambridge, UK)**
**James Sumner (University of Manchester, UK)**
**Roland Wittje (University of Regensburg, Germany).**
Chemistry is the premier science dealing with the material world. From early modern times to the present, chemists have been involved in the analysis and synthesis of materials, in manufacture and industrial production. Engaging in diverse fields such as medicine, metallurgy, dyeing and agriculture, the science had an important part in the shaping of the modern world, and was in turn shaped through its interactions with technology and industry.

Thursday 22 August

8:30—8:55 Registration
9:00—9:45 Keynote Lecture 1: Lawrence Principe (Johns Hopkins University, USA), ‘Uncovering and Trading Secret Materials in the 17th Century, or, How to Make the Bologna Stone’
10:15—12:15 Parallel Sessions
   Session 1: Objects and the Philosophy of Chemistry
   • Anders Lundgren (Uppsala University, Sweden), ‘The non-discovery of elements in the 19th century’
   • Klaus Ruthenberg (Coburg University, Germany), ‘Radicals: Between Matter and Substance’
   • Maria Elisa Maia (FFCUL, Portugal), ‘Controversies about atomism as a tool in chemistry teaching’
   • Jordi Mora-Casanova (Universitat Autònoma de Barcelona, Spain), ‘Krausism, a German philosophy for a Spanish chemistry’
   Session 2: 20th Century Physical Chemistry
   • Staffan Wall (University of Gothenburg, Sweden), ‘The early history of electrokinetics’
   • Gisela Boeck (University of Rostock, Germany), ‘Is Paul Walden really the discoverer of Ionic liquids?’
   • Fabio Pichierri (Tohoku University, Japan), ‘Bragg’s law and the birth of chemical crystallography’
   • Xavier Roqué (Universitat Autònoma de Barcelona, Spain), ‘Radiumwünsche: A Material Reassessment of the Rise of the Nuclear Sciences in Weimar’
13:15—14:00 Keynote Lecture 2: Marta Lourenço (University of Lisbon, Portugal), ‘The Invisible Heritage: Increasing Relevance and Use of Material Sources in the History of Science’
14:10—15:40 Parallel Sessions
   Session 3: Environmental Chemistry
   • Heinrich Kahlert, ‘From good to harm: General Motors’ and DuPont’s Engagement of developing, producing and banning Chlorofluorocarbons’
   • Marco Taddia (University of Bologna, Italy), ‘Energy dilemma in the early 20th century: the chemist’s point of view’
   • Ernst Homburg (Maastricht University, The Netherlands), Title to be announced
   • Masanori Kaji (Tokyo Institute of Technology, Japan), ‘The Cadmium Poisoning in Japan: The Case of Itai-Itai Disease and Beyond’
   • J.A. (Arjan) Linthorst (Utrecht University and Maastricht University, The Netherlands), ‘The scientific development of Green chemistry’
OTHER MEETINGS

‘Chemistry in Material Culture’ International Conference on the History of Chemistry  http://www.qichc.se
Uppsala University, Sweden

Session 4: Material Culture in Early Modern Chemistry

- **Stephen Johnston (University of Oxford, UK),** ‘Exhibiting Chemistry: Material Culture, the Museum and the Display of Early Chemistry’
- **Corinna Guerra (Istituto Italiano per gli Studi Storici, Italy),** ‘Vesuvius as Testing Bench for Chemical Materials and Theories’
- **Wenjing Li (Chinese Academy of Social Sciences, China),** ‘A Vanishing Flame: The Transformation of the Concept of Fire as an Agent in the Pre-Lavoisian Chemistry’
- **Fredrik M. Kirkemo (Norwegian University of Science and Technology, Norway),** ‘Reconstructing 16th century distillation’
- **Joaquín Pérez-Pariente (Instituto de Catálisis y Petroleoquímica CSIC, Spain),** ‘Reproducibility of eighteenth century recipes of Potable Gold’

17:30—Meeting of the The Working Party (WP) on History of Chemistry of the European Association for Chemical and Molecular Sciences (EuCheMS)

Friday, 23 August

9:15 Parallel Sessions

9:15– 11:00 Session 5: Discipline Building and Discipline Busting

- **Marianne Noël (Université Paris-Est, France),** ‘Emergence of a science of supramolecular systems at the University of Strasbourg (1961-2011)’
- **Ignacio Suay-Matallana (University of Valencia, Spain),** ‘José Casares and the circulation of material culture between textbooks and laboratories’
- **Olof Ljungström,** ‘The Discipline Busters: molecular biology, Rockefeller Foundation and Karolinska Institutet’

9:15—12:00, 14:00—14:30 Session 6: Sites of Innovation and Production

- **Stephen J. Weininger (Worcester Polytechnic Institute, USA),** ‘Technology, Economics, Materials and Science: The Rise of Petroleum Chemistry in the United States’
- **Elena A. Zaitseva (Baum) (Moscow State University, Russia),** ‘On the history of the development of chemical science and industry in Russia in the first decades of the XX century: innovation activities of the Ledentsov’s society’
- **Peter Reed (UK),** ‘Acid Towers and Weldon Stills in Leblanc Widnes’
- **Masao Uchida (Wako University, Japan),** ‘Two Centuries of Chemistry and Chemical Technology in Japan: A Perspective from the “Chemical Heritage of Japan” Project’
- **Éva Vámos (Hungarian Chemical Society, Hungary),** ‘Survey of Chemical Sites of Hungary – Results Achieved So Far and Plans for the Next Steps’

11:30—12:00, 14:00-16:30 Session 7: Technologies of visualisation

- **Mariachiara Di Matteo (University of Pisa, Italy),** ‘Amedeo Avogadro and the chemistry of colours: a case of privilege’
- **Maria Estela Jardim (University of Lisbon, Portugal),** ‘Nineteenth century medical photography as physical-chemical inquiry: a collaboration between physicians and photographers’
- **Geert Vanpaemel (KU Leuven, The Netherlands),** ‘Rembrandt’s chemist: AP Laurie and the public science of art’
- **José Ramón Bertomeu-Sánchez (Universitat de València-CSIC, Spain),** ‘Material Proofs: Bloodstains, Chemistry and Microscopy in France around 1830’
OTHER MEETINGS

‘Chemistry in Material Culture’ International Conference on the History of Chemistry  http://www.9ichc.se
Uppsala University, Sweden

- **Recep Karadag Sibel Alpaslan Arca and Emine Torgan (Marmara University, Turkey)**, ‘Periodic comparison of two caftans by non-destructive and micro analysis methods in the Topkapi Palace Museum’

13:00—13:45 **Keynote Lecture 3: Mary Jo Nye (Oregon State University, USA)**, ‘Mine, thine, and ours: Collaboration and the material culture of the 20th Century Chemical Laboratory’

14:30—16:30 **Session 8: History of Laboratories**

- **Gábor Palló (Budapest University of Technology and Economics, Hungary)**, ‘Resource and Site: Vitamin C from Paprika’
- **Marco Beretta (University of Bologna, Italy)**, ‘Between Natural History and Natural Philosophy: Torbern Bergman’s Chemical Laboratory’
- **Bjørn Pedersen (University of Oslo, Norway)**, ‘The laboratories used by Guldberg and Waage’

18:30 **Conference Dinner (optional)**

**Saturday, 24 August**

9:30—12:00 **Parallel Sessions**

**Session 9. Material Culture around the Chemical Revolution**

- **Hjalmar Fors (Uppsala University, Sweden)**, ‘Elements in the Melting Pot: Merging chemistry, assaying and natural history, c. 1730-1760’
- **Patrice Bret (Centre Alexandre Koyré, France)**, ‘Material culture around the Chemical Revolution: the correspondences of Lavoisier & Guyton de Morveau’
- **Andreas Weber (University of Twente, the Netherlands)**, ‘Backbones of Productivity: Fertilizer, Writing Paper and Ink in the Netherlands, 1780-1815’
- **Finn Øivind Jensen (Norway)**, ‘What Sir Humphrey Davy said in 1824, cathodic protection and the relation to Norway’

**Session 10: Materials in the 20th and 21st Century**

- **Apostolos Gerontas (Norwegian University of Science and Technology, Norway)**, ‘High Performance Liquid Chromatography and Chemical Practice; the effects of automated high-speed separation in analysis’
- **Pierre Laszlo (University of Liège, France)**, ‘How did clays affect the history of chemistry?’
- **Muriel Le Roux (CNRS, France)**, ‘Mastering Nature: the long route to the Navelbine or a story of a university – industry cooperation’
- **Anita Quye (University of Glasgow, UK)**, ‘The chemist and the cellulosic plastics – when breaking up is not so hard to do’

**Upcoming Deadlines:**

**31 May 2013**
Deadline for ‘early bird’ registration. For late registration, 500 SEK will be added to the conference fee.

**5 July 2013**
Deadline for registration

Questions regarding the conference will be answered by Ulrika Örn ulrika@chemsoc.se at the Swedish Chemical Society; Phone:+46 8 502 541 81.
OTHER MEETINGS

XV Convegno di Storia e Fondamenti della Chimica
Gruppo Nazionale di Fondamenti e Storia della Chimica (GNFSC), Bologna, Italy

The meeting is organised by the National Group of History and Fundamentals of Chemistry, founded in 1986, by the National Academy of Sciences called the XL, helped by the department of Chemistry ‘Giacomo Ciamician’ and the department of Philosophy and Communication of the University.

Participants will include academics who belong to the school, as well as leading figures in the industrial world. The conference is sponsored by the Italian Chemical Society, by the Italian Association of Science and Technology of Macromolecular, and by the Italian Society for the History of Science.

For more information and papers, see http://www.gnfsc.it/

History of Science Society Annual Meeting
Boston, Massachusetts, U.S.A.

The 2013 History of Science Society meeting will be held on November 21-24, 2013 at the Westin Boston Waterfront Hotel. The meeting will mark the 100th anniversary of the publication of the journal Isis.

Meeting registration will be available online on 1 July 2013.

For more information on this meeting, see http://www.hssonline.org/Meeting/index.html

The history of alchemy and chemistry is usually well represented at this meeting. This year, the Forum for the History of the Chemical Sciences (FoHCS) will be sponsoring a special session in honour of Alan Rocke. The panel’s contents are rendered below:

Panel: Chemists and Chemistry in the Nineteenth Century: A Session in Honor of Alan J. Rocke

Sponsored by the Forum for the History of the Chemical Sciences (FoCHS)

Organizer: Peter J. Ramberg (Truman State University, USA)

Chair: Mary Jo Nye (Oregon State University, USA)

Commentary: Alan J. Rocke (Case Western Reserve University, USA)

- Mel Usselman (University of Western Ontario, Canada): ‘Atomic Theory and Multiple Combining Proportions: Some Things Just don’t Add Up’
- Seymour H. Mauskopf (Duke University, USA): ‘William Barlow and the Determination of Atomic Arrangement in Crystals’
- Jeffrey Johnson (Villanova University, USA): ‘Dilemmas of 19th-century Liberalism among German Academic Chemists: Shaping a National Science Policy from Hofmann to Fischer’
CALLS FOR PAPERS

1st European Autumn School on History of Science and Education: ‘Sources and Resources for Educational Purposes in the Era of Internet’

Institut d’Estudis Catalans, Barcelona, Spain

November 14-16

The Societat Catalana d’Història de la Ciència i de la Tècnica is organising the 1st European Autumn School on History of Science and Education. The main goal of the School is to provide training and to encourage debate, participation and effective interaction among the attending public and the invited specialists, dealing with basic and practical aspects concerning the interplay between history of science and education. The School is addressed mainly to students of doctorate or master degrees, post-doctorates, in-service teachers, scholars and researchers interested in the history of science as an interface with science and science education. The topic of this first meeting is centred around the sources and resources of the history of science for educational purposes in the era of internet. The digitization of libraries and museums collections has made accessible a significant part of the literary and material cultures of science worldwide. Furthermore, some museums and academic institutions, which preserve this material culture of science, produce virtual reconstructions of the past that can be used for teaching aims. Concerning this topic, there are some salient and challenging aspects that might deserve reflexion and discussion: The assessment of sources of the history of science regarding their educational value, the relevance of the historiographical analysis of sources based in their authenticity and reliability in relation to their teaching usefulness, the remaking of historical sources to turn them into educational resources, or the management of application software, social media applications and learning environment systems as tools to include the history of science in science education.

Deadlines:

28 June 2013 Deadline for grants application
5 July 2013 Deadline for submitting papers
30 September 2013 Deadline for submitting a short source or resource presentation (optional) and to register to answer the questions put forward by the lecturers in their seminars.

For more information, see http://schct.iec.cat/Web1AutumnSchool/FirstAutumnSchool.html.

International Conference on Knowledge and Colonial Science

Faculdade de Ciências da Universidade de Lisboa, Pavilhão C6, Lisbon, Portugal

November 27-29

The International Conference Knowledge and Colonial Science results from the collaboration between the Centro de Filosofia das Ciências da Universidade de Lisboa and the Centro de História of the Instituto de Investigação Científica Tropical (IICT) and aims to reflect and discuss the nature of science’s role in the colonial context as well as its relevance in a post-colonial perspective. The meeting intends to join researchers, teachers and specialists from the fields of natural, social and human sciences in order to stimulate the debate on an issue that has gained considerable visibility over the last few decades. For more information, please see http://coloquicienciacolonial2013.wordpress.com/.

Submission of abstracts: The Conference is open to all interested researchers as well as the general public. Proposals in the form of abstracts should be submitted to coloquio.i.3c@gmail.com, by 5 July 2013. Please refer to http://coloquicienciacolonial2013.files.wordpress.com/2013/04/call-english.pdf

Official languages: Portuguese, English, French and Spanish.
CALLS FOR PAPERS

‘Chemical Reactions: Chemistry and Global History’ International Conference
2014 Cain Conference, Chemical Heritage Foundation, Philadelphia

Deadlines for Submission of Abstracts: 1 June 2013.
Travel support is available for participants.

One of the most important developments in the history of science and technology in recent years has been the recognition that, far from being an essentially western history, it can best be understood and analysed in the broader context of global history. This is not a call to investigate ‘influence’ or to compare the ‘achievements’ of ‘the West and the Rest’, but to consider how globally spread interactions and networks of commercial and cultural exchange both depended on and fed scientific and technological investigation and development. Such an approach has proven extremely fruitful in the history of medicine, natural history (botany, etc.), astronomy, cartography and geography. Surprisingly, the history of chemistry has yet to be analytically integrated with global history in a sustained and organized way. This conference and subsequent edited volume are a first step in that direction.

For the purposes of this conference, the term ‘chemistry’ should not be considered in a scientifically narrow, discipline-bound way. Rather, we are interested to include examinations of knowledge-claims and practices, wherever they were situated or travelled, that somehow involved the de- and re-composition of material compounds, irrespective of whether they were labelled as ‘chemistry’ by contemporaries.

In order to provide a manageable way into this huge and fascinating field, the conference will be limited to the seventeenth-twentieth century and be organised around a small number of topic areas:

- **Chemistry and Global Commodities** – examples include porcelain, sugar, oil, rubber (natural and synthetic) and ‘recreational drugs’.
- **Chemistry and Environment** – modifying or sustaining the environment through chemistry, whether conscious or as an unintended by-product. Examples range from pest control to ‘cradle to cradle’ modes of production and include globally connected topics such as the Green Revolutions and Bhopal.
- **Chemistry and Global Health** – from the early-modern circulation of drugs and pharmaceutical knowledge to recent struggles over patent rights and distribution of medicines.
- **Chemistry and Industry** – from the early-modern world of porcelain manufacture, textile production and dyeing to recent issues relating to the mining and exploitation of minerals only available in war-torn areas of Africa, production of computers and cell phones.
- **Chemistry and Governance** – the role of governments, trading companies, (professional and amateur) scientific societies and corporations in managing and directing the production and circulation of chemically-based productions, methods and knowledge.
- **Chemistry and Everyday Life** – the introduction of new processes and materials such as glass, cement, synthetic fibers, ersatz foods, plastics and nano-materials. Subject areas might include topics such as architecture, clothing and fashion, food and drink.

Submit a Proposal

One-page proposals for individual presentations or round-table discussions that fall under any of these rubrics or focus on relations between them are welcome. We hope to include not only historians of chemistry, but also historians who more generally investigate global commodities, the environment, global health, industry, governance and material culture. The deadline for proposal submission is **1 June 2013**. Travel support for participants, to defray the cost of transportation and lodging will be available. The conference will be open (without cost) to all who are interested.

Proposals should be sent to: cberkowitz@chemheritage.org. For further information, please contact Carin Berkowitz, cberkowitz@chemheritage.org or Lissa Roberts, l.l.roberts@utwente.nl.
The Society for the History of Alchemy and Chemistry congratulates Professor Carsten Reinhardt on his appointment as President and CEO of the Chemical Heritage Foundation (CHF) effective 1 August 2013. Reinhardt is Professor of History of Science at Bielefeld University, a Council Member of SHAC, and a member of the Editorial Advisory Board of Ambix. He will be the third president of CHF, succeeding Thomas R. Tritton, who is retiring.

Reinhardt was selected following a worldwide search for a leader with a great depth of experience in the history of science and technology. He has extensively researched and published on the impact of chemistry on society through topics including the history of industrial research, the emergence of instrumentation, and chemistry’s links to physics, biology, medicine, and technology.

Carsten Reinhardt joined the faculty of Bielefeld University in 2007. In 2006–2007 he held a fellowship at the Max Planck Institute for the History of Science. Prior to that, he spent a decade as a professor at the University of Regensburg. The author of three books, most recently Shifting and Rearranging: Physical Methods and the Transformation of Modern Chemistry (Science History Publications/USA, 2006), Reinhardt has contributed to five edited volumes and published nearly forty scholarly articles. In addition he has received many awards and fellowships, including being named a fellow at the Max Planck Institute for the History of Science and professeur invité in the Department of Philosophy, École Normale Supérieure. Reinhardt was an Edelstein Fellow at CHF in 1998–1999. He was also an Edelstein Fellow at The Hebrew University of Jerusalem in 1994.

**CHF Travel Fellowships**

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: travel-grants@chemheritage.org.
The Chemical Heritage Foundation is pleased to announce the appointments of the Beckman Center Fellows for the academic year 2013–2014. Below are the fellows, their affiliations, and their research.

**Cain Distinguished Fellow (4 months in residence)**
- Robert Fox (University of Oxford, UK)

**Long-Term Postdoctoral Fellows (9-months in residence)**
- Donna Bilak (Bard Graduate Center), Edelstein Fellow, ‘The Allegorical Laboratory: Michael Maier’s Alchemical Emblem Book Atalanta fugiens (1617)’
- Alex Csiszar (Harvard University), Haas Fellow, ‘The Rise of the Scientific Journal in Britain and France’
- Juan-Andres Leon (Harvard University), Cain Fellow, ‘Mathematical Models in Polymer Research, 1940s-1970s: an Industry-Driven Theoretical Science?’
- Emily Stanback (CUNY Graduate Center), Haas Fellow, ‘Romantic Experimentation: Radical Science and the Politics of Disability’

**Long-Term Dissertation Fellows (9 months in residence)**
- Elisabeth Berry Drago (University of Delaware), Allington Fellow, ‘Thomas Wijck’s Painted Alchemists at the Intersection of Art, Science and Practice’
- Nicholas Harris (University of Pennsylvania), Price Fellow, ‘Better Religion through Chemistry: Aydemir al-Jildaki and Alchemy under the Mamluks’
- Iain Watts (Princeton University), Edelstein Fellow, ‘Current’ Investigations: Galvanism, the Birth of Electrochemistry, and the World of Scientific News, 1790-1820’

**Short-Term Fellows**
- Juan Luis Delgado (Universidad Autónoma de Madrid, Spain), Doan Fellow (1 month), ‘Chemical Industry and Chemicals in Spanish gum resin industry, 19-20th Centuries’
- Michelle DiMeo (College of Physicians of Philadelphia), Allington Fellow (2 months), ‘Katherine Jones, Lady Ranelagh (1615-91): The Intellectual Life of Robert Boyle’s Older Sister’
- Georgiana Delia Hedesan (University of Oxford, UK), Allington Fellow (3 months), ‘The Pursuit of Universal Medicine: Alchemical Prolongation of Life and Christianity in Seventeenth Century Paracelsian and Helmetontian Thought’
- Leah McEwen (Cornell University), Otlet Fellow (2 months), ‘Researching the Future through the History of Chemical Information’
- Jarmo Pulkkinen (University of Oulu, Finland), Allington Fellow (1 month), ‘A. I. Virtanen – A Finnish ‘System-Building’ behind AIV butter salt and AIV Method’
- Viviane Quirke (Oxford Brookes University, UK), Doan Fellow (1 month), ‘Chemistry and the History of Cancer Chemotherapy in the US, 1940s-1990s’
- Linda Richards (Oregon State), Doan Fellow (2 months), ‘Unraveling Radiation History’
- Gildo M. dos Santos (University of São Paulo, Brazil), Ullyot Scholar (2 months), ‘Ida Noddack and the Universal Function of Matter’
- Thibaut Serviant-Fine (Université Claude Bernard Lyon 1, France), Doan Fellow (2 months), ‘Drugs and Tools. Antimetabolites in the Early History of Cancer Chemotherapy (1940-1960)’
- Nicholas Shapiro (University of Oxford, UK), Doan Fellow (3 months), ‘Chemical Freshness, Chemical Fetish: The Rise of the Synthetic ‘New Smell’ in Mid-20th Century America’
- Robert Slate (George Mason University), Doan Fellow (1 month), ‘Regulating Nanomaterials: Drawing Lessons from TSCA and REACH’
- Peter Westin (Georgia Institute of Technology), Doan Fellow (1 month), ‘Synthetics of Speed: The Trajectory of Changes in Tire Compound Formulation Across Motorsports and Automobiles in the Latter Half of the 20th Century’
The Genizah Research Unit at Cambridge University Library would like to announce the broadcasting of *Life in Fragments: Stories from the Cairo Genizah*, a 5-episode series for BBC Radio 3's *The Essay*. Produced by Nightjar, the show features five researchers from the Unit giving short (15-mins) talks about the historical aspects of the Cairo Genizah. Further details below.

*The Essay* is on Monday to Friday 27-31 May at 10:45pm on BBC Radio 3, and the shows will be available on iPlayer or to download as a podcast after the event.

The website is: [http://www.bbc.co.uk/programmes/b02otknt/broadcasts/upcoming](http://www.bbc.co.uk/programmes/b02otknt/broadcasts/upcoming)

The iplayer link is: [http://www.bbc.co.uk/iplayer/radio](http://www.bbc.co.uk/iplayer/radio)

The Cairo Genizah is a treasure trove of manuscripts from the Ben Ezra synagogue in Old Cairo that portrays over 800 years of community life. Rediscovered in the 19th century, this vast communal paper-bin contained hundreds upon thousands of scraps of rag-paper and parchment – an unedited archive of prayers, letters, poems, magical spells, alchemical recipes, children’s exercise books, divorce deeds and pre-nuptial agreements that paints a lively and intimate picture of daily medieval life in Egypt and the Eastern Mediterranean.

**Episode 1: The Discovery (27th May)**
In this first essay, Dr Esther-Miriam Wagner of the Genizah Research Unit tells the story of the discovery of the Genizah inside the ancient and crumbling synagogue of Al-Fustat, a suburb of modern day Cairo. Featuring a legendary curse, a pair of intrepid Scottish twins, an eccentric scholar and one very generous rabbi...

**Episode 2: Letters (28th May)**
Intercepting private letters between medieval merchants, Dr Ben Outhwaite, Head of the Genizah Research Unit, uncovers an international trading network that united Jews, Muslims and Christians across Europe, North Africa and the Middle East.

**Episode 3: Women (29th May)**
Looking at marriage and divorce deeds, as well as some incredibly detailed pre-nuptial agreements, Dr Melonie Schmierer-Lee of the Genizah Research Unit reveals the fortunes of women in medieval Cairo.

**Episode 4: Three Lives (30th May)**
Reading the private documents of the legendary philosopher Maimonides, community leader Solomon ben Judah and Indian Ocean trader Abraham ben Yiju, Dr Daniel Davies of the Genizah Research Unit sheds light on three very different lives.

**Episode 5: Alchemy & Magic (31st May)**
In this final essay, Dr Gabriele Ferrario of the Genizah Research Unit reveals the most secretive side of the Genizah collection: the manuscripts relating to alchemy and magic.

Presenters: Esther-Miriam Wagner, Ben Outhwaite, Melonie Schmierer-Lee, Daniel Davies, Gabriele Ferrario
Produced by Michele Banal and Miranda Hinkley
A Nightjar production for BBC Radio 3
Robert Boyle Summer School, 4-7 July 2013

Robert Boyle (1627 – 1691) was born in Lismore Castle and was perhaps the most influential scientist of his day and the most respected of the founding members of the Royal Society of London.

The Robert Boyle Summer School will run this summer from the 4-7 July 2013 at his birthplace, Lismore Heritage Town, Co. Waterford, Ireland. Boyle believed that the ‘new experimental philosophy’ (science) could and should be of great benefit to mankind. He published, 350 years ago this year, On the Usefulness of Natural Experimental Philosophy and reflecting on this we will consider the contribution of science to mankind then and now and have Professor Liam Dolan of Oxford University talking about developments in understanding of plants and Professor Rose Ann Kenny TCD talking about human ageing.

The event will feature world-leading scientists and historians gathering together to discuss a wide range of topics relating to Boyle, his works and times and his legacy including Dr Anna-Marie Roos of the University of Lincoln, Professor Bill Eaton of Georgia Southern University and Peter Elmer of the University of Exeter. For more information, please refer to the website: http://www.robertboyle.ie/
The Grolier Club is pleased to present a landmark exhibition exploring the legacy of thirty-two remarkable women whose extraordinary scientific accomplishments in physics, chemistry, astronomy, mathematics, computing, and medicine changed science. Extraordinary Women in Science & Medicine: Four Centuries of Achievement will illuminate the often little-known careers and accomplishments of these female scientists, examining their work and lives over four centuries.

More than 150 original artifacts, including books, manuscripts, serials, authors’ separates, Ph.D. theses, and laboratory apparatus (such as that used by Marie Curie during her earliest work on radioactivity) will be on view, providing a remarkable overview of the scientific contributions of this eminent group. Included will be numerous items with special attributes and provenance. Of particular interest will be Emilie Du Châtelet’s 1759 translation of Newton’s Principia with the bookplate of Talleyrand; copies of all of her other scientific publications; a mathematics workbook and a letter, both in her hand; and materials about her fourteen-year relationship with Voltaire, including a book she co-authored—although without her name on the title page. A scientific breakthrough written on a brown paper bag is displayed. The exhibition also serves to announce a falsely attributed first edition due to a typesetters error in the seventeenth century and other bibliographical discoveries.

Extraordinary Women in Science & Medicine: Four Centuries of Achievement highlights such modern luminaries of the physical sciences as Marie and Irène Curie, Marietta Blau, Lise Meitner, Maria Goeppert Mayer, C.-S. Wu, Dorothy Crowfoot Hodgkin, and Rosalind Franklin in physics and chemistry. Among medical scientists, the exhibition features Gerti Cori, instrumental in unveiling the fundamental mechanism of metabolism; Gertrude Elion, the first to design medicines effective in the cure of cancer and viral diseases; Rosalyn Yalow, developer of the powerful analytic tool, radioimmunoassay; and Florence Sabin, whose discoveries form the basis for our current understanding of cellular immunity. Two game-changers in medical science are Rita Levi-Montalcini, discoverer of nerve growth factor, and Barbara McClintock who discovered that genes are not fixed but move—the key paradigm shift in modern genetics. Great and influential clinical physicians include Louise Boursier, midwife to King Henry IV and Marie de Medici of France; the pioneering pediatric neurologist Mary Putnam Jacobi; and Helen Taussig, designer of the life-saving ‘blue baby’ operation.

The exhibition is designed to pose questions about women’s recognition—or lack thereof—in the sciences. Topics treated include educational opportunities, role models, the use of social capital, individual styles of doing science, and gender issues associated with society norms of the periods. The viewer may consider such questions, for example, as who deserved and who received Nobel Prize awards among the modern women. The intention is to raise awareness about how women’s roles have been limited in the development of the sciences.

The exhibition was organized by Curators Ronald K. Smeltzer, Ph.D., Paulette Rose, Ph.D., and Robert J. Ruben, M.D., and will be open to the public free of charge, Monday – Saturday, 10 a.m. to 5 p.m. Additional information and directions are available at www.grolierclub.org.

Related Events: Thursday, 3 October 2013, 6:00 PM-7:30 PM: Collectors’ Forum; Saturday, 26 October 2013, between 12:00 PM-5:00, Symposium on Extraordinary Women in Science & Medicine

16, 23, 30 October 2013: Lunch-hour tours of the exhibition.

For special visits with a curator as host, contact Ronald K. Smeltzer, rksmeltzer@verizon.net
Oregon News, Events & Grants

New Appointment

Congratulations to the Hon. Editor of Ambix, Dr Jennifer M. Rampling, who has been appointed to a tenure-track Assistant Professorship in History at Princeton University. Dr Rampling will teach on early modern science as part of Princeton’s Program in History of Science, starting in February 2014. She is currently a Research Fellow in the Department of History and Philosophy of Science, University of Cambridge, and a Research Fellow of Clare Hall, Cambridge, where she works on the history of medieval and early modern alchemy, medicine and natural philosophy.

HIST Award for Outstanding Achievement
in the History of Chemistry

The recipient of the 2013 HIST Award of the Division of the History of Chemistry of the American Chemical Society is Professor William R. Newman, Distinguished Professor and Ruth Halls Professor of History and Philosophy of Science, Indiana University, Bloomington, IN. The HIST Award will be presented to Prof. Newman at the autumn national meeting of the American Chemical Society in Indianapolis in September 2013.

The award recognises an outstanding career of contributions to the history of chemistry. It is international in scope, and is presented annually at the autumn national ACS meeting. This award is the successor to the Dexter Award (1956-2001) and the Sydney M. Edelstein Award (2002-2009), also administered by the Division of the History of Chemistry (HIST).

Obituary:
Professor Colin Russell

Professor Colin A. Russell died at home on 17 May after a long illness. He was born in London on 7 September 1928, England and took an external London BSc at University College, Hull. He was a organic chemistry lecturer at Kingston Technical College (now Kingston University) and Harris College, Preston (now the University of Central Lancashire), before founding in 1970 the Department of the History of Science and Technology at the Open University, where he spent the rest of his career. In retirement, he became a research scholar in the History and Philosophy of Science Department at Cambridge University and a visiting fellow at Wolfson College, Cambridge.

While at Kingston, Colin became interested in the history of chemistry, and took an M. Sc. (1958) and Ph.D. (1962) at the University of London in the history and philosophy of science, and later the D.Sc. (1978).

(continued on next page)
His monograph on the history of valency published in 1971 remains a classic in the field. In 1977, to mark the centenary of the Royal Institute of Chemistry (soon to become the Royal Society of Chemistry), Colin published *Chemists by Profession: The Origins and Rise of the Royal Institute of Chemistry*, with his OU colleagues, Gerrylynn K. Roberts and Noel Coley. At the Open University, he became interested in the chemical industry and filmed several obsolescent industrial processes, including the last lead chamber plant in Britain just before it was demolished. He became increasingly concerned about the loss of material about the chemical industry and set up a project to record the archives of the industry.

When Colin was in Preston, he discovered that Edward Frankland was born in the town and ultimately this connection led to the publication of *Lancastrian Chemist: The Early Years of Sir Edward Frankland* (1986) and *Edward Frankland: Chemistry, Controversy and Conspiracy in Victorian England* (1996). During the research for these books, he discovered an important collection of Frankland correspondence is still in the hands of the Frankland family, which he microfilmed for the benefit of other scholars; this archive was deposited in the John Rylands Library in 2009. In the 1980s, Colin became increasingly concerned about the relationship between the chemical industry and the environment.

He created one of the first research fellowships in the history of the chemical industry and the environment, and with his colleagues, published *Chemistry, Society and Environment: A New History of the British Chemical Industry* in 2000. A long-standing interest in the history of railways finally resulted in *Early Railway Chemistry and its Legacy* (2011), co-authored with John Hudson. Unusually for a professional historian of chemistry, he was a Fellow of the RSC and a member of Council between 1999 and 2002. He was the chairman of the RSC Historical Group in a crucial period for the group in the 1980s and president of the British Society for the History of Science from 1986 to 1988. He was presented with the Dexter Award by the American Chemical Society in 1990 and the David Mellor Award from the University of New South Wales in 1995. Colin also had a strong interest in the relationship between science and religion. He was president of Christians in Science and on the advisory board of the Faraday Institute in Cambridge. He also gave the Templeton Lectures at Cambridge in 1993, which were published as *The Earth, Humanity and God*. Historians of chemistry will also be grateful for his two volumes on *Recent Developments in the History of Chemistry* (1985) and *Chemical History: Reviews of the Recent Literature* (2005) with Gerrylynn K. Roberts.

Peter J. T. Morris

Obituary:
Professor David C. Goodman

David C. Goodman, professor of the history of science at the Open University, has also died recently. While he became better known as a historian of early modern science in Spain and Portugal, David began his career in the late 1960s as a historian of chemistry and published papers on early nineteenth century crystallography. He was a colleague of Colin Russell and they collaborated on an Open University course on the rise of scientific Europe, and published the still valuable *The Rise of Scientific Europe, 1500-1800* in 1991.

Peter J. T. Morris
Between 20 and 24 June 2011 I completed the activities described in the award application. On 20 June I visited Professor Hasok Chang in Cambridge, UK, and spoke with him about my thesis and the talk I was to give on 23 June. I presented him with slides that gave a preliminary outline of my thesis and we discussed various trouble spots in the arguments and remedies for them, as well as discussing further literature that I should incorporate into the thesis itself. We discussed prospects for my visiting Cambridge for a full term to work more closely with him. In particular, he pointed out to me some ways to justify the claim that the case studies in chemistry that I am investigating are in fact cases of scientific explanation, although they do not feature the characteristics of traditional accounts of explanation.

On 22–24 June I attended the third biennial conference of the Society for Philosophy of Science in Practice in Exeter, UK. There I discussed my doctoral work with a number of colleagues both in the context of my talk and in more informal settings. In particular, I brought up a number of case studies in chemistry that I would like to consider for my thesis and surveyed my colleagues on which ones were familiar, which unfamiliar, and which challenged them to reconsider their views on what counts as a scientific explanation. My thesis project uses chemical case studies to re-envision philosophical theories of scientific explanation, and the conference gave me my first chance to take some of the case studies to the history-and-philosophy-of-science community and obtain public feedback.

The case studies that I have amassed so far have come to me largely through my own historical work in chemistry, and I intend to continue developing this research throughout my thesis. My own area of historical expertise is in early twentieth-century mathematical models of the chemical bond, and so far most of my case studies have evolved from that work. One of the primary arguments I am making against the current philosophical literature originates in the importance of molecular structure, and the geometrical structures that model it, in explaining chemical phenomena. I use historical and contemporary anecdotes from chemistry to illustrate this thesis, focusing in particular on the chemical community’s struggle to reconcile its classical intuitions about the electrostatic linkages of particles with the quantum theory of the electron.

I have begun to develop a few other case studies out of conversation with chemists and archival studies. The one I worked through in the most depth for the conference was that of Fischer-Tropsch synthesis, a common industrial process by which natural gases are converted into liquid fuel via transition-metal (iron or cobalt) catalysts. Professor Chang’s more recent work on chlorine and acids may prove useful as well. The feedback I received from the conference was immensely valuable, and I have reorganized the way I use the Fischer-Tropsch synthesis example because of it. I have also made contacts with a number of colleagues interested in similar projects, such as Andrea Woody and Jonathan Tsou, who have been keen and constructive critics so far.

I thank the Society for the History of Alchemy and Chemistry very much for awarding me the opportunity to develop this thesis project through my work with Professor Chang and my trip to the Society for Philosophy of Science in Practice conference. It has been quite eye-opening so far.
I am a second year DPhil student at the University of Oxford in the history of science and medicine. My doctoral thesis centres on domestic medicine in eighteenth-century England and investigates the social and material history of recipe books, which were collections of advice for maintaining households. Within these manuscripts I focus on recipes that were used for medical treatment. Recipe collecting was a long-standing tradition which continued to thrive in wealthy and middling households, despite the increased availability and affordability of purchasable medical care. Building on current research investigating the consumer nature of medicine provided by doctors and apothecaries, and the household’s equally vital role in medical care, my project considers the extent to which eighteenth-century households maintained the recipe collecting tradition as part of medical treatment, whilst simultaneously evolving with the commercialization and professionalization of medicine.

Made possible by the generous financial support from SHAC through a New Scholar Award, I was able to complete a large portion of the archival research. I visited four county record offices throughout England, in addition to the Brotherton Library at the University of Leeds, and I photographed over fifty recipe books and other documents related to domestic medicine. In conjunction with another research grant I was also able to complete my archival research at the Wellcome Library, which included photographing and analysing approximately seventy manuscripts. This research award was specifically for my work related to the role of distillation in eighteenth-century household medicine, and I have found numerous valuable sources related to this practice. At the Wellcome Library I photographed a unique recipe book that belonged to a woman named Rebecca Tallamy, which was recorded in a 1691 edition of John French’s ‘The Art of Distillation’. My blog post on ‘The Recipes Project’ discusses the relationship between manuscript and print sources in recipe books and the use of distillation in the household, and can be viewed here http://recipes.hypotheses.org/278. Isabella Fenwick’s recipe book from the Brotherton Library will be a case study in my chapter on distillation. Her book contains a number of medical waters, one being ‘Surfeit Water My Lady Manchester’s Way’; a useful tonic for indigestion and melancholy. From the Gloucestershire County Record Office, a letter dated May 2, 1734 exchanged between cousins includes a recipe for a cordial water for treating plague that the writer claimed ‘to the best of [her] Memory much the richest’. Distillation required expertise and patience and this recipe advised, ‘if you distil a greater quantity [that] cannot be distilled in one day, give not over distilling till all is done but keep your alembic going night and day.’ Plague water was one of the most common distilled waters during the eighteenth century and was a trusted domestic treatment against digestive ailments, and other illnesses like smallpox and measles.

Currently, I am writing a chapter on advice and treatment in recipe books that will consider the household as part of a social-wide cooperative system of health and medical care. During the summer I plan to revise and complete my case study chapter on distillation in domestic medicine. My archival research would not have been possible without the help of SHAC, so I thank them once more for their support.
Vangelis Koutalis

University of Ioannina, Greece

My proposed project was a continuation of the research project I had submitted to the Society for the History of Alchemy and Chemistry one year ago (the report on the research done by means of SHAC 2011 awards scheme is published in the Chemical Intelligence, no. 7, p. 27). Being close to completing my doctoral dissertation, the topic of which is the emergence and dissemination of chymistry in Greek-speaking communities during the first half of 18th century, my aim was to examine certain primary manuscript sources additional to those I had already worked with.

Having already transcribed a large part of the copy of the manuscript Greek translation of Jean d’Espagnet’s *Enchiridion Physicae Restitutae* by the 18th century Greek-speaking scholar Anastasios Papavassilopoulos, preserved in the Library of the Romanian Academy, Bucharest, Ms 485 (18th century), I examined the two other surviving copies of the same manuscript translation (National Library of Greece, Athens, Ms 1331, ff. 1r-98v; Collection of the Historical and Ethnological Society, Athens, Ms 34; both dated to the early 18th century). The collation of these three copies will enable me to prepare a critical edition of it.

Judging from the condition of the manuscript copies, one may validly infer that the Greek translation of the *Enchiridion* was used as a textbook. If this is the case, then it is the earliest, as far as we can tell, specimen of modern, explicitly non-Aristotelian natural philosophy in the Greek-speaking communities of the Ottoman empire. As such, it can be seen as a challenge to the dominant historiographical narrative on the development of scientific discourse in the Greek-speaking scholarly milieu of the 18th century, according to which the passage to modernity is identified with the dissemination or appropriation of the Newtonian natural philosophy (whereas D’Espagnet’s book is a Paracelsian treatise).

Some of the results of my work on Papavassilopoulos’ translation were presented at the symposium on ‘Byzantine and post-Byzantine alchemy: principles, influences, and effects’ organised by Gianna Katsiampoura (Institute fon Neohellenic Research, National Hellenic Research Foundation, Greece) and Rémi Franckowiak (Université des Sciences et Technologies de Lille, France), during the 5th International Conference of the European Society for the History of Science, which took place in Athens, from the 1st to the 3rd of November 2012. My contribution to that conference will be published in the proceedings of the aforementioned symposium.

I also visited the library of the monastery of Olympiotissa, in the city of Elassona, where the single surviving copy of the printed book of Michael Kontopides Marcellus, *Σύνοψις της Φυσικής Δυνάμεως*. Και τού τρόπου με τον οποίον πρέπει να μεταχειριζόμεθα μίαν Σκόνην ονομαζόμενην Πέμπτη ουσία Χρυσίου ιατρικοῦ. Συνθεμένη ἀπὸ ἐμὲ τῶν ταπεινῶν Μιχαήλ Κοντοπίδην Μάρκκλλον. Αξίωτην ὁποίαν τῆς περιφήμου πόλεως Παταβίου καὶ νέας Αθήνας. Πάδοβα: 1691, pp. 32 (Synopsis of the Natural Power, and of the way in which we have to use a power called *Fifth Essence of the Golden Medicine*, Padova, 1691) is held. This book is the first printed evidence of the early modern iatrochymistry in Greek. Under the form of an advertising brochure, the author (whose name is known through a few manuscript Antidotaria dated to the 18th century) provides a theoretical justification for the application of chymical knowledge in medicine, which evinces Paracelsian influences. The study of its content will allow a deeper understanding of the intellectual context within which the translation of d’Espagnet’s *Enchiridion* became possible.
The SHAC Autumn Meeting was held on Saturday 8 December at the Science Museum London, on the theme of ‘What’s the Matter? The Material Culture of Chemistry?’ This day of talks, discussion and guided tours explored the material aspects of the history of alchemy and chemistry. It was organised by Dr Peter Morris and Dr Robert Bud (Science Museum) on behalf of the Society.

The day began with two tours of the Museum’s collections. First, Ms Jane Insley (Science Museum) led a tour of the exhibition ‘James Watt and our World,’ which includes a reconstruction of Watt’s workshop. Dr Jennifer Rampling (University of Cambridge) then introduced the new exhibition ‘Signs, Symbols, Secrets: An Illustrated Guide to Alchemy,’ including a discussion of the alchemical imagery used in the Museum’s recently discovered ‘Ripley Scroll.’

The Society’s Annual General Meeting was held at 13.40 in the Founders Room. The Chair, Dr Robert Anderson, delivered a short address to introduce the meeting, thanking Professor and Mrs Robert Temple for their generous contributions to the Society. Their donation enables the Society to publish an occasional series of monograph-length volumes as supplements to Ambix, dedicated to early alchemy and chemical studies and translations. The Hon. Secretary, Dr Anna Marie Roos, then presented the Annual Report of the Society’s activities of 2011 to the meeting. This included an announcement of the winner of the Rumford Fellowship, the winners of the SHAC Award Scheme, the recipient of the Oxford History of Chemistry Dissertation Prize, the appointment of Dr Jennifer Rampling as Editor and Dr Peter Morris as Deputy Editor of Ambix, the expansion of Ambix to four issues per year, and changes to Council Membership.

Dr Peter Morris then opened the afternoon session of the meeting, which consisted of two sessions and a roundtable discussion.

Session 1 – Recovering Material Culture

Marcos Martinón-Torres (UCL) gave a talk titled ‘No crucible, no chemistry: reaction vessels in early modern laboratories’. Since the Middle Ages, crucibles that were manufactured in the Hesse region of Germany were renowned for their ability to withstand strong reagents and high temperatures. Using petrographic, chemical and X-ray diffraction analysis, Dr Martinón-Torres showed that Hessian crucibles are able to withstand high temperatures: something their makers had identified empirically long before their chemical structure was identified using twentieth-century techniques. This fascinating talk included the opportunity to handle several early modern crucibles, one of which still contained metallic silver.

Haileigh Robertson (University of Leeds) then spoke about the challenge of ‘Replicating early modern gunpowder’, presenting the latest findings from her Ph.D. research. She examined the role of gunpowder as science, developed according to the Baconian ideal to elucidate the relationship between scientific theory and military practice. She also recounted her attempts to reproduce the formula of early modern gunpowder, grounding it contextually with a discussion of the aerial nitre theory, among other chymical theories of the early modern period. Her presentation led to a series of lively questions concerning replication of early modern chymical practices.
Minutes for the Annual General Meeting 2011 (continued)

Finally, Robert Anderson (Clare Hall, Cambridge) presented on ‘Material material culture: new Black finds’. He opened his lecture with a brief discussion of the pedagogical role of chemistry museums and their audiences, focusing on the Chemical Heritage Foundation in Philadelphia. He then discussed archaeological findings in the Old College quadrangle at the University of Edinburgh found near the former laboratory of Joseph Black, who became Professor of Chemistry in 1766. The laboratory was demolished in the 1790s, and the dig was carried out prior to a landscaping project in the quadrangle. Included in the findings were samples of mercury and arsenic, along with glass tubes, bottle stoppers, thermometers and storage jars, as well as ceramic distillation apparatus likely made by Wedgwood. Dr Anderson’s talk shed new light on Black’s working practices.

Session 2 – Materials and Practices

After tea, the second session opened with a talk by Robert Bud (Science Museum) on ‘Narratives of science-practice in the 19th century as inspired by accounts of chemical practice and Watt in particular’. Peter Oakley (Royal College of Art) then gave a talk titled ‘Managing a Stream of Gold: the UK Assay Office in the 20th century’. Dr Oakley brought his expertise as an employee of the Assay Office to his engaging paper. He argued convincingly and engagingly that the apparatus of the modern assay office is essentially very similar to that of a seventeenth-century assay office. He showed that the techniques used in assaying early modern alchemical materials changed only gradually over the centuries. Dr Oakley also discussed the private and public face of the Assay Office. These papers were followed by a lively roundtable discussion.

Anna Marie Roos
Jennifer Rampling

NEW MEMBERS

SHAC welcomes the following new members:

Altieri, Pablo  New York  Student member
Everett, Nicholas  University of Toronto  Full member
Exarchakos, Kostas  National University of Athens  Student member
Hendriksen, Dr Marieke  University of Groningen  Full member
Kaji, Dr Masanori  Tokyo Institute of Technology  Full member
Kettle, Andrew  Brisbane  Student member
Qaranta-Vogliotti, Paolo  Tradate, Varese, Italy  Full member
Radakovic, Robert  University of Exeter  Student member
Schranz, Kristen  University of Toronto  Student member
Tynan, Stephen  Indiana State University  Student member
Winterburn, Emily  University of Leeds  Full member
MEMBERSHIP

Subscriptions 2013-2014

Subscriptions are normally due on 1 January each year (they have been delayed this year while the Society’s website is being re-designed). It is also possible to pay for two years at a time. The rates are:

<table>
<thead>
<tr>
<th>Type of Membership</th>
<th>For 2013</th>
<th>2013 &amp; 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Membership</td>
<td>£35</td>
<td>£70</td>
</tr>
<tr>
<td>in US Dollars</td>
<td>$70 US</td>
<td>$140 US</td>
</tr>
<tr>
<td>Retired member with 10 years standing</td>
<td>£27</td>
<td>£54</td>
</tr>
<tr>
<td>in US Dollars</td>
<td>$54 US</td>
<td>$108 US</td>
</tr>
<tr>
<td>Student member</td>
<td>£22</td>
<td>£44</td>
</tr>
<tr>
<td>in US Dollars</td>
<td>$44 US</td>
<td>$88 US</td>
</tr>
</tbody>
</table>

Methods of Payment

1. Online via PayPal.

2. By a cheque in pounds sterling, payable to SHAC sent to John Perkins, 19 Nethercote Road, Tackley, Oxfordshire, OX5 3AW.

3. By a US dollar cheque payable to SHAC. **Please add $15 to the value of your cheque to cover the costs of currency conversion** and send the cheque to John Perkins, 19 Nethercote Road, Tackley, Oxfordshire, OX5 3AW.

4. By International Bank Transfer to Santander Bank, Bootle, Merseyside GIR 0AA, UK;

   BIC: ABBYGB2L

   IBAN: GB12 ABBY 0901 5511 6100 09.

When paying by bank transfer please give your name and ‘SHAC subscription’ as the payment reference, otherwise it is not possible to identify who has made the payment.

UK members who subscribe in connection with their work are reminded that the subscription is tax-deductible.
We are welcoming any contributions newsletter readers might wish to make to the Chemical Intelligence. This includes, but is not limited to:

- Upcoming Conferences or Meetings
- Publications
- Conference or Meeting Reports (these should not normally exceed 1,000 words)
- News Items or Announcements
- Grants, Fellowships or Awards
- Reviews of Websites, projects or blogs of interest (up to 500 words)

The Editor retains the right to select those contributions that have relevancy to all the SHAC members.

We also wish to make the Chemical Intelligence a platform of interaction between members. Hence, we encourage you to submit:

- Questions you may wish to put to other members
- Materials in progress you are working on and wish to share
- Suggestions for improvement

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

Jo Hedesan, E-mail: georgianahedesan@yahoo.com

WWW.AMBIX.ORG

Society for the History of Alchemy and Chemistry

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 quarterly from 2013. 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/, under ‘Membership’.

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

John Perkins
19 Nethercote Road
Tackley
Oxfordshire OX5 3AW
United Kingdom

E-mail: shacperkins@gmail.com