

Chemical Intelligence

Newsletter of The Society for the History of Alchemy and Chemistry
No. 5 May 2011

2011 marks the International Year of Chemistry, under the auspices of the International Union of Pure and Applied Chemistry (IUPAC) and UNESCO. Throughout the year, a host of events and exhibitions will allow scholars, scientists and the wider public to explore chemistry's history in all its permutations: from ancient glass-making to alchemical medicine, from the legacy of Lavoisier to modern environmental chemistry.

This spring, the Society pays tribute to its past, with a full report on its 75th Anniversary Meeting. It also looks forward: to a new, four-year series of international meetings – *Sites of Chemistry, 1600–2000* – and to a new generation of younger scholars, whose work on the history of alchemy and chemistry is celebrated by the launch of the new Rumford Scholarship in the History of Alchemy or Chemistry, and the award of the 2011 Partington Prize.

In this issue:

1. Calendar	5. Reports
2. Calls for papers	6. News and resources
3. Prizes, grants, fellowships	7. Membership
4. SHAC Graduate Network	8. Further Intelligence

1. Calendar

1.1 SHAC meetings

13 June
2011 **SHAC Council meeting**
Birkbeck, University of London

3–5 July
2011 **SHAC General Meeting (Summer):**
'Sites of Eighteenth-Century Chemistry'
Maison Française d'Oxford, Oxford

Sites of Chemistry, 1600–2000 is a four-year project, sponsored by SHAC and the Wellcome Trust, to investigate the multitude of sites, spaces and places where chemistry has been practised since 1600. Registration is now open for the first meeting (programme below).

Sunday 3 July:

18.00–20.00 Welcome, Reception at the Museum of the History of Science

Monday 4 July:

9.00–9.30 Registration and Introduction

9.30–12.30 Session 1: 'Metropolitan sites and contexts'

- John Christie (Oxford), 'Chemical London: chemical sites and the politicization of experimental space'
- Lissa Roberts & Jeroen Bos (Twente), 'Chemistry and colonialism in the port cities of Amsterdam and Batavia'
- Simon Werrett (Seattle), 'Green is the Colour: St. Petersburg's chemical laboratories and competing visions of chemistry in the eighteenth century'
- John Perkins (Oxford). 'Chemical Paris: laboratories and other sites, 1750–90'.

12.30–13.30 Lunch; meeting of the project Steering Committee.

13.30–15.45 Session 2: 'Laboratories: spaces and practices'

- Geert Vanpaemel (Louvain), 'The Site of Ambiguity. the chemistry laboratory at Louvain University'
- Christine Lehman (Paris). 'Pierre Joseph Macquer's chemical sites: laboratories and instruments'
- Marco Beretta (Florence), 'Lavoisier's chemical laboratories: a preliminary survey'
- Mary Bowden (Philadelphia), 'Realizing Joseph Priestley's laboratory in Northumberland, Pennsylvania'
- Jane Insley (London), 'Chemistry in the Garret – James Watt's cookbook chemistry at Heathfield, Birmingham, 1790–1819'.

16.00–18.00 Session 3: 'Chemical sites, cultural spaces and contexts'

- Matthew Eddy (Durham), 'Demonstrations, Visualisations and Conversations: the University of Edinburgh's sites of chemical instruction'
- Rachel Dunn (Durham), 'Chemistry in Dissenting Academies and Literary and Philosophical Societies'
- Elena Serrano (Barcelona), 'Making space, building networks: women's chemistry in late eighteenth-century Spain'
- Corinna Guerra (Bari), 'In case of eruption? Enjoy the natural laboratory of the Kingdom of Naples'.

19.00–22.00 Conference dinner and river trip. Salters Boatyard, Folly Bridge.

Tuesday 5 July

9.00–12.00 Session 4: 'Chemical sites and economic contexts I: the State and innovation'

- Hjalmar Fors (Stockholm), 'Chemistry in the Swedish Bureau of Mines'.
- Peter Konecny (Regensburg), 'Sites of chemistry in the Schemnitz Mining Academy and the Habsburg mining administration'
- Ursula Klein (Berlin), 'Chemical Experiments on pigments in the laboratory of the Royal Prussian Porcelain Manufactory (1787–91)'
- Patrice Bret (Paris), 'Chemistry sites of the gunpowder manufacturing administration in eighteenth-century France'.

12.00-13.00 Lunch; Meeting of the project committee.

13.00–15.15 Session 5: 'Chemical sites and economic contexts II: private entrepreneurs, innovation and the state'

- Samir Boumediene (Lyons), 'The apothecary's shop as a site for the practice of chemistry in the eighteenth century'
- Emma Spary (Cambridge), 'Food laboratories in eighteenth-century Paris'
- Thomas Le Roux (Paris), 'Places of chemistry and pollution, Paris and France, 1750–1800'
- Marie Thébaud-Sorger (Paris), 'The workshop of ballooning: staging a culture of heat and gases in provincial towns in France at the end of the eighteenth century'.

15.30–16.30 Roundtable on comparative perspectives, and conclusion.

For further details (including registration form), see the conference website at: <http://www.sitesofchemistry.org/>, or contact the contact the co-ordinators of the project, John Perkins (jperkins@brookes.ac.uk), and Antonio Belmar (belmar@ua.es).

24 Nov
2011

SHAC General Meeting (Autumn) and AGM:

'Academics, Consultants, Industrialists and Government Chemists: The History of Chemists' Careers in England, 1880–c.1960'

Oxford Brookes University, Oxford

Speakers will include: Dr Robin Mackie, Dr Gerrylynn Roberts and Dr Anna Simmons (Open University) on the changing pattern of chemists' careers over the period; Prof Bill Brock (University of Leicester) on Armstrong and Crookes as exemplars of academic and consulting careers, 1880–1930; Dr Vivianne Quirke (Oxford Brookes University) on Spinks as an exemplar of a twentieth-century industrial career; and Dr Sally Horrocks (University of Leicester) on women's careers from the Second World War onwards. SHAC's AGM for 2010 will be held on the day.

Further information on the meeting will be available in the next issue of *Chemical Intelligence*, and on SHAC's website: www.ambix.org.

1.2 SHAC-supported events

May –
August 2011

AD HOC: History of Chemistry Reading Group

AD HOC started life in London in 2004 as a monthly reading and discussion group, organised by Hasok Chang. Parallel series of meetings are held at UCL and Cambridge. While our main focus is on history, we also pay attention to philosophical, sociological, public and educational dimensions of chemistry. Over the past years our meetings have been attended by a variety of scholars, ranging from advanced undergraduates to teaching staff in both science studies and chemistry, and often attracting visitors from other parts of the UK and abroad. For more information, including the programme and details of readings, please visit our website, www.hps.cam.ac.uk/adhoc. To join the mailing list, contact the group's secretary, Stephanie Seavers (stephanie.seavers.09@ucl.ac.uk).

AD HOC (Cambridge): 'Chemistry and Education'

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

- 11 May 'Chemistry in the curriculum'
Keith Taber (Faculty of Education, Cambridge)
- 18 May 'Learning chemistry from books'
Hasok Chang and Jennifer Rampling (HPS, Cambridge)
- 1 June 'Chemistry courses in the Enlightenment and beyond'
Robert Anderson (Clare Hall, Cambridge) and John Perkins (Oxford Brookes University)
- 8 June 'Chemistry in Cambridge'
Simon Schaffer (HPS, Cambridge)

AD HOC (London): 'Chemistry and the Public'

6pm–7.30pm (Tuesdays, monthly), University College London

- 17 May 'Victorian popular chemistry'
Melanie Keene (Homerton College, Cambridge)
- 7 June 'Ballooning'
Mi Gyung Kim (North Carolina State University)
- 5 July 'Chemistry and the science media'
Kat Austen (*New Scientist*)

- 9 August 'Chemistry: a televised history'
Followed by AD HOC's 7th birthday party.

- 10 May 2011 '**Chimie et alchimie: continuités et ruptures**'
2.30pm–5.30pm, Salle Corbin (locaux de STL, bâtiment B), Université de Lille 3, Villeneuve d'Ascq (métro Pont-de-bois), Lille

UMR 8163 'Savoirs, Textes, Langage' (CNRS, universités de Lille 3 et de Lille 1): Séminaire 'Histoire de la chimie aux XVIIe et XVIIIe siècles' (responsables: Bernard Joly et Rémi Franckowiak).

'Lavoisier et l'alchimie'

- Marco Beretta (Università di Bologna/Institute and Museum of History of Science, Florence), 'Lavoisier and alchemy: the conservation of matter and the struggle against transmutation'
- John Perkins (Oxford Brookes University), 'The rejection of alchemy and the construction of chemistry as an enlightened science, France, 1720–70'

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

A colloquium to mark the collaboration of the Oxford Seminar in the History of Chemistry (University of Oxford History Faculty, Maison Française d'Oxford, Oxford Brookes University, SHAC), Séminaire 'Histoire de la chimie aux XVIIe

et XVIIIe siècles' (Université de Lille 1 et 3), and AD HOC (Department of History and Philosophy of Science, University of Cambridge).

1) Papers

- Jennifer Rampling (University of Cambridge), 'When Hermes met Hippocrates: medical alchemy and chemical medicine in early modern England'.
- Anna Marie Roos (University of Oxford) [and Victor Boantz (Sydney)], 'Alchemical agendas, the New Science and patterns of authority at the early Académie Royale des Sciences and the Royal Society'.
- Remi Franckowiak (Université de Lille 1), 'Chimie et alchimie dans les papiers de Jean Hellot'.
- John Perkins (Oxford Brookes University), 'The rejection of alchemy and the construction of chemistry as an enlightened science, France, 1720–70'.

2) Forum (presentations by graduate students and those who have recently completed their doctorates):

- Jo Hedesan (University of Exeter), 'Medical alchemy and Christianity in the thought of Johan Baptista Van Helmont (1579–1644)'.
- Lindsey Fitzharris (University College London), 'Chemical corpuscularianism: theories of matter and the influence of Van Helmont in John Webster's *Metallographia* (1671)'.
- Cesare Pastorino (Chemical Heritage Foundation), 'Weighing matter: the origins of Francis Bacon's experiments on specific gravities'.
- Karin Ekholm (University of Cambridge), 'Alchemical processes and metaphors in Highmore's theory of generation'.

3) Roundtable

Is alchemy chemistry? Should the two be treated beneath an umbrella term like 'chymistry', or 'technoscience'? Was there anything distinctive about alchemy that was 'lost' during the 'transition' to chemistry? If there was a transition, when did it happen, and why? A discussion of the relationship between alchemy and chemistry, led by Bernard Joly (Université de Lille 3) and Hasok Chang (University of Cambridge).

For further information, or if you are interested in participating, please contact John Perkins at jperkins@brookes.ac.uk.

1.3 Other activities worldwide

3 May 2011 **'Primo Levi's lesson: a bridge between chemistry and literature'**
4.00pm, Unilever Lecture Theatre, Department of Chemistry, Lensfield Road, Cambridge

This seminar is hosted jointly by the Departments of Chemistry and of History and Philosophy of Science, University of Cambridge. Professor Luigi Dei (Department of Chemistry 'Ugo Schiff', University of Florence) will be speaking about the science-literature connection in Primo Levi's work.

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

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

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

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

4 May **Res Metallica symposium: 'The Periodic Table of Mendeleev'**
1:30pm–7.30pm, Katholieke Universiteit Leuven: 'Aula van de Tweede Hoofdwet', Thermo-technisch Instituut, Kasteelpark Arenberg 41, 3001 Heverlee

The next Res Metallica symposium takes place at the Termotechnical Institute of the Catholic University of Leuven. The symposium is organized within the framework agreement between Bekaert, ArcelorMittal Gent/OCAS and Umicore and the department of Metallurgy and Materials Engineering of the K.U.Leuven.

- 1.30pm: Registration and coffee
- 2.00pm: Prof. Peter Atkins (Oxford), 'A seat at the periodic table'
- 3.30pm: Unveiling of the life-size interactive table of Mendeleev
- 4.00pm: Prof. Eric Scerri (UCLA), 'The still vital periodic table'
- 5.00pm: Dr Jürgen Gieshoff and Maurits Van Camp (Umicore), 'Umicore and the table of Mendeleev'
- 6.00pm: Reception

There is no registration fee. Please register online before **1 May 2011**, at: <http://www.mtm.kuleuven.be/ResMetallica>

May 2011 **Chemical Heritage Foundation Brown Bag Lectures**
12.00pm–1.00pm, Chemical Heritage Foundation, Philadelphia, USA

Brown Bag Lectures (BBLs) are a series of weekly, informal talks on the history of chemistry or related subjects, including the history and social studies of science, technology, and medicine. Based on original research (sometimes still in progress), these talks are given by local scholars for an audience of CHF staff and fellows and interested members of the public. The Brown Bag Lecture Series is a project of the Beckman Center for the History of Chemistry and the Othmer Library of Chemical History.

10 May Benjamin Gross (Princeton University), 'Snatching defeat from the jaws of victory: RCA and the commercialization of the LCD'

17 May Funke Sangodeyi (Harvard University), 'Body Holocaust: antibiotics, good germs, and disease ecologies, 1940s–1950s'

24 May Megan Shields Formato (Harvard University), 'Niels Bohr's writing'

18–20 May **Congrès de la Société française d'histoire des sciences et des techniques**
2011 *Faculté des Sciences et des Techniques de l'Université de Nantes, France*

Bernard Joly et Rémi Franckowiak (Université de Lille) organisent une session intitulée, 'Alchimie, chimie, littérature et poésie'. Le programme détaillé de cette session peut être consulté sur le site du congrès de la SFHST: <http://sfhstnantes2011.blogspot.com/>. Pour plus d'informations, contacter: sfhst.nantes2011@gmail.com.

6–8 June **7th Laboratory History Conference**
2011 *Katholieke Universiteit Leuven, Belgium*

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

The aim of the conference is to investigate the history of the modern laboratory in relation to its institutional environment, ranging over national styles of research, different disciplines and both formal and informal functions. Detailed information, including the programme, is available on the conference website: <http://laboratoryhistoryconference.wordpress.com/category/1-home/>. Alternatively, please contact Prof. Geert Vanpaemel or Eline Van Assche at labhist7@arts.kuleuven.be.

21–24 June **CHMC symposium: 'Renewing the heritage of chemistry in the 21st century'**
2011 *ESPCI ParisTech and Maison de la Chimie, Paris*

Registration is now under way for this international symposium: 'Renewing the heritage of chemistry in the 21st century. Conversations on the preservation, presentation, and utilization of sources, sites, and artefacts', to be held in Paris from Tuesday 21 to Friday 24 June 2011. The symposium, which is organized under the auspices of the Commission on the History of Modern Chemistry of the International Union of History and Philosophy of Science (Division of History of Science and Technology), will begin with a reception at the Académie des sciences on the evening of 21 June, and sessions will take place at the Ecole supérieure de physique et de chimie industrielles (ESPCI ParisTech) on 22 June and the Maison de la Chimie on 23 June. A number of optional visits have been arranged for 24 June.

For further details and to register, go to <http://chmc2011.fr/?lang=en>. To benefit from the lower rates for registration, please register before **30 April 2011**.

Jeffrey Johnson, president of the CHMC (Jeffrey.Johnson@villanova.edu)
Robert Fox, chair of the symposium programme committee (robert.fox@history.ox.ac.uk).

9–11 August 2011 **International Society for the Philosophy of Chemistry:
Summer Symposium 2011**
Universidad de los Andes, Bogota, Columbia

Full details in section 2, below.

4–8 September 2011 **International Conference on the Chemistry of Glasses and Glass-
Forming Melts in celebration of the 300th anniversary of the birth of
Mikhail Vasilievich Lomonosov**
Lady Margaret Hall, Oxford

The Society of Glass Technology's Annual Conference will include formal sessions of scientific and technological presentations, and a History and Heritage Session dedicated to the History of Glass, its chemistry, and its manufacture. Speakers include Vera Keller (University of Oregon), Anna Marie Roos (University of Oxford), and Dedo von Kerssenbrock-Krosigk (Museum Kunst Palast, Dusseldorf).

Programme and registration details are available at the Society's website:
<http://www.Oxford2011.sgthome.co.uk/>

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

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

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

For more information, see the website:

http://www.gdch.de/vas/tagungen/tg/5511_e.htm. Additional information, including registration details, is available in a PDF document at: http://www.euchems.org/binaries/First_Circular_2011_Rostock_a_tcm23-195163.pdf.

For information on student bursaries, see section 4 below.

29–30
September
2011

Colloquium and Exhibition: 'Chemistry in the wake of revolutions: Gay-Lussac and the post-Lavoisier period' ('La chimie au lendemain des révolutions: Gay-Lussac et l'après-Lavoisier')
Ecole Polytechnique, Paris

An international conference and an exhibition on chemistry in its multiple dimensions at the beginning of the nineteenth century, with a particular emphasis on the chemistry of Gay-Lussac.

Provisional programme includes:

- Catherine Jackson (University College London), 'The "glassware revolution" and the development of synthetic organic chemistry'
- Frank James (Royal Institution, London), 'Faraday and the French chemists'
- Ursula Klein (Max-Planck Institute, Berlin), 'Organic chemistry after Lavoisier'
- Fabien Knittel (IUFM–Université de Franche-Comté), 'Mathieu de Dombasle: un agronome critique de la chimie dans le premier tiers du XIXe siècle'
- David Knight (Durham University), 'Davy and Gay-Lussac'
- Catherine Kounelis (ESPCI Paris Tech), 'Atomes ou proportions? Retour à la réception de la théorie atomique en France (1808–1819)'
- John Perkins (Oxford Brookes University), 'Establishing the new chemistry in France: the provinces and Paris, 1785–1815'
- Sacha Tomic (Université Paris I Panthéon-Sorbonne), 'Les pratiques de laboratoire et la contribution de Gay-Lussac dans l'émergence de la chimie organique'.

Further information can be found at:

<http://events.polytechnique.fr/home/chemistry-and-revolutions>

<http://events.polytechnique.fr/accueil/chimie-et-revolutions>

26 October
2011

'Environmental Chemistry: A Historical Perspective'
The Royal Society of Chemistry, Chemistry Centre, Burlington House, Piccadilly, London

A meeting organised by the Royal Society of Chemistry's Environmental Chemistry Group and Historical Group.

Post World War Two industrialisation has had an undoubted benefit for much of mankind. Life expectancy has increased, food is available, and the transition from a rural to an urban environment, which is increasingly controlled by electronic communications, has resulted in a decline in the need for manual labour. With every utopia there is a dystopia, and the impact of man on his environment is a major concern for this part of the twenty-first

century. Who were the people who first raised these concerns? What are the key observations behind the debate on climate change? How did experiments with breadcrumbs give us an understanding of the environmental chemistry of metals and metalloids? This joint RSC Historical Group and Environmental Chemistry Group symposium will answer these questions and much more. Chemistry provided the medicines, agrochemicals, hydrocarbon fuels, and synthetic materials which propelled the changes of the twentieth century. Equally, our understanding of the complex cycles of terrestrial, marine and atmospheric environments owes much to the ability of chemistry to identify and measure environmental change. 'Time present and time past are both perhaps present in time future.' By recognising the pioneers of environmental chemistry, the lessons of time past may secure time future.

For further information please contact: Rupert Purchase, 38 Sergison Close, Haywards Heath, West Sussex RH16 1HU.

E-mail: rp@rupertpurchase.demon.co.uk

2. Calls for papers

9–11 August 2011 **International Society for the Philosophy of Chemistry:
Summer Symposium 2011**

Universidad de los Andes, Bogota, Columbia

Each year the International Society for the Philosophy of Chemistry organises a symposium which gathers the leading researchers working on philosophy and foundational issues of chemistry. The 2010 ISPC meeting was held at the University of Oxford and in all previous years has alternated between North America and Europe. This year, (2011), the meeting is taking place, for the first time, in Latin America, thanks to the importance that philosophy of chemistry has gained in this part of the world. The organisers hope that ISPC 2011 will provide a place for scholars from Europe and the Americas to come together, where the worldwide philosophy of chemistry community will strengthen its relationships.

Lectures will be on such areas as foundational concepts, ontology, methods, ethics and aesthetics, as well as to the nature of chemical explanation, the relationship between chemistry and other sciences, historical aspects of chemistry, sociology and linguistics of chemistry and educational aspects. The special theme of ISPC 2011 will be the roots of Avogadro's hypothesis: its development and impact on chemistry and related fields, as well as its implications and problems. Another special topic of interest will be the relationship between mathematics and chemistry, its historical development and the current state of this relationship which has given rise to the new chemical subfield of mathematical chemistry.

The deadline for submitting abstracts is **27 May 2011** and for pre-registration is **15 July 2011**. The website of the symposium, which contains all relevant information, and is being constantly updated, is at:

<https://sites.google.com/site/intsocphilchem2011/home>

21 Sept.
2011 **Second SHAC Postgraduate Workshop on the History of Alchemy and Chemistry: 'The material culture of chemistry'**
*Department of History and Philosophy of Science, Free School Lane,
Cambridge CB2 3RH*

Full details in section 4.1, below.

22–24
September
2011 **'Alchemy and Medicine from Antiquity to the Enlightenment'**
*CRASSH and the Department of History and Philosophy of Science, University
of Cambridge*

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

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

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

Proposals for 20 minute papers are welcomed, and the participation of postgraduate students and junior researchers is particularly encouraged (with student bursaries available). Topics might include, but are not limited, to:

- Transmission of alchemical and medical knowledge
- Elixirs and the prolongation of life
- Impact of alchemical remedies on medical practice
- Paracelsus, Van Helmont and their followers
- Shared ingredients, methods and apparatus
- Medical practitioners as alchemists
- Use of medical concepts in alchemy
- Medicine, alchemy and patronage
- Iatrochemistry vs. medical orthodoxy
- Charlatanry and fraud
- Books, recipes, and secrets

The language of the conference is English. Abstracts of 200–300 words, accompanied by a one-page CV, should be sent to Jennifer Rampling (jmr82@cam.ac.uk) by **1 May 2011**.

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

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

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

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

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

Papers with a global, international or national outlook are preferred to regional or local studies. Since the approach to this topic is interdisciplinary, chemists, toxicologists, historians of science and medicine, environmental historians, sociologists and scholars, active in environmental organisations, etc., are all invited to participate and to contribute a paper. Papers that satisfy the final reviewing procedure will be published in a volume with the working title

Hazardous chemicals: Agents of risk and change (1800–2000). The Rachel Carson Center will cover the travel cost and accommodation expenses for all participants invited to deliver a paper. Further details are available at the STEP website, <http://147.156.155.104/?q=node/81>.

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

3. Prizes, grants, fellowships

3.1 SHAC grants and prizes

The Partington Prize 2011

The Society for the History of Alchemy and Chemistry is pleased to announce the winners of the 2011 Partington Prize. The Prize has been awarded jointly to:

Dr Marcos Martín-Torres (Institute of Archaeology, University College London) for his essay 'Inside Solomon's House: an archaeological study of the Old Ashmolean chymical laboratory in Oxford', and

Mr Evan Ragland (Chemical Heritage Foundation, Philadelphia, and Department of History and Philosophy Science, Indiana University) for his essay 'Chymistry and taste in the seventeenth century: Franciscus dele Boe Sylvius as a chymical physician between Galenism and Cartesianism'.

Details of the presentation of the Prize will be available shortly. We congratulate both winners.

Rumford Scholarship in the History of Alchemy or Chemistry

The Chemical Heritage Foundation (CHF) and the Society for the History of Alchemy and Chemistry (SHAC) encourage applications for a newly offered grant, the Rumford Scholarship, intended to support research by North Americans in Europe.

This new annual award will enable the Rumford Scholar to travel to Europe in order to undertake original research in the history of chemistry or alchemy in libraries, archives or museum collections using relevant resources. The award may be held in any European country. The value of the award is £2,300.

Applications are now open and application forms are available from:

<https://private.filesanywhere.com/chemheritage/fs/v.aspx?v=896b68868b62a6a66f9a>

Completed applications and/or questions should be submitted to:

fellowships@chemheritage.org.

Eligibility: Applicants must be either current doctoral students or have been awarded their doctorate no more than three years prior to 1 January 2011. In addition,

independent scholars and part-time or adjunct faculty at any point in their academic career are eligible to apply. Individuals currently holding other research grants to support travel to Europe are not eligible. Applicants must be normally resident in North America.

Outcomes: The Scholar will give a talk at CHF about their work shortly after their return. Support to allow the Scholar to travel to Philadelphia to do this will be available outside the funding of the scholarship. The Scholar must submit a report of not less than 750 or more than 1500 words to CHF and SHAC within three months of carrying out the research, and a statement of account together with receipts. The report will be published in an appropriate form by the two organizations. The support of CHF and SHAC must be acknowledged in any publication arising from the research.

Closing date: **30 April 2011**.

The decision will be announced by 31 May 2011. The Scholar must take up the award within nine months of the date of its announcement.

SHAC will use its best endeavours to facilitate access to collections, to assist in finding accommodation and to put the Scholar in touch with other historians.

Society for the History of Alchemy and Chemistry Award Scheme 2011

Award Scheme

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

Closing date for both schemes: **31 May 2011**.

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

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

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

Development Fund

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

3.2 Other prizes, grants and fellowships

Travel grants, Chemical Heritage Foundation, Philadelphia

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

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

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

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

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

4. SHAC Graduate Network

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

If you have any questions about the Graduate Network, and the opportunities available for students and early career researchers interested in the history of alchemy and chemistry, please contact SHAC's student representative, Stephanie Seavers, at stephanie.seavers.09@ucl.ac.uk.

4.1 Graduate Network events

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

SHAC is offering five bursaries of up to £100 each to PhD students or early career researchers (who will be within three years of completing their PhD's at the date of the conference) who are attending and presenting papers at the 8th ICHC Conference in Rostock. Anyone who wishes to apply for these bursaries should contact Georgette Taylor (g.taylor@ucl.ac.uk) for an application form, making it clear that they are applying for funds to attend the ICHC Conference. The closing date for applications is **31 May 2011**.

Gesellschaft Deutscher Chemiker (GDCh) is also planning to offer scholarships to a limited number of students, candidates for doctorates, diplomas, or bachelor's and master's degrees making a presentation (as main author of an oral paper or poster) at the conference. Please send your application by **31 May 2011** at the latest. The application form is at: http://www.gdch.de/vas/tagungen/tg/5511/bursaries_e.htm.

21 September 2011 **2nd SHAC Postgraduate Workshop on the History of Alchemy and Chemistry**

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

'The material culture of chemistry'

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, and to showcase their work. The 2011 workshop investigates 'The material culture of chemistry'. The day will be divided into three parts, each held at a different location in Cambridge:

1. 'Researching the material culture of chemistry'

A panel of 15-minute presentations on topics related to the material culture of alchemy and chemistry in any historical period. To participate in the panel, please submit an abstract of about 200 words by e-mail to Jennifer Rampling (jmr82@cam.ac.uk) by **1 June 2011**. Presenters should be current postgraduate students or junior researchers (within 3 years of completion of the PhD).

2. 'Replicating historical experiments'

Prof. Hasok Chang (HPS, Cambridge) will help us recreate some key eighteenth- and nineteenth-century chemical experiments, and discuss the historiographical functions of experimental replication.

3. 'Reading Newton's manuscripts'

Prof. William Newman (Indiana University, Bloomington) and Peter M. Jones (King's College) will lead this hands-on session, examining some of Isaac Newton's chymical manuscripts in the Library of King's College, Cambridge.

The workshop is free of charge, and bursaries are available towards the cost of travel and accommodation. For registration and enquiries, please contact Jennifer Rampling (jmr82@cam.ac.uk).

The workshop immediately precedes the international conference *Alchemy and Medicine from Antiquity to the Enlightenment* (22–24 September 2011).

Workshop participants are encouraged to stay in Cambridge for the conference, and to submit abstracts for conference presentations (see Call for Papers, in section 2 above).

5. Reports

5.1 SHAC events

19 November 2010:

SHAC 75th Anniversary Meeting: 'The History of the History of Chemistry'



A meeting to celebrate the 75th Anniversary of the Society for the History of Alchemy and Chemistry was held in London at the Royal Institution on 19 November 2010. The day began with a tour, led by Professor Frank James, of the Science in the Making Exhibition of the recently refurbished Museum of the Royal Institution.

Dr Robert Anderson, the Society's Chairman, opened the meeting by welcoming the 70 members and other historians of chemistry from Europe, Canada and the USA. He noted that 2010 was not only the 75th anniversary of SHAC, but also the 180th anniversary of the publication in 1830 in London of Thomas Thomson's famous *History of Chemistry*, probably the first book of its kind devoted to our subject. Dr Anderson reported that, in addition to holding this meeting, the Society was also marking its anniversary with the compilation of a catalogue (prepared by Tony Simcock) of the SHAC archives, which are deposited at the Museum of the History of Science at Oxford. This compilation revealed a lack of photographs of the Society's activities that it was planned to remedy at this meeting. Dr Anderson thanked the Managers of the Royal Institution and also Professor Frank James for making it possible to hold this meeting in the singularly appropriate setting of the RI.

Professor Bill Brock, University of Leicester, 'Exploring early modern chymistry: the first decade of the Society for the History of Alchemy and Chemistry':

Although SHAC had celebrated its 50th anniversary in 1986, a scrutiny of the fragmentary pre-war archives in 2007 revealed that it had really been founded in November 1935 when its first Council was named and publicised. Nevertheless, due to the inefficiency of its first Secretary, no members' meeting was called until 25 November 1936. Prof. Brock outlined the context of the Society's formation, namely

the wave of interest in the archaeology of Egyptian, Greek, Indian and Chinese cultures during the 1920s and 1930s, the development of the history of science as a discipline during the same decades, the popular and scientific interest in Rutherford and Soddy's 'newer alchemy' of atomic physics, and the long-standing minority interest of the middle classes in theosophy and other occult movements.

The Society's initiators were Gerard Heym, Frank Sherwood Taylor, James R. Partington and Douglas McKie. Prof. Brock explained the origins of the title *Ambix* for the Society's journal, first issued in May 1937, and its division of chronological responsibilities with the *Annals of Science* that McKie and others founded in 1936. The industrial chemist, philanthropist and Egyptologist, Sir Robert Mond, became the Society's first (and only) President in 1936 and supported the Society financially. Consequently, when he died unexpectedly in October 1938 there was a financial crisis. Partington believed SHAC could only solve its problems by widening its remit to include the whole of the history of chemistry and chemical industry – a suggestion not adopted until 1975. SHAC's continuation was further compromised in March 1939 when Taylor resigned the editorship. SHAC was effectively forced to wind up that summer. However, when war ended in 1945, Taylor, who had become Curator of the Oxford Museum of History of Science, called a meeting of the pre-war Council to re-establish the Society. Almost immediately there was a serious personality clash between Partington and Taylor over the editorial control of *Ambix*. Their dispute over the potential obscenity of one of Taylor's articles led to Partington's resignation from the Society in March 1946. He did not rejoin until 1961, after Taylor's death. SHAC was also faced by new threats to its existence from the creation of the British Society for the History of Science in 1947 and from the launch of the annual *Chymia* in 1948. Fortunately, with subsidies from the Royal Society and ICI, the Society tottered on. With the move to new and cheaper printers in 1957, SHAC finally began to achieve stability. Prof. Brock concluded by drawing attention to the fascinating personal views of leading post-war Council members such as Heym, Taylor, Kurt Josten, Henry Stapleton and Stephen Mason as they struggled to understand the implications of nuclear physics for the study of alchemy.

Professor Frank James, The Royal Institution, 'The Two Cultures and the history of chemistry':

Drawing on his biographical studies of Dr Marie Boas Hall (1919–2009) and Professor A. Rupert Hall (1920–2009), Prof. James showed that, from his schooldays in Leicester, Prof. Hall had become associated with a network of historians and scientists at the centre of what would become the 'two cultures' debate. At Christ's College, Cambridge, he was part of C P Snow's group. Hall became in 1948 the first curator of the Whipple Museum of the History of Science in Cambridge; his first student, Derek De Solla Price, examined the instruments and apparatus collection at the Cavendish Laboratory. Price came under the patronage of its Director, Sir William Bragg, who had wide ranging interests in art and three-dimensionality and who encouraged his physics students similarly to think more broadly and attend lectures on the humanities. Bragg had previously involved Snow in recruiting scientific personnel for war work projects, fictionalized in *The New Men*, though Snow himself had little experience of industry. It was possibly during this phase that the phrase 'the two cultures' was coined.

Prof. James pointed out that these individuals produced a remarkable set of 'mega texts' in the 1950s and early 1960s that would be influential well beyond the academy: Rupert Hall's *The Scientific Revolution* (1954), C P Snow's *The Two Cultures and the Scientific Revolution* (1959), Thomas Kuhn's *The Structure of Scientific Revolutions* (1962) and Derek De Solla Price's *Little Science, Big Science*

(1963). (It was Kuhn who had introduced Marie Boas to Rupert Hall in 1951.) Prof. James showed that this nexus of works coincided with a movement for the teaching of the humanistic relations of science and encouraged the growth of the history of science by means of the establishment of a number of posts, including in 1962 the chair at Imperial College London, whose first incumbent was Rupert Hall. He concluded by reflecting on various ways in which the two cultures debate had functioned in our field and in broader society.



Dr Marcos Martín Torres, Institute of Archaeology, University College London, 'Recent developments in the history of alchemy':

From the perspective of his interest in archaeological science and material culture, Dr Martín-Torres pointed to an exponential growth in the number of publications with the word 'alchemy' in their titles over the last decade. Comparing the decade of the 1960s with that of the 'noughties', he noted a shift from a geographical emphasis on Asian and oriental topics, focusing on language/technology, religion/folklore and philosophy/psychology, to a geographical emphasis on European topics, focusing on wider cultural and literary themes. In the earlier period, alchemy was defined by contraposition to chemistry, whereas by the later period that notion had been challenged by historians such as William Newman and Lawrence Principe who deployed the term 'chymistry' for what was formerly called 'early chemistry', reserving the term 'chemistry' for developments after the mid-eighteenth century.

Turning to alchemy as craft practice, Dr Martín-Torres pointed to more fluid boundaries of analysis. From the perspective of material culture studies, he referred to Dr Robert G. W. Anderson's article 'The Archaeology of Chemistry' and to a lack of studies of chemical equipment, though more resources were coming to light, and called for the repetition of experiments supplemented by the use of modern techniques such as the scanning electron microscope. Other recent historiographical trends were the examination of patronage and commercial practices. He also pointed to examples of work on specific areas of practice, such as the alchemy of glass. As with other fields, the study of the history of alchemy, too, is benefitting from the

rapid growth of electronic resources. Outside the academy, interest stimulated by the 'Harry Potter' effect should not be overlooked.

Professor Marco Beretta, University of Bologna, 'The changing role of history in the identity of continental chemistry':

In a wide ranging paper, Professor Beretta focused on continental histories of chemistry, pointing out that not all nineteenth-century works were Whiggish. Furthermore, the association of chemistry with industry influenced writing on the history of chemistry. He began his analysis with the work of Jean-Baptiste Dumas in 1837, whose philosophy of chemistry strove for general principles of science and focused on those who challenged Aristotle. Dumas made use of primary sources and initiated the input of manuscripts. Ferdinand Hoefer's *Histoire de la Chimie* of 1842 drew on a humanistic background to investigate the complexity of interrelationships. That is, he saw alchemy and practical craft traditions as important. Michel Eugène Chevreul, meanwhile, argued that the history of chemistry should introduce the reader to a classification of key ideas. Hermann Kopp's two volume work of 1843 ostensibly presented past theories 'objectively'. The approach in volume 1 was biographical, while that in volume 2 was to focus on monographic themes, rejecting nationalism and giving little cultural or geographical contextualization. Cannizzaro's historical work of 1858 proclaimed the atom to be a closed subject and was not only ideological, but proclaimed that the history of chemistry had important intellectual and pedagogical roles. In the second half of the nineteenth century, histories of chemistry could be seen to have two purposes: firstly to defend either theory or national traditions; or to concentrate on primary sources. Prof. Beretta also pointed to a German philological tradition of editing texts in the history of chemistry, culminating in Ostwald's *Classiker* from 1889, which enabled the more systematic use of primary sources and followed in the tradition of Dumas.

Prof. Beretta pointed to the influence of H el ene Metzger who argued before the Second World War that scientific progress was an unsatisfactory category of historiographical analysis; that is, that science needed to be understood in the context of the broader history of ideas. Lavoisier's bicentenary in 1943 stimulated major celebrations including an exhibition of primary sources and the material culture of Lavoisier's work. Experiments were repeated using original instruments, something which influenced the young Maurice Daumas to change from his career as a chemist to researching the history of scientific instruments in France. The Second World War left the history of chemistry in continental Europe in a poor state, with relatively few studies in the 1950s and 1960s. Prof. Beretta concluded by pointing out that history of chemistry returned to the spotlight in the 1990s because of its value for applied science and suggested that chemistry's diversity gave it a unique role in the history of science. He called for comparative studies with other specialities and expansion to other domains.

'The Good Old Days'. Panel discussion with Professor Maurice Crosland, Professor Colin Russell and Professor David Knight, chaired by Professor Hasok Chang:

The 'Three Professors' reflected on their varying paths to the history of chemistry. All had started as undergraduate chemists. Russell and Crosland both made the transition to the history of chemistry via the important part-time MSc course at University College London under Douglas McKie, who was mentioned earlier in the day as a founder of SHAC. Prof. Crosland also paid tribute to the late Dr Bill Smeaton who carried the history of chemistry forward at UCL with such distinction and was a pivotal member of the Society, serving as Hon. Treasurer for more than 25 years and eventually as Chairman. Prof. Knight made the transition while still an undergraduate

at Oxford, taking the Part II in the history of chemistry, a route followed by quite a few people at the meeting. Knight suggested that his early work on Davy followed rather 'automatically' from the fact that his Part II supervisor was Harold Hartley.

All three became professional academic historians of chemistry at a time when the history of science was a growth area in the academy, but held posts in very different contexts. Russell joined the fledgling Open University as an historian of science within the Arts Faculty and eventually expanded the subject into a History of Science Department there. Knight joined the Philosophy Department of Durham University at what he called the 'high point of logical positivism', so they needed a philosopher and historian of science. Crosland began his history of science career at Leeds, also in a department with philosophers, and later headed up a new department at the University of Kent at Canterbury.

Prof. Russell stressed the value of group research in historical work, as well as scientific work. Prof. Knight stressed the importance of not forgetting the great works of our predecessors. Prof. Crosland made a related point in stressing the importance of what we might call historiographical tolerance – to differ in view from other historians should not be to rubbish what has gone before.

Public Lecture by Professor Simon Schaffer (University of Cambridge), 'The Unfortunate Chemist – Tribulations of Chemical Philosophy in an Age of Revolution':

'Chemistry is often associated with misfortune' began Professor Schaffer, who went on to suggest that 'Optimism is the chief virtue of the chemist', citing the still potent notions of the elixir and transmutation.

The lecture focused on public chemistry in England in the late eighteenth century, a period when journalism dominated public debate. Requiring more study by historians, he argued that journals of the time can be consulted as maps of cultural context in England. Chemistry featured largely in such publications at a time when it was associated with revolution, but did not have a clear disciplinary identity in the sense of public recognition. Prof. Schaffer looked at the case of James Price, FRS MD, who claimed that he had found a white powder that could convert mercury into gold. Richard Kirwan, wrote how Price meant 'nothing more than to make country folk stare', but the *Gentleman's Magazine* used the incident as a means of criticising the Royal Society and University of Oxford. When a group of witnesses from the Royal Society travelled to Price's home in Surrey to observe his experiment, he stepped to one side, drank prussic acid and died. The whole episode, and the accompanying correspondence and comment, reveal much about the management of reputation in public print and how easily the reputation of English institutions such as the Royal Society and Oxford University could be questioned by a public chemical demonstration.

Prof. Schaffer also related the cases of two lesser known figures, John Elliott, an apothecary who had worked in Cheapside and who was tried at the Old Bailey in 1787 for an attempted shooting, and Robert Harrington, a member of the Corporation of Surgeons. Both men had published treatises claiming that the sun was inhabited, and, by exploring the relationship between their work and their reputations, Prof. Schaffer argued that whether and how chemistry was understood, and how practitioners publicized their work and constructed their reputations, should be seen as a matter for the social history of plausibility. He also highlighted how the cases illustrated the instability, vulnerability and manipulability of public chemistry during this period and the importance of the role of publicity in defining what counted as a philosopher chemist. Prof. Schaffer concluded by calling for an expansion of the 'cast

list' of past scientists and an examination of a wider, more public theatre to consider how reputation is made. He also drew attention to the importance of 'sites of chemistry' in these studies, something which will receive further investigation at the forthcoming series of conferences sponsored by SHAC.

The public lecture was preceded by a reception in the Royal Institution Museum and followed by a dinner at the Royal Institution's Restaurant, Time and Space. The day was brought to a close with a few words from SHAC's Chairman, Robert Anderson, and a toast to the Society from the science writer and SHAC member, Philip Ball.

The proceedings of the Anniversary Meeting will provide the basis of a special issue of *Ambix*, 'The History of the History of Chemistry', in November 2011.

Gerrylynn Roberts
Anna Simmons

Photographs by Georgette Taylor

Séminaire 'Histoire de la chimie aux XVIIe et XVIIIe siècles'

UMR 8163 'Savoirs, Textes, Langage' (CNRS, universités de Lille 3 et de Lille 1)

Les activités du mois de mai 2011 mettront un terme aux travaux du séminaire d'histoire de la chimie à l'âge classique que j'ai mis en place en 2003, avec la collaboration de Rémi Franckowiak depuis 2006. L'organisation de ce séminaire visait à combler une lacune dans l'histoire de la chimie: si les travaux concernant cette dernière à partir du milieu du XVIIIe siècle abondent, les études concernant la chimie et l'alchimie au tournant du XVIIe et du XVIIIe siècle, pour excellentes et remarquables qu'elles soient, restaient rares et isolées.

Il s'agissait donc de rassembler dans un séminaire mensuel, autour d'un petit groupe de chercheurs lillois, celles et ceux qui, en France et ailleurs, avaient entrepris des recherches sur le sujet, afin de favoriser la confrontation de leur point de vue, la mise en commun des analyses et la production d'un savoir nouveau. Les fructueuses collaborations développées avec nos collègues et ami(e)s de France, des Etats-Unis, de Grande-Bretagne, d'Italie, des Pays-Bas et d'ailleurs, témoignent que ce but a été atteint, comme le montrent aussi plusieurs publications passées et à venir:

- 'Chimie et mécanisme à l'âge classique', *Methodos* 8 (2008): <http://methodos.revues.org/873>
- *La chimie chez les philosophes à l'âge classique*, Oxford, Colledge Publication, collection 'Les cahiers de logique et d'épistémologie', à paraître fin 2011.
- 'La chimie à l'Académie royale des sciences de sa création à l'arrivée de Lavoisier', à paraître dans *Methodos* 12 (2012).
- Les programmes des séminaires des années passées sont consultables dans les archives du site de l'UMR STL: <http://stl.recherche.univ-lille3.fr/pagearchivespresentation.html>

Les chantiers ainsi ouverts se poursuivent maintenant ailleurs sous diverses formes et le moment semble venu de clore les activités du groupe lillois. Je remercie très sincèrement toutes celles et ceux qui, avec courage, fidélité et amitié, ont bien voulu apporter leurs contributions à ces travaux en faisant partager à tous les membres du groupe leurs savoirs et leurs compétences.

Bernard Joly

5.2 Reports on SHAC Subject Development Awards 2010–11

Peter Forshaw (University of Amsterdam)

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

On 24 June 2010, the University of Amsterdam hosted its first SHAC-sponsored thesis workshop for graduate and postgraduate students, on the subject of alchemy. This free event was organised by the newly appointed assistant professor for History of Western Esotericism in the Early Modern Period, Dr Peter Forshaw, under the auspices of the university's Chair for the History of Hermetic Philosophy and Related Currents. He was fortunate enough to be able to take advantage of the presence of two other members of SHAC's council, Professor Lawrence Principe (Johns Hopkins), who was over in the Netherlands for several months as visiting professor at the University of Utrecht, and Dr Jennifer Rampling (Cambridge), who was busy exploring the Vossius archives at Leiden University. They both generously agreed to contribute to the day, and a third council member, Dr Stephen Clucas (Birkbeck, University of London), flew over from London to participate in the one-day workshop. These three speakers formed the core of the event, each sharing their experience of carrying out research, writing and giving papers on the history of alchemy. They had been asked to provide as much advice as possible for junior scholars interested in entering the field, and all three spoke engagingly about the trials, tribulations, and satisfactions of working with archival material, framing research questions, the importance of contextual research and many other issues of interest to the audience. The question and answer sessions took place in a light-hearted but informative manner and it was gratifying to see that a great deal of enthusiastic discussion took place during the lunch break at the restaurant Ovidius.

The second part of the workshop took advantage of the presence of the council members from ESSWE, the European Society for the Study of Western Esotericism, all of whom were in Amsterdam for their annual meeting. As Dr Forshaw is also a member of that council, he had cajoled them into participating in a 'Laboratory', which was as experimental as the name implies. The assembled ESSWE and SHAC council members split up into groups of three and took up places in different parts of the room. Everyone else attending the meeting was invited to join one of the groups, depending on the research interests of the scholars. Jenny Rampling, Peter Forshaw and Gyorgy Szonyi, for example, formed a group to discuss working with visual aspects in medieval and renaissance alchemy and magic. Each scholar briefly introduced him/herself and gave some idea of their research before encouraging the students to introduce their own research interests. In our group, most students were already interested in some aspect of alchemy, albeit from widely varying perspectives: some were from history of science backgrounds, others from religious studies, one had studied psychology and another was an art historian. It was interesting to note that several students were still at BA level, others were following an MA, while one or two were already engaged in doctoral research. Discussion was lively and carried on during the coffee break. The combination of historians of alchemy from SHAC and historians of cabala, early modern occult philosophy, and so forth from ESSWE worked well, generating ample opportunity for the consideration of theoretical issues such as typologies, disciplinary boundaries and interdisciplinarity, as well as the practical considerations of how to write a thesis, where to apply for funding, and how to go about getting published. While the initial focus of the event was medieval and early modern, discussion ranged far more widely, right up to the twentieth century.

The third part of the workshop was a roundtable discussion in which the four SHAC council members commented on issues that had arisen during questions following the initial presentations or during the 'Laboratory' sessions. The ESSWE members made valuable contributions by asking questions and adding comments as members of the audience and it was pleasing to see the more self-confident students joining in the session.

The following morning a group of students went with Peter Forshaw to view some of the alchemical books and manuscripts at the Bibliotheca Philosophica Hermetica, with a guided tour by Cis van Heertum.

From feedback received from students and participants, this thesis workshop appears to have been a popular event and was an ideal way of announcing the 15-week MA module on the history of Medieval and Early Modern Alchemy that took place from September-December 2010. Postgraduate students attended from the UK, Norway, Denmark, Germany, Belgium, Romania, Spain and Canada, as well as BA and MA students from the Netherlands. The Center for History of Hermetic Philosophy has already received requests for further events along the same lines and I have been pleased to advertise the fact that SHAC is sponsoring a series of seminars by guest speakers on the history of alchemy from various European Universities, the first to be Didier Kahn in March 2011.

Peter Forshaw

Leslie Tomory (independent scholar)

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

The funds from this grant were used to fund the acquisition of publication quality images for my upcoming book *Progressive Enlightenment: The Origins of the Gaslight Industry 1780–1820*. The book will be published by MIT Press in early 2012. It explores the birth of the gas industry in the context of the Industrial Revolution and large scale technological networks. It argues that the gas industry represented a new wave of industrial development in the first Industrial Revolution because in contrast with many other industries based on new technologies, gas was the first to be founded on technology heavily derived from contemporary science; that it required an amount of capital beyond the means of individuals or partnerships; and that the gas network was the first tightly-integrated large scale technological network.

The book begins by exploring why there were multiple independent inventions of gaslight technology throughout Europe, and shows that the development of contemporary pneumatic chemistry had reached the point that knowledge of gases, as well as techniques and instruments to manipulate them had become commonplace throughout Europe. The technology of the gas industry was made possible because the first inventors of gas lighting made use of contemporary science.

The second chapter of the book explores the creation of industrial forms of gaslight technology throughout Europe. It begins to answer why, like so many other inventions in the Industrial Revolution, gaslight only became an industry in Britain. It was due in large part to a thriving coal trade in Britain, as well as skills in iron working there. The technology, however, did not simply fail on the Continent. Rather, it took on a different form because continental engineers focussed on the distillation of wood, not coal, and this led them in different technical directions.

The third chapter shows how Boulton & Watt laid the foundations for the new gas industry in Britain by creating the first industrially useful versions of the technology. This set them apart from many of their contemporaries who had similar small-scale forms of gaslight technology. Boulton & Watt were able to do this because they had access to a large network of customers willing to fund development; they were already building large pneumatic machines in the form of steam engines; and they were able to publicize their work effectively.

The fourth chapter explores the founding of the Gas Light and Coke Company in London by Frederick Winsor, whose entrepreneurial energies were indispensable in creating the momentum needed to gather an influential groups of supporter and to gather £100,000 in capital to start the company. This new group's ambitions collided with Boulton & Watt's existing business, leading to a political battle over the company's plans to win a charter of incorporation by Parliamentary act.

The final chapter explores the construction of gas on the network model. Boulton & Watt had conceived of gas technology as individual plants for each buildings, but by 1820, the GLCC had built a network throughout London, supplied by three gasworks. This model emerged only slowly, and involved solving a host of technical, business and social challenges, such as internal company management, system dynamics, and control of users.

Leslie Tomory

6. News and resources

6.1 SHAC news

Appointments to SHAC Council

At the Society's Annual General Meeting in December 2010, the following officers were elected to the Council of the Society for the History of Alchemy and Chemistry:

- Hon. Deputy Editor of *Ambix*: Jennifer M. Rampling (Department of History and Philosophy of Science, University of Cambridge)
- Hon. Book Reviews Editor: José Ramon Bertomeu Sanchez (Universitat de València)
- Student Representative: Stephanie Seavers (Department of History, University College London).

Ambix: forthcoming issues

The March issue of *Ambix* includes four essays, on topics ranging from medieval alchemical poetry to twentieth-century Russian history. Papers by Stephen Clucas (London) and Rémi Franckowiak (Lille) are the result of a fruitful collaboration between historians of chemistry in London, Lille and Oxford between 2009–10, on the theme of 'Chymistry and mechanism'.

- Stephen Clucas (Birkbeck, University of London), 'Margaret Cavendish's materialist critique of Van Helmontian chymistry'
- Rémi Franckowiak (Université de Lille, UMR 8163 STL CNRS), 'Mechanical and chemical explanations in Du Clos' chemistry'

- Olga Yu Elina (S. I. Vavilov Institute for the History of Science and Technology, Moscow), 'Private initiatives, public support, and war practices: development of fertilisers in Russia'
- Didier Kahn (CNRS, Paris), 'Alchemical poetry in medieval and early modern Europe: a preliminary survey and synthesis. Part II — Synthesis'.

In July 2011, a special issue of *Ambix* presents papers from the symposium 'Chemistry in the aftermath of World Wars', held at the 23rd International Congress of History of Science and Technology (Budapest, 2009), whose theme was 'Ideas and Instruments in Social Context'. Papers include:

- Jeffrey Allan Johnson (Villanova University), 'Crisis, change and creativity in science and technology: chemistry in the aftermath of twentieth-century global wars'
- Danielle M. E. Fauque (GHDSO, Université Paris-Sud 11), 'French chemists and the international reorganization of chemistry after the First World War'
- Yoshiyuki Kikuchi (Massachusetts Institute of Technology), 'World War I, international participation and reorganisation of the Japanese chemical community'
- Sally Horrocks (University of Leicester), 'World War II, postwar reconstruction and British women chemists'.

Finally, the SHAC 75th Anniversary Issue in November 2011 will present papers on 'The History of the History of Chemistry': studies on the historiography of alchemy and chemistry as it has developed since the founding of SHAC in 1935.

Back issues of *Ambix* available in hard copy

Back issues of *Ambix* since 2004 (Vol. 51) are available from the Treasurer at £5.50 per issue, as are copies of the Cumulated Index. Copies of the collection of papers from *Ambix*, edited by Allen Debus, *Alchemy and Early Modern Chemistry* (2004) are available at £7.50.

Contact: shacperkins@googlemail.com or John Perkins, 19 Nethercote Road, Tackley, OX5 3AW, United Kingdom.

Back issues of *Ambix* available online

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

Davy Correspondence Project

A calendar of many of Humphrey Davy's letters is now online at www.davy-letters.org.uk. This digitisation project was assisted by a SHAC Subject Development Award.

6.2 Other news

The Chemical Heritage Foundation

Beckman Center for the History of Chemistry: Fellows for 2011–2012

The Chemical Heritage Foundation is pleased to announce the appointments of the Beckman Center Fellows for the academic year 2011–2012. CHF will welcome nine long-term fellows and ten short-term fellows. Below are the fellows, their affiliations, and the title of their research topics.

Long-Term Postdoctoral Fellows:

- Augustin Cerveaux (University of Strasbourg, France), Cain Fellow: ‘“From an art to a science”: changes in paint chemistry and technology in Progressive Era America and the Great Depression’.
- Catherine Jackson (University College London, UK), Cain Fellow: ‘Material world: analysis, synthesis and the making of modern chemistry’.
- Brendan Matz (Yale University), Haas Fellow: ‘The science of nutrition in Germany and the United States, 1870–1920’.
- J. Emmanuel Raymundo (Tulane University), Edelstein Fellow: ‘National skin: contact, conflict and the Culion leper colony in the US Occupied Philippines, 1902–1941’.
- Doogab Yi (National Institutes of Health), Haas Fellow: ‘The organized search for the oncogene: “proto” biotechnology, molecular medicine, and the history of the war on cancer, 1964–1980’.

Long-Term Dissertation Fellows:

- Jongmin Lee (Virginia Tech), Edelstein Fellow: ‘Regulatory engineering in the EPA: chemical monitoring, catalytic converters, and the controlled environment’.
- Christine Nawa (University of Regensburg, Germany), Price Fellow: ‘Robert Wilhelm Bunsen’s research style and his teaching’.

Short-Term Fellows:

- Michelle Francl (Bryn Mawr College), Herdegen Fellow, 2 months: ‘Sideline science: critical commentaries in nineteenth-century journals and twenty-first-century blogs’.
- Nathaniel Freiburger (University of California, Davis), Société de Chimie Industrielle Fellow, 3 months: ‘Cultures of engineering and the engineering of politics: the making of lithium as an object of techno-scientific knowledge and politics in Bolivia’.
- Apostolos Gerontas (Norwegian University of Science and Technology), Doan Fellow, 4 months: ‘Writing the history of high performance liquid chromatography’.
- Rebecca Laroche (University of Colorado, Colorado Springs), Allington Fellow, 2 months: ‘Placing Robert Boyle’s *Experiments and Considerations Touching Colours* in dialogue with the recipe arch’.
- Pedro Ruiz-Castell (University of Valencia, Spain), Allington Fellow, 3 months: ‘New identities from the invisible: The early days of electron microscopy’.
- Ulf Schmidt (University of Kent, UK), Doan Fellow, 2 months: ‘Secret science: human experimentation in biological and chemical warfare research during the Cold War’.

- Elena Serrano (CEHIC–UAB, Spain), CHF Fellow, 2 months: ‘Women and chemistry in late eighteenth-century Spain: the chemico-charitable activities of the Junta de Damas’.
- Etienne Stockland (Columbia University), Allington Fellow, 2 months: ‘Trust, credit and expertise: the alchemical practitioners of Elizabethan London’.
- Changming Wang (Guangxi University for Nationalities, China), Allington Fellow, 4 months: ‘The lives and studies of outstanding Chinese chemistry students in the United States during the Republic of China (1911–1949): A comprehensive investigation on chemical dissemination and cultural exchange’.

6.3 Museums and archives

The Roche Historical Collection and Archive, Basel

The Roche Historical Collection and Archive was founded as a central resource within Roche Group Holdings in 1992. Since the foundation of the company in 1896, documents, printed matter, photographs, films and objects have been collected on a regular basis. However, these collections were held by individual departments. The centralization of 1992 hence meant that these vast resources became accessible to research for the first time.

Today, the archive not only comprises the complete letters, reports or minutes documenting the company’s establishment and the foundation of affiliates. Documents related to research activities, production plants and processes as well as social and financial history are also an important part of the records held. Thanks to the early internationalization of Roche (the company started off almost simultaneously in three countries), these documents are an invaluable resource for historians all over the world.

In addition to these classic archival records, the Roche Historical Collection and Archive’s holdings also include a variety of special collections. About two million photographs from all over the world and 3000 films make it an important audiovisual archive. A vast collection of Roche products, ranging from pharmaceuticals and chemicals to the machines produced by Roche Diagnostics is complemented by selected machinery and equipment used for research and production purposes. More exotic are a collection of bespoke furniture linked to the company’s architectural and artistic heritage and a collection of ancient pharmaceutical ceramics. Finally, the archive hosts an important collection of anatomical preparations which is used to teach surgeons all over the world.

Apart from making the Roche heritage available in a historical exhibition in Basel, the archive is very actively publishing brochures and books on selected themes. The most recent publication, “Tales from the Anatomy Theatre”, is devoted to the history of anatomical preparations.

Alexander Bieri

Alexander Bieri is Curator of The Roche Historical Collection and Archive. Alexander He has published many books and articles both on Roche-related and other themes, and assumes responsibility for a variety of Roche in-house museums and organised special exhibitions in Switzerland and abroad. In his capacity as a specialist for twentieth century design, he is a member of ICOMOS Switzerland.

Contact details:

F. Hoffmann-La Roche AG
The Roche Historical Collection and Archive
Grenzacherstrasse 124
CH-4070 Basel

E-mail: alexander.bieri@roche.com

Website: http://www.roche.com/about_roche/milestones.htm

Open upon appointment. The Roche Archive is a corporate member of SHAC.

Watt's Workshop at the Science Museum, London

Chemistry in the Garret – James Watt's cookbook chemistry at Heathfield, Birmingham, 1790–1819

The Science Museum in London is privileged to hold the garret workshop from the retirement home of James Watt, the Scottish steam pioneer, and has recently put the workshop and its contents back on public display. David Miller has investigated James Watt's chemical activities with respect to his understanding of heat, water, steam and what we now call energy; the workshop contains evidence for his activities as a practical chemist, in particular, bleaching, dyeing, ink-making, pottery and sculpture-copying. The workshop was both a workspace, which was used by all three Watt menfolk (for instance, for experimentation into pneumatic medicine), and a general dumping ground for bits and pieces from most aspects of the great man's life, and less comprehensively those of his two sons.

Research continues, but comparison of the contents of the workshop with the problems Watt was known to be wrestling with at various stages of his life has given a richer picture of his work, his friends and his family.

Jane Insley

(Senior Curator of Engineering Technologies, Science Museum)

Contact: jane.insley@sciencemuseum.org.uk

Syracuse University Library Plastics Collection: online

The Special Collections Research Center at the Syracuse University Library has unveiled a new website, <http://plastics.syr.edu>, devoted to its significant Plastics Collection. The website is a treasure trove of information and images of the over 2,000 artifacts in the Plastics Collection, the largest university-based resource on the history of plastics. The site also links to more than 40 archival collections on the history of plastics, and to the library's catalog of several thousand books and periodicals related to the history, science, technology and business of plastics. New information and artifacts are added regularly.

The Plastics Collection serves to advance the study and understanding of plastics in society, including its role in chemistry, technology, industry, medicine, art, design, sports, and other fields. The collection holds a variety of early plastics made of celluloid, thermoset plastics such as Bakelite and Catalin, as well as plastics made popular after WWII, such as acrylics, polystyrene, polyethylene, polypropylene, and nylon. The archival collection contains material related to important plastics companies, such as sunglasses manufacturer Foster Grant, as well as the papers of

inventors and entrepreneurs who helped make the 20th century the "Age of Plastic." Of special interest are plastics pioneer John Wesley Hyatt's patent books.

The project was launched in 2007 when members of the Plastics Pioneers Association, an organization of individuals who are persons of accomplishment in the plastics industry, approached SU Library about establishing a plastics collection and companion website. The collection expanded in 2008 when the National Plastics Center and Museum located in Leominster, Massachusetts closed and transferred its collections of artifacts, books, and manuscripts to SU. This acquisition expanded the Library's already significant holdings in industrial design, science, and technology.

The Greenwald-Haupt Charitable Foundation and Harry Greenwald, an SU alumnus and member of the SU Library Advisory Board, provided funding for the project. The Plastics History and Artifacts Committee of the Plastics Pioneers Association also provided support. Greenwald's continuing support will enable the ongoing development of the collection and plastics website.

For more information, contact Sam Gruber, curator of the Plastics Collection: sdgruber@syr.edu.

6.4 Publications

Call for papers: HYLE special issue on 'Chemistry & Mathematics'

Deadline: **15 August 2011**.

HYLE: International Journal for Philosophy of Chemistry invites papers for a special issue on 'Chemistry & Mathematics'.

The relationship between mathematics and chemistry has a long history. In fact one of the new features of modern chemistry was the introduction of arithmetical relations by Lavoisier. One could even argue that the oldest molecular theory, in Plato's *Timaeus*, was a geometrical theory of chemistry. Not only chemistry but also mathematics has benefited from the relationship, as can be acknowledged in the development of Graph Theory, a mathematical theory with roots in chemical questions. Other important results from this synergy are related to symmetry, such as the conception of a tetrahedral carbon, the octahedral symmetry of certain coordination compounds, the hexagonal nature of benzene, or the interpretation of spectra, on the one hand, and the development of the mathematical theory of symmetry out of mineralogy, on the other. More recent examples of successful interplay between mathematics and chemistry include the understanding of fullerenes, the rational design of drugs, and the estimation of toxicological and environmental impact of chemical substances.

And yet, chemistry and mathematics could hardly be more different in methodological regard: a strict experimental science here and a purist a priori approach there. That difference was perhaps responsible for the comparatively small role that mathematics has played in chemistry compared to its role in physics. While such methodological tensions have been influential in mathematical physics since centuries, the field of mathematical chemistry has slowly emerged only since the 1970s. More recently it has established itself with an International Academy and an International Society of Mathematical Chemistry as well as two specialized journals, *MATCH Communications in Mathematical* and *Journal of Mathematical Chemistry* and *Journal of Computer Chemistry*. The delayed development of mathematical chemistry suggests that there are

considerable barriers between mathematics and chemistry, which philosophical analysis might help understand and perhaps eventually overcome.

Because HYLE is the international journal devoted to philosophy of chemistry, it is the ideal place for posing philosophical and historical questions regarding both the relationship between mathematics and chemistry and the nature of today's mathematical chemistry. We particularly welcome papers on one or more topics of the following non-exclusive list:

Philosophical foundations of mathematical chemistry

- Is mathematical chemistry a distinct field that can be clearly defined and distinguished from other established and related fields, such as physical chemistry, quantum chemistry, and mathematical physics?
- Does mathematical chemistry have a specific methodology and epistemology that distinguish it from both mainstream chemistry and mathematics as well as from mathematical physics?
- Does mathematical chemistry produce a priori or a posteriori knowledge? Is it a theoretical science as opposed to experimental chemistry? Could there be an experimental mathematical chemistry?
- Does mathematical chemistry require specific ontological or metaphysical assumptions or positions regarding the (mathematical) constitution of the world or the reality of mathematical entities?
- Are there specific branches of mathematics that are particularly appropriate for mathematical chemistry? If so, does that tell us something about chemistry in general and mathematical chemistry in particular?
- Does mathematical chemistry necessarily require or actually establish new relationships between mathematics and chemistry, other than taking mathematics as a mere tool for chemistry?
- Are there particular links between mathematical chemistry, on the one hand, and philosophy of chemistry and philosophy of mathematics, on the other?

History of the mathematics/chemistry relationship and mathematical chemistry

- Does the history of the chemistry/mathematics relationship provide any clues as to what has fostered and hindered its cooperative development?
- Why did mathematical chemistry emerge so late compared to mathematical physics?
- How did today's mathematical chemistry actually emerge? What socio-cultural and cognitive factors favored its development and determined its current shape and research focus? How was the development received by mainstream chemistry and mainstream mathematics?
- Could mathematical chemistry have been differently developed under different historical conditions? Could there be other definitions, other main areas, or even other methodologies and epistemologies of mathematical chemistry?
- Did the development of mathematical chemistry have any impact on other branches of chemistry and mathematics or even beyond?

Manuscripts should follow the general Guidelines for Authors, available on the HYLE website (www.hyle.org). Enquiries regarding the suitability of submissions, and submissions (in appropriate form for anonymous reviews) should be sent no later than 15 August 2011 to:

Guillermo Restrepo, Guest Editor (Laboratorio de Química Teórica, Universidad de Pamplona, Pamplona, Colombia) at grestrepo@unipamplona.edu.co and guillermorestrepo@gmail.com, or to Joachim Schummer, Editor-in-chief of HYLE, at editor@hyle.org.

7. Membership

New members

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

Malika Basu (Vidyasagar University)
Dr Carin Berkowitz (Chemical Heritage Foundation)
Prof Raymond Bonnett (Queen Mary, University of London)
Dr Mary Ellen Bowden (Chemical Heritage Foundation)
Ron Brashear (Chemical Heritage Foundation)
Victoria Cambrames (Columbia University)
Dr Peter Crowley (National University of Ireland, Galway)
Rachel Dunn (University of Durham)
Alain Fafard (Montreal)
Prof Carlos Filgueiras (Universidade Federal de Minas Gerais, Belo Horizonte, Brazil)
Corinna Guerra (University of Bari)
Jo Hedesan (Exeter University)
Mark Hunwick (Grays, Essex)
Vangelis Koutalis (University of Ioannina)
Sienna Latham (Victoria University of Wellington, New Zealand)
Rodney Mace (Hay-on-Wye)
Prof Isabel Malaquias (University of Aveiro, Portugal)
Susanne Mans (University of Amsterdam)
Gabriel Maroney (Fort Bragg, USA)
Dr Michal Meyer (Chemical Heritage Foundation)
Dr Mark Montgomery (University College London)
Maureen Odendaal (Epsom College)
Prof Kevin Ogle (Ecole Nationale Supérieure de Chimie de Paris)
Anne Christin Otto (University of Kiel)
Dr Luc Petersmitt (University of Lille)
Evan Raglan (Indiana University, Bloomington)
Peter Schuler (Wandlitz, Germany)
Alexander Guthrie Stewart (Falkirk)
Dr Tom Tritton (Chemical Heritage Foundation)
Dr James Voelkel (Chemical Heritage Foundation)
Dr Annelise van Gijzen (University of Antwerp)
Selina White (University of Limerick)
Jenny Wilson (Brockenhurst, Hants)

Joining SHAC

The Society for the History of Alchemy and Chemistry has a longstanding tradition in the field, organising colloquia, publications and promoting the interdisciplinary study of the history of alchemy and chemistry from its early beginnings to the present. The Society offers support to its members, including an award scheme, regular meetings and events, graduate network, and the triennial Partington prize for original academic

writing on any aspect of the history of alchemy and chemistry. It offers a forum for advertising forthcoming events, both within the United Kingdom and internationally, and its website provides a portal to resources relating to the history of alchemy and chemistry.

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

Application forms and membership information may be found on the Society's website, <http://www.ambix.org/>, 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@google-mail.com

Further Intelligence

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

Jennifer Rampling
Department of History and Philosophy of Science
Free School Lane
Cambridge CB2 3RH
United Kingdom
E-mail: jmr82@cam.ac.uk