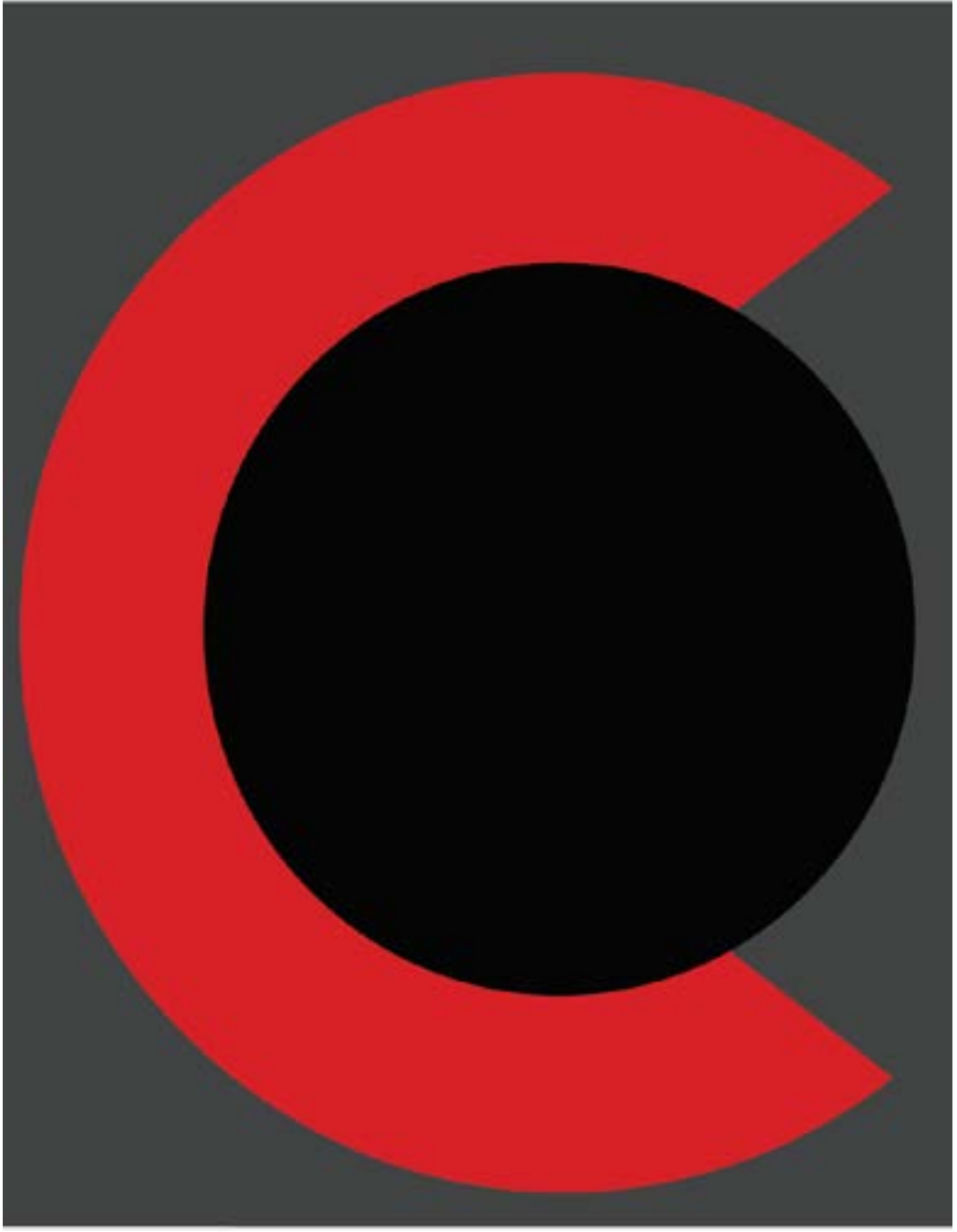


# Chemical Intelligence July 2019

SHAC

SOCIETY FOR THE HISTORY OF ALCHEMY AND CHEMISTRY

# Editorial

A warm welcome to the fresh new issue of Chemical Intelligence! For the foreseeable future, this newsletter will be edited from the country of Jöns Jacob Berzelius, where yours truly will be exercising her fika -skills in the name of philosophy of chemistry in practice. Many, many thanks to Judith Mawer for overseeing previous issues of this newsletter, and for her guidance in how to put it together.

In 2018, we received the very sad news that our community lost the irreplaceable David Knight (1936 – 2018). In June, we also commemorated him in Durham, where professors Matthew Daniel Eddy, Robin Hendry, and Frank James organised a conference in his memory. For those of you who did not have the chance to attend the meeting, SHAC's commemorations can be found both on the pages of Ambix and from this issue.

As many of you already know, the year 2019 marks 150 from the Russian Chemist Dmitrii Ivanovich Mendeleev's discovery of the periodic system of chemical elements. Many an event is being organized to mark the discovery – so many in fact that keeping track of all of them seems to be a challenge analogous to organizing all the chemical elements! Perhaps the easiest way to remain informed is to look for the hashtag #IYPT2019 on twitter and check the official IYPT19 website.

It is only apt that many of the conferences will take place in St. Petersburg. Look out especially for the following:

- IUPAC endorsed Mendeleev 150: 4th International Conference on the Periodic Table (26-28 July). For further details, see: https://mendeleev150.ifmo.ru/

- A satellite symposium to XXI Mendeleev Congress on General and Applied Chemistry, organised by SHAC's very own Brigitte van Tiggelen amongst others. Keynotes include professors Bernadette Bensaude-Vincent, Helge Kragh, David Lewis, and Martyn Poliakoff. https://hystsymposium.wordpress.com/6546456-2/

For those who are visiting the banks of river Neva for the first time, I would recommend trying out the traditional donut shop Pyshechnaya on Bolshaya Konyshennaya. Not only can you get your daily dose of fat, sugar, and starch in Pyshechnaya, but also experience the authentic taste of Soviet "coffee." For those of you who are interested in substitutions, perhaps the substance in question would make a compelling case study.

As can be seen from this issue of Chemical Intelligence, the past spring has been vibrant for our community. As usual, you may find here the reports on recent events and advertisements for upcoming ones. I am grateful for my colleagues who contributed to this issue. Hope you enjoy reading about the events as much as you enjoyed attending them!

Best wishes,
Karoliina Pulkkinen

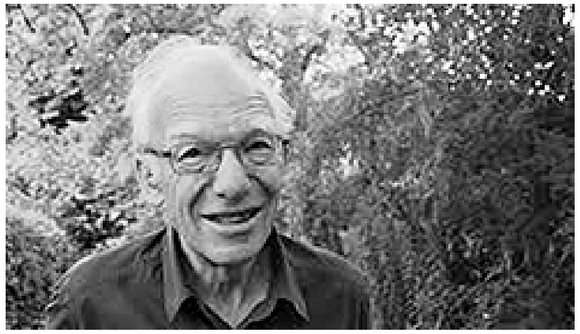


REPORT: 'Matter, Ideas, Nature: A Conference in Memory of David Marcus Knight' held at the University of Durham, 14-15 June 2019.

David Knight (1936 – 2018) was one of the most prominent historians of science to emerge in the wake of the 'Two Cultures' controversy as W.H. Brock pointed out in his appreciation of Knight at the start of this two day SHAC supported meeting commemorating his life and work. (An extended version of this appreciation should have appeared in Ambix by this time this report is published). Knight's contribution to the history of chemistry, with books such as *Atom and Elements, Ideas in Chemistry, The Transcendental Part of Chemistry* and, of course, his biography of Humphry Davy, was only part of a prodigious historical output. His other work included general books on the history of science such as *The Age of Science* and *Voyaging in Strange Seas*, on science and religion (*Science and Spirituality* and, co-edited with Matthew Eddy, *Science and Beliefs: from Natural Philosophy to Natural Science*) and on bibliography (*Natural Science Books in English, 1600-1900*). As Eddy discussed in his opening remarks much of Knight's extensive collection of books are now in the library of the University of Durham where they are being gathered together as a named collection, along with Knight's papers.

The programme of the meeting reflected these various aspects of Knight's interests with speakers drawn from his colleagues in the Department of Philosophy at Durham, his former students and historians who over the years were closely associated with Knight. All the speakers discussed topics relating to their current research referring to their links with Knight. Nancy Cartwright and Robin Hendry, both former colleagues of Knight's, addressed from a philosophical standpoint the issues surrounding current concerns of trust in science, and indeed in other areas. Another strong commonality of the meeting was biography. Jim Moore and Frank James talked about the early lives of Alfred Wallace and Humphry Davy respectively and coincidentally both used the tithe maps of the 1830s as sources of evidence – clearly a new trend in the history of science in the making – while Robert Fox talked





Garnett's departure from the latter arguing that it was due to Count Rumford's bullying him. Davy and Garnett were chemists and the discussion of chemical topics was continued by Eddy in his reconsideration of Joseph Black's theory of matter. Sarah Day talked about writing narrative using a Russian explorer as a case study, Peter Bowler made the unlikely but effective comparison of the views of H.G. Wells and A.N. Whitehead on the nature of invention, while Sophie Forgan gave a highly entertaining talk on kangaroos in Europe in the four or five decades following 1788. This was a very pleasant relaxed meeting with plenty of time allowed for both formal and informal discussion.

This was all the more so as many members of Knight's family were able to be present for most of the meeting and it was a pleasure to meet them. The organisers, especially Eddy and Hendry, are to be congratulated in arranging this meeting. Everyone said it was a very appropriate commemoration of Knight's work, although one family member commented that he would have been amazed at all the attention – which perhaps give a clue as to why he was so highly regarded in the academic community.

- Frank James

Portrait by John Partridge, 1840

REPORT:Albertopolis

On 11 April 2019 the history of chemistry in South Kensington was celebrated at the "Chemistry in Albertopolis" conference held at the Science Museum. "Albertopolis" was the designation given to the ambitious site of science and culture proposed by Prince Albert, whose beginning was enabled by the purchase of the site with profits from the Great Exhibition of 1851. Part of the "ChemFest 2019" series of events celebrating 150 years of the periodic table, this conference was conceived by Mary Archer (Chair of the Science Museum Group) and organised by Science Museum staff including most of all Rupert Cole. Presentations were given by Robert Anderson, Hasok Chang, William Brock, Anne Barrett, Bill Griffith and William Motherwell, Peter Morris, Rupert Cole and Hattie Lloyd, covering a diverse range of topics relating to the traditions of chemical research and teaching at Imperial College (and its predecessor institutions) and the Science Museum. The event closed with a lecture on "Lyon Playfair: chemist and commissioner" by Ian Blatchford, Director and Chief Executive of the Science Museum Group, and a dinner hosted by Alice Gast, the President of Imperial College, with an after-dinner talk by Joe Palca, science correspondent for US National Public Radio. For the remaining events in ChemFest 2019, see:

https://www.discoversouthken.com/itinerary/chemistry-festival/

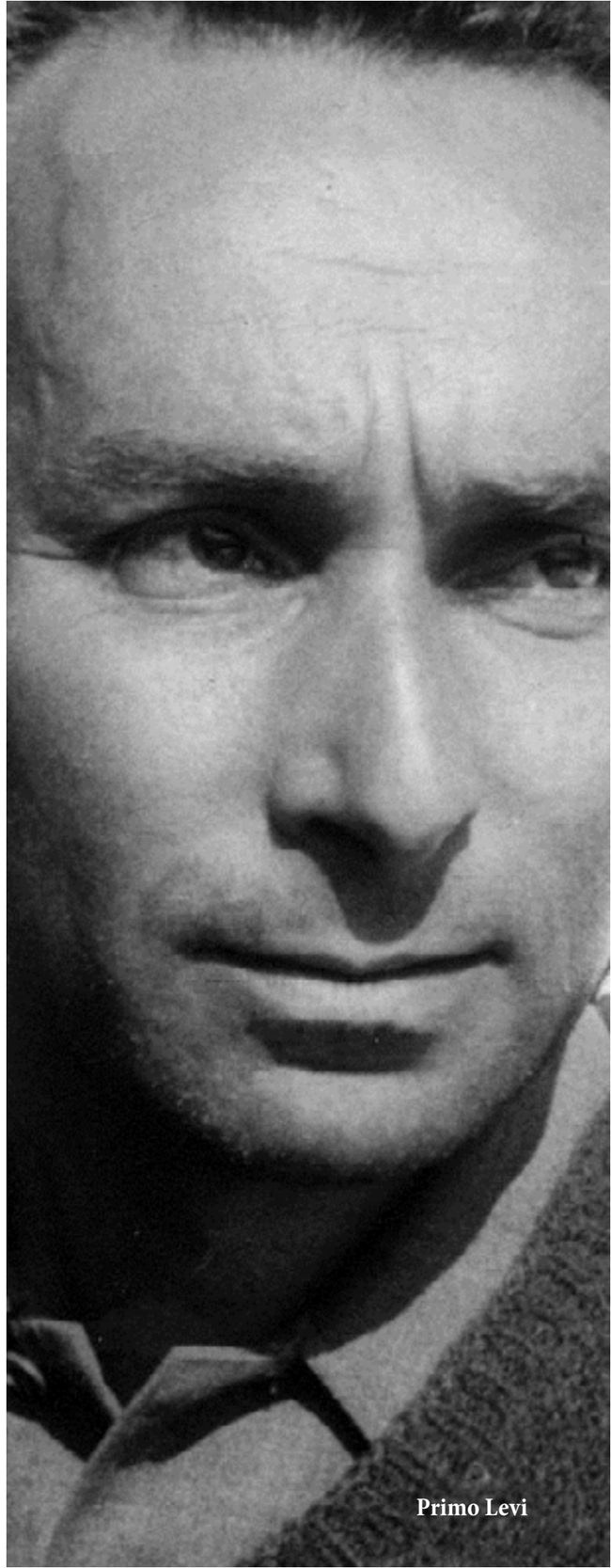


REPORT: AD HOC

With continuing financial and moral support from SHAC, the AD HOC (Association for the Discussion of the History Of Chemistry) group continued its activities in both Cambridge and London in the academic year 2018–19. The London branch was led by Simon Werrett at UCL, and held monthly meetings starting from January to April 2019 on the theme of "Before and After Plastics", combining discussions of the history of materials and concerns about the environmental impacts of plastics. In Cambridge the activities were coordinated by Karoliina Pulkkinen (autumn 2018) and Hasok Chang (winter and spring 2019), and featured the following speakers/discussants: David Teplow on the meaning of science (15 Oct. 2018), Agnes Bolinska on protein structures (22 Oct. 2018), Hasok Chang on compositionism (12 Nov. 2018), Karoliina Pulkkinen on prediction and the periodic table (28 Jan. 2019), Steve Irish on pseudomorphism (18 Feb. 2019), Agnes Bolinska and Hasok Chang on crystallography and pluralism (11 Mar. 2019), Robin Hendry on trusting atoms (29 Apr. 2019), Joe Martin on the origins of materials science (13 May 2019), and Melanie Keene and Hasok Chang on Primo Levi's The Periodic Table (10 June 2019). We all remain very grateful for the support from SHAC enabling these events!

-Hasok Chang





Primo Levi

REPORT: "The Changing Role of Consultants in Industry, 1850–2000", a Workshop held at the Maison Française, Oxford, 10-11 May 2019

The Workshop was organised by Peter Reed (an Independent Researcher from California), Jonathan Aylen (Honorary Senior Fellow, Manchester Institute of Innovation Research, University of Manchester) and Viviane Quirke (Senior Lecturer in Modern History and History of Medicine at Oxford Brookes University).

The workshop attracted 20 participants, of whom 15 gave papers during the two days of the workshop. The keynote lecture was given by Anna Guagnini (University of Bologna) who also acted as a commentator; two additional commentators were from the University of Oxford and from the Science Museum, London. The workshop had a strong international outlook with participants from Italy, Norway, the USA and Canada as well as the UK. The papers which were pre-circulated cover studies of key individuals or consultancy firms in key sectors such as chemicals, pharmaceuticals, engineering, construction, and the social sciences.

The workshop was an extremely worthwhile event: varied, informative, breaking new ground and thought provoking. It tapped a wide range of new research and stimulated debate. All in all, a great success in opening up a new field neglected by historians of science, engineering and technology. It is now planned to publish a selection of the papers, either as a book or as special issues of journals.

Financial support was provided by the Society for the History of Alchemy and Chemistry, the Newcomen Society, Oxford Brookes University and the British Society for the History of Science, for which the organizers are extremely grateful.

- Peter Reed



# NEW SCHOLARS AWARD

REPORT: Karoliina Pulkkinen

The New Scholar grant awarded by SHAC covered my costs of attending Philosophy of Science biennial conference held in Seattle. At PSA, I had the opportunity to present my work and to gain helpful feedback from many scholars based in the U.S. and Canada. As PSA was held jointly with HSS, I had the chance to interact with both historians and philosophers who work on the periodic system of the chemical elements. The grant was especially appreciated considering that my paper on Dmitrii Mendeleev was selected for publication in their conference proceedings issue. The article is forthcoming in Philosophy of Science in December 2019.

Without the generous help of SHAC, it would not have been possible to take my paper to PSA/HSS, so many thanks for the support!

- Karoliina Pulkkinen



REPORT: Sarah Lang/SHAC NEW SCHOLARS AWARD

The SHAC New Scholars Award allowed me to finance my participation and talk at the autumn workshop of "Netzwerk Alchemie" at Forschungszentrum Gotha of the University of Erfurt on October 1st 2018. Current results of Netzwerk Alchemie's ongoing "Processus Universalis" project were presented and discussed. It is the goal of the "Processus Universalis" project to explore methods of dealing with groups of texts all concerning one type of alchemical recipe. In the project, 35 early modern texts are being analyzed, 18 of which were processed in a digital way so far. For one of the recipes in question, first preparatory experiments have been done and it will be realized experimentally in whole towards the end of 2018 in the laboratory of Landesmuseum für Vorgeschichte in Halle.

The purpose of the part of the project funded by SHAC's New Scholars Award was to present the results of the ongoing research on how make sense of early Modern "processus universalis" recipes using digital methods. Digital Humanities methods like Natural Language Processing can render "invisible" intertextuality visible and help track visible allusions as to determine closeness of text witnesses statistically. While digital tools for the creation of textual stemmata already exist, they are not apt for the alchemical recipes of the "processus universalis" Netzwerk Alchemie currently deals with as the recipes form a network, not a stemma. Existing methods had to be tested and evaluated.

The results of the digital analysis presented at the Gotha workshop can be summed up as follows:
Stylometry (authorship attribution) was able to recreate the results of the researchers' close reading computationally. The method, however, worked as a "black box" and it remained unclear how the computer had gotten to these results and which concrete criteria had driven it to its decisions. The method turned out to be useful for the analysis of alchemical recipes but needed to be supplemented by further analyses for an adequate interpretation of its results. Topic modeling and word clouds did not yield helpful results as the corpus analyzed was too small and the strongly varying early modern German orthography had not been normalized in the pre-processing phase of the analysis. The exact matching of text similarities, however, resulted in a visualization of intertextual references which even allowed to dissect text parts and start to identify "fractions" between experimental and theoretical parts of the recipes. For the future continuation of the analysis, texts were tagged with keywords which will be soon visualized. Furthermore, fuzzy matching promises better results than the exact matching done so far.

- Sarah Lang

# SUBJECT DEVELOPMENT AWARDS

FROM EVAN HEPLER-SMITH: Evan Hepler-Smith received a SHAC subject development award in 2018. This enabled him to support a joint interdisciplinary workshop with the Boston College Institute for the Liberal Arts entitled Remapping Chemicals, Environments, and Toxicity. Here, he outlines the backgound to the workshop and sketches the discussion that took place.

Toxic pollutants are responsible for nearly 10 million premature deaths a year, per a 2017 report of the Lancet Commission on Pollution and Health. The burdens of pollution are also disproportionately borne by the global poor. This comprises not only a major global health issue but a significant human rights concern, as detailed in a 2018 report to the UN Human Rights Council. Furthermore, whether associated with infrastructure (lead pipes and paint dust, cities choked with diesel exhaust, coal-burning power plants) or synthetic chemical emissions and waste (from PCBs to the perfluoroalkyl substances or "PFASs"), a signal feature of chemical pollution is its tendency to accumulate and persist. In the words of one group of environmental toxicologists, environmental toxicity poses an "intractable, potentially never-ending chemicals management issue that challenges the conventional chemical assessment and management paradigm adopted by society since the 1970s.

At present, scholars and professionals in a wide range of fields are engaged in reconceiving both the causes of chemical pollution and toxicity and potential ways of solving it. Across the disciplines, scholars have grown frustrated with existing approaches to toxic chemicals cleanup and regulation. Molecule-by-molecule, site-by-site, or sector-by-sector efforts always seem to get bogged down in uncertainty. When action does come, it too often seems to involve simply trading one toxic hazard for another—or increasing global environmental inequality by shifting toxicity toward disadvantaged and neglected communities. For more than a century, scientists, advocates, industries, and regulators have swung back and forth between efforts to mitigate toxic hazard—often provisionally successful, almost always ultimately dissatisfying—at the level of individual chemical substances, individual sources and sinks of emissions, and individual applications of chemical products. Might there be other, potentially more productive ways of conceiving of chemicals, environments, and toxicity? Might we canvas the long-term history of alchemy and chemistry for paths not taken that are worth further exploration?

With the support of the Society for the History of Alchemy and Chemistry and the Boston College Institute for the Liberal Arts, an interdisciplinary group of scholars gathered in Boston in June 2019 for a workshop entitled Remapping Chemicals, Environments, and Toxicity. Disciplines represented included history, anthropology, sociology, chemical engineering, geography, library and information science, and industrial ecology. We compared notes on how our communities have sought more promising approaches to the persistent problem of environmental toxicity by rethinking what persistent chemicals are, in the first place. For example, industrial ecologist Jonathan Krones accounts for aggregate flows of materials, and conceives of the hazards that they may pose, within the context of broader cycles of "industrial metabolism." Similar remappings engage categories from petrochemical refineries to fine particulates to personal care products.

The participants in this meeting—historians Angela Creager, Evan Hepler-Smith, David Jones, Colleen Lanier-Christensen, and Michelle Murphy; anthropologists Ruth Goldstein, Nicholas Shapiro, and Elena Sobrino; engineer Jonathan Krones; geographer Julie Guthman; librarian and information professional Leah McEwen; and sociologist Lauren Richter—would like to thank the Society for the History of Alchemy and Chemistry for helping to support this productive and provocative gathering.



FROM MARIE THÉBAUD-SORGER:
The conference Biographies of Materials was held at the Maison Française d'Oxford in Oxford (4-5 March 2019) supported by a SHAC Subject Development Award. It was very successful and gathered 20 speakers. We engaged historians and anthropologists and geographers in a dialogue with material scientists in order to better characterize the hybrid life of materials as natural entities and social or economic agents, with the support of the SHAC, the Oxford History of science Museum, the Oxford Centre for the History of Science, Medicine and technology, as well as in France the DIM MAP (Heritage and Ancient Materials).

We invited chemists from France, material scientists such as Clément Sanchez ( College de France), Hervé Arribart (ESPCI), and Loïc Bertrand (Paris-Saclay, Synchroton) as well as people from Oxford working also at the crossroad between chemistry and archaeology such as Mark Pollard (ERC FLAME- FLow of Ancient Metals across Eurasia) and academics from several fields in humanities: anthopologist and geographer- Ludovic Coupaye (UCL), Derek McCormak (Oxford)- Historians and philosophers of Science - Hasok Chang (Cambridge), Simon Werett (UCL), Michael Bycroft (Warwick), Mat Paskins (LSE), Viviane Quirke (Oxford-Brookes),

The biographical metaphor is used to emphasize not only the life-stories of materials but also to their individuality and their agency. Additionally it favours narratives of the entanglements of human societies and economies with environmental cycles (depletion of natural resources, pollution), and with longer and shorter term temporalities (geochemical, climatic, seasonal, modes of production, market longevity, etc.). This workshop was a great opportunity to discuss further collaborative interdisciplinary research networks on humans' interactions and interdependence with materials, as well as on the economic, societal and environmental impacts of materials studied from different perspectives.
Below the programme and attached programme and abtracts.



**Monday March 4**
9 :30 Welcome coffee
10: 00 Bernadette Bensaude-Vincent and Marie Thébaud-Sorger
Introduction: Historical perspectives

Old & New Materials
Chair : John Christie
11 :00 Hervé Arribart (ESPCI, Paris)
History of glass research: the quest for material's perfection
11 :30 Michael Bycroft (University of Warwick)
The classification of gems in seventeenth-century France
12 :00 Hasok Chang (Cambridge University)
Chlorine: An Element of Controversy

Society, economy, and sustainability
Chair : Hasok Chang
14 :00 John R.R. Christie (Oxford)
Alum: Temporalities, Modes of Production, Communities.
14 :30 Judith Rainhorn (Paris I Panthéon-Sorbonne)
Entangled whites: lead and zinc oxydes between health and market, 19th c.
(Confort break)
15 : 10 Simon Werrett (UCL)
The power of lasting : Thrifty science and bodily maintenance
15:40 Bernadette Bensaude-Vincent (Université Paris 1 Panthéon-Sorbonne)
Plastics and the culture of disposal

Coffee break

Between Nature and Design (I)
Chair : Sergei Dudarev (University of Oxford)
16 :30 Clément Sanchez (Paris, Collège de France):
Hybrid materials: From history to bioinspired strategies
17:00 Frédéric Thibault-Starzyk (MFO)
Zeolites - the Swiss cheese materials: the interest is (mostly) in the voids
17 :30 General discussion
18 :00 Drinks

**Tuesday March 5**
Between Nature and Design (II)
Chair : Frédéric Thibault-Starzyk
9 :30 Welcome coffee
10 : 00 Viviane Quirke (Oxford Brookes University)
Oestrogen and its identities
10 :30 Derek McCormack (University of Oxford) & Marie Thebaud-Sorger (MFO/CNRS)
Making air matter
11 :30 Ludovic Coupaye (UCL)
Anthropology of Techniques, Anthropologies of Materials: The revealing dimension of technical activities.

Tuesday 13 :30- 15h00
Materials & Archeology
Chair : Rob Iliffe
13:30 A.M. Pollard (University of Oxford)
Thinking Beyond Provenance for Archaeological Materials
14 :00 Loïc Bertrand & Étienne Anheim (CNRS & EHESS, Paris)
While studying material evidence of the early metallurgy of copper…
14 : 30 Stephen Johnston (Oxford Museum of History of Sciences)
The strange case of the missing materials:
museological traditions and material investigations
15 :00 Wrap-Up and perspectives for future network

# The Partington Prize 2020 is now open for entries

Deadline: Midnight GTM, 31 December 2019

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

The competition is open to anyone with a scholarly interest in the history of alchemy or chemistry who, by the closing date of 31 December 2019, has not reached 35 years of age, or if older is currently enrolled in a degree programme or has been awarded a master's degree or PhD within the previous three years. Further details can be found in the May/August issue of Ambix and on https://www.ambix.org/partington-prize/

To access past prize-winning essays please visit:

https://think.taylorandfrancis.com/journal-prize-est-ambix-partington-prize/



# AUTUMN MEETING

Society for the History of Alchemy and Chemistry Autumn Meeting and AGM

William Crookes (1832-1919)
Saturday 19 October 2019,
Royal Institution, 21 Albemarle Street, London, W1S 4BS
http://www.rigb.org/visit-us/find-us

This year marks the centenary of the death of William Crookes. Journalist, chemist, photographer, spiritualist, businessman, sometime Secretary of the Royal Institution and President of the Royal Society of London, Crookes was a key figure in the science of the second half of the nineteenth century and beginning of the twentieth. This meeting, organised by the Society for the History of Alchemy and Chemistry, the Historical Group of the Royal Society of Chemistry and the Royal Institution, which is part of the ChemFest celebrations of the sesquicentenary of the periodic table, will examine various aspects of Crookes's extraordinary career and his place in science.

The Society for the History of Alchemy and Chemistry's AGM will also be held at this meeting and further details about this will be sent to members in the autumn.

Programme

13.15 SHAC AGM
13.45 Registration for Crookes Meeting
13:55 Welcome and Introduction: Frank James, (Royal Institution and Chair of SHAC)

First Session Chair: Anna Simmons (UCL)

14.00 Richard Noakes (Exeter University)
'Two Parallel Lines'? The Trajectories of Physical and Psychical Research in the Work of William Crookes
14:20 Kelley Wilder (De Montfort University, Leicester)
William Crookes, a life in Photo-Chemistry

15.00 Refreshment Break

Second Session Chair: Peter Morris (Chair of RSCHG)
15.30 Frank James (Royal Institution and UCL)
William Crookes and Michael Faraday
16.10 Paul Ranford (UCL)
Crookes's "Invisible Helper" – George Gabriel Stokes (1819-1903)
16.50 William Brock (University of Leicester)
The key to the deepest mystery of nature: Crookes, periodicity and the genesis and evolution of the elements

17.30 Close of meeting

There is no charge for this meeting, but prior registration is essential. Please email Robert Johnstone (robert.johnstone.14@ucl.ac.uk) if you would like to attend. If having registered, you are unable to attend, please notify Robert Johnstone.

# POSTGRAD WORKSHOP

Postgrad workshop
10th Annual SHAC Post-Graduate Workshop: "Society and the Creation of (al)Chemical Knowledge"
Hosted by the Embassy of the Free Mind, Amsterdam, Netherlands

Thursday, 28 November 2019

18:00 Public Lecture by Megan Piorko, Dissertation Fellow, Consortium for History of Science, Technology and Medicine
"The Secret Rosicrucianist State of Arthur Dee's Fasciculus Chemicus"
Chaired by Dr. Peter Forshaw, Head of the Ritman Research Institute

Friday, 29 November 2019

10:30 Lyke de Vries, Junior Research Fellow, Center for the History of Philosophy and Science "Between Academic Integrity and Confessionalization: Andreas Libavius' Study of the Rosicrucian Manifestos"
11:15 Fabiana Lopes da Silveira, Doctoral Candidate in Classical Languages and Literature, University of Oxford
"In the Melting Pot: The Self-presentation of Alchemical Knowledge in the Letter from Isis to Horus"
12:00 Lunch break
13:00 Sarah Lang, Doctoral Candidate in Digital Humanities, Zentrum f. Informationsmodellierung
"On alchemical language: Connecting the dots between expert knowledge and Decknamen using digital methods"
13:45 Umberto Veronesi, Doctoral Candidate at the Institute of Archaeology, University College London
"The Old Ashmolean Museum and Oxford's Seventeenth-century Chymical Community: A Material Culture Approach"
14:30 Coffee break followed by a roundtable discussion
15:30 Keynote Presentation by Dr. Marieke Hendriksen, Senior Researcher at NL Lab, Royal Netherlands Academy of Arts and Sciences in Amsterdam
"(No) Laughing Matter: Alchemy between Academy and Society"
16:45 Post workshop drinks at Café Brandon

Saturday, 30 November 2019

10:15 Dr. Filip A. A. Buyse, Academic Visitor, University of Oxford
"Boyle, Glauber and The Hartlib Circle: The Redintegration of Nitre"
11:00 Dr. Magdalena Luszczynska, Postdoctoral Fellowship at the Polonsky Academy, The Van Leer Jerusalem Institute, Israel
"Anthropocene or the Human Impact on Alchemical Earth(s)"
12:00 Lunch break
13:00 Guided tour of the special texts and objects housed at the Ritman Library led by Head of the Ritman Research Institute, Dr. Peter Forshaw
14:00 Coffee break followed by a roundtable discussion
15:00 Keynote Presentation by Dr. Simon Werrett, Senior Lecturer in History and Philosophy of Science at University College London's Department of Science and Technology Studies
"Sweete Chymistry: Domestic Thrift and Experimental Inquiry in Seventeenth-Century England"
16:00 Concluding Remarks

Please RSVP attendance to Megan Piorko at studentrep@ambix.org by 1 October 2019



AMBIX
New Studies on Humphry Davy:
May/August 2019 issue of Ambix

FROM Frank James:
Sharon Ruston and I have edited a special double issue of Ambix which brings together eight new studies on Humphry Davy (listed below) together with an appreciation of the life and work of David Knight, much of whose scholarship was devoted to understanding Davy. Taken together they provide a much richer and more nuanced account of aspects of Davy's life, showing how he and his work fitted into the very complex and difficult social, cultural and political contexts of the opening decades of the nineteenth century. Taking as our starting point Thomas Carlyle's 1829 critique of modern science, in this introduction we weld together the themes that emerge from these papers, many of which ground their results in the project to publish Davy's Letters due next year. This project has provided evidence that helps us critique the disciplinary boundaries that led to Davy becoming seen mostly as a chemist, while his friend Samuel Taylor Coleridge has generally been categorised as a poet. Such boundaries are now breaking down fruitfully as these essays all illustrate in their different ways. A consequence of the new understandings being produced, is that we need to consider anew what constitutes chemistry and chemists, how reputations and commemorations are constructed, the role of audiences (especially women) in developing knowledge and the use of language and literature, which, among other things, are key elements linking chemistry with other parts of society and culture. Davy provides an excellent location by which to address the historical issues involved, providing us with an opportunity to balance carefully these and other components (such as human agency) in understanding how knowledge is constructed.

Frank A.J.L. James and Sharon Ruston: New Studies on Humphry Davy: Introduction

Hattie Lloyd Edmondson: Chivalrous Chemistry

Sharon Ruston: Humphry Davy: Analogy, Priority, and the "true philosopher"

Gregory Tate: Humphry Davy and the Problem of Analogy

Tim Fulford: Davy Takes to the Hills: Dialogic Enquiry and the Aesthetics of the Prospect View

Jan Golinski: "The Fitness of Their Union": Travel and Health in the Letters of Humphry and Jane Davy

Andrew Lacey: New Light on John Davy

Frank A.J.L. James: Constructing Humphry Davy's Biographical Image

David M. Knight: Sources and Resources for Davy: 1960 and Now

William H. Brock: David Marcus Knight (1936-2018):
An Appreciation

# STUDENT PROFILES
## Sarah Lang

**Sarah Lang**
**Digital Humanities at Centre for Information Modelling / Zentrum f. Informationsmodellierung (ZIM-ACDH**

**Self Introduction**
My name is Sarah Lang and I was born in Baden-Württemberg / Germany in 1992. For my studies, I moved to Graz / Austria where I completed a Bachelor in Archaeology in 2016, teacher's education 2011-2017 (Mag.phil., Latin & French), and a Master's degree 2017 (Religious Studies, thesis on the iatrochemist Michael Maier), at Karl-Franzens-Universität Graz, including an ERASMUS stay at Université Montpellier III Paul Valéry / France. My research interests include Digital Classics, Alchemy and literary studies focusing on cultural history. In 2016, a job offer at our local Digital Humanities centre where I had done a DH certificate changed my perspectives in the Humanities: I currently am Digital humanities predoc, charged with the technical aspects of the Digital Classics project: "Graz Repository of Ancient Fables", ZIM-ACDH Institute of Classical Philology, KFU Graz. Since 2017 I am a Doctoral candidate in Digital Humanities at Centre for Information Modelling / Zentrum f. Informationsmodellierung (ZIM-ACDH) where I try to combine Digital Neo-Latin / studies with History of Science / Alchemy research. My supervisors are Prof. Georg Vogeler (ZIM-ACDH Graz: Digital Humanities, Semantic Web) and Prof. Martin Muslow (University of Erfurt: history of science). The thesis is on the subject of (semi-)automated digital edition of alchemical texts using the example of Count Michael Maier. Currently, I am also a Guest Lecturer at the University of Passau in Digital Humanities in the topics of digital annotation and quantitative text analysis.

**What is the greatest challenge you faced as a postgraduate student?**
The greatest challenge for me as a postgraduate student probably is interdisciplinarity. Not concerning my own person but rather in the way that I have to maintain contacts, networks and so on in multiple fields and that I need to gain acceptance in different fields which means that the people in question usually lack background on one half of my doctoral thesis. This means I have to come up with ways of convincing Digital Humanities people why alchemical Decknamen are so complicated and explain to alchemy researchers how digital methods could help alchemy research. Being a sort of mediator between fields is good and, usually, people are nice. But it also costs a lot of energy and I have been subject many times to light forms of discrimination against alchemy research in the Digital Humanities field. For example, one of my abstracts dealing with digital methods to use on alchemical language was rejected with the explanation that supposedly, already in the Enlightenment period, alchemical language has been proven to be basically meaningless. The (anonymous) reviewer then cited the "Méthode de nomenclature chimique" (1787) to prove their point that my question had been answered sufficiently over 200 years ago and this review actually caused a rejection of my paper. This is only the tip of the iceberg, of course, but I frequently encounter the problem that Digital Humanities researchers don't (want to?) believe me when I claim that alchemical language is different from 'normal' language for which computer linguistics have already provided sufficient methods. Actually it is one of the main reasons I receive rejections. Other than what I would have expected, the fact that alchemy currently seems to be somewhat of a "fancy" en-vogue topic does not give me better chances at academic applications. Rather the old stigma against alchemy research seems to linger outside of the History of Science communities.



# STUDENT PROFILES
## Fabiana Lopes da Silveira

**Fabiana Lopes da Silveira**
**University of Oxford**

**Self Introduction**
I am a DPhil candidate in Classical Languages and Literature at the University of Oxford, funded by the CAPES Foundation (Ministry of Education, Brazil). As a Master's student in Linguistics at the University of Campinas, I was funded by Fapesp (São Paulo Research Foundation, Brazil) and was also a visiting member of the Corpus Christi College Centre for the Study of Greek and Roman Antiquity (University of Oxford) for six months. It was in this period that I first considered working on less conventional and more interdisciplinary material for my Doctoral Degree. I have always found alchemy extremely intriguing both in language and imagery, but I had never considered its origins. It was by searching for ancient evidence on the topic that my current project came about. My thesis intends to demonstrate how certain early alchemical writings exploit literary and linguistic devices in a way that the text becomes a reflection of the alchemical process itself. By mixing spiritual, philosophical and technical language, elements from different genres, a variety of cultural and literary references, and intricate imagery of various sorts, I argue, the text becomes an alchemy laboratory where the author experiments with familiar elements and transforms them into material that seems strange, impenetrable, yet compelling: an exquisite treasure for which the reader has to dig. Both deprived of and given enough information to be bewildered but not completely lost, the reader seems prompted to take up the search that may or may not give access to the secret of alchemical knowledge.

**What is the greatest challenge you faced as a postgraduate student?**
While ancient alchemy is an extremely stimulating theme of research, it is equally challenging for reasons known to the readers of this newsletter: the texts are difficult to date, the nature of the evidence in terms of transmission and authorship is problematic and scarce, and there is still very little scholarship on the topic (a difficulty fortunately being diminished by a number of members of this Society). These hurdles require one to be extremely careful when putting forward an argument, and this is one of the reasons why my approach to these texts is mainly literary. In doing so, I hope my thesis will help those interested in ancient alchemy to navigate the "impenetrability" of these texts a bit more easily, as well as contribute to a further appreciation of the cultural and literary value of the beginnings of a tradition that has been so overlooked in classical scholarship.

# LETTERS FROM MEMBERS

FROM W.H. BROCK: For the next issue of Chemical Intelligence you might like to draw members' attention to an article about two of SHAC's founding fathers, John Read and J. R. Partington. It's by a member, the Head of Chemistry at Highgate School, Zbigniew (Andrew) Szydlo. The citation is:

"Two English Chemists/Authors/Teachers: John Read and James Riddick Partington", Chem Didact Ecol Metrol, 23 (1-2) (2018), 47-70

That's the online journal of the Polish Society for Ecological Chemistry & Engineering. The article is in English with a Polish abstract. I don't suppose any readers have ever heard of the journal. I hadn't until Andrew drew my attention to it. It's a free access journal.

**SHAC exteds warm welcome to the new members of the society!**

Sarah Nielsen
Francesca Vanke
Guthrie Brown
Agneses Benzonelli
Silvia Pérez Criado
Robert Van Den Berg
Marcus Carrier
Stefania Buosi Moncunill
Ana Rita Lourenco
Christoper Halm
Filip Buyse
Fabiana Lopes da Silveira
Birte Camen
David Greenlaw
Charlotte Abney
Ute Frietsch
Joshua Kelberman
Armel Cornu-Atkins
Corinna Gannon
Alexander Nader
Francesca Antonelli
Denise Straiges



# MEMBERSHIP

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 Taylor & Francis and appears quarterly. Members also receive the Society's newsletter, Chemical Intelligence, twice yearly, and any new editions from the Sources of Alchemy and Chemistry volume.
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 Membership Secretary, Dr Carolyn Cobbold:
cacobbold@gmail.com.

**We welcome any contributions that newsletter readers might wish to make to Chemical Intelligence. This includes, but is not limited to:**

- **Upcoming Conferences or Meetings**
- **Publications**
- **Conference or Meeting Reports (these should not normally exceed 1,000 words)**
- **News Items or Announcements**
- **Grants, Fellowships or Awards**
- **Reviews of Websites, projects or blogs of interest (up to 500 words)**
- **The Editor retains the right to select those contributions that are most relevant to the interests of the**
- **Society's members.**

**We also wish Chemical Intelligence to provide a platform for interaction between members. We therefore encourage you to submit:**

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

**For any queries regarding the content of Chemical Intelligence, or to propose material for inclusion in future issues, please contact the editor: kjp41@cam.ac.uk.**