

SOCIETY FOR THE HISTORY OF ALCHEMY AND CHEMISTRY

Programme | **Geographies of Alchemy and Chemistry**

5th SHAC Postgraduate Workshop (October 24, 2014)

Venue: University of Amsterdam, Bungehuis 1.01, Spuistraat 210, 1012VT Amsterdam

09:30	Registration
10:00	Introductions
10:15	<i>Session 1</i>
	Carmen Simioli (Napoli), 'Mercurial Alchemy in Tibet: The Transmission of an Indian Alchemical Practice to Tibet and Its Elaboration in the Zur Medical Lineage'
	Tillmann Taape (Cambridge), 'A Geography of Distillation around Strasbourg, c. 1500'
	Ruben E. Verwaal (Groningen), 'Crossing Bodily and Disciplinary Boundaries: Chymistry of Urine in Leiden, c. 1700'
11:45	Break
12:00	<i>Keynote: Geographies of Alchemy</i>
	Dr. Peter J. Forshaw (Amsterdam), 'Transmissions and Transmutations of Alchemical Texts'
13:00	Lunch Break
14:15	<i>Session 2</i>
	Charlotte A. Abney (Yale), 'Networks of Chemistry: The Discovery of Cerium in Gustavian Sweden'
	Dr. Axel Petit (Nantes), 'The Circulation of Ions in Europe in the 19 th Century'
	Carolyn Cobbold (Cambridge), 'Controlling Chemical Dyes in Food: International and Institutional Comparisons'
15:45	Break
16:00	<i>Keynote: Geographies of Chemistry</i>
	Prof. Dr. Lissa Roberts (Twente), 'Amsterdam and the World in the Eighteenth Century'
17:00	<i>Roundtable Discussion</i>
	Chair: Dr. Georgiana Hedesan (Oxford)
17:45	End

Registration: The workshop, including refreshments, is free but the number of participants is limited.

Please register until October 10 by emailing Judith Mawer (Exeter), studentrepuk@ambix.org.

Travel Bursaries: Contributions towards travel expenses are available for a limited number of participants.

Please contact Mike A. Zuber (Amsterdam), studentrepint@ambix.org.

The SHAC Graduate Network gratefully acknowledges the generous support of our external sponsors:



UNIVERSITY OF AMSTERDAM
ASCH—Amsterdam School for History and Culture



History of Hermetic Philosophy
and related currents

Keynote 1: Geographies of Alchemy

‘Transmissions and Transmutations of Alchemical Texts’

Dr. Peter J. Forshaw (University of Amsterdam)

Peter J. Forshaw researched his doctorate in early-modern intellectual history at Birkbeck, University of London, on the complex hieroglyphic and theosophical figures and the interplay of alchemy, magic and *cabala* in the *Amphitheatrum sapientiae aeternae: Amphitheatre of Eternal Wisdom* (1595/1609) of Heinrich Khunrath of Leipzig (1560-1605), ‘doctor of both medicines and faithful lover of theosophy’. After a British Academy Postdoctoral Fellowship on ritual magic and projects at the universities of Strathclyde and Cambridge devoted to early-modern alchemy and astrology, respectively, he was appointed to his current position in 2009.

<http://www.uva.nl/over-de-uva/organisatie/medewerkers/content/f/o/p.j.forshaw/p.j.forshaw.html>

Keynote 2: Geographies of Chemistry

‘Amsterdam and the World in the Eighteenth Century’

Prof. Dr. Lissa Roberts (University of Twente)

Lissa Roberts is professor of long term development of science and technology at the University of Twente. She received her PhD in European cultural and intellectual history at UCLA (University of California at Los Angeles), where she wrote a dissertation entitled *From Natural Theology to Naturalism: Diderot and the Perception of Rappports*. Since that time, she has held positions at a number of universities in both the United States (including UCLA, University of California at Irvine, Washington University and San Diego State University) and the Netherlands. She now heads the research program on the ‘long term development of science and technology’.

<http://www.utwente.nl/mb/steps/people/scientific/roberts/>

Session 1

‘Mercurial Alchemy in Tibet: The Transmission of an Indian Alchemical Practice to Tibet and Its Elaboration in the Zur Medical Lineage’

Carmen Simioli (PhD Candidate, Università di Napoli “L’ Orientale”)

According to ancient Tibetan texts, the sacred site of Oḍḍiyānā, nowadays identified with Swat in northern Pakistan, has played a significant role in the dissemination of tantric Buddhism and alchemy in Tibet. In the thirteenth century Orgyenpa Rinchenpel (1229/1230-1309) brought back from Ogyen a series of alchemical teachings on mercury that were handed down within several medical lineages. These became crucial in the process of consolidating Tibetan mercury-based pharmacology in the fourteenth and fifteenth centuries. Among the medical lineages related to Orgyenpa, the Zur lineage, or Southern Medical School, represented by Zurkharwa

Nyamnyi Dorjé (1439-1475), codified various key-teachings on mercury. This paper starts by referring to the mystical origin of Tibetan mercurial alchemy as described by selected hagiographies and pharmacological writings, and argues how this origin is consistent with the quest for the authoritative Indian antecedent. Thenceforth, the paper outlines the noteworthy development of this practice in southern Tibet.

‘A Geography of Distillation around Strasbourg, c. 1500’

Tillmann Taape (PhD Candidate, University of Cambridge)

Hieronymus Brunschwig was a busy surgeon and apothecary practicing chiefly in and around the Alsatian town of Strasbourg. Despite his apparent lack of university education, he read widely and wrote prolifically on medical topics in his native dialect. In particular, his two manuals on distillation, published in 1500 and 1512, were highly popular and widely read across the German lands and beyond. In this paper, I situate the practices Brunschwig describes and the production of the books themselves in their local context. Archival and archeological evidence shows that distillation was widely practised in and around Strasbourg, and Brunschwig’s instructions reveal that the techniques he describes were informed and facilitated by local craft expertise. Combining an analysis of Brunschwig’s writings on distillation with an outline of the local artisanal culture based on archival material, I show that Brunschwig’s alchemical project of medicinal distillation was firmly embedded in a network of overlapping craft practices which included the manufacture of appropriate equipment and the development of relevant artisanal skills, but also, crucially, the thriving publishing scene at Strasbourg. After all, it is only through the printer’s craft that Brunschwig’s alchemical expertise, shaped in a specific local context, could be mobilised and circulated to a global readership.

‘Crossing Bodily and Disciplinary Boundaries: Chymistry of Urine in Leiden, c. 1700’

Ruben E. Verwaal (PhD Candidate, University of Groningen)

Taking the volatile property of urine as case study, this paper aims at presenting two geographies of chemistry, namely the place of chemistry at eighteenth-century universities and the materiality of urine as chemical substance. I will first argue that the fluidity of urine as focal point can trace developments of academic chemistry incorporated in medical faculties and curricula. Inspired by Jan Baptista van Helmont, medical professor Herman Boerhaave subjected his patients’ urine, amongst other bodily fluids, to chemical experimentation. Also his students in Leiden and other Dutch universities increasingly applied chemical methods to bodily excrements to explain body’s physiological and pathological phenomena. Second, I will argue that bodily fluids and their chemical meanings ought to be understood in their specific spatial and cultural contexts. As bodies commonly leak and seep, their fluidity negated corporeal boundaries. Urine was no mere waste product, but thanks to chemistry it was a cleaning product for textile and dyeing enterprises, or it resurfaced as an essential salt for therapeutic and dietary purposes. In sum, the focus on the fluid and flow of urine provides a new perspective on the flexible boundaries of bodies and early modern branches of medical and chemical knowledge.

Session 2

'Networks of Chemistry: The Discovery of Cerium in Gustavian Sweden'

Charlotte A. Abney (PhD Candidate, Yale University)

The absence of a celebrity genius in Swedish Chemistry between the death of Torbern Bergman (1735-1784) and the rise to fame of Jöns Jacob Berzelius (1779-1848) led to the perception, articulated since the early nineteenth-century, of a twenty-five-year interregnum lull in the field. Though since recognised as a component of the "Berzelian myth," in the words of Anders Lundgren, this perception has left unexamined the distinctive ways in which chemistry in fact thrived in Gustavian Sweden within active networks of conversation and collaboration. Drawing centrally upon the correspondence of Johan Gottlieb Gahn (1745-1818) with Wilhelm Hisinger (1766-1852) around the event of the discovery of the element cerium in 1803 and 1804, this paper illuminates and investigates active formal and informal exchanges of knowledge. I shall examine communications between individuals in academia and in the mining industry; between Uppsala-trained chemists of successive generations; and between the Swedes and the wider European world of research in the physical sciences, locating my study in the Republic of Letters during the chemical revolution.

'The Circulation of Ions in Europe in the 19th Century'

Dr. Axel Petit (Université de Nantes)

Coined by Michael Faraday in 1834, the concept of ion spread in Europe all throughout the nineteenth century. By the emergence of quantum mechanics, it had gained legitimacy in the mind of many theoretical and experimental scientists from all around the world.

The term, "Ion" first appeared when it became necessary to explain the conduction of electricity through electrolytes. At that time, Faraday conceived it as a mobile entity. It circulated then to several German laboratories (Hittorf's in Munster, Kohlrausch's in Würzburg and Helmholtz's in Berlin), where its meaning changed. In Germany, ions were thought of as charged entities. At the end of the century, three groups fought each other on the very nature of ions: ionists led by Ostwald in northern Europe, organic chemists led by Armstrong in London and Maxwellians led by J.-J. Thomson in Cambridge. Each pictured their own form of ions, which depended on their cultural backgrounds and their geographical situations.

The aim of this talk is to clarify how the circulation of the concept of the ion occurred, how it spread to spaces that appear scientifically far from one to another, and how it was transformed by these spaces. What were the geographical, cultural and epistemological contexts that led to the many transformations of the concept of ion in the nineteenth century?

'Controlling Chemical Dyes in Food: International and Institutional Comparisons'

Carolyn Cobbold (PhD Candidate, University of Cambridge)

My talk will examine to what extent geography and institutional space affected the development of analysis and control of chemical food additives in the late 19th century.

From the mid 1850s, chemists began to synthesise a manifold array of new chemical substances from coal-tar waste including drugs, perfumes, and dyes. By 1900 these new substances had become an integral part of modern life. While historians have studied the creation of these new substances in a spatial context across Europe, less work has been done to examine how these novel chemicals were acknowledged, analysed and controlled by different communities in various settings.

My research explores specifically the introduction of chemical dyes into food production across Europe. In particular, I am examining how a new breed of chemists known as public analysts, appointed by governments to safeguard the public food supply, viewed the adoption of chemically synthesized dyes into food and to what extent their work informed food legislation and public perception.

In my paper I shall show that intellectual, social, economic and political factors influenced their work significantly from country to country. Moreover, different institutional and physical settings as, well as variation in social status between the chemists producing the new substances and those detecting and analysing them, also played a part in the ultimate trajectory of food dyes.