

Arabistik

DJHP WORKSHOP: Chrysopoetic Recipes and Chemical Theory in Medieval Greek and Arabic Texts, convened by L. Rau and A.M. Roberts

23.05.2024 - 24.05.2024



Chrysopoetic Recipes and Chemical Theory in Medieval Greek and Arabic Texts

Convenors: Leonie Rau and Alexandre Roberts

Thursday, May 23, 2024

10:00 – 10:30
Registration, morning coffee

10:30 – 11:00
Beatrice Gruendler (Freie Universität Berlin)
Welcoming Remarks, followed by a word of introduction by the convenors Leonie Rau and Alexandre Roberts

11:00 – 12:30
Regula Forster (Universität Tübingen)
The Most Important Recipes? al-Jildakī on Alchemy among the Specific Properties
Discussion: Beatrice Gruendler

12:30 – 14:00
Lunch break

14:00 – 15:30
Gerassimos Merianos (National Hellenic Research Foundation, Athens)
Making, Simulating, and Counterfeiting Gold: What Was Chrysopoia Supposed to Mean?
Discussion: J. Cale Johnson

15:30 – 16:00
Coffee break

16:00 – 17:30
Lucia Ruggenti (University of Bologna)
On Dyes, Clothes, Swords, and Shoes: The Supporters' Angle on Gold and Its Imitations
Discussion: Leonie Rau

Friday, May 24, 2024

10:00 – 11:30
Vincenzo Carlotta (Humboldt-Universität zu Berlin)
Reiteration: A Procedural Step and Its Theoretical Implications in Byzantine Alchemy
Discussion: Jan J. van Ginkel

11:30 – 13:00
Alexandre Roberts (University of Southern California)
Chrysopoetic Recipe as Locus for Chemical Exegesis in the Greek Hierotekhnical Tradition
Discussion: Isabel Tzoul

13:00 – 14:30
Lunch break

14:30 – 16:00
Matteo Martelli (University of Bologna)
Egg-Chrysopoia in Byzantium
Discussion: Philip van der Kijk

16:00 – 16:30
Coffee break

16:30 – 17:30
Plenary Discussion & Concluding Remarks

The Chrysopoetic workshop series is supported by the Dahlem Junior Host Program, DFG, Freie Universität Berlin and Institute für Wissenschaftsgeschichte der Albert-Ludwigs-Universität, Arabic Studies, Arabic Literature Cosmopolitan (Leibniz Prize), Arabic Studies, Beatrice Gruendler

VENUE
Freie Universität Berlin, Institut für Wissenschaftsgeschichte, Arminiusstr. 10, 10188 Berlin-Dahlem

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Chrysopoetic Recipes 05/2024, poster designed by Josefin Böttiger.

DJHP - Dahlem Junior Host Program 2024

Workshop convened by Leonie Rau and Alexandre M. Roberts, funded by the Dahlem Junior Host Program 2024.

Programme poster session May 23/24, 2024.

This workshop investigates Greek and Arabic texts containing or concerning recipes for making gold, asking how and why their authors, readers, and users understood these recipes, as texts (genre), as procedures (what precisely they were meant to accomplish), and as examples of natural phenomena calling out for explanation (why and in what sense they worked). How do such recipes compare to other types of recipes (e.g., for drugs, ink, perfume, or foodstuffs)? How did understandings of chrysopoetic recipes change over time? And what can recipes teach us about developments in practical and theoretical chemistry over the course of the Greek and Arabic middle ages?

The Chrysopoetic workshop series is supported by the **DHJP - Dahlem Junior Host Program 2024**, Freie Universität Berlin

and

Institut für Wissenschaftsgeschichte des Altertums, Freie Universität Berlin, J. Cale Johnson

Arabic Literature Cosmopolitan (DFG/Leibniz Prize), Arabic Studies Freie Universität Berlin, Beatrice Gruendler

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ABSTRACTS

Reiteration: A Procedural Step and Its Theoretical Implications in Byzantine Alchemy Vincenzo Carlotta (Humboldt-Universität zu Berlin)

In alchemical practice, specific operations are often reiterated multiple times, either identically or with minor variations, to bring about the transformation of the substances used in alchemical recipes. The crucial role of reiteration is especially evident in Early Modern alchemy, particularly in the context of rectifying alchemical substances to produce the elixir. Although evidence of reiteration also exists in Greek alchemical texts, its recognition is sometimes obscured by philological and exegetical issues arising from the repetition of the same or similar terms in close proximity. Moreover, the loose theoretical framework of Greek alchemy is unclear about the significance of these repetitive steps of the alchemical process. Are operations reiterated because natural substances achieve increasing degrees of purification under the action of external causes, primarily heat, or through their interactions with other ingredients? Does alchemical change involve a gradual progression through intermediate transformations, leading from initial ingredients to gold? If the latter is true, how does alchemical change relate to substantial change, usually characterised in natural philosophy as an instantaneous process? This paper aims to analyse textual evidence of reiteration in Byzantine alchemical sources to clarify its role both as a procedural step and as a key element within the theoretical framework of Byzantine alchemy. Understanding reiteration within these contexts not only sheds light on the replication of ancient alchemical recipes, but also assists in evaluating the significance of these recipes within the Byzantine alchemical tradition.

The most important recipes? al-Jildakī on alchemy among the specific properties Regula Forster (Eberhard-Karls-Universität Tübingen)

The 14th-century Mamluk scholar Aydamir al-Jildakī is one of the most prominent alchemists of the so-called post-classical period. A scholarly interest in his works, however, has only emerged recently although Manfred Ullmann has called him “one of the greatest scholars of the Islamic cultural sphere” already back in 1972.

In this paper, al-Jildakī's only non-alchemical work that is extant will be discussed: Durrat alghawwās wa-kanz al-ikhtisās fi 'ilm al-khawāṣṣ (“The diver's pearl and the distinction's treasure, On the science of sympathetic properties”) is an encyclopaedic work on the specific properties of the things of the natural world, from humans to animals, plants, and minerals and then proceeding to languages and scripts. In this final part, the Durra also contains a chapter on alchemy that features a surprisingly large number of recipes. I will argue that this chapter may be read as al-Jildakī's quintessential summary of alchemy and that his selection of recipes here as a “best of”.

Egg-Chrysopoia in Byzantium Matteo Martelli (University of Bologna)

The paper will focus on a set of Byzantine technical texts that utilize eggs as primary tools in the process of gold making. Special attention will be devoted to recipes describing the distillation of eggs in the Byzantine tradition, which will be analyzed and compared with the descriptions of similar procedures preserved in Syriac and Arabic sources. These recipes will be contextualized by exploring the different layers of meaning associated with eggs comprised in the late antique and medieval alchemical theories of matter.

Making, Simulating, and Counterfeiting Gold: What Was *Chrysopoeia* Supposed to Mean?

Gerasimos Merianos (Institute of Historical Research, National Hellenic Research Foundation, Athens)

In Byzantium, the oscillation between the theoretical possibility of creating gold and the reality of simulating gold was constant. Notably, within this cultural context, the potentiality of true *chrysopoeia*, in particular, was not only accommodated by certain philosophical concepts but also by the “transformative processes” found in theological discourse, reflecting a continuous interchange between different domains of knowledge. However, as we explore the treatises and technical recipes on *chrysopoeia* in the Greek alchemical corpus, a fundamental and longstanding question arises: what was the breadth of meaning acquired by the label “chrysopoetic recipes” over time? Did the term *chrysopoeia* encompass both the aim to produce gold and merely to simulate it? Moreover, how did the intention of comprehending the principles underlying chrysopoetic procedures coincide with the practical aim to simulate gold? These issues are further complicated as even within the sphere of imitation, methods, expertise, and goals varied extensively, reflecting connections to diverse artisanal fields. For instance, the chemical dyeing of metals differs significantly from employing amalgam plating for gilding. Drawing from both alchemical and non-alchemical literature, this paper aims to explore aspects of *chrysopoeia*'s meanings and its conceptualizations in both specialized and lay contexts within Byzantium.

On Pages, Clothes, Swords, and Shoes: The Supports' Angle on Gold and Its Imitations

Lucia Raggetti (University of Bologna)

Gold and its imitations play the protagonist's role in decoration and embellishment of all sorts of artifacts. Apart from the characterizing ingredients (mineral, vegetal, or a mixture of the two), the variety of supports influenced technical aspects of 'chrysopoetic' procedures and their written transmission. Recipes for the preparation of gold and its artificial imitation, in fact, are scattered throughout a variety of different handbooks dealing with specific crafts. Looking at this corpus from the supports' angle may not only reveal technical specificities and their related artisanal knowledge, but may also bring to light different social relations and tensions, common knowledge and shared aspirations that underlay the interaction between gold and its imitations.

Chrysopoetic Recipe as Locus for Chemical Exegesis in the Greek Hierotechnical Tradition

Alexandre M. Roberts (University of Southern California)

For some, a recipe for making gold is a text that provides a set of instructions for making gold. For others, it is an opportunity to reflect on why those instructions work — a locus, in other words, for hermeneutical investigation meant to elucidate and justify chemical theory. This talk will explore a middle Byzantine example of the latter from the Greek hierotechnical tradition, arguing that slow and patient hermeneutical work on the historian's part will be a key step towards integrating these recipes and commentaries about them into the history not only of chemical technology but also of chemical thought.

The Commentary of Olympiodoros the Alchemist: A Puzzle to be Assembled

Cristina Viano (CNRS/Sorbonne, Paris)

Olympiodoros' commentary on the lost *Kat' energeian* of Zosimos appears at first sight like a discontinuous and frustrating puzzle. I propose here to analyze its structure and to show the elements of continuity and coherence which hold this puzzle together. I will then propose an hypothesis on the identity of this author and his relationship with Alexandrian Neoplatonism.

Zeit & Ort

23.05.2024 - 24.05.2024

Institut für Wissensgeschichte des Altertums
Arnimallee 10, 14195 Berlin-Dahlem
in person participation

LINKS ZUM THEMA

➤ Chrysopoetics programme poster