

Presentation of the Workshop

Introduction: Alchemical Manuscripts: an Overview

by Alain Touwaide, *Institute for the Preservation of Medical Traditions*

Catalogue of Greek Alchemical Manuscripts and Inventory of Related to Alchemy Greek Manuscripts

by Vangelis Koutalis, *National Hellenic Research Foundation*

The main output of Dacalbo project is the compilation of the catalogue of the manuscripts and the inventory of related texts.

In Dacalbo data base the catalogue is accompanied by the photos of the manuscripts and metadata and also a bibliography on Geek Alchemy.

The catalogue and the inventory will be presented and discussed. The categories of related texts of the inventory will be also discussed.

The relationships between alchemy and natural philosophy in Byzantine times

by Gianna Katsiampoura, *National Hellenic Research Foundation*

The presentation addresses the relationship between alchemy and natural philosophy in the Byzantine era. Our research is based on the examination of the life and works of the scholars who presented works on both natural philosophy and alchemy.

The main questions examined are the following: How the ancient and Christian philosophical traditions were combined with the alchemical? In this new context, what was the artificial and what was the natural? What challenges did the artistic world offer to the category of the natural? Which was the main theoretical approach on the relation between knowing and doing? Which was the byzantine conception of matter and, based on this, did the alchemical techniques imitate nature or attempt to change it?

And finally, how the maker-craftsman attempted to change a nature which was created by the God-Creator.

The mutations of alchemy and the development of 'chymistry' in the post-Byzantine era: Chymistry in the Greek-speaking communities during the 17th and the 18th centuries - mapping the signs of its emergence and spread

by Vangelis Koutalis, *National Hellenic Research Foundation*

Carrying out DACALBO research project, a number of manuscript and printed texts, attesting the emergence and spread in Greek-speaking communities, from the 17th to the 18th century, of chymistry, have been located and studied. The term 'chymistry', introduced by Lawrence Principe and Michael Newman, is taken here to denote a field of knowledge incorporating chrysopoeia (the pursuit of metallic transmutation),

spagyria (the art of analysis and synthesis), metallurgy, iatrochemistry, as well as natural philosophy, implying thus conceptual articulations and experimental research on the compositions, decompositions, transformations and potencies of natural substances.

The corpus of Greek texts evincing signs of the emergence and spread of chymistry includes several textbooks on natural philosophy, many manuscript and printed medical compilations bearing traces of iatrochemical influence, translations of iatrochemical compendia, the manuscript translation of d'Espagnet's *Enchiridion Physicae Restitutae*, the manuscript translation of Biringuccio's *Pirotechnia*, and one separate treatise dedicated to chymistry (*Synopsis of Chymia*, based on Lemery's *Cours de Chymie*).

The educational applications of the historical material and on the reproduction of alchemical procedures

by Kostas Exarchakos and Constantine Skordoulis, *National and Kapodistrian University of Athens*

In this presentation, we will at first give a short account of the role of History of Science in Science Teaching underlying the merits of the historical approach in the science classroom. Following we will report on the design and development of a series of teaching activities based on the History of Alchemy (4th-17th centuries) as it is reconstructed through the collections of primary and secondary literature in the data bases of the project DACALBO.

Two sets of teaching activities have been designed and developed: 1) Activities aiming in the training of secondary teachers of Chemical and Life Sciences in using original (alchemical) texts for the reconstruction of apparatuses in the school laboratory and 2) Activities aiming in raising awareness on issues of cultural heritage for the wider public.

Namely, activities supported by innovative interactive charts and timelines, activities exploring the relation between the Greek, Arabic and European alchemical traditions, and activities highlighting the technical applications of Alchemy (eg. pigments), the relation of alchemy to medicine and the presence of alchemy in poetry, literature and myths.

Collateral topical activities have been also developed such as the description of the materials used for writing, the laboratories of copying (Scriptoria), the coloring of clothes and the use of plants during the Medieval and Modern period.