

Session Title: Circulation And Communication Of The Chemical Knowledge In The Greek-Speaking Communities From Antiquity To The 17th Century

**DESIGN AND DEVELOPMENT OF EDUCATIONAL ACTIVITIES
BASED ON THE HISTORY OF ALCHEMY**

K. Exarchakos^a, K. Skordoulis^b

^a*Institute of Historical Research, National Hellenic Research Foundation-Faculty of Education, National & Kapodistrian University of Athens, Greece
xrchakosk@gmail.com*

^b*Faculty of Education, National & Kapodistrian University of Athens, Greece
kostas4skordoulis@gmail.com*

Abstract

This paper consists of two parts: In the first part a short account of the role of History of Science in Science Teaching is given underlying the merits of the historical approach in the science classroom. In the second part, the paper reports 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 (:Digital archive concerning alchemy in Byzantium and in Greek-speaking communities of the Ottoman Empire) implemented by the research consortium "History, Philosophy and Didactics of Science and Technology" (www.hpdst.gr).

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.