



Scientific objects in the exhibition CHIMICA| the art of transforming matter

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Secondary School André de Gouveia (ESAG) is frequently associated to Liceu de Évora from which it inherited the historical and cultural background. *Lyceu Nacional d'Évora* was established in 1841 after the educational reform of Passos Manuel and was set at Colégio do Espírito Santo, in Évora, until 1979. During that period, a physics and chemistry laboratory was created and developed at the Liceu and it was enriched with brand new scientific objects and small equipment to be used in classes, especially in teaching demonstrations. Crosschecking the information from the records kept at the library of ESAG, sales catalogues and teaching books from that period and information from other sources, it was possible to find out, in several cases, who the seller or the manufacturer of the object was and its function in an experimental design at the laboratory. Reagents, playing a fundamental role at the laboratory, are also an interesting subject. Analytical balances, gasometers, pneumatic machine or alembic are some of the objects that are analysed from a real and historical point of view. Part of this collection was recently exhibited in the Évora Museum under the name of *CHIMICA | a arte de transformar a matéria (CHIMICA | the art of transforming matter)*. Chemistry depends on working with material things and processes and a chemistry laboratory is, in fact, a prototype of a large-scale industry through the synthesis of chemical compounds and the interaction with technological processes.



Alembic Dujardin-Salleron. Manufacturer: Dujardin-Salleron, Paris, France.

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Keywords: CHIMICA; scientific objects; Liceu de Évora; ESAG

References:

[1] **consulted websites:**

<http://www.dujardin-salleron.com/societe/>

<http://www.kern-sohn.com/lshop,inline,13637005095337,en,1363700510-5337,,,124,,.htm>

http://www.kern-sohn.com/cosmoshop/default/pix/user_img/zusatzseiten/Themen_Historie.pdf

<http://www.sil.si.edu/digitalcollections/trade-literature/scientific-instruments/CF/SIcompany-names-drilldown.cfm>

[2] J. Salleron, Notice sur les instruments de précision: construits par J. Salleron, 3^{ème} et 4^{ème} parties, Paris, 1864.