

## Towards a material archive of dyestuffs from the XX century

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The preservation of material archives of substances is a relatively recent issue, relevant in the field of cultural heritage preservation.

Although since the start of large-scale industrial chemistry (first half of XIX century) many artists experimented new pigments and ligands, along XX century the use of commercially available new materials in art production reached a general diffusion, at a level that in many cases the study and the conservation of works of art have to face many problems. Most pigments, and often the totality of other ingredients, are practically unknown and/or require expensive chemical analysis, when it is not possible to find traced samples.

Something alike happens with all the textile materials present in many kinds of collections, if we think of the mind-blowing number of synthetic dyestuffs that followed the lucky intuition by William Perking in the spring of 1859.

The availability of dye material archives could also be useful for researchers involved in other fields: the synthetic dyestuffs revolution has led to exceptional advantages to the lifestyle of all mankind, but was characterised by tragic consequences for the health and the environment, still present in many places around the world. As we know, most of the early introduced substances were of high ecotoxicological concern. Having an archive of industrial grade formulates, often rich in byproducts and raw materials residuals, can give an added value also to these researches.

At international level, the publicly accessible material archives of dyes and pigments are very few. This communication outlines an early feasibility stage for the creation of a new archive, or an addition to existing collections, starting from a considerable number of dyestuff samples, in their original packaging, almost all from the second half of last century.

The were "rescued" some years ago from a clean-up of old didactic warehouses of the former Istituto Nazionale di Setificio (now, ISIS Paolo Carcano), Como. Until now they have been preserved in a confined storage. Most of them are in the range 10 - 100 g.

For many of them, there is also a documentation in a large collection of bound catalogues, mostly with original dyed fabric samples.

Possible research lines could include the complete cataloguing starting from the Colour Index tracing, the chemical characterisation of some representative formulates, but also a controlled use to prepare new textile samples as references.

Further developments could include a cooperation with other schools (analogue "relics" can be still present in the storages of many other historic Istituti Tecnici) and with a large number of firms, both chemical producers and finishing factories.

