AN ADHESIVE IS FOREVER!
CHEMISTRY THAT SAVES CONTEMPORARY ART

In 1962, the pop artist Andy Warhol printed a prefabricated pattern on canvas, divided into areas to be coloured according to a number-colour correspondence, and only filled in some sections, deliberately letting the work unfinished. Called *Do it yourself*, the series is made of synthetic materials, more perishable than traditional art ones. Although Warhol was not the first one to introduce this kind of material, the art he represents, appreciated all over the world, poses a big challenge for conservation scientists: how can we reduce the high rate of degradation of these materials and thus preserve the memory of our society?

The evolution of contemporary art and the use of new materials are closely related to the major events and socio-political phenomena that marked the 20th century. The introduction of non-traditional artistic techniques results from many factors, strictly related to those major events such as: the development of synthetic alternatives to replace the scarcity of traditional sources during the World War II, the existence of many plants with large capacity to produce coatings and explosives with no large enough market after war finished, the radical changes in society after both wars and also other structural changes like the Russian Revolution, the division of the world into Capitalism and Socialism, Nazism, Holocaust, the intellectual migration from Europe to America and the beginning of the Cold War (Shashoua, 2016, p.ix; Standeven, 2008, p.79, Elias, 2010, p.26).

Those factors challenged artists in the proposal of new aesthetic patterns and although the chemical changes in paint production may apparently have an immaterial relation with the interpretation of a painting, its intrinsic properties “enables an artist to communi-
cate in an effective manner” and have “profound effect on how artists work” contributing with the artistic aspiration of breaking with the traditional metier (Elias, 2010, p.26; McGlinchey and Pratt, 2000, p.9)

Let’s go back to Andy Warhol, then. A pop art exponent who became famous by developing an artistic expression using icons of advertising and popular celebrities, Warhol was possibly the most famous and the first one to introduce adhesive applied decal numbers in an artwork to create the series *Do It Yourself*, inspired by the commercial product “paint by numbers”. (see Fig. 1). The work of art was made with acrylic paints and Letraset® numbers, which is a “transferable” stickers produced by the British company with the same name, and consists of characters, numbers or letters, silk-screen printed on a plastic sheet, that was later coated with a fin layer of pressure sensitive adhesive and finally protected with a waxy release paper. By placing the transparent sheet on a surface, it was possible to “transfer” the figures onto the surface by scratching the sheet. The famous stickers were produced and marked from 1960s onward as an alternative to the traditional water transfers.

The increasing presence of synthetic materials in collections poses an important challenge to museum conservators due to its less stable structures when compared with more traditional artistic materials.

Considering that more research needs to be developed in order to reduce the uncertainties that those materials impose on the conservation practices in museums and collections I decide to contribute during my PhD research at UniTo to increase the available knowledge in regards to Letraset® composition and degradation pattern as a way to improve its conservation.

The results obtained during this research project may have a large impact in collection care due to Letraset®’s broadly usage not only in the production of Modern and Contemporary Art but also Architectural Drawings, Graphic Material, Posters, Artist’s Books, Photographs, Maps, Visual Poetry, Miniature Models, Scientific Charts, Archaeological Survey Drawings, Labels and Signage.

In order to build up the knowledge on Letraset® conservation I am carrying out a scientific characterization at the Chemistry Department including infrared radiation and spectrometric measurements to break its brand secret formulation and unveil its chemistry composition. Those analyses allied with accelerated ageing tests promoted with mock-ups may permit a better knowledge of the degradation process expected to occur and from that guideline for treatments and environmental conditions will be produced with contributions not only to Letraset® conservation but also to the study of plastics and pressure sensitive adhesives to be conserved in museums, archives and collections.

**References**


