

## ART and SCIENCE

### Printing photographic images using living inks (Olivier Sola)

Through a science and art project, Team 4 demonstrated the possibility of using *Streptomyces* spores as printing ink. The work was carried out as part of an artistic project by Olivier Sola, then a 2nd-year student at Le Fresnoy, Tourcoing (studio national des Arts contemporains de Tourcoing). The *Streptomyces* strain used belongs to the coelicolor species, meaning “the color of the sky”. This color is due to the production of a pigment, actinorhodin, which functions as a pH indicator, generating hues ranging from pink to blue. A simple inkjet printer with tanks filled with spore suspension, has enabled us to produce prints with remarkable definition, the images appearing after incubation of the printed paper on a suitable nutrient medium. The ink is living, which means that images evolve if the printing papers are kept on the culture medium. The papers can, however, be dried to keep them at a particular stage of coloration. The artworks from Ultrachrome project were presented in the exhibition Panorama 22 : Les sentinelles from October 15, 2020 to April 20, 2021 at Le Fresnoy (<https://www.lefresnoy.net/exposition/1277/oeuvre/1330/>).

[https://institutcharlesviollette.univ-lille.fr/en\\_GB/news/printing-photographic-images-with-living-inks](https://institutcharlesviollette.univ-lille.fr/en_GB/news/printing-photographic-images-with-living-inks)

