"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 760801".

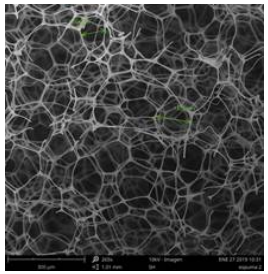
Newsletter #1

NEMOSINE aims to improve the traditional storage solutions, such as freeze storage (below 5ºC), by developing an **innovative smart package** with the main goal of **energy saving and extent conservation time of cultural objects based on cellulose derivatives**.
The consortium is working in the selection of the best and appropriate material for the conservation boxes. Development of protective/active system using MOFs (Metal Organic Frameworks, in the plural like VOCs - Volatile Organic Compounds) based on acetic acid adsorbers is addressed. Along this, different real films (22) have been analysed, detecting until 50 different VOCs. Fungicides solutions are also analyzed (ie. linalool and ethanol impregnated in silica gel).

Balancing and cost effective solutions

"Essentially, to provide a solution for long term preservation of films based on state of the art curation and conservation, economically driven."

Impregnation of foams involves a self-assembly process based on a previous surfactant treatment and then assembling by dip-coating. The results show a very homogeneous MOF impregnation including the most internal parts of the samples.



Integrating Social Media

The project spreads news and last minute updates on the project progression on social media like Linkedin and Twitter. Also industry's news related to the field of conservation, preservation, storage, film and photography are analyzed.

Nemosine is offering through its web site repository several information made available public (in respect to the partner's IPR) along with other documents which are restricted only to the consortium's partners and to the European Commission personnel.

The goal to spread the world about the project to international conferences, trade shows, word of mouth, and so on. Please help us in this effort☺

The project is also considering "green" solutions that have a low impact in the territory and can meet the latest requirements in terms of energy saving and preservation ISO-ANSI standards.

Advance Innovation while controlling costs

Breaking news

The project's meeting in Lisbon, Portugal, was concluded on July 12th, 2019.
Next meeting will be in Valencia, Spain, with the European Commission, on September 11th, 2019 to evaluate the progression of the project in the first 18 months.

Can your film storage keep up? The true cost of innovation and its effect on your bottom line

The project is not only working on the technical and R&D aspects of the conservation issues, but also on the best practice management of the storage boxes.
Current research and advances R&D activities are made in the following areas:
Nanostructured sensors:

1. Acetic acid absorbers and antifungal carriers integration
2. A complete box for predictive modelling, including special sensors.
3. Ambiance monitoring
4. A curative solution to help existing archives storing films in the most effective way.

Wireless and Bluetooth sensors with cloud data storage are discussed in order to deliver to the project the most appropriate technical solution in terms of costs, maintenance, access and usability of the storage boxes in long period of time.
Predictive kinetic and chemometrics models are considered as part of the development process.
Regarding the packaging of modular polypropylene boxes, 3D technologies are involved for design and production optimization.

What's next?
The project is just ending its 18th month of activities. Many more R&D activities, discussions and outcomes are predicted from now on.
Please stay tuned for our next newsletter.
We plan to release this newsletter every six months and we hope you enjoy the reading.
More information from the industry, the research, preservation and cultural heritages sectors will be available, whenever possible, also through our social network channels.
We aim to attract to our project potential new partners, new people, stakeholders, archivists, researchers, educators, conservators and so on, creating a very active contribution of partners and external collaborators and advisors.
Nemosine will also aim to cluster its activities with other projects in the sphere of nanotechnologies.☺