

Course Title	ORGANIC/INORGANIC NANOCOMPOSITES: PROPERTIES AND APPLICATIONS
Instructor	Giuseppe Cavallaro
N of hours	10
description	Presentation of the properties and applications for nanocomposites based on inorganic and organic components.
contents	<ul style="list-style-type: none"> <li>Preparation of nanocomposite materials in aqueous, gel and solid phases.</li> <li>Correlation between the structure and the mesoscopic properties. Barrier effect on the thermal resistance. Mechanical behaviour, transparency and water uptake ability. Control of the hydrophobic/hydrophilic character of the surfaces.</li> <li>Nanocomposites for cultural heritage conservation: surface cleaning protocols and consolidation/deacidification of lignocellulosic artworks.</li> <li>Nanocomposites for environmental purposes: biocompatible packaging and decontamination.</li> <li>Nanocomposites for biomedical and pharmaceutical applications: controlled delivery of active molecules.</li> </ul>