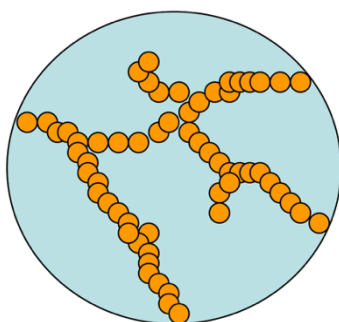


Sol-gel synthesis of nanostructured functional materials

Prof. Antonio Aronne

Topic: Sol-gel is a versatile technique representing a bottom-up chemical approach for the synthesis of a variety of functional materials, including inorganic, hybrid and nanocomposite materials.



Contents:

- ❖ Fundamentals of sol-gel chemistry
- ❖ Control of sol-gel process for the production of powders, monoliths, aerogels, films, nanoparticles
- ❖ Sustainability and green chemistry in sol-gel synthesis
- ❖ Application areas and case studies:
 - design of heterogeneous catalysts for industrial, environmental and energy fields
 - deposition of thin films and coatings
 - manufacturing of polymers, vitrimers and nanocomposites with improved thermal, mechanical, and flame-retardant and recyclability features.

The lessons will be held by Profs. Antonio Aronne, Claudio Imperato and Aurelio Bifulco.

Duration: 18 hours (six lessons of 3 h) in September - October 2024.

Scheduled dates: September 25 and 30; October 2, 9, 15 and 23.

Room: Biblioteca Storica (Piazzale Tecchio)

Time: 15:00 – 18:00

To register to the course, please fill the following form: [registration](#).

For further information: antonio.aronne@unina.it.