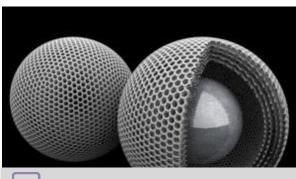


# RESEARCH GROUP

# New materials and nanotechnology for food applications

The group develops novel nanoreinforced biopolymers for food packaging applications, including antimicrobial and antiviral active packaging. They also develop new micro-, submicro- and nanoencapsulation technologies of bioactive compounds for functional food applications.



The group is open to discuss any kind of collaboration with industry and academia related to these topics.

#### FIELD OF EXPERTISE

The group Works in the improvement of materials and technologies for food packaging and encapsulating applications. They employ different nanotechnologies to develop novel materials based on biopolymers, polymers, blends, nanoencapsulation and nanocomposites.

The functionality of foods or ingredients can be improved by controlling the release after consumption. The group develops novel systems for the micro- and nanoencapsulation of bioactive ingredients for functional foods.

In the field of food safety, they develop novel materials for food applications with antimicrobial and antiviral functions.

Furthermore, on the frame of a prestigious ERC grant, they study the early colonization of the gut in children and the implications for long-term health and wellbeing.

## MAIN APPLICATIONS AND SERVICES

- Consulting and fundamental and applied research in Science and Technology of Materials, particularly in polyolefins and high barrier polymers
- Development of novel materials, including biomaterials and biocomposites, for food, pharmaceutical, biomedical, chemical and hydrocarbon packaging applications.
- Novel systems for active and bioactive packaging and biopackaging,
- Development of novel systems for micro and nanoencapsulation for the protection of diverse bioactive ingredients for functional foods.



**FURTHER INFORMATION** 

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