

# RESEARCH CENTER ON PLANT MACROMOLECULES

UMR 5301

  
Université  
Grenoble Alpes[Polysaccharides](#)[Glycochemistry](#)[Glycans](#)[Glycopolymers](#)[Glycobiology](#)

## KEY FIGURES:

**26**   
permanent researchers  
and lecturers

**34**   
technical and  
administrative staff

**20**   
PhD students and  
postdoctoral researchers

**70**   
publications per year  
(on average)

## OVERVIEW

The Research Center on Plant Macromolecules (CERMAV) conducts projects in various glycoscience fields, ranging from human health and plant biology to materials science and glycochemistry. Sugars are present in all living organisms, and their structural and chemical complexity allows them to act as mediators and signaling agents in many biological functions. Their unique architecture offers great potential as biosourced raw materials.

## RESEARCH TOPICS

- Design of functional and smart biosourced materials through the self-assembly of glycopolymers in solution or as thin films.
- Development of innovative biotechnologies combining synthesis and fundamental knowledge to study the role of oligosaccharides in biological processes.
- Development of functional biomaterials by controlled chemical modification of polysaccharides for health applications.

