



## NUGIER-CHAUVIN Caroline

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<https://www.ensc-rennes.fr/recherche/equipe-cos/>  
[https://www.researchgate.net/profile/Caroline\\_Nugier-Chauvin](https://www.researchgate.net/profile/Caroline_Nugier-Chauvin)

## Education and Professional Career

- Actual position
  - (2021-) Professor
- Dean of Graduate Academic Affairs at ENSC Rennes (2011-2024)
- Habilitation to be Head Supervisor of PhD students (2003)
- Post-doctoral fellow (1991-92) Glaxo Group Research in medicinal chemistry department (Greenford-London, UK)
- PhD (1988-91) in Chemical Sciences - Laboratoire de Chimie Organique et des Substances Naturelles de l'ENSC Rennes
- Master Degree in Organic Chemistry (1988) Univ. Rennes I
- French Graduate Chemical Engineer Degree (1988) ENSC Rennes

## Teaching activities

### *Advanced Chemistry and Engineering Degree*

#### *Molecular Chemistry Master*

- Organic chemistry
- Biological chemistry
- Natural Products
- Biocatalysis
- Metabolic Biochemistry
- Design and supervision of training projects in innovation, research and bibliography

## Membership in professional organizations

- Elected member of the ENSCR Board of Directors (2012-2020)
- Member of the Education working group of the Gay-Lussac Federation (2012-2024)
- Nominated member of the Academic Council and of the Education working group of University of Rennes (2020-2024).
- Nominated member of the Executive Board of NCU Ide@I project (2022-2024)
- Nominated member of the Education working group Doctoral School 3M (2020-2024)
- Member of the WP-3 coordination group IRIS-E "Interdisciplinary Research & Innovative Solutions for Environmental Transition" - France 2030 (2025-)

## Research themes and experiences

- Biotechnological processes for the synthesis and the modification of oligo- and polysaccharides, glycofuranosides and glycoconjugates (glycosylhydrolases, lipases, thioglycoligases and mutated enzymes)
- Bioactive molecules (immunostimulating agents, anti-parasitic drugs, tensioactive agents,...)
- Valorization of renewable raw materials: plant and algal polysaccharides, lipids
- Enzymatic polymerization

### • Scientific skills

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Glycochemistry : chemo-enzymatic glycosylation, enzymatic modification of carbohydrates and oligosaccharides

Biocatalysis : protein engineering mutagenesis, protein over-expression and purification of tailored biocatalysis

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### • Committee work and awards

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Member of the Groupe Français des Glycosciences (GFG)

Member of the Club des Bioconversions en Synthèse Organique (CBSO)

« Prime d'Excellence Scientifique » (1999 – 2017)

« Academic Palmes » (2015)

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## Scientific Production

- PhD Thesis : 11 ; research engineers and masters : 20
- Publications: 57 ; Book Chapter: 3 ; Patent: 4 ; National Reviews : 4
- Invited talks at Conferences and seminars: 10; Communications at Conferences: 34

### **Extract :**

- T. Wong, L. Brault, E. Gasparotto, R. Vallée, P.-Y. Morvan, V. Ferrières, C. Nugier-Chauvin, *Molecules*, **2021**, 26, 4445.
- H. Casajus, E. Dubreucq, S. Tranchimand, V. Perrier, C. Nugier-Chauvin, E. Dubreucq, P. Loyer, S. Cammas-Marion, *Biomacromolecules*, **2020**, 21, 7, 2874-2883.
- H. Casajus, S. Saba, M. Vlach, E. Vène, C. Ribault, S. Tranchimand, C. Nugier-Chauvin, E. Dubreucq, P. Loyer, S. Cammas-Marion, N. Lepareur, *Polymers*, **2018**, 10, 1244; doi:10.3390/polym10111244.
- H. Casajus, S. Tranchimand, D. Wolbert, C. Nugier-Chauvin, S. Cammas-Marion, *J. Appl. Polym. Sci.*, **2017**, DOI: 10.1002/app.44604.
- A. Pennec, R. Daniellou, P. Loyer, C. Nugier-Chauvin, V. Ferrières *Carbohydr. Res.* **2015**, 402, 50–55.
- A. Pennec, L. Legentil, L. Herrera-Estrella, V. Ferrières, A.-L. Chauvin, C. Nugier-Chauvin, *Green Chem.*, **2014**, 16, 3803-3809.
- I. Chlubnová, B. Sylla, C. Nugier-Chauvin, R. Daniellou, L. Legentil, B. Králová, V. Ferrières *Nat. Prod. Rep.*, **2011**, 28, 937-952.
- I. Chlubnová, D. Filipp, V. Spiwok, H. Dvořáková, R. Daniellou, C. Nugier-Chauvin, B. Králová, V. Ferrières *Org. Biomol. Chem.*, **2010**, 8, 2092-2102.