

COULEMBIER Olivier
Prof. Dr.

Functions: Research Director of the F.R.S.-FNRS & ***AXA*** Professor in Chemistry

Date of Birth: June 2nd, 1979

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Website: https://green4chem.com/

Institution: University of Mons (UMONS), Center of Innovation and Research in Materials and Polymers (CIRMAP), Laboratory of Polymeric and Composite Materials (https://www.smpc.be)

Professional Address: *Mailing address:* Place du Parc, 23 - 7000 Mons, Belgium
Laboratory address: Avenue Victor Maistriau, 25 – Bâtiment Science des Matériaux (BSM), 1st floor, room 17 – 7000 Mons, Belgium

Research Interest: ***Sustainable polymer chemistry focused on the design and synthesis of innovative macromolecular materials, inspired by biomimetic principles and addressing challenges in polymer synthesis, plastic waste valorization, and CO_2 utilization.***

Research General Overview

Research in the Coulembier group centers on macromolecular engineering inspired by biomimicry. Our portfolio encompasses multiple approaches to precisely control the synthesis of complex macromolecular architectures through the design of novel monomers, initiators, and on-demand catalysts.

Our primary focus lies in sustainable polymer science, encompassing green methodologies for polymer synthesis as well as innovative strategies to address plastic waste and valorize carbon dioxide. To translate our chemical discoveries into practical applications, we maintain close interdisciplinary collaborations with engineers, biologists, and medical researchers across academia and industry.

Professional History

2025 – present Research Director, F.R.S. – FNRS *(Directeur de Recherche)* – University of Mons – Laboratory of Polymeric and Composite Materials; Macromolecular Engineering Section

2020 – 2025	Senior Research Associate, F.R.S. – FNRS *(Maître de Recherche)* – University of Mons – Laboratory of Polymeric and Composite Materials
2017 – present	Adjunct Professor of Chemistry *(Chargé de cours)* – University of Mons
2008 – 2020	Research Associate, F.R.S. - FNRS (*Chercheur Qualifié*) – University of Mons – Laboratory of Polymeric and Composite Materials
2006 – 2008	Post-doctoral Researcher, F.R.S. - FNRS (*Chargé de Recherches*) – University of Mons-Hainaut – Laboratory of Polymeric and Composite Materials

Editorial Responsibilities

2026 – present	Associate Editor, *RSC Advances* – Royal Society of Chemistry (RSC), United Kingdom

Education

2008	Post-doctoral Research (2), Almaden Research Center of IBM (CA, USA), Supervisor: Dr James L. Hedrick
2006	Post-doctoral Research (1), Stanford University (CA, USA), Supervisor: Prof. Robert M. Waymouth
2001-2005	Ph.D. Degree, University of Mons-Hainaut (BE), Supervisor: Prof. Ph. Dubois, Thesis Title: *« Synthesis and characterizations of amphiphilic copolymers based on poly(β-malic acid) »*
2003	Post-graduate Diploma, University of Mons-Hainaut (BE), Mention: *Greatest Distinction*
2000	Teaching Qualification, University of Mons-Hainaut (BE), Mention: *Satisfaction*
1997-2001	B.Sc. (2nd class Honours), University of Mons-Hainaut

Teaching Activities

2025 – present	General Chemistry II (BAB 1 – CHIM, PHYS, BIO) – University of Mons
2016 – present	Organic Chemistry II (BAB 2 - CHIM) – University of Mons
2009 – present	Nanotechnology of Drug Targeting (Master 2 - CHIM) – University of Mons
2009 – present	Ring-Opening Polymerization (Master 1 & 2 - CHIM) – University of Mons
2007 – 2009	Nanotechnology of Drug Targeting (Master 2 - CHIM) – University of Mons-Hainaut
2006 - 2009	Polymerization by “Coordination-Insertion” (Master 1 - CHIM) – University of Mons-Hainaut

Awards & Recognitions

2025	Laureate of the "prix Louis Melsens" – Royal Belgian Academy
2024	Recipient of the Assucopie Grant for Scientific Article Publication - Belgium
2024	Recipient of the IAAM Scientist Medal – European Advanced Materials - Sweden
2022	Professor Holder of an *AXA* Chair in Chemistry
2021	Laureate of the "prix Agathon De Potter" of chemistry – Royal Belgian Academy
2021	Top cited paper *"Limitations of Ion Mobility Spectrometry – Mass Spectrometry for the Relative Quantification of Architectural Isomeric Polymers: A Case Study"* – 2020/2021 – Rapid Communication in Mass Spectrometry
2021	Top cited paper *"Cyclic Polymers: Advances in their synthesis, properties, and biomedical applications"* – 2020/2021 – Journal of Polymer Science
2020	Top downloaded paper "*Organocatalysis applied to the ring-opening polymerization of β-lactones: A brief overview"* – 2018/2019 – Journal of Polymer Science
2018	Finalist of the Young Investigation Award of the American Chemical Society
2018	Finalist of the IUPAC Award
2016	Finalist of the Carl Marvel Award of the American Chemical Society
2014	Laureate of the C.G.B.-C.B.B. incentive award – Royal Society of Chemistry – Belgium
2006	Stanford Grant Fellowship – United States of America
2005	Best communication selection– *Belgian Polymer Group Prize* – Belgium
2002	Best final work award – *Belgian Polymer Group Prize* – Belgium
2002	Best communication selection - *Belgochlor Prize* –Belgium

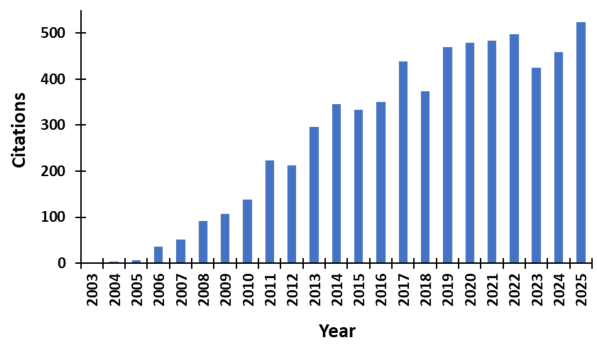
Memberships

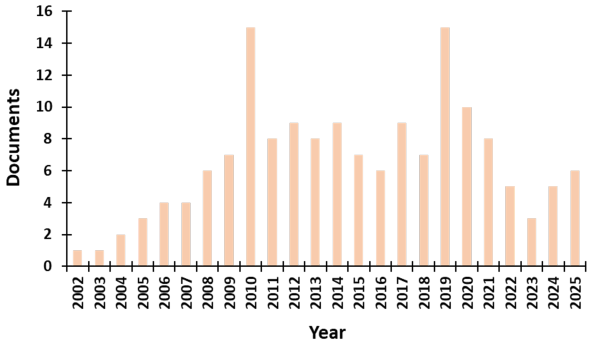
2022 – present	Member of the QS Intelligence Unit as Education Expert
2022 – present	Member of the PhD course in Chemical Science – University of Messina, Italy
2013 – 2023	Member of the « Comité de Gestion du Bulletin des Sociétés Chimiques Belges »
2009 – 2022	Member of the "Agence Nationale de la Recherche"
2005 – present	Member of the « American Chemical Society »

2000 – 2016 Member of the « Belgian Polymer Group »

2000 - present Member of the « Société Royale de Chimie » of Belgium

Scientific Contributions *(Data Sources: Scopus & Google Scholar – October 2026)*





Publications:
- Number of published papers: **161**
- *h*-factor: **47**
- *i-10* factor: **130**
- Average citations per paper: **53.0**
- Number of citations: **8539**

Book Chapters: 4

Patents: 5

Newsletter: 1

Supervision *from 2005 to January 2026*

Master thesis: 16

Ph.D. thesis: 20

Postdoc students: 12

Trainee Fellowship Students: 12