Short bio

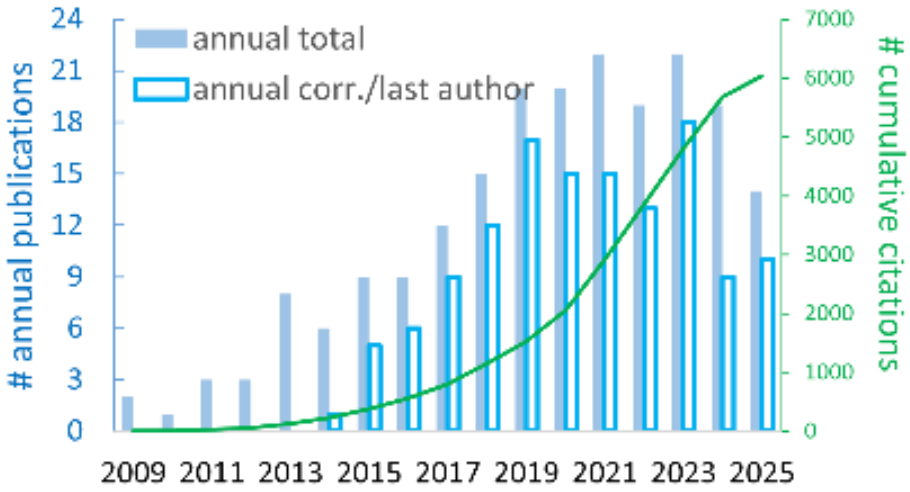
Dagmar R. D'hooge (°1983) obtained a Chemical Engineering PhD in 2010 at Ghent University. He was a postdoc in the Matyjaszewski Polymer Group (Carnegie Mellon University) in 2011, and in the Macromolecular Architectures research Team (Karlsruhe Institute of Technology) in 2013. He is a former FWO postdoctoral researcher.

Since 2017, he is a visiting scientist at Stanford University (USA). Since 2022, he is the elected Chair of the Department Materials, Textiles and Chemical Engineering at Ghent University (6 units). He is listed in the Stanford International Ranking of top 2% scientists.

His research focuses on the design of (de)polymerization and polymer processing techniques. The chemical design, functional material tailoring and process intensification is performed up to the industrial scale, using advanced in-house developed multi-scale modeling tools in combination with experimental validation. He uniquely performs research in the fields of chemical engineering, materials science, polymer science and chemistry, sustainability, and polymer mechanics/rheology.

Track record

- full length peer-reviewed articles: 203 (129 corresp./last author); *h*-index (WoS/GS): 42/49



- book chapters: 7; Books: 2; 3 granted patents
- 250 international conferences with 30 invited lectures
- co-founder of 2 spin-offs, Polinivo and MakinH
- editorial board member Polym. Chem. & Scientific Reports.
- awards, e.g. Solvay award (2006), Jozef Plateau award (3 times), and International Olympic Committee Climate Action Award with FIH (2024).
- invited member of the International Union of Applied Chemistry (IUPAC); task leader
- 16.6 M€ of research grants (10.8 M€: PI; 3.6 M€: co-PI; 2.2 M€: partner)
- PI for infrastructure of 8 M€.

Five representative publications as last and corresponding author

- **Chemical Engineering Journal** **2025** 507, 160744; https://doi.org/10.1016/j.cej.2025.160744

Unique protocol for soluble and insoluble fraction of crosslinked polymers; times cited: 1 **(IF: 14.6)**

- **Nano Energy** **2025** 135, 110629; https://doi.org/10.1016/j.nanoen.2024.110629

Introducing AI tools to control polymer extrusion applications; times cited: 1 **(IF: 16.8; cover)**

- **Additive Manufacturing** **2024** 86, 10419; https://doi.org/10.1016/j.addma.2024.104191

Extrusion design, uniquely accounting for temp. dependencies; times cited: 7 **(IF: 11.6)**

- **Nature Materials** **2021** 20, 1422; https://doi.org/10.1038/s41563-021-01040-0

Structure-property relationships for crosslinked polymers; times cited: 108 **(IF: 43.8; cover)**

- **Nature Communications** **2019**, 10, 3642; https://doi.org/10.1038/s41467-019-11368-6

Kinetic Monte Carlo design of individual chains involving comonomers; times cited: 58 **(IF: 15.0)**.