

Curriculum Vitae

Christophe Boisson

Research Director (**DR2**)
Date of birth: 7 april 1969

Laboratoire Chimie, Catalyse, Polymères et Procédés

C2P2- UMR 5265 (CNRS - UCBL - CPE Lyon)
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Education

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| 2006 | Habilitation à Diriger des Recherches from the University Claude Bernard Lyon 1. |
| 1993-1996 | Ph.D. in Organic Chemistry from the University Paris-Sud (Paris-Saclay). |
| 1992 | Master in Molecular Chemistry from the University Montpellier II. First class Honours. |
| 1992 | Chemical engineer from the "Ecole Nationale Supérieure de Chimie de Montpellier". |

Professional Experience

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| Since 2019 | Director of the joint laboratory ChemistLab (Michelin - CNRS - UCBL - CPE Lyon – INSA Lyon). |
| 2016-2019 | Director of the Laboratory of Innovation, Scale-up, and Intensification of Polymerization processes (LabCom C2P2/Activation). |
| 2013-2017 | Group leader of the team Chemistry and Polymerization Processes at the C2P2. |
| 2008 | Research Director (DR2), CNRS. |
| 1996 | Researcher (CRCN), CNRS.
Laboratory for Chemistry and Polymerization Processes (LCPP – now C2P2). |

Expert activities and committee member

- Since 2014, member of Comité National de la Recherche Scientifique (CoNRS) - Section 11).
- Reviewer: Angewandte Chemie International Edition, ACS Catalysis, Macromolecules, Polymer Chemistry, Macromolecular Rapid Communications, Macromolecular Chemistry and Physics
- Project evaluation: ANRT, ANR, FNRS, Qatar National Research Fund, Carnot MICA.
- External member of juries: 20 juries of PhD and 1 jury of HDR.

Scientific production, communication and supervision

- Articles in peer reviewed journal: 105
- Book chapters: 3
- Published patents: 28
- Invited lectures in international conferences and seminars: 40
- PhD students: 26
- Post-doctoral researcher and engineers: 23
- Master students: 23

Research collaboration contracts with industry

Arkema, Braskem, Dutch Polymer Institute (Polyolefin cluster), Ineos, Michelin, Rhodia/Solvay, Total Marketing & Services, Total Petrochemicals Feluy.
Director of a joint laboratory with Michelin (ChemistLab).

Research Interests

My research work focuses on catalytic polymerizations of olefins and conjugated dienes. Main achievements concern:

- The design of activating supports for the preparation of supported metallocene catalysts for olefin polymerization.
- Development of neodymium catalysts for the copolymerization of olefins with butadiene and discovery of new elastomers named EBR (Ethylene Butadiene Rubbers).
- Design of end functionalized polyethylenes and their use as building blocks and additives in material science.

Selected publications

« Alternating Copolymerization of Ethylene with Butadiene using a Neodymium Metallocene Catalyst »

J. Thuilliez, V. Monteil, R. Spitz, C. Boisson, *Angew. Chem. Int. Ed.* **2005**, *44*, 2593-2596. DOI: 10.1002/anie.200462019.

« Synthesis of well-defined polymer architectures by successive catalytic olefin polymerization and living/controlled polymerization reactions »

R. Godoy Lopez, C. Boisson, F. D'Agosto, *Prog. Polym. Sci.* **2007**, *32*, 419-454. DOI: 10.1016/j.progpolymsci.2007.01.004.

« Telechelic polyethylene from catalyzed chain growth polymerization »

I. German, W. Khelifi, S. Norsic, C. Boisson, F. D'Agosto, *Angew. Chem. Int. Ed.* **2013**, *52*, 3438-3441. DOI: 10.1002/anie.201208756.

« Borate and MAO Free Activating Supports for Metallocene Complexes »

F. Prades, J.-P. Broyer, I. Belaid, O. Boyron, O. Miserque, R. Spitz, C. Boisson, *ACS Catal.* **2013**, *3*, 2288-2293. DOI: 10.1021/cs400655y.

« Deciphering the mechanism of Coordinative Chain Transfer Polymerization of ethylene using neodymocene catalysts and dialkylmagnesium »

R. Ribeiro, R. Ruivo, H. Nsiri, S. Norsic, F. D'Agosto L. Perrin, C. Boisson, *ACS Catal.* **2016**, *6*, 851-860. DOI: 10.1021/acscatal.5b02316.

« Design by surface organometallic chemistry of a bipodal bis(pentafluorophenoxy)aluminate supported on silica as activator for ethylene polymerization »

D. W. Sauter, N. Popoff, M. Ahsan Bashir, K. C. Szeto, R. M. Gauvin, L. Delevoye, M. Taoufik, C. Boisson, *Chemical Communications* **2016**, *52*, 4776-4779. DOI: 10.1039/C6CC00060F.

« Polyolefins, a success story » - review

D. Sauter, M. Taoufik, C. Boisson, *Polymers* **2017**, *9*, 185. DOI:10.3390/polym9060185.

« Copolymerization of olefins with conjugated dienes »

I. Belaid, V. Monteil, C. Boisson, In *Handbook of Transition Metal Polymerization Catalysts*, Wiley, 2018, Chapter 18

« Identification of a transient but key motif in the living coordinative chain transfer cyclo-copolymerization of ethylene with butadiene »

I. Belaid, B. Macqueron, M.-N. Poradowski, S. Bouaouli, J. Thuilliez, F. Da Cruz-Boisson, V. Monteil, F. D'Agosto, L. Perrin, C. Boisson, *ACS Catal.* **2019**, *9*, 9298-9309. DOI: 10.1021/acscatal.9b02620.