

Curriculum Vitae Prof. Filip Du Prez



PERSONAL INFORMATION

Family name, First name: Du Prez, Filip

Researcher ID: <http://www.researcherid.com/rid/B-6411-2008>

Date of birth: October 30, 1970 (Born in Zottegem, Belgium)

URL for web site: www.PCR.UGent.be

• EDUCATION

- 1996 **PhD** in Chemistry (funded by Fund of Scientific Research (FWO) – Belgium)
Faculty of Sciences/ Department of Organic and Macromolecular Chemistry, Ghent University/ Belgium and partially in Lehigh University, USA (Prof. Sperling)
- 1992 **Master** in Chemistry with greatest Distinction, Faculty of Sciences/ Department of Organic and Macromolecular Chemistry, Ghent University/ Belgium

• CURRENT POSITIONS

- 1999 – 2017 **Professor** (full Professor since 2010) and research leader Polymer Chemistry Research Group, Faculty of Sciences/ Department of Organic and Macromolecular Chemistry, Ghent University
- 2008 – 2017 **Promotor-Coordinator** of *valorization consortium Chemtech* dealing with the research valorization of 15 UGent chemistry research groups (<http://www.chemtech.ugent.be/en/>)
- Since 2015 **Founder** of Centre of Macromolecular Chemistry at UGent (80 researchers), see www.CMaC.ugent.be
- Since 2008 **Editor** of European Polymer Journal

• PREVIOUS POSITIONS

- 2008 **Visiting professor** (5 months), Centre for Advanced Macromolecular Design/ University of New South Wales/ Australia (hosted by Prof. C. Barner-Kowollik)
- 1996 – 1999 **Postdoctoral position** (funded by FWO), University of Montpellier, France (10 months) and Department of Organic and Macromolecular Chemistry, Ghent University/ Belgium (26 months)

• FELLOWSHIPS AND AWARDS

- 2014 Prometheus award for best researcher of Ghent University (see www.ugent.be/en/research/research-ugent/trackrecord/awards/awards-2014.htm)
- 1996 – 1999 Postdoctoral fellowship FWO and mobility grant (National Science Foundation)
- 1995 Chemistry and Technology Award (1st laureate) from DSM chemical company
- 1992 – 1996 PhD fellowship FWO and 2 mobility grants (National Science Foundation)

• SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

- 2000 – 2017 Supervision of 25 Postdocs/ 41 PhD's (27 graduated PhD's, actual supervision of 17 PhD's; 2 as copromotor) / 62 Master Students in Department of Organic and Macromolecular Chemistry, Ghent University/ Belgium

Seven former postdocs and one PhD have taken **academic positions** (France, UK, NL, India, Argentina, Vietnam, China) while 7 postdocs/20 PhD's have taken important **industrial positions** in chemical/material/life science companies such as 3M, Agfa, Allnex, Arkema, Bayer, BASF, Dow, DSM, Huntsman, Janssen Pharmaceutica, Lanxess, Recticel, Solutia and Umicore.

TEACHING ACTIVITIES

1999 – 2014 Courses in Organic Chemistry, Introduction to Polymer Science, Polymer Materials, Advanced Polymer Chemistry in Ghent University (both for Chemistry and Chemical Engineers)/ Belgium (around 115 hours / year)

ORGANISATION OF SCIENTIFIC MEETINGS 2007 – 2014 (N = national, I = international)

- 2017 (I) Chairman International Conference ‘*Advanced Polymers via Macromolecular Engineering*’ (APME) in Ghent (500 participants)
- 2014 (N) Chairman Belgian Polymer Group Annual Meeting (220 participants) / Belgium
- 2013 (I) Chairman ESF networking conference “*Precision Polymeric Materials*” (95 p) / Belgium
- 2012 (I) Chairman 2nd Belgian-German Macromolecular meeting “*Advanced Materials by Modular Strategies: From Synthesis to Industrial Applications*” (145p) / Belgium
- 2009 (I) Chairman 1st Belgian-German Macromolecular meeting “*Controlled/Living Radical Polymerizations*” (140p) / Belgium
- 2007 (I) Chairman International Workshop “*Functional polymer materials based on tailor-made macromolecules: synthesis, characterization and membrane applications*” (80p) / Belgium
- 2007 (I) Co-organizer 1st Symposium “*Baekeland 2007: Thermosets – 100 years after Bakelite*” (200p) / Belgium

Publication analysis and scientific impact (January 2018)

The research activities in the areas of 1) polymer functionalization, 2) dynamic and self-healing polymers and 3) polymers from renewable resources resulted in more than 250 refereed publications including 12 reviews (h-index 46; > 7000 citations overall), 15 book chapters, (co-)editor of a Wiley-book, editor of two special issues and inventor on 11 patents or patent applications.

Some representative publications as senior author (papers in 2011 – 2017)

1. Hannes A. Houck, Filip E. Du Prez and Christopher Barner-Kowollik, Controlling Thermal Reactivity with Different Colors of Light, **Nat. Comm.**, 8, 1869 (2017)
2. Wim Denissen, Martijn Droesbeke, Renaud Nicolaÿ, Ludwik Leibler, Johan Winne, Filip E. Du Prez, Chemical control of the viscoelastic properties of vinylogous urethane vitrimers, **Nat. Comm.**, 8, 14857-14863 (2017)
3. Steven Martens, Jos Van den Begin, Annemieke Madder, Filip E. Du Prez, Pieter Espeel, Automated synthesis of monodisperse oligomers, featuring sequence control and tailored functionalization, **J. Am. Chem. Soc.**, 138, 14182–14185 (2016).
4. Stijn Billiet, Kevin De Bruycker, Frank Driessen, Hannelore Goossens, Veronique Van Speybroeck, Johan M. Winne and Filip E. Du Prez*, Triazolinediones enabling click and transclick reactions, **Nat. Chem.**, 6(9), 815-821 (2014)
4. Oliver Roling, Kevin De Bruycker, Benjamin Vonhören, Lucas Stricker, Martin Körsgen, Heinrich F. Arlinghaus, Bart Jan Ravoo, Filip E. Du Prez*, “Rewritable polymer brush micropatterns grafted by triazolinedione click chemistry”, **Angew. Chem Int. Ed.**, 54, 13126 – 13129 (2015)
5. Wim Denissen, Guadalupe Rivero, Renaud Nicolaÿ, Ludwik Leibler, Johan Winne, Filip E. Du Prez*, Vinylogous urethane vitrimers, **Adv. Funct. Mat.**, 25, 2451–2457 (2015)
6. Pieter Espeel, Lieselot L.G. Carrette, Katarzyna Bury, Sven Capenberghs, Filip E. Du Prez*, Annemieke Madder*, Multi-functionalized sequence-defined oligomers from a single building block, **Angew. Chem. Int. Ed.** 52, 1 – 5 (2013)

7. Pieter Espeel, Fabienne Goethals and Filip E. Du Prez*, One-pot multistep reactions based on thiolactones: extending the realm of thiol-ene chemistry in polymer synthesis, **J. Am. Chem. Soc.**, 133, 1678-1681 (2011)

• **Most important reviews/book contributions (selected from recent period 2011-2017)**

Fabienne Goethals, Daniel Frank, Filip Du Prez, Protected Thiol Strategies in Macromolecular Design, **Prog. Polym. Sci.** 64, 76–113 (2017)

Kevin De Bruycker, Stijn Billiet, Hannes A. Houck, Subrata Chattopadhyay, Johan M. Winne and Filip E. Du Prez, Triazolinediones as highly enabling synthetic tools, **Chem. Rev.**, 116, 3919–3974 (2016)

Wim Denissen, Johan M. Winne and Filip E. Du Prez, Vitrimers: permanent organic networks with glass-like fluidity, **Chem. Sci.**, 7, 30-38 (2016)

Xander Hillewaere, Filip Du Prez, Fifteen Chemistries for Autonomous Extrinsic Self-Healing Polymers and Composites, **Prog. Polym. Sci.** 49–50, 121–153 (2015)

Christopher Barner-Kowollik, Filip E. Du Prez, Pieter Espeel, Craig J. Hawker, Thomas Junkers, Helmut Schlaad, Wim Van Camp, “Clicking Polymers or Just Efficient Linking: What Makes the Difference?” **Angew. Chem. Int. Ed.**, 50, 60-62 (2011)

Talha Gokmen, Filip Du Prez, Porous Polymer Particles – A Comprehensive Guide to Synthesis, Characterization, Functionalization and Applications, **Prog. Polym. Sci.** 37, 365-405 (2012)

Bart Dervaux, Filip Du Prez, Heterogeneous azide-alkyne click chemistry: towards metal-free end products, **Chem. Sci.**, 3, 959-966 (2012)

Co-editor of Wiley-book “Complex macromolecular Architectures: Synthesis, characterization and self-assembly”, Ed. Filip Du Prez, Nikos Hadjichristidis, Akira Hirao and Yasuyuki Tezuka Wiley-VCH, Weinheim Germany, ISBN 978-0-470-82513-6 (2011).