

Prof Dr. Bart Jan Ravoo (* 1970)

**Professor at the Organic Chemistry Institute
Westfälische Wilhelms Universität, Münster, Germany**

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Biomimetic supramolecular chemistry and responsive self-assembly



Scientific career

since 2016	co-Director of the Center for Soft Nanoscience (SoN), WWU Münster (D)
2012-2014	Dean of the Department of Chemistry and Pharmacy, WWU Münster (D)
since 2010	Professor W3, WWU Münster (D)
2007-2010	Professor W2, WWU Münster (D)
2002-2006	Assistant Professor, MESA+ Institute for Nanotechnology, University of Twente (NL), with Prof. D.N. Reinhoudt
1999-2002	Newman Scholar at University College Dublin (IRL)
1999	Postdoctoral Fellow at University College Dublin (IRL), with Dr. R. Darcy
1994-1998	PhD, University of Groningen (NL), with Prof. J. B. F. N. Engberts
1988-1994	Studies of Chemistry, University of Groningen (NL)

Awards

1999-2002	Newman Scholar at University College Dublin (IRL)
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Scientific output

>190 Scientific publications (peer reviewed)
>50 Conference contributions (plenary and invited lectures)
>50 Lectures for scientific colloquia
Mentor of 15 PhD students (28 completed dissertations, 25 diploma/MSc theses)

Ten important recent publications

Nguyen, D.T.; Freitag, M.; Ruehling, A.; Körsgen, M.; Lamping, S.; Schaefer, A. H.; Siekman, M.; Arlinghaus, H.F.; Van der Wiel, W.G.; Glorius, F.; Ravoo, B.J. *Versatile micropatterns of N-heterocyclic carbenes on gold surfaces: Increased thermal and pattern stability with enhanced conductivity*. Angew. Chem. Int. Ed. **2018**, 57, 11465–11469.

Lamping, S.; Otremba, T.; Ravoo, B.J. *Carbohydrate responsive surface adhesion based on dynamic covalent chemistry of phenylboronic acid and catechol containing polymer brushes*. Angew. Chem. Int. Ed. **2018**, 57, 2474–2478.

Stricker, L.; Fritz, E.C.; Peterlechner, M.; Doltsinis, N.L.; Ravoo, B.J. *Arylazopyrazoles as light-responsive molecular switches in cyclodextrin-based supramolecular systems*. J. Am. Chem. Soc. **2016**, 138, 4547–4554.

Röling, O.; De Bruycker, K.; Vonhören, B.; Stricker, L.; Körsgen, M.; Arlinghaus, H.F.; Ravoo, B.J.; Du Prez, F.E. *Rewritable polymer brush micropatterns grafted by triazolidione click chemistry*. Angew. Chem. Int. Ed. **2015**, 54, 13126–13129.

Samanta, A.; Tesch, M.; Keller, U.; Klingauf, J.; Studer, A.; Ravoo, B.J. *Fabrication of hydrophilic polymer nanocontainers by use of supramolecular templates*. J. Am. Chem. Soc. **2015**, 137, 1967–1971.

Himmelein, S.; Lewe, V.; M.C.A. Stuart; Ravoo, B.J. *An injectable carbohydrate-based hydrogel containing vesicles as responsive non-covalent cross-linkers*. Chem. Sci. **2014**, 5, 1054-1058.

Schenkel, J.H.; Samanta, A.; Ravoo, B.J. *Self-assembly of soft hybrid materials directed by light and magnetic field*. Adv. Mater. **2014**, 26, 1076–1080.

Samanta, C.; Stuart, M.C.A.; Ravoo, B.J. *Photoresponsive capture and release of lectins in multilamellar complexes*. J. Am. Chem. Soc. **2012**, 134, 19909–19914.

Nalluri, S.K.M.; Voskuhl, J.; Bultema, J.L.; Boekema, E.J.; Ravoo, B.J. *Light-responsive capture and release of DNA in a ternary supramolecular complex*. Angew. Chem. Int. Ed. **2011**, 50, 9747-9751.

Rauschenberg, M.; Bomke, S.; Karst, U.; Ravoo, B.J. *Dynamic peptides as biomimetic carbohydrate receptors*. Angew. Chem. Int. Ed. **2010**, 49, 7340-7345. (Very Important Paper)