

Piotr Nowak

Curriculum Vitæ

Wyss Institute, Harvard University
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Born in 1987, Warsaw
Nationality - Polish

Education & research experience

- 2016–now **Postdoctoral fellow**, *Wyss Institute for Biologically Inspired Engineering*, Harvard University, US., Advisor: Prof. Peng Yin.
- 2010–2016 **PhD studies**, *Centre for Systems Chemistry*, University of Groningen, NL., Thesis: *Cooperative effects in systems chemistry*. Advisor: Prof. Sijbren Otto.
- 2006–2010 **MSc studies**, *College of Inter-Faculty Individual Studies in Mathematics and Natural Sciences*, University of Warsaw, PL., Thesis: *Asymmetric 1,3-dipolar cycloaddition reaction*, with honours. Advisor: Prof. Janusz Jurczak.
- 07–09.2009 LLP-Erasmus internship, University of Groningen, NL. Advisor: Prof. Sijbren Otto
- 2003–2006 LXIV LO, Warsaw (high school)

Publications

- J.W. Sadownik, E. Mattia, P. Nowak, and S. Otto, Diversification of Self-Replicating Molecules, *Nature Chem.*, **2016**, *8*, 264–269.
- Y. Han, P. Nowak, M. Colomb-Delsuc, M.P. Leal, and S. Otto, Instructable Nanoparticles Using Dynamic Combinatorial Chemistry, *Langmuir*, **2015**, *31*, 12658–12663. (contributed equally with Y.H.).
- P. Nowak, M. Colomb-Delsuc, S. Otto, and J. Li, Template-Triggered Emergence of a Self-Replicator from a Dynamic Combinatorial Library, *J. Am. Chem. Soc.*, **2015**, *137*, 10965–10969 (contributed equally with J.L.).
- K. Zwoliński, P. Nowak, and M.J. Chmielewski, Towards multifunctional MOFs—transforming a side reaction into a post-synthetic protection/deprotection method, *Chem. Commun.*, **2015**, *51*, 10030–10033.
- P. Nowak, V. Saggiomo, F. Salehian, M. Colomb-Delsuc, Y. Han, and S. Otto, Localized Template-Driven Functionalization of Nanoparticles By Dynamic Combinatorial Chemistry., *Angew. Chem. Int. Ed.*, **2015**, *54*, 4192–4197.
- J. Li, P. Nowak, and S. Otto, An Allosteric Receptor by Simultaneous "Casting" and "Molding" in a Dynamic Combinatorial Library., *Angew. Chem. Int. Ed.*, **2015**, *54*, 832–837.
- J. Li, P. Nowak, H. Fanlo-Virgós, and S. Otto, Catenanes from Catenanes: Quantitative Assessment of Cooperativity in Dynamic Combinatorial Catenation, *Chem. Sci.*, **2014**, *5*, 4968–4974.

S. Hamieh, V. Saggiomo, P. Nowak, E. Mattia, R. F. Ludlow, and S. Otto, A "Dial-A-Receptor" Dynamic Combinatorial Library., *Angew. Chem. Int. Ed.*, **2013**, 52, 12368–12372.

J. Li, P. Nowak, and S. Otto, Dynamic Combinatorial Libraries: From Exploring Molecular Recognition to Systems Chemistry., *J. Am. Chem. Soc.*, **2013**, 135, 9222–9239 (contributed equally with J.L.).

J. Romanski, P. Nowak, A. Maksymiuk, C. Chapuis, and J. Jurczak, Diastereoselective 1,3-Dipolar Cycloadditions of both Electronically Modified Phenyl-nitrile Oxides and Stilbenes, *RSC Adv.*, **2013**, 3, 23105–23118.

J. Romanski, P. Nowak, K. Kosinski, and J. Jurczak, High-pressure Transesterification of Sterically Hindered Esters, *Tetrahedron Lett.*, **2012**, 53, 5287–5289.

J. Romanski, P. Nowak, C. Chapuis, and J. Jurczak, Total Synthesis of (5S)-dihydroxyashabushiketol, *Tetrahedron: Asymm.*, **2011**, 22, 787–790.

Submitted/in preparation

D. Komaromy, P. Nowak, and S. Otto, Dynamic Combinatorial Libraries, invited chapter in *Dynamic Covalent Chemistry*, ed. W. Zhang, *in press*.

P. Nowak, M. Oikonomu, S. Yapar, S. Kubik, S. Otto, and A. Velders, Dynamic Chemistry at Nano and Macro Interfaces, a Perspective in preparation for *Chem. Sci.*

B. Matysiak, P. Nowak, I. Cvrtila, and S. Otto, Antiparallel Dynamic Covalent Chemistries, in preparation.

Awards, scholarships and fellowships

- 06.2014 Poster Prize at the Systems Chemistry Action Meeting: *Instructable Nanoparticles for Biomacromolecule Recognition*(San Sebastian, ES)
- 06.2013 Poster Prize at the joint RUG-RWTH symposium: *Recognition of Double-stranded DNA with Gold Nanoparticles Using Dynamic Combinatorial Chemistry*(Aachen, DE)
- 09.2012 IUPAC Poster Prize at the 21st IUPAC International Conference on Physical Organic Chemistry for poster: *Recognition of Biomacromolecules with Gold Nanoparticles Using Dynamic Combinatorial Chemistry* (Durham, UK)
- 2011–2014 Marie Curie Early Stage Researcher (Dynamol ITN)
- 2007–2010 Scholarship of the Polish Ministry of Science and Higher Education (three times)
- 2007–2009 Scholarship of the Capital City of Warsaw (twice)
- 2007 II Award at the Polish Final of the European Union Contest for Young Scientists for the paper: *High-Pressure Transesterification: A Preliminary Scope and Limitations Study* (Warsaw, PL)
- 2006 Laureate of the 38th Chemistry Olympiad (national level)

Other professional experience

- 09.2013 Organizer of the 2nd Centre for Systems Chemistry Symposium, Groningen
- 04.2009 President of the organizing committee, 2nd BaltChem International Young Chemists Conference, Warsaw

- 04.2008 Member of the organizing committee, 1st BaltChem International Young Chemists Conference, Warsaw
- 2008–2009 President of the Students' Chemical Society "Fulleren", University of Warsaw

Skills and competences

- Synthetic skills Organic synthesis, Nanoparticle synthesis and functionalization
- Analytical methods NMR, HPLC, LC-MS
- Modelling Molecular dynamics, electronic structure simulations, kinetic modelling
- Computer skills Windows, Linux, \LaTeX , MS/Libre Office, vector & 3-D graphics
- Teaching Practical Synthesis and Analysis laboratory course, Supramolecular Chemistry tutorials, Soft Molecular Materials tutorials
- Supervision 4 MSc students, 1 BSc student, 5 internship students
- Languages English - fluent, Polish - mother tongue

Hobbies

Playing guitar, reading (science-fiction, philosophy), popularization of science