

RAFAL KLAJN

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PERSONAL	Born December 8th, 1982, citizen of Poland	
EDUCATION	Northwestern University <i>McCormick School of Engineering and Applied Science</i> Ph.D. in Chemical Engineering (expected graduation date: Aug 2009) Thesis: <i>Novel nanomaterials derived from noble metal nanoparticles</i> Advisor: Professor Bartosz A. Grzybowski, grzybor@northwestern.edu	Aug 2004 onwards
	University of Warsaw M.Sc., <i>summa cum laude</i> (Chemistry)	Sept 2001 – Jun 2004
RESEARCH EXPERIENCE	University of Wroclaw Peptide chemistry: solid-phase synthesis of new immunosuppressants Supervisor: Professor Zbigniew Szewczuk	Aug 1999 – Dec 1999
	Institute of Organic Chemistry, Polish Academy of Sciences Organic chemistry: new reactions in interfacial catalysis Supervisor: Professor Mieczyslaw Makosza	Jan 2000 – Mar 2000
	Rowland Institute at Harvard Biophysics: probing protein denaturation with NMR Supervisor: Dr. Jeffrey C. Hoch	Jun 2000 – Aug 2000
	Institute of Organic Chemistry, Polish Academy of Sciences Organic chemistry: metathesis reactions Supervisor: Dr. Karol Grela	Sep 2001 – Mar 2003
	International Institute of Molecular and Cell Biology Structural biology and peptide synthesis. Supervisor: Dr. Matthias Mochler	Apr 2003 – Jun 2004
	Cold Spring Harbor Laboratory Structural biology Supervisor: Dr. Leemor Joshua-Tor	Jun 2003 – Aug 2003
	Northwestern University Nanotechnology, microfabrication Supervisor: Professor Bartosz A. Grzybowski	Aug 2004 onwards
AWARDS	Laureate of the National Chemistry Olympiad (Poland) National Contest for Young Scientists (first prize) Participant of the EU Contest for Young Scientists, Amsterdam, Netherlands Ministry of National Education Fellowship "School Nobel" prize in Chemistry (Poland) Goldman Sachs Global Leader Award, London, UK N.S.F. Materials Research Science & Engineering Center Fellowship	1999, 2000, 2001 2000 2000 2001, 2002, 2003 2001 2003 2006, 2007

MEETINGS AND	Research Science Institute, Cambridge, MA	2000
CONFERENCES	London International Youth Science Forum, London, UK	2001
	1st Central European Conference "Chemistry towards Biology", Portorož, Slovenia	2002
	Euregionale 2003, Dresden, Germany	2003
	Goldman Sachs Global Leadership Institute, London, UK	2003
	NATO ASI Course "Introduction to Bioinformatics", Dubrovnik, Croatia	2003
	Undergraduate Research Program, Cold Spring Harbor, NY	2003
	GDCh-JCF Frühjahrssymposium, Heidelberg, Germany	2004
	234th American Chemical Society National Meeting, Chicago, IL	2007
	13th International Conference on Unconventional Photoactive Systems, Evanston, IL	2007
	2nd International Symposium on Bioinspired Engineering, Dead Sea, Israel	2007
	BASF Conference on Nanomaterials, Singapore	2007

PUBLICATIONS

1. M. Makosza, J. Przyborowski, R. Klajn, A. Kwast, „Simple synthesis of 2-substituted tetrahydrofuran-3-carbonitriles”, *Synlett* **2000**, *12*, 1773-1774.
2. A. Michrowska, M. Bieniek, M. Kim, R. Klajn, K. Grela, „Cross-metathesis reaction of vinyl sulfones and sulfoxides”, *Tetrahedron* **2003**, *59*, 4525-4531.
3. R. Klajn, M. Fialkowski, I.T. Bensemann, A. Bitner, C.J. Campbell, K. Bishop, S. Smoukov, B.A. Grzybowski, „Microcolour micropatterning of thin films of dry gels”, *Nat. Mater.* **2004**, *3*, 729-735.
4. C.J. Campbell, M. Fialkowski, R. Klajn, I.T. Bensemann, B.A. Grzybowski, „Color micro- and nanopatterning with counter-propagating RD fronts”, *Adv. Mater.* **2004**, *16*, 1912-1917.
5. D. Witt, R. Klajn, P. Barski, B.A. Grzybowski, „Applications, properties, and synthesis of ω -functionalized *n*-alkanethiols and disulfides – the building blocks of self-assembled monolayers”, *Curr. Org. Chem.* **2004**, *8*, 1763-1797.
6. C.J. Campbell, R. Klajn, M. Fialkowski, B.A. Grzybowski, „One-step multilevel microfabrication by reaction-diffusion”, *Langmuir* **2005**, *21*, 418-423.
7. S.K. Smoukov, C.J. Campbell, R. Klajn, K.J.M. Bishop, B.A. Grzybowski, „Surface microstructuring by wet stamping”, *Adv. Mater.* **2005**, *17*, 1361-1365.
8. M. Fialkowski, K.J.M. Bishop, R. Klajn, S.K. Smoukov, C.J. Campbell, B.A. Grzybowski, „Principles and implementations of dissipative (dynamic) self-assembly”, *J. Phys. Chem. B* **2006**, *110*, 2482-2496.
9. K.J.M. Bishop, R. Klajn, B.A. Grzybowski, „The core and the most useful molecules of organic chemistry”, *Angew. Chem. Int. Ed.* **2006**, *45*, 5348-5354.
10. A.M. Kalsin, B. Kowalczyk, S.K. Smoukov, R. Klajn, B.A. Grzybowski, „Ionic-like behavior of oppositely charged nanoparticles”, *J. Am. Chem. Soc.* **2006**, *128*, 15046-15047.
11. M. Paszewski, S.K. Smoukov, R. Klajn, B.A. Grzybowski, „Multilevel surface nano- and microstructuring via sequential photoswelling of dichromated gelatin”, *Langmuir* **2007**, *23*, 5419-5422.
12. R. Klajn, K.J.M. Bishop, B.A. Grzybowski, „Light-controlled self-assembly of reversible and irreversible nanoparticle suprastructures”, *Proc. Natl. Acad. Sci. USA* **2007**, *104*, 10305-10309.
13. R. Klajn, K.J.M. Bishop, M. Fialkowski, M. Paszewski, C.J. Campbell, T.P. Gray, B.A. Grzybowski, „Plastic and moldable metals by self-assembly of sticky nanoparticle aggregates”, *Science* **2007**, *316*, 261-264.
14. R. Klajn, A.O. Pinchuk, G.C. Schatz, B.A. Grzybowski, „Synthesis of heterodimeric sphere-prism nanostructures via metastable gold supraspheres”, *Angew. Chem. Int. Ed.* **2007**, *42*, 8363-8367.
15. R. Klajn, T.P. Gray, P.J. Wesson, S.K. Smoukov, B.A. Grzybowski, „Bulk synthesis and surface patterning of nanoporous metals and alloys from supraspherical nanoparticle aggregates”, *Adv. Funct. Mater.* **2008**, *accepted for publication*.