



A. D. Schlüter

The author presented on this page has recently published his **10th article** since 2000 in *Angewandte Chemie*:

“The Largest Synthetic Structure with Molecular Precision: Towards a Molecular Object”: B. Zhang, R. Wepf, K. Fischer, M. Schmidt, S. Besse, P. Lindner, B. T. King, R. Sigel, P. Schurtenberger, Y. Talmon, Y. Ding, M. Kröger, A. Halperin, A. D. Schlüter, *Angew. Chem.* **2011**, *123*, 763–766; *Angew. Chem. Int. Ed.* **2011**, *50*, 737–740.

A. Dieter Schlüter

Date of birth:	Sometime in 1952
Position:	Professor of Polymer Chemistry, Department of Materials, ETH Zürich (Switzerland)
E-mail:	ads@mat.ethz.ch
Homepage:	http://www.polychem.mat.ethz.ch/ (Is never up-to-date, sorry!)
Education:	1980 Diploma in Chemistry, Universität München (LMU, Germany) 1984 PhD with Günter Szeimies, Universität München 1985–86 Postdoctoral fellow with K. Peter C. Vollhardt, UC Berkeley (USA) 1986 Research stay with W. Jim Feast, University of Durham (UK) 1991 Habilitation with Gerhard Wegner, Max Planck Institute for Polymer Research, Mainz (Germany)
Awards:	I am most proud of the “Golden Owl 2010”, which honors lecturers who have provided exceptional teaching at ETH Zürich.
Current research interests:	The research interest of my group is within the field of synthetic and supramolecular chemistry, directed towards the creation of structurally novel polymers including cylindrical objects, molecular sheets, and 2D polymers. Methodological developments also play a role. Our research is motivated by the novelty of the molecular structures pursued, and by the claim to achieve a visible progress in polymer synthesis. Although applications are always of considerable relevance in defining the goal, fundamental questions are of equal importance. The two questions that presently thrill us the most are 1) does systematic thickening of polymer chains lead to new properties? and 2) can one achieve lateral growth to give infinitely extended, covalent, monolayered molecules with internal periodicity (2D polymers)?
Hobbies:	Exploring Romania

My favorite piece of research is ... Günther Maier’s tetrahedrane synthesis.

The biggest challenge facing scientists is ... to not surrender in fighting the growing importance of business strategies in science.

My greatest achievement has been ... to convince my current wife that it was worth marrying me. She has not yet regretted it, I believe.

My biggest inspiration is ... an emotionally relaxed situation in the anticipation of a nice evening for two.

The part of my job that I enjoy the most is ... to witness the excitement of students when doing the long sought after key experiment.

Young people should study chemistry because ... it can have a strong component of creativity, very much like in arts.

My 5 top papers:

1. “The Largest Synthetic Structure with Molecular Precision: Towards a Molecular Object”: B. Zhang, R. Wepf, K. Fischer, M. Schmidt, S. Besse, P. Lindner, B. T. King, R. Sigel, P. Schurtenberger, Y. Talmon, Y. Ding, M. Kröger, A. Halperin, A. D. Schlüter, *Angew. Chem.* **2011**, *123*, 763–766; *Angew. Chem. Int. Ed.* **2011**, *50*, 737–740. (This paper describes a one-pot reaction that can generate 200 MDa covalent mass with high structure regularity.)
2. “Two-Dimensional Polymers: Just a Dream of Synthetic Chemists?”: J. Sakamoto, J. van Heijst, O. Lukin, A. D. Schlüter, *Angew. Chem.* **2009**, *121*, 1048–1089; *Angew. Chem. Int. Ed.* **2009**, *48*, 1030–1069. (Writing this article made us understand, where the problems are in the rational synthesis of 2D polymers.)
3. “Tuning Polymer Thickness: Synthesis and Scaling Theory of Homologous Series of Dendronized Polymers”: Y. Guo, J. van Beek, B. Zhang, M. Colussi, P. Walde, M. Kröger, M. Schmidt, A. Zhang, A. Halperin, A. D. Schlüter, *J. Am. Chem. Soc.* **2009**, *131*, 11841–11854. (This publication is a symbiosis of scaling theory and synthesis and describes how the diameter of linear polymer chains can be systematically increased.)
4. “Towards a Fully Conjugated, Double-Stranded Cycle: A Mass Spectrometric and Theoretical Study”: C. Denekamp, A. Etinger, W. Amrein, A. Stanger, M. Stuparu, A. D. Schlüter, *Chem. Eur. J.* **2008**, *14*, 1628–1637. (Herein we describe the first proof for the existence of a double-stranded, fully conjugated cycle in the gas phase.)
5. “Suzuki Polycondensation Put to Work: A Tough Poly(*meta*-phenylene) with a High Glass-Transition Temperature”: R. Kandre, K. Feldman, H. E. H. Meijer, P. Smith, A. D. Schlüter, *Angew. Chem.* **2007**, *119*, 5044–5047; *Angew. Chem. Int. Ed.* **2007**, *46*, 4956–4959. (This paper describes the outstanding mechanical properties of a tough amorphous poly(*para*-*meta*-phenylene), which rival that of commercial polycarbonate reputed for its toughness.)

DOI: 10.1002/anie.201100667