

Research Profile Rainer Jordan

1) General Information

Name: Rainer Jordan, Prof. Dr.
Date of Birth: 25.08.1967
Gender: Male
Address: TU Dresden, Chair of Macromolecular Chemistry,
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Current position: Professor, W3
Family status: Married, 2 children

2) Academic Education

Study of Chemistry (1986 – 1993), Universität Mainz, Dipl.-Chem., Prof. K.K. Unger
Study of Chemistry (1989 – 1990), Kyoto University, IAS-Fellow, Prof. T. Saegusa

3) Scientific Education

Habilitation: Chemistry, TU München, 2004, Prof. O. Nuyken
PhD graduation: Dr. rer. nat., Universität Mainz, 1996, Prof. K.K. Unger

4) Career

2009 – present Professor for Macromolecular Chemistry, TU Dresden
2004 – 2008 Akademischer Oberrat (C1), TU München
1998 – 2008 Assistant Professor Research, Polytechnic University, Brooklyn, NY
1996 – 1998 DFG-PostDoc-Fellow, Polytechnic University, Brooklyn, NY (Prof. A. Ulman)
1993 – 1996 PROCOPE-Fellow, C.N.R.S. Paris (Prof. B. Sebille)

5) Other

Selected other professional activities:

since 2018 Vice-President and Cofounder of DelAqua Pharmaceuticals Inc.
since 2016 Dean of Studies, Faculty of Chemistry and Food Chemistry, TU Dresden
since 2010 Faculty advisory board member for Boston University
since 2009 Editorial board member of Journal of Colloid Polymer Science, Springer
since 2009 (Co-) Organizer of the Biannual Dresden Polymer Discussions
since 2000 reviewer for: DFG, ERC, EC, NIH, NSF, AvH, DAAD, ISF, PRF and others
2014 – 2017 Speaker of the Dresden Initiative for Bioactive Interfaces and Materials (DIB)
2008 – 2011 Consultant to Serina Therapeutics Inc.

6) Publications

a) List of ten most important publications

- [1] Y. Che, T. Zhang, Y. Du, I. Amin, C. Marschelke, R. Jordan, **"On water" Surface-initiated Polymerization of Hydrophobic Monomers** *Angew. Chem. Int. Ed.* **2018**, in print. (DOI:10.1002/anie.201809100)
- [2] T. Zhang, Z. Liao, L. M. Sandonas, A. Dianat, P. Xiao, I. Amin, X. Liu, R. Gutierrez, T. Chen, E. Zschech, G. Cuniberti, R. Jordan, **Polymerization Driven Monomer Passage Through Monolayer Chemical Vapour Deposition Graphene** *Nat. Commun.* **2018**, 9, 4051.
- [3] T. Zhang, Y. Hou, V. Dzhagan, Z. Liao, G. Chai, M. Löffler, D. Olanas, A. Milani, S. Xu, M. Tommasini, D. R. T. Zahn, Z. Zheng, E. Zschech, R. Jordan, X. Feng, **Copper-surface-mediated synthesis of acetylenic carbon-rich nanofibers for active metal-free photocathodes** *Nat. Commun.* **2018**, 9, 1140.
- [4] M. Steenackers, A. M. Gigler, N. Zhang, F. Deubel, M. Seifert, L. H. Hess, C. H. Y. X. Lim, K. P. Loh, J. A. Garrido, R. Jordan, M. Stutzmann, I. D. Sharp, **Polymer Brushes on Graphene** *J. Am. Chem. Soc.* **2011**, 133, 10490-10498.
- [5] R. Luxenhofer, A. Schulz, C. Roques, S. Li, T. K. Bronich, E. V. Batrakova, R. Jordan, A. V. Kabanov, **Doubly-Amphiphilic Poly(2-oxazoline)s as High-Capacity Delivery Systems for Hydrophobic Drugs** *Biomaterials* **2010**, 31, 4972-4979.
- [6] M. Steenackers, R. Jordan, A. Küller, M. Grunze, **Engineered Polymer Brushes by Carbon Templating** *Adv. Mater.* **2009**, 21, 2921-2925.
- [7] R. Luxenhofer, R. Jordan, **Click Chemistry with Poly(2-oxazoline)s.** *Macromolecules* **2006**, 39, 3509-3516.
- [8] U. Schmelmer, R. Jordan, W. Geyer, W. Eck, A. Götzhäuser, M. Grunze, A. Ulman, **Surface-initiated polymerization on self-assembled monolayers: Amplification of patterns on the micrometer and nanometer scale** *Angew. Chem. Int. Ed.* **2003**, 42, 559-563.
- [9] R. Jordan, A. Ulman, J. F. Kang, M. H. Rafailovich, J. Sokolov, **Surface-Initiated Anionic Polymerization of Styrene by Means of Self-Assembled Monolayers.** *J. Am. Chem. Soc.* **1999**, 121, 1016-1022.
- [10] R. Jordan, A. Ulman, **Surface Initiated Living Cationic Polymerization of 2-Oxazolines.** *J. Am. Chem. Soc.* **1998**, 120, 243-247.