Prof. Dr. Klaus Müllen

1. Personal information

Name Date and place of birth Business address Professor Klaus Müllen Cologne, 02.01.1947 Max-Planck-Institut für Polymerforschung Ackermannweg 10, D-55128 Mainz, Germany Tel: +0049 6131 379 151 Fax: +0049 6131 379 350 muellen@mpip-mainz.mpg.de



2. Professional Career

- 1966 1969 Studies in Chemistry
- University of Cologne
- 1969 Diplomchemiker-Degree (Professor E. Vogel)
- 1971 PhD-work, University of Basel (Professor F. Gerson)
- 1972 1978 Postdoctoral-training and Habilitation (Professor J.F.M. Oth) ETH Zürich
- 1977 Privatdozent ETH Zürich
- 1979 1984 Professor University of Cologne
- 1983 1989 Professor University of Mainz
- 1988 Call from the University of Göttingen
- 1989 Scientific Member of the Max-Planck-Society and Director at the Max-Planck-Institute for Polymer Research
- 1992 Call from the University of Cologne

3. Professional Duties

1995	Member of the Evaluation Board of Volkswagenstiftung
1995	Member of the Editorial Boards of Macromolecular Chemistry and Physics,
	Journal of Materials Chemistry, Journal of Macromolecular Science, Pure and Applied Chemistry
	Editor of Synthetic Metals
1998	Editor of Polymer Bulletin
1998	Member of the Evaluation Committee of Chemistry Departments in Nordrhein- Westfalen (Germany)
1999	Member of the Selection Committee of the Alexander-von-Humboldt- Foundation
2000	Member of the Advisory Board of the Center of Nanoscience, University of Munich
	Member of the Evaluation Committe of Chemistry Departments of Universities of Fribourg and Neuchatel (Switzerland)
2001	Member of the Evaluation Committee for Chemistry in the Netherlands
2003	Member of the Editorial Board of the Journal of the American Chemical Society Chairman of the Advisory Committee of "Eidgenössisches Materialprüfungsam
2004	Member of the Editorial Board of Chemistry of Materials
2005	Member of the Editorial Board of Chemistry Letters
	Member of the Editorial Board of Chemistry World
	Member of the Editorial Board of Accounts of Chemical Research
2006	Member of the Editorial Board of Macromolecules
	Member of the Editorial Board of the Indian Journals of Macromolecules,
	Chemisty and BioChemistry
	Member of the Senate Committee of the German Science Foundation
	Associate Editor of the Journal of the American Chemical Society

2008-2009 President of the German Chemical Society

4. Awards and Lectureships

1990 1993 1993	Visiting Professor, University of Osaka (JSPS) Max-Planck-Research-Prize Honorary Professor, East China University of Technology, Shanghai
1995	Richard-Willstätter-Lecturer, Jerusalem
1996 1997	"Capita-Selecta"-Lecturer, Katholieke University of Leuven Philip-Morris-Research-Prize
1997	Melville-Lecturer, University of Cambridge
1998	Visiting Professor, University of Rennes
1999	Member of the German Academy Leopoldina
2000	Bruno-Werdelmann-Lecturer, University of Essen
2001	Honorary Doctorate Degree, University of Sofia
2001	Bayer Distinguished Lecturer, Washingston University, St. Louis
2001	Smets-Lecturer, Belgium
2001	Nozoe-Award, San Diego
2002	Lane Lecturer, Champaign, University of Urbana
2002	Kyoto University Foundation Award
2003	Science Award of the "Stifterverband"
2005	Visiting Scientist (University of Nice)
2006 2006	International Award of the Belgian Polymer Group
2000	Honorary Professor, Chinese Academy of Sciences, Institute of Applied Chemistry, Changchun
2006	Butler Lecturer, University of Florida, Gainesville
	Barré Lecturer, University of Montreal
	Bender Lecturer, Northwestern University, Evanston
	ICI Distinguished Lecturer, University of Calgary
2007	Otto-Bayer-Lecturer, University of Cologne
2008	Hermanos Elhuyar – Hans Goldschmidt Award of the Spanish Chemical Society Visiting Professor, University of Bordeaux
	Honorary Professor, Institute of Chemistry, Beijing, Chinese Academy of Sciences
	Bayer Lecturer, University of Pittsburgh
	S. Kwolek Lecturer, Carnegie Mellon University,
	Innovation Award of the State of North Rhine Westphalia
	Nicolaus August Otto Award
2009	Visiting Scientist, University of Marseille
	The Society of Polymer Science Japan International Award
	Honorary Member of the Israel Chemical Society
	Honorary Professorship, Jiao Tong University, Shanghai, China
2010	Honorary Professorship, University of Heidelberg
	Honorary Doctorate Degree, Karlsruhe Institute of Technology (KIT)
2011	The European Research Council (ERC) Advanced Investgator Grant
2011	Polymer Award of the American Chemical Society

5. Research targets

- New polymer-forming reactions including methods of organometallic chemistry;

- multi-dimensional polymers with complex shape-persistent architectures;
- functional polymeric networks, in particular for catalytic purposes;
- dyes and laser writing into polymers;
- chemistry and physics of single molecules;
- molecular materials with liquid crystalline properties for electronic and optoelectronic devices;
- materials for lithium or hydrogen storage;
- biosynthetic hybrids;
- nanocomposites.

Ten most important publications

Total number of reviewed publications: 1080 (The most important paper marked in bold.)

- Atomically Precise Bottom-up Fabrication of Graphene Nanoribbons Jinming Cai, Pascal Ruffieux, Rached Jaafar, Marco Bieri, Thomas Braun, Stephan Blankenburg, Matthias Muoth, Ari P. Seitsonen, Moussa Saleh, Xinliang Feng, Klaus Müllen, Roman Fasel Nature in print (2010)
- Forever young: polycyclic aromatic hydrocarbons as model cases for structural and optical studies Ralf Rieger Klaus Müllen J. Phys. Org. Chem. 23, 315-325 (2010)
- Macromolecular scaffolding: The relationship between nanoscale architecture and function in multichromophoric arrays for organic electronics Vincenzo Palermo, Erik Schwartz, Chris E. Finlayson, Andrea Liscio, Matthijs B. J. Otten, Sara Trapani, Klaus Müllen, David Beljonne, Richard H. Friend, Roeland J. M. Nolte, Alan E. Rowan, Paolo Samorì Adv. Mater. 22, E81-E88 (2010)
- Nanographene-Constructed Hollow Carbon Spheres and Their Favorable Electroactivity with Respect to Lithium Storage Shubin Yang, Xinliang Feng, Linjie Zhi, Qian Cao, Joachim Maier, Klaus Müllen Adv. Mater. 22, 838-842 (2010)
- Nitrogen-Doped Ordered Mesoporous Graphitic Arrays with High Electrocatalytic Activity for Oxygen Reduction Ruili Liu, Dongqing Wu, Xinliang Feng, Klaus Müllen Angew. Chem. Int. Ed. 49, 2565-2569 (2010)
- The Influence of Morphology on High-Performance Polymer Field-Effect Transistors
 Hoi Nok Tsao, Don Cho, Jens Wenzel Andreasen, Ali Rouhanipour, Dag W. Breiby, Wojciech Pisula, Klaus Müllen Adv. Mater, 21, 209-212 (2009)
- Dispersion of Graphene Sheets in Organic Solvent Supported by Ionic Interactions Yanyu Liang, Dongqing Wu, Xinliang Feng, Klaus Müllen Adv. Mater, 21, 1679-1683 (2009)
- Filling the Cavity of Conjugated Carbazole Macrocycles with Graphene Molecules: Monolayers Formed by Physisorption Serve as a Surface for Pulsed Laser Deposition Bruno Schmaltz, Ali Rouhanipour, Hans Joachim Räder, Wojciech Pisula, Klaus Müllen Angew. Chem. Int. Ed, 48, 720-724 (2009)
- Self-Assembly of a Donor-Acceptor Dyad Across Multiple Length Scales: Functional Architectures for Organic Electronics Jeffrey M. Mativetsky, Marcel Kastler, Rebecca C. Savage, Desirée Gentilini, Matteo Palma, Wojciech Pisula, Klaus Müllen, Paolo Samorì Adv. Funct. Mater. 19, 2486-2494 (2009)

 Towards high charge-carrier mobilities by rational design of the shape and periphery of discotics
Xinliang Feng, Valentina Marcon, Wojciech Pisula, Michael Ryan Hansen, James Kirkpatrick, Ferdinand Grozema, Denis Andrienko, Kurt Kremer, Klaus Müllen Nature Materials Vol. 8, 421-426 (2009)