

<b>Name</b>	<b>Prof. Dr. Frank Würthner</b>		
<b>Contact</b>	Universität Würzburg Institut für Organische Chemie & Center for Nanosystems Chemistry (CNC) D-97074 Würzburg, Germany  Phone: +49 931 3185340 Fax: +49 931 3184756 <a href="http://go.uniwue.de/wuerthner-group">http://go.uniwue.de/wuerthner-group</a> E-Mail: <a href="mailto:wuerthner@uni-wuerzburg.de">wuerthner@uni-wuerzburg.de</a>		
<b>Birth Date/Place</b>	1964, Villingen-Schwenningen, Germany		
<b>Education</b>	2001	Habilitation in Organic Chemistry, University of Ulm (with Peter Bäuerle): <i>Supramolecular Dye Chemistry</i>	
	1990-1994	Dr. rer.nat., University of Stuttgart (with Franz Effenberger): <i>Synthesis and Properties of Donor-Acceptor-substituted Oligothiophenes</i>	
	1984-1990	Study of Chemistry, University of Stuttgart	
<b>Academic Career</b>	since 2002	Professor, Chair of Organic Chemistry II, Univ. of Würzburg	
	since 2010	Founding Director of the <i>Center for Nanosystems Chemistry</i>	
	2007-2009	Dean of the Faculty of Chemistry and Pharmacy at the University of Würzburg	
	2001/2002	Professor of Organic Chemistry (temporally limited), Technical University of Karlsruhe	
	1997-2000	Liebig and DFG fellow (Habilitation), University of Ulm	
	1995-1996	Chemist at BASF AG, Central Research, Ludwigshafen.	
	1994-1995	Post-doc with Prof. J. Rebek, Jr. at the Massachusetts Institute of Technology (MIT), Cambridge/MA (USA)	
<b>Research Topics</b>	Dyes and organic semiconductors; Supramolecular chemistry; Photochemistry; (Bio-)molecular recognition; Self-assembly & supramolecular polymerization, gelation and organic nanostructure formation; Materials for organic electronics, photonics, photovoltaics & photocatalysis		
<b>Calls</b>	2009	Max-Planck Director position offered by MPI of Solid State Research, Stuttgart	
	2008	Chair Organic Chemistry offered by University of Heidelberg	
	2008	Chair Organic Chemistry offered by Karlsruhe Institute of Technology	
	2002	Chair Organic Chemistry offered by University of Würzburg	
	2001	C3 Professor Organic Chemistry offered by Universität zu Köln	
<b>Project Coordination</b>	since 2016	Member of the Board of Directors of the <i>Bavarian Polymer Institute</i> (BPI) and Head of the <i>Key Lab of Supramolecular Polymers</i> in Würzburg	
	since 2012	Member of the Board of Directors of the Bavarian Research Network <i>Solar Technologies Go Hybrid</i> ; Coordinator in 2013	
	2006-2019	Member of the Board of Directors and Vice Coordinator (2006-2016) of the <i>Röntgen Research Center for Complex Material Systems</i> , University of Würzburg	

## Honors and Awards

2019	Adolf-von-Baeyer Medal (German Chemical Society)
2018	ERC Advanced Grant 2017 Ta-shue Chou Award (Academia Sinica, Taiwan)
2017	Member Bavarian Academy of Sciences and Humanities
2016	Member German National Academy of Science Leopoldina Elhuyar-Goldschmidt Award (Royal Chemical Society Spain) Elsevier Lecture Award (Japanese Photochem. Association) Fellow of the Royal Society of Chemistry (FRSC)
2015	Emanuel Vogel Lecture (University of Cologne) Molecular Science Frontier Lecture Professorship, Chinese Academy of Science, Beijing
since 2014	Listed as Highly Cited Researcher & World's Most Influential Scientific Minds in Chemistry
2014	K. S. Krishnan Memorial Lecture (Indian Association of the Cultivation of Science, Kolkata)
2009	Steinhofer Award & Lectureship (University of Freiburg)
2003	Tarrant Award & Lectureship (University of Florida)
2002	Arnold Sommerfeld Award (Bavarian Academy of Science)
2000	Otto Röhm Memorial Award
1997	Liebig Fellowship (Fonds der Chemischen Industrie)
1995	Feodor Lynen Fellowship (Humboldt Foundation)

## Visiting Professorships

2019	South China University of Technology, Guangzhou/China
2013	Academia Sinica, Taipei/Taiwan
2011	Chinese Academy of Science, Institute of Chemistry, Beijing
2010	Université d'Angers, France
2001	Universitat de les Illes Balears, Spain

## Editorial Boards

since 2015	Associate Editor of <i>Organic Chemistry Frontiers</i> (Royal Society of Chemistry)
since 2015	Editorial Advisory Board Member of <i>Open Chemistry</i> (De Gruyter)
since 2012	International Advisory Board Member of the <i>Asian Journal of Organic Chemistry</i> (Wiley-VCH)
2010-2018	Editorial Advisory Board Member of the <i>Journal of Organic Chemistry</i> (American Chemical Society)
since 2008	Editorial Advisory Board Member of the <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> (Springer)
2005	Editor of the <i>Topics in Current Chemistry</i> Volume "Supramolecular Dye Chemistry"

## Advisory Boards

since 2010	Member of the Scientific Council and Curator of the <i>Fonds der Chemischen Industrie</i>
2007-2012	Member of the Selection Committee of the <i>Alexander-von-Humboldt Foundation</i> (Institutional Partnerships)
2007-2015	Scientific Consultant in the field of Organic Electronics for BASF SE
2009/2010	Member of the Selection Committee for International Research Groups of the Max-Planck Society
2011-2014	Member Evaluation Panel 5 of the European Research Council (Starter & Consolidator Grants)

## Conference Organization

2019	Chairman of <i>Suprachem 2019</i>
2013	Chairman of the <i>7th Conference on Conjugated Oligomers and Polymers (KOPO)</i>
2001	Secretary General of the <i>5th International Symposium on Functional <math>\pi</math>-Electron Systems</i>

## Publications, Lectures

> 400 publications, h-index: 92, 15 granted patents and > 300 lectures in 1997 – 2019.  
Member of the GDCh (German Chemical Society), the ACS, and the RSC.

## Selection of Plenary Lectures at International Conferences (last 5 years)

2019	<i>18. International Conference on Novel Aromatic Compounds (ISNA)</i> , Sapporo, Japan (accepted)
2018	<i>International Conference on Science and Technology of Synthetic Metals (ICSM)</i> , Busan, Korea
2017	<i>52nd Conference on Stereochemistry</i> , Bürgenstock
2017	<i>Gordon Research Conference on Self-assembly and Supramolecular Chemistry</i> , Les Diablerets, Switzerland
2016	<i>International Symposium on Catalysis and Fine Chemicals</i> , Taipei/Taiwan
2016	<i>3rd Riken International Symposium on Supramolecular Chemistry and Functional Materials</i> , Tokyo, Japan
2015	<i>Faraday Discussions on Supramolecular Photochemistry</i> , Cambridge, UK, 15.-17. 9. 2015
2014	<i>8th Asian Photochemistry Conference</i> , Trivandrum, India
2014	5. Fundación Ramón Areces Scientific Symposium "CHEMISTRY: ANSWERS FOR A BETTER WORLD", Madrid, Spain

## 20 significant publications

1. F. Würthner, C. Thalacker, A. Sautter  
*Adv. Mater.* **11**, 754–758 (1999)  
Hierarchical Organization of Functional Perylene Chromophores to Mesoscopic Superstructures by Hydrogen Bonding and  $\pi$ - $\pi$  Interactions
2. F. Würthner, C. Thalacker, S. Diele, C. Tschierske  
*Chem. Eur. J.* **7**, 2245–2253 (2001)  
Fluorescent J-type Aggregates and Thermotropic Columnar Mesophases of Perylene Bisimide Dyes
3. F. Würthner, S. Yao, T. Debaerdemaeker, R. Wortmann  
*J. Am. Chem. Soc.* **124**, 9431–9447 (2002)  
Dimerization of Merocyanine Dyes. Structural and Energetic Characterization of Dipolar Dye Aggregates and Implications for Nonlinear Optical Materials
4. F. Würthner, Z. Chen, F. J. M. Hoeben, P. Osswald, C.-C. You, P. Jonkheijm, J. van Herrikhuyzen, A. P. H. J. Schenning, P. P. A. M. van der Schoot, E. W. Meijer, E. H. A. Beckers, S. C. J. Meskers, R. A. J. Janssen  
*J. Am. Chem. Soc.* **126**, 10611–10618 (2004)

- Supramolecular p-n-Heterojunctions by Co-Self-Organization of Oligo(*p*-phenylene Vinylene) and Perylene Bisimide Dyes
5. S. Bhosale, A. L. Sisson, P. Talukdar, A. Fürstenberg, N. Banerji, E. Vauthey, G. Bollot, J. Mareda, C. Röger, F. Würthner, N. Sakai, S. Matile  
*Science* **313**, 84–86 (2006)  
Photoproduction of Proton Gradients with  $\pi$ -Stacked Fluorophore Scaffolds in Lipid Bilayers
  6. Z. Chen, V. Stepanenko, V. Dehm, P. Prins, L. D. A. Siebbeles, J. Seibt, P. Marquetand, V. Engel, F. Würthner  
*Chem. Eur. J.* **13**, 436–449 (2007)  
Photoluminescence and Conductivity of Self-Assembled  $\pi$ - $\pi$ -Stacks of Perylene Bisimide Dyes
  7. X. Zhang, Z. Chen, F. Würthner  
*J. Am. Chem. Soc.* **129**, 4886–4887 (2007)  
Morphology Control of Fluorescent Nanoaggregates by Co-Self-Assembly of Wedge- and Dumbbell-Shaped Amphiphilic Perylene Bisimides
  8. T. E. Kaiser, H. Wang, V. Stepanenko, F. Würthner  
*Angew. Chem. Int. Ed.* **46**, 5541–5544 (2007)  
Supramolecular construction of fluorescent J-aggregates based on hydrogen-bonded perylene dyes
  9. S. Ghosh, X-Q. Li, V. Stepanenko, F. Würthner  
*Chem. Eur. J.* **14**, 11343–11357 (2008)  
Control of H- and J-Type  $\pi$ -Stacking by Peripheral Alkyl Chains and Self-sorting Phenomena in Perylene Bisimide Homo- and Heteroaggregates
  10. R. Schmidt, J. H. Oh, Y.-S. Sun, M. Deppisch, A.-M. Krause, K. Radacki, H. Braunschweig, M. Könemann, P. Erk, Z. Bao, F. Würthner  
*J. Am. Chem. Soc.* **131**, 6215–6228 (2009)  
High-Performance Air-Stable n-Channel Organic Thin Film Transistors Based on Halogenated Perylene Bisimide Semiconductors
  11. X. Zhang, S. Rehm, M. M. Safont-Sempere, F. Würthner  
*Nature Chem.* **1**, 623–629 (2009)  
Vesicular perylene dye nanocapsules as supramolecular fluorescent pH sensor systems
  12. M. Gsänger, J. H. Oh, M. Könemann, H. W. Höffken, A.-M. Krause, Z. Bao, F. Würthner  
*Angew. Chem. Int. Ed.* **49**, 740–743 (2010)  
A Crystal-Engineered Hydrogen-Bonded Octachloroperylene Diimide with a Twisted Core: An n-Channel Organic Semiconductor
  13. H. Bürckstümmer, E. V. Tulyakova, M. Deppisch, M R. Lenze, N. M. Kronenberg, M. Gsänger, M. Stolte, K. Meerholz, F. Würthner  
*Angew. Chem. Int. Ed.* **50**, 11628–11632 (2011)  
Efficient Solution-Processed Bulk Heterojunction Solar Cells by Antiparallel Supramolecular Arrangement of Dipolar Donor-Acceptor Dyes
  14. T. He, M. Stolte, F. Würthner  
*Adv. Mater.* **25**, 6951–6955 (2013)

Air-Stable n-Channel Organic Single Crystal Field-Effect Transistors Based on Microribbons of Core-Chlorinated Naphthalene Diimide

15. X. Zhang, D. Görl, V. Stepanenko, F. Würthner  
*Angew. Chem. Int. Ed.* **53**, 1270–1274 (2014)  
Hierarchical Growth of Fluorescent Dye Aggregates in Water by Fusion of Segmented Nanostructures
16. S. Ogi, V. Stepanenko, K. Sugiyasu, M. Takeuchi, F. Würthner  
*J. Am. Chem. Soc.* **137**, 3300–3307 (2015)  
Mechanism of Self-Assembly Process and Seeded Supramolecular Polymerization of Perylene Bisimide Organogelator (Highlighted by E.W. Meijer in *Angew. Chem. Int. Ed.* 2015, **54**, 8334)
17. T. He, M. Stolte, C. Burschka, N. H. Hansen, T. Musiol, D. Kälblein, J. Pflaum, X. Tao, J. Brill, F. Würthner  
*Nature Commun.* **6**, 5954 (2015)  
Single crystal field-effect transistors of new Cl<sub>2</sub>NDI polymorph processed by sublimation in air.
18. S. Seifert, K. Shoyama, D. Schmidt, F. Würthner  
*Angew. Chem. Int. Ed.* **55**, 6390-6395 (2016)  
An Electron-Poor C<sub>64</sub> Nanographene by Palladium-Catalyzed Cascade C-C Bond Formation: One-Pot Synthesis and Single-Crystal Structure Analysis
19. M. Schulze, V. Kunz, P. D. Frischmann, F. Würthner  
*Nature Chem.* **8**, 576-583 (2016)  
A Supramolecular ruthenium macrocycle with high catalytic activity for water oxidation that mechanistically mimics photosystem II
20. C. M. Wolff, P. D. Frischmann, M. Schulze, B. J. Bohn, R. Wein, P. Livadas, M. T. Carlson, F. Jäckel, J. Feldmann, F. Würthner, J. K. Stolarczyk  
*Nature Energy* **3**, 862-869 (2018)  
All-in-one: combining nanoparticulate and molecular co-catalysts for visible-light-driven full water splitting

Würzburg, October 2019