

Name	Prof. Dr. Frank Würthner born 1964, Villingen-Schwenningen, Germany	
Contact	Julius-Maximilians-Universität (JMU) Würzburg Institut für Organische Chemie & Center for Nanosystems Chemistry (CNC) 97074 Würzburg, Germany Phone: +49 931 3185340 E-Mail: wuerthner@uni-wuerzburg.de http://go.uniwue.de/wuerthner-group ORCID ID: 0000-0001-7245-0471 Researcher ID: K-5181-2015	
		
Education	2001 Habilitation in Organic Chemistry, University of Ulm: <i>Supramolecular Dye Chemistry</i> 1990-1994 Dr. rer.nat., University of Stuttgart: <i>Synthesis and Properties of Donor-Acceptor-substituted Oligothiophenes</i> 1984-1990 Study of Chemistry (Diploma), University of Stuttgart	
Academic Career	since 2002 Professor , Chair of Organic Chemistry, JMU Würzburg since 2010 Founding Director of the <i>Center for Nanosystems Chemistry</i> at the JMU Würzburg 2007-2009 Dean of the Faculty of Chemistry & Pharmacy, JMU 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 Dye Research, Ludwigshafen 1994-1995 Postdoc at Massachusetts Institute of Technology, Cambridge/MA (USA)	
Research Topics	supramolecular engineering of functional dye aggregates, dyes and organic semiconductors, supramolecular photofunctional materials, artificial photosynthesis, solar energy conversion	
Awards, Academy Memberships and Other Honors (Selection)	2025 Jubilee Chair Professor, Indian Academy of Sciences 2024 Rudolf-Gompper Lecture (KOPO conference Bad Honnef) Henriette Herz Scout (Alexander von Humboldt Foundation) Distinguished Guest Professor, Tsinghua University, Beijing 2022 Janssen Lecture (University Autonoma Madrid) 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 Fellow of the Royal Society of Chemistry (FRSC) Elhuyar-Goldschmidt Award (Royal Chemical Society Spain) Elsevier Award (Japanese Photochem. Association) 2015 Emanuel Vogel Lecture Award (University of Cologne) 2015 Molecular Science Frontier Lecture Professorship, Chinese Academy of Science, Beijing since 2014 Listed as Highly Cited Researcher	

	2009	Max-Planck Director position offered by MPI of Solid State Research, Stuttgart (declined)
	2009	Steinhofer Lecture Award (University of Freiburg)
	2003	Tarrant Lecture Award (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	2024-2026	Tsinghua University, Beijing/China
	2019-2023	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
Project Coordination	since 2024	Spokesperson Indogerman International Research Training Group IRTG 2991 on <i>Photoluminescence in Supramolecular Matrices</i>
	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 (SolTech)</i> , Coordinating Director in 2013 & 2023
	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
Editorial Boards	since 2015	Editorial Board Member of <i>Organic Chemistry Frontiers</i> , from 2015-2024 being active as Associate Editor (Royal Society of Chemistry)
	since 2024	Editorial Advisory Board Member of <i>Chemical Society Reviews</i> (Royal Society of Chemistry)
	2024	Guest Editor <i>Chemistry – A European Journal</i> special issue on Supramolecular Matter
	since 2021	Editorial Advisory Board Member of <i>Chemical Physics Reviews</i> (American Institute of Physics)
	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 (Selection)	since 2010	Member of the Scientific Council / Curator of the <i>Fonds der Chemischen Industrie</i>
	2020-2024	Member of the Academic Advisory Committee of the Institute of Chemistry, Academia Sinica, Taiwan

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

Conference Organization (Selection)

2024	Co-Chair of the 26 th <i>International Conference on Science and Technology of Synthetic Metals</i> (ICSM) in Dresden
2024	Chairman (together with Z. Xie) of the <i>International Symposium on Supramolecular Dye and Materials Chemistry</i> , Guangzhou
2023	Chairman of the 12 th <i>Conference on Solar Technologies Go Hybrid</i> , Würzburg
2019	Chairman (together with F. Beuerle) of <i>Suprachem 2019</i> , Würzburg
2013	Chairman of the 7 th <i>Conference on Conjugated Oligomers and Polymers (KOPO)</i> , Würzburg
2012	Chairman of the 2 nd <i>Conference on Solar Technologies Go Hybrid</i> , Würzburg
2001	Secretary General of the 5 th <i>International Symposium on Functional π-Electron Systems</i> , Ulm

Publications, Patents, Lectures

> 600 publications, among them 98 in *Angewandte Chemie*
60 in the *Journal of the American Chemical Society*, and
> 20 in *Nature* group journals.

h-index: 122 (WoS)

> 20 granted patents and > 300 lectures in 1997 – 2024.

Member of the GDCh (German Chemical Society), the ACS, and the RSC.

Selection of Plenary Lectures at International Conferences (last 10 years)

2024	20 th <i>International Conference on Novel Aromatic Compounds</i> (ISNA), Toronto, Canada
2024	18 th <i>International Symposium on Macrocyclic and Supramolecular Chemistry</i> , Hangzhou, China
2023	5 th <i>PKU-Wuxi AppTec Symposium of Organic Chemistry</i> , Peking, China
2022	<i>Italian Photochemistry Conference</i> , Ferrara, Italy
2019	18. <i>International Conference on Novel Aromatic Compounds</i> (ISNA), Sapporo, Japan
2018	<i>International Conference on Science and Technology of Synthetic Metals</i> (ICSM), Busan, Korea
2017	52 nd <i>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	3 rd <i>Riken International Symposium on Supramolecular Chemistry and Functional Materials</i> , Tokyo, Japan
2014	8 th <i>Asian Photochemistry Conference</i> , Thiruvananthapuram, India

20 Significant Original Publications

1. M. A. Niyas, K. Shoyama, M. Grüne, F. Würthner
Nature **637**, 854–859 (2025)
Bilayer nanographene reveals halide permeation through a benzene hole
2. J. Rühe, K. Vinod, H. Hoh, K. Shoyama, M. Hariharan, F. Würthner
J. Am. Chem. Soc. **146**, 28222–28232 (2024)
Guest-Mediated Modulation of Photophysical Pathways in a Coronene Bisimide Cyclophane
3. A. Schulz, R. Fröhlich, A. Jayachandran, M. Stolte, T. Brixner, F. Würthner
Chem **10**, 2887–2900 (2024)
Panchromatic light-harvesting antenna by supramolecular exciton band engineering for heteromeric dye foldamer
4. N. Noll, A.-M. Krause, F. Beuerle, F. Würthner
Nature Catalysis **12**, 867–877 (2022)
Enzyme-like water preorganization in a synthetic molecular cleft for homogeneous water oxidation catalysis
5. M. Mahl, M. A. Niyas, K. Shoyama, F. Würthner
Nature Chemistry **14**, 457 (2022)
Multilayer stacks of polycyclic aromatic hydrocarbons
6. K. Shoyama, F. Würthner,
J. Am. Chem. Soc. **141**, 13008–13012 (2019)
Synthesis of a Carbon Nanocone by Cascade Annulation
7. M. Wehner, M. I. S. Röhr, M. Bühler, V. Stepanenko, W. Wagner, F. Würthner
J. Am. Chem. Soc. **141**, 6092–6107 (2019); cited 192 times (web of science, 24.11.2024)
Supramolecular Polymorphism in One-Dimensional Self-Assembly by Kinetic Pathway Control
8. 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), cited 381 times (web of science, 24.11.2024)
All-in-one: combining nanoparticulate and molecular co-catalysts for visible-light-driven full water splitting
9. M. Schulze, V. Kunz, P. D. Frischmann, F. Würthner
Nature Chemistry **8**, 576-583 (2016), cited 207 times (web of science, 24.11.2024)
A supramolecular ruthenium macrocycle with high catalytic activity for water oxidation that mechanistically mimics photosystem II
10. S. Ogi, V. Stepanenko, K. Sugiyasu, M. Takeuchi, F. Würthner
J. Am. Chem. Soc. **137**, 3300–3307 (2015), cited 422 times (web of science, 24.11.2024)
Mechanism of Self-Assembly Process and Seeded Supramolecular Polymerization of Perylene Bisimide Organogelator
11. M. Gsänger, J. H. Oh, M. Koenemann, H. W. Hoeffken, A.-M. Krause, Z. Bao, F. Würthner
Angew. Chem. Int. Ed. **49**, 740–743 (2010); cited 388 times (web of science, 24.11.2024)

A Crystal-Engineered Hydrogen-Bonded Octachloroperylene Diimide with a Twisted Core: An n-Channel Organic Semiconductor

12. R. Schmidt, J. H. Oh, Y.-S. Sun, M. Deppisch, A.-M. Krause, K. Radacki, H. Braunschweig, M. Könnemann, P. Erk, Z. Bao, F. Würthner
J. Am. Chem. Soc. **131**, 6215–6228 (2009), cited 665 times (web of science, 24.11.2024)
High-Performance Air-Stable n-Channel Organic Thin Film Transistors Based on Halogenated Perylene Bisimide Semiconductors
13. X. Zhang, S. Rehm, M. M. Safont-Sempere, F. Würthner
Nature Chemistry **1**, 623–629 (2009), cited 540 times (web of science, 24.11.2024)
Vesicular perylene dye nanocapsules as supramolecular fluorescent pH sensor systems
14. Z. Chen, V. Stepanenko, V. Dehm, P. Prins, L. D. A. Siebelles, J. Seibt, P. Marquetand, V. Engel, F. Würthner
Chem. Eur. J. **13**, 436–449 (2007), cited 591 times (web of science, 24.11.2024)
Photoluminescence and conductivity of self-assembled π - π stacks of perylene bisimide dyes
15. T. E. Kaiser, H. Wang, V. Stepanenko, F. Würthner
Angew. Chem. Int. Ed. **46**, 5541–5544 (2007), cited 482 times (web of science, 24.11.2024)
Supramolecular construction of fluorescent J-aggregates based on hydrogen-bonded perylene dyes
16. U. Rösch, S. Yao, R. Wortmann, F. Würthner,
Angew. Chem. Int. Ed. **45**, 7026–7030 (2006), cited 378 times (web of science, 24.11.2024)
Fluorescent H-aggregates of merocyanine dyes
17. 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), cited 408 times (web of science, 24.11.2024)
Supramolecular p-n-Heterojunctions by Co-Self-Organization of Oligo(*p*-phenylene Vinylene) and Perylene Bisimide Dyes
18. F. Würthner, S. Yao, T. Debaerdemaeker, R. Wortmann
J. Am. Chem. Soc. **124**, 9431–9447 (2002), cited 301 times (web of science, 24.11.2024)
Dimerization of Merocyanine Dyes. Structural and Energetic Characterization of Dipolar Dye Aggregates and Implications for Nonlinear Optical Materials
19. F. Würthner, C. Thalacker, S. Diele, C. Tschierske
Chem. Eur. J. **7**, 2245–2253 (2001); cited 650 times (web of science, 24.11.2024)
Fluorescent J-type Aggregates and Thermotropic Columnar Mesophases of Perylene Bisimide Dyes
20. F. Würthner, C. Thalacker, A. Sautter
Adv. Mater. **11**, 754–758 (1999); cited 210 times (web of science, 24.11.2024)
Hierarchical Organization of Functional Perylene Chromophores to Mesoscopic Superstructures by Hydrogen Bonding and π - π Interactions

5 Significant Review Articles

1. D. Bialas, E. Kirchner, M. I. S. Röhr, F. Würthner,
J. Am. Chem. Soc. **143**, 4500–4518 (2021), cited 171 times (web of science, 24.11.2024)
Perspectives in Dye Chemistry: A Rational Approach toward Functional Materials by Understanding the Aggregate State
2. M. Wehner, F. Würthner
Nat. Rev. Chem. **4**, 38–53 (2020), cited 362 times (web of science, 24.11.2024)
Supramolecular polymerization through kinetic pathway control and living chain growth
3. F. Würthner, C. R. Saha-Möller, B. Fimmel, S. Ogi, P. Leowanawat, D. Schmidt
Chem. Rev. **116**, 962–1052 (2016), cited 1415 times (web of science, 24.11.2024)
Perylene Bisimide Dye Assemblies as Archetype Functional Supramolecular Materials
4. F. Würthner, T. E. Kaiser, C. R. Saha-Möller
Angew. Chem. Int. Ed. **50**, 3376–3410 (2011); cited 2164 times (web of science, 24.11.2024)
J-Aggregates: From Serendipitous Discovery to Supramolecular Engineering of Functional Dye Materials
5. F. Würthner
Chem. Comm. **14**, 1564–1579 (2004); cited 2249 times (web of science, 24.11.2024)
Perylene bisimide dyes as versatile building blocks for functional supramolecular architectures

Würzburg, January 2025