Name **Prof. Dr. Frank Würthner**
born 1964, Villingen-Schwenningen, Germany



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Education

2001	Habilitation in Organic Chemistry, University of Ulm (with Peter Bäuerle): *Supramolecular Dye Chemistry*
1990-1994	Dr. rer.nat., University of Stuttgart (with Franz Effenberger): *Synthesis and Properties of Donor-Acceptor-substituted Oligothiophenes*
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 *Center for Nanosystems Chemistry* 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 (AvH Lynen fellow) at Massachusetts Institute of Technology, Cambridge/MA (with Julius Rebek, Jr.)

Research Topics supramolecular engineering of functional dye aggregates, self-assembly and supramolecular polymerization, supramolecular photofunctional materials, organic semiconductors, solar energy conversion, artificial photosynthesis, supramolecular (photo-)catalysis

Awards, Academy Memberships, and other Honors (Selection)

2026	**Izatt-Christensen Award 2026** (Supramolecular Chemistry)
2025	**ERC Advanced Grant 2024**
2024	Henriette Herz Scout (Alexander von Humboldt Foundation)
2019	**Adolf-von-Baeyer Medal** (German Chemical Society)
	ERC Advanced Grant 2017
2018	Ta-shue Chou Award (Academia Sinica, Taiwan)
2017	Elected Member **Bavarian Academy of Sciences and Humanities**
2016	Elected 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)
since 2014	Listed by Clarivate as **Highly Cited Researcher**
2009	**Max-Planck Director position** offered by MPI of Solid State Research, Stuttgart (declined)

	2008	Organic Chemistry Chair position offered by the University of Heidelberg (declined)
	2008	Organic Chemistry Chair position offered by the Karlsruhe Institute of Technology (declined)
	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)

Distinguished Lectureships (Selection)

2026	Franz Effenberger Lecture (University of Stuttgart)
2025	Xin Da Lecture (Peking University)
2025	Annual Chemistry Lecture, JNCASR Bangalore
2025	Distinguished Chemistry Lecture, IIT Kanpur
2024	Rudolf-Gompper Lecture (KOPO conference Bad Honnef)
2022	Janssen Lecture (University Autonoma Madrid)
2015	Emanuel Vogel Lecture (University of Cologne)
2015	Molecular Science Frontier Lecture Professorship, Chinese Academy of Science, Beijing
2014	K. S. Krishnan Lecture (Indian Association for the Cultivation of Science, Kolkata)
2009	Steinhofer Lecture (University of Freiburg)
2003	Tarrant Lecture (University of Florida)

Visiting Professorships

2025	Jubilee Chair Professorship, Indian Academy of Sciences
2024-2026	Distinguished Guest Professor, 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

Major Project Coordination

2024-2029	**Spokesperson** Indogerman International Research Training Group **IRTG 2991** on *Photoluminescence in Supramolecular Matrices* (JMU Würzburg with IISER Thiruvananthapuram)
2025-2029	**ERC Advanced Grant:** *Supramolecular Approach to Schwarzite Carbon Materials* (SCHWARZITE)
2018-2024	**ERC Advanced Grant:** *Supramolecular Architectures for Ruthenium Water Oxidation Catalysis* (SUPRAWOC)
since 2016	Member of the Board of Directors of the *Bavarian Polymer Institute* (BPI) & Head of the *Key Lab of Supramolecular Polymers* in Würzburg
2012-2026	Member of the Board of Directors of the Bavarian Research Network *Solar Technologies Go Hybrid* (SolTech) & Head of the *Key Lab for Supramolecular Solar Energy Conversion*, Coordinating Director in 2013 & 2023
2006-2019	Member of the Board of Directors and Vice Coordinator (2006-2016) of the *Röntgen Research Center for Complex Material Systems*, University of Würzburg

Editorial Boards

since 2026	**Associate Editor** *Journal of the American Chemical Society*

since 2015	Editorial Board Member of *Organic Chemistry Frontiers*, from 2015-2024 being active as **Associate Editor** (Royal Society of Chemistry)
since 2024	Editorial Advisory Board Member of *Chemical Society Reviews* (Royal Society of Chemistry)
since 2021	Editorial Advisory Board Member of *Chemical Physics Reviews* (American Institute of Physics)
since 2015	Editorial Advisory Board Member of *Open Chemistry* (De Gruyter)
since 2012	International Advisory Board Member of the *Asian Journal of Organic Chemistry* (Wiley-VCH)
since 2008	Editorial Advisory Board Member of the *Journal of Inclusion Phenomena and Macrocyclic Chemistry* (Springer)
2026	Guest Editor for the themed issues on "Photoluminescent Organic Materials" in RSC journals *Chemical Society Reviews, Chemical Science*, *Physical Chemistry Chemical Physics* and *Journal of Materials Chemistry*
2024-2026	Guest Editor *Chemistry – A European Journal* special issue on "Supramolecular Matter" (Wiley-VCH)
2019	Guest Editor for the Themed Collection "In celebration of Julius Rebek's 75th birthday" in *Organic Chemistry Frontiers*
2016	Guest Editor for the Themed Collection "Novel π-electron molecular scaffolds" in *Organic Chemistry Frontiers*
2010-2018	Editorial Advisory Board Member of the *Journal of Organic Chemistry* (American Chemical Society)
2005	Editor of the *Topics in Current Chemistry* volume "Supramolecular Dye Chemistry"

Advisory Boards (Selection)

2026-2028	Member of the Academic Advisory Committee of the Institute of Chemistry, Academia Sinica, Taiwan
since 2025	Founding Member and Elected Board Member of the German Chemical Society (GDCh) Section *Supramolecular Chemistry*
since 2020	Member Selection Committee for the German Chemical Society (GDCh) Awards in Organic Chemistry (Adolf-von-Baeyer and Emil Fischer Medals), since 2023 Chair
2020-2024	Member of the Academic Advisory Committee of the Institute of Chemistry, *Academia Sinica*, Taiwan
2011-2014	Member Evaluation Panel 5 of the *European Research Council* (Starter & Consolidator Grants)
since 2010	Member of the Scientific Council / Curator of the *Fonds der Chemischen Industrie,* since 2023 Chairman of Literature Award Commission
2007-2015	Scientific Consultant for Organic Electronics for *BASF SE*
2007-2012	Member of the Selection Committee of the *Alexander-von-Humboldt Foundation*
2009/2010	Member of the Selection Committee for International Research Groups of the *Max-Planck Society*

Conference Organization (Selection)

2027	Chair of the Alexander-von-Humboldt Award Winner Symposium on *Macromolecular and Supramolecular Chemistry* in Bonn
2024	Co-Chair of the *26th International Conference on Science and Technology of Synthetic Metals* (ICSM) in Dresden

2024	Chairman (together with Z. Xie) of the *International Symposium on Supramolecular Dye and Materials Chemistry*, Guangzhou
2023	Chairman of the *12th Conference on Solar Technologies Go Hybrid*, Würzburg
2019	Chairman (together with F. Beuerle) of *Suprachem 2019*, Würzburg
2013	Chairman of the *7th Conference on Conjugated Oligomers and Polymers (KOPO)*, Würzburg
2012	Chairman of the *2nd Conference on Solar Technologies Go Hybrid*, Würzburg
2001	Secretary General of the *5th International Symposium on Functional π-Electron Systems*, Ulm

Publications, Patents, Lectures

> 600 publications, among them 101 in *Angewandte Chemie*
69 in the *Journal of the American Chemical Society*, and
> 20 in *Nature* group journals including *Nature*, *Nature Materials*, *Nature Energy*, *Nature Catalysis* & *Nature Chemistry* (8)

h-index: 130 (WoS, July 2026)

> 20 granted patents and > 400 lectures since 1997.

Member of the *American Chemical Society* (ACS), the *Royal Society of Chemistry* (RSC) and the *German Chemical Society* (GDCh) including Membership of the Sections Supramolecular Chemistry, Organic Chemistry, Photochemisty, Macromolecular Chemistry.

Plenary Lectures at International Conferences (selection from last 10 years)

2027	*33rd International Conference on Photochemistry,* Taipei, Taiwan (accepted)
2027	*Gordon Research Conference on Self-assembly and Supramolecular Chemistry*, Les Diablerets, Switzerland (accepted)
2026	*17th International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM 2026),* Krakow, Poland
2026	*20th International Symposium on Macrocyclic and Supramolecular Chemistry*, Bordeaux, France
2025	*13th Asian Photochemisty Conference*, Kochi, India
2025	26th *International Symposium on the Photochemistry and Photophysics of Coordination Compounds* (ISPPCC), Milazzo, Italy
2024	*20th International Conference on Novel Aromatic Compounds* (ISNA),Toronto, Canada
2024	*18th International Symposium on Macrocyclic and Supramolecular Chemistry*, Hangzhou, China
2023	*5th PKU-Wuxi AppTec Symposium of Organic Chemistry,* Peking, China
2022	*Italian Photochemistry Conference*, Ferrara, Italy
2019	*18. International Conference on Novel Aromatic Compounds* (ISNA), Sapporo, Japan
2018	*International Conference on Science and Technology of Synthetic Metals* (ICSM), Busan, Korea
2017	*52nd Conference on Stereochemistry*, Bürgenstock

2017 *Gordon Research Conference on Self-assembly and Supramolecular Chemistry*, Les Diablerets, Switzerland

20 Significant Original Publications

1. L. Ernst, Y. Hong, H. Song, W. Zhang, E. Lass, D. Kim, F. Würthner,
   Nat. Chem. **18**, 923-930 (2026)
   Generating extended foldamer dye stacks and unravelling their evolving exciton dynamics
2. M. A. Niyas, K, Shoyama, M. Grüne, F. Würthner
   Nature **637**, 854–859 (2025)
   Bilayer nanographene reveals halide permeation through a benzene hole
3. L. Ernst, H. Son, D. Kim, F. Würthner
   Nat. Chem. **17**, 767–776 (2025)
   Photoinduced stepwise charge hopping in π-stacked perylene bisimide donor–bridge–acceptor arrays
4. 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
5. N. Noll, A.-M. Krause, F. Beuerle, F. Würthner
   Nature Catalysis **12**, 867–877 (2022) cited 32 times (web of science, 10.12.2025)
   Enzyme-like water preorganization in a synthetic molecular cleft for homogeneous water oxidation catalysis
6. M. Mahl, M. A. Niyas, K. Shoyama, F. Würthner
   Nature Chemistry **14**, 457 (2022); cited 58 times (web of science, 10.12.2025)
   Multilayer stacks of polycyclic aromatic hydrocarbons
7. K. Shoyama, F. Würthner,
   J. Am. Chem. Soc. **141**, 13008–13012 (2019), cited 120 times (web of science, 10.12.2025)
   Synthesis of a Carbon Nanocone by Cascade Annulation
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 463 times (web of science, 10.12.2025)
   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 227 times (web of science, 10.12.2025)
   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 498 times (web of science, 10.12.2025)
    Mechanism of Self-Assembly Process and Seeded Supramolecular Polymerization of Perylene Bisimide Organogelator

11. 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); 274 citations (web of science, 10.12.2025)
Efficient Solution-Processed Bulk Heterojunction Solar Cells by Antiparallel Supramolecular Arrangement of Dipolar Donor-Acceptor Dyes

12. 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 401 times (web of science, 10.12.2025)
A Crystal-Engineered Hydrogen-Bonded Octachloroperylene Diimide with a Twisted Core: An n-Channel Organic Semiconductor

13. 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), cited 682 times (web of science, 10.12.2025)
High-Performance Air-Stable n-Channel Organic Thin Film Transistors Based on Halogenated Perylene Bisimide Semiconductors

14. X. Zhang, S. Rehm, M. M. Safont-Sempere, F. Würthner
Nature Chemistry **1**, 623–629 (2009), cited 559 times (web of science, 10.12.2025)
Vesicular perylene dye nanocapsules as supramolecular fluorescent pH sensor systems

15. 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 612 times (web of science, 10.12.2025)
Photoluminescence and conductivity of self-assembled π-π stacks of perylene bisimide dyes

16. T. E. Kaiser, H. Wang, V. Stepanenko, F. Würthner
Angew. Chem. Int. Ed. **46**, 5541–5544 (2007), cited 503 times (web of science, 10.12.2025)
Supramolecular construction of fluorescent J-aggregates based on hydrogen-bonded perylene dyes

17. U. Rösch, S. Yao, R. Wortmann, F. Würthner,
Angew. Chem. Int. Ed. **45**, 7026–7030 (2006), cited 403 times (web of science, 10.12.2025)
Fluorescent H-aggregates of merocyanine dyes

18. 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 414 times (web of science, 10.12.2025)
Supramolecular p-n-Heterojunctions by Co-Self-Organization of Oligo(*p*-phenylene Vinylene) and Perylene Bisimide Dyes

19. F. Würthner, S. Yao, T. Debaerdemaeker, R. Wortmann
J. Am. Chem. Soc. **124**, 9431–9447 (2002), cited 310 times (web of science, 10.12.2025)

Dimerization of Merocyanine Dyes. Structural and Energetic Characterization of Dipolar Dye Aggregates and Implications for Nonlinear Optical Materials

20. F. Würthner, C. Thalacker, S. Diele, C. Tschierske
Chem. Eur. J. **7**, 2245–2253 (2001); cited 658 times (web of science, 10.12.2025)
Fluorescent J-type Aggregates and Thermotropic Columnar Mesophases of Perylene Bisimide Dyes

5 Significant Review Articles

1. F. Würthner,
Angew. Chem. Int. Ed. **59**, 14192–14196 (2020), cited 659 times (web of science, 08.08.2026)
Aggregation-Induced Emission (AIE): A Historical Perspective

2. M. Wehner, F. Würthner
Nat. Rev. Chem. **4**, 38–53 (2020), cited 557 times (web of science, 08.08.2026)
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 1728 times (web of science, 08.08.2026)
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 2523 times (web of science, 08.08.2026)
J-Aggregates: From Serendipitous Discovery to Supramolecular Engineering of Functional Dye Materials

5. F. Würthner
Chem. Comm. 14, 1564–1579 (2004); cited 2373 times (web of science, 08.08.2026)
Perylene bisimide dyes as versatile building blocks for functional supramolecular architectures

Würzburg, October 2026