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born 1964, Villingen-Schwenningen, Germany

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**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 (temporarily 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** dyes and organic semiconductors, supramolecular dye chemistry, functional dye aggregates, self-assembled photofunctional materials, artificial photosynthesis, solar energy conversion

**Project Coordination**

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> ; 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

**Awards and Calls**

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

2016	Fellow of the Royal Society of Chemistry (FRSC) Elhuyar-Goldschmidt Award (Royal Chemical Society Spain) Elsevier Award (Japanese Photochem. Association)
2015	Emanuel Vogel Lecture (University of Cologne)
since 2014	Listed as Highly Cited Researcher
2014	K. S. Krishnan Memorial Lecture (Indian Association of the Cultivation of Science, Kolkata)
2009	Max-Planck Director position offered by MPI of Solid State Research, Stuttgart (declined)
2009	Steinhofer Lecture Award (University of Freiburg)
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)
2003	Tarrant Lecture Award (University of Florida)
2002	Arnold Sommerfeld Award (Bavarian Academy of Science)

### Visiting

#### Professorships

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

#### Editorial Boards

since 2015	Associate Editor of <i>Organic Chemistry Frontiers</i> (Royal Society of Chemistry)
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

since 2020	Member of the Academic Advisory Committee of the Institute of Chemistry, Academia Sinica, Taiwan
since 2010	Member of the Scientific Council and Curator of the <i>Fonds der Chemischen Industrie</i>
2011-2014	Member Evaluation Panel 5 of the European Research Council (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 Max-Planck Society

## Conference Organization

2023	Chairman of the 12. Conference of <i>Solar Technologies Go Hybrid</i>
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

> 600 publications, among them 87 in *Angewandte Chemie* and 56 in the *Journal of the American Chemical Society*.

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> 20 granted patents and > 300 lectures in 1997 – 2022.

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

## Selection of Plenary Lectures at International Conferences (last 6 years)

2019	<i>18. International Conference on Novel Aromatic Compounds (ISNA)</i> , Sapporo, Japan
2018	<i>International Conference on Science and Technology of Synthetic Metals (ICSM)</i> , Busan, Korea
2017	<i>52nd Conference on Stereochemistry</i> , Bürgenstock
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

## 20 significant original 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. U. Rösch, S. Yao, R. Wortmann, F. Würthner,  
*Angew. Chem. Int. Ed.* **45**, 7026–7030 (2006)  
Fluorescent H-aggregates of merocyanine dyes

6. 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
7. X. Zhang, S. Rehm, M. M. Safont-Sempere, F. Würthner  
*Nature Chemistry* **1**, 623–629 (2009)  
Vesicular perylene dye nanocapsules as supramolecular fluorescent pH sensor systems
8. 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
9. 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
10. 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
11. D. Görl, X. Zhang, V. Stepanenko, F. Würthner  
*Nature Comm.* **6**, 7009 (2015)  
Supramolecular block copolymers by kinetically controlled co-self-assembly of planar and core-twisted perylene bisimides
12. S. Ogi, V. Stepanenko, K. Sugiyasu, M. Takeuchi, F. Würthner  
*J. Am. Chem. Soc.* **137**, 3300–3307 (2015) [287 citations 01.02.2022]  
Mechanism of Self-Assembly Process and Seeded Supramolecular Polymerization of Perylene Bisimide Organogelator
13. M. Schulze, V. Kunz, P. D. Frischmann, F. Würthner  
*Nature Chemistry* **8**, 576-583 (2016)  
A supramolecular ruthenium macrocycle with high catalytic activity for water oxidation that mechanistically mimics photosystem II
14. 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
15. X. Wen, A. Nowak-Król, O. Nagler, F. Kraus, N. Zhu, N. Zheng, M. Müller, D. Schmidt, Z. Xie, F. Würthner  
*Angew. Chem. Int. Ed.* **58**, 13051–13055 (2019)  
Tetrahydroxy-Perylene Bisimide Embedded in a Zinc Oxide Thin Film as an Electron-Transporting Layer for High-Performance non-Fullerene Organic Solar Cells
16. K. Shoyama, F. Würthner,

- J. Am. Chem. Soc.* **141**, 13008–13012 (2019)  
Synthesis of a Carbon Nanocone by Cascade Annulation
17. J. Kim, T. Schembri, D. Bialas, M. Stolte, F. Würthner  
*Adv. Mater.* **2021**, 2104678  
Slip-Stacked J-Aggregate Materials for Organic Solar Cells and Photodetectors
  18. T. He, M. Stolte, Y. Wang, R. Renner, P. Ruden, F. Würthner, C. Frisbie  
*Nature Materials*. **20**, 1532–1538 (2021)  
Site-specific chemical doping reveals electron atmospheres at the surfaces of organic semiconductor crystals
  19. M. Mahl, M. A. Niyas, K. Shoyama, F. Würthner  
*Nature Chemistry* **14**, DOI 10.1038/s41557-021-00861-5 (2022)  
Multilayer stacks of polycyclic aromatic hydrocarbons
  20. 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

Würzburg, January 2023