

## Prof. Dr. Svetlana B. Tsogoeva

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Homepage: <https://www.chemistry.nat.fau.eu/tsogoeva-group/>  
Position: Professor of Organic Chemistry  
Children: one son (b. 2008)



### Academic Training with Degrees

09/1990 - 07/1995 **Chemistry**  
Diploma in Chemistry *with highest honours*  
Department of Chemistry, St.-Petersburg State University, Russia

### Academic Degrees

09/2005 **Juniorprofessorship/Qualification as Associate Professor**  
Organic Chemistry, University of Göttingen, Germany  
10/1998 **Doctoral Dissertation/PhD**  
Organic & Bioorganic Chemistry, Department of Chemistry,  
St.-Petersburg State University, Russia

### Professional Background after Degree

02/2007 - to date **Professor of Organic Chemistry (W2)**  
Institute of Organic Chemistry I, University of Erlangen-Nürnberg  
10/2005 - 01/2006 **Juniorprofessor** – after positive evaluation – *Period 2*  
Institute of Organic and Biomolecular Chemistry, University of  
Göttingen  
01/2002 - 09/2005 **Juniorprofessor** – *Period 1*  
Institute of Organic and Biomolecular Chemistry, University of  
Göttingen  
07/2000 - 12/2001 **Research Scientist**  
Fine Chemicals Division, Degussa AG and Creavis GmbH, Germany  
11/1998 – 06/2000 **Postdoctoral fellow**  
DFG Graduiertenkolleg "Chemische und Biologische Synthese von  
Wirkstoffen", Institute of Organic Chemistry, University of  
Frankfurt/Main

### Honors and Awards:

2012 Otto-Röhm Research Award  
2008 Tetrahedron: Asymmetry "Most Cited Paper 2005-2008 Award"  
2007 Thieme Chemistry Journal Award 2007  
2006 GDCh (*Gesellschaft Deutscher Chemiker*) Travel Award  
2006 FCI (*Fonds der Chemischen Industrie*) Travel Award  
2006 CERC3 (*Chairmen of the European Research Councils' Chemistry  
Committees*) Travel Award  
2005 JSP Junior Scientist Award (*EUCHEM*)  
2003 Förderpreis des FCI (*Fonds der Chemischen Industrie*)  
1998-2000 Postdoctoral Research Fellowship; DFG Graduate School "*Chemische  
und Biologische Synthese von Wirkstoffen*"  
1995-1998 Procter & Gamble Postgraduate Research Fellowship

## Scientific Interests:

1. Development of novel organocatalytic domino reactions and one-pot process for the synthesis of bioactive compounds, chiral drugs and fluorescent materials;
2. Design and synthesis of artemisinin-derived hybrids as potent anticancer, antiviral and antimalarial agents;
3. Asymmetric organocatalysis with bifunctional thiourea-amines, short peptides and BINOL-phosphates.

## Statistical Information:

Publications in refereed international journals: >125, h-index: 40

### 10 Selected Publications:

1. Artemisinin-(Iso)Quinoline Hybrids by C-H Activation and Click Chemistry: Combating Multidrug-Resistant Malaria. A. Çapcı, M. M. Lorion, H. Wang, N. Simon, M. Leidenberger, M. C. Borges Silva, D. R. M. Moreira, Y. Zhu, Y. Meng, J. Y. Chen, M. Lee, O. Friedrich, B. Kappes, J. Wang, L. Ackermann, S. B. Tsogoeva, **Angew. Chemie. Int. Ed.**, 2019, 58, 13066.
2. Facile Access to Challenging ortho-Terphenyls via Merging Two Multi-Step Domino Reactions in One-Pot: A Joint Experimental/ Theoretical Study. B. W. Grau, S. Bönisch, A. Neuhauser, F. Hampel, A. Görling, S. B. Tsogoeva, **ChemCatChem**, 2019, 11, 3982 (Invited Article in a Special Issue "Women of Catalysis").
3. F. E. Held, A. A. Guryev, T. Fröhlich, F. Hampel, A. Kahnt, C. Hutterer, M. Steingruber, H. Bahsi, C. von Bojničić-Kninski, D. S. Mattes, T. C. Foertsch, A. Nesterov-Mueller, M. Marschall, S. B. Tsogoeva. Facile access to potent antiviral quinazoline heterocycles with fluorescence properties via merging metal-free domino reactions. **Nature Commun.**, 2017, 8: 15071.
4. C. M. Bock, G. Parameshwarappa, S. Bönisch, C. Neiss, W. Bauer, F. Hampel, A. Görling, S. B. Tsogoeva. Generation of Complex Azabicycles and Carbobicycles from Two Simple Compounds in a Single Operation through a Metal-Free Six-Step Domino Reaction. **Chem. Eur. J.** 2016, 22, 5189.
5. T. Fröhlich, A. Çapcı Karagöz, C. Reiter, S. B. Tsogoeva, Artemisinin-Derived Dimers: Potent Antimalarial and Anticancer Agents. **J. Med. Chem.**, 2016, 59, 7360.
6. C. Reiter, S. López-Molina, B. Schmid, C. Neiss, A. Görling, S. B. Tsogoeva. Michael Addition of N-unprotected 2-Oxindoles to Nitrostyrene Catalyzed by Bifunctional Tertiary Amines: Crucial role of dispersion interactions. **ChemCatChem**, 2014, 6, 1324.
7. S.-W. Wei, R. Messerer, S. B. Tsogoeva, Asymmetric Synthesis of *beta*-Adrenergic Blockers via Multi-step One-Pot Transformations involving *in situ* Chiral Organocatalyst Formation. **Chem. Eur. J.**, 2011, 17, 14380.
8. A. Zamfir, S. B. Tsogoeva, Asymmetric Hydrocyanation of Hydrazones Catalyzed by *in situ* Formed O-silylated BINOL-Phosphate: A Convenient Access to Versatile  $\alpha$ -Hydrazino Acids. **Org. Lett.**, 2010, 12, 188.
9. S. B. Tsogoeva, S.-W. Wei, M. Freund, M. Mauksch, Generation of Highly Enantioenriched Crystalline Products in Reversible Asymmetric Reactions with Racemic or Achiral Catalysts. **Angew. Chem. Int. Ed.**, 2009, 48, 590.
10. D. A. Yalalov, S. B. Tsogoeva, T. E. Shubina, I. M. Martynova, T. Clark, Evidence for an Enol Mechanism in a Highly Enantioselective Mannich-type Reaction Catalyzed by Primary Amine-Thiourea. **Angew. Chem. Int. Ed.** 2008, 47, 6624.

### **Guest Editor:**

- Symmetry, Special Issue on “Asymmetric Organocatalysis, 2011”
- Asymmetric Catalysis, Special Issue on “Asymmetric Organocatalysis, 2014”
- Symmetry, Special Issue on “Asymmetric Catalysis, 2015”
- MOLECULES, Special Issue “Artemisinin: Against Malaria, Cancer and Viruses”, 2016/2017
- ChemCatChem (together with *co-Guest Editors* Lutz Ackermann and Guangbin Dong), Special Collection “The Catalysis of Ring Synthesis”, 2020

### **Award Selection Committee Member:**

- Committee Member “Symmetry 2018 Young Investigator Award”
- Committee Member “Symmetry 2018 Travel Awards”
- Committee Member & Chairperson: GDCh Award “Marie Skłodowska-Curie – Wilhelm Klemm-Vorlesung”

### **Editorial Board Member:**

ACS Medicinal Chemistry Letters (since 2020)  
Russian Journal of Organic Chemistry (since 2019)  
Pharmaceuticals (since 2019)  
Academic Editor at PeerJ (since 2019)  
Journal of Chemistry (since 2012)  
Symmetry (since 2009)

### **Reviewer of Research Grants for:**

- ACS PRF (American Chemical Society Petroleum Research Fund)
- DFG (Deutsche Forschungsgemeinschaft)
- ERC (European Research Council) Consolidator Grants
- FWF (Austrian Science Fund)
- ISF (Israel Science Foundation)
- NWO (Netherlands Organisation for Scientific Research)

### **Other Memberships / Activities**

- CM0703 COST Action on “Systems Chemistry”
- Erlangen Catalysis Resource Center (ECRC)
- Graduate School Molecular Science (GSMS)
- Emil Fischer Graduate School (EFS)
- Interdisciplinary Center for Molecular Materials (ICMM)
- CORE Steering Committee & Supervisory Board
- Applied Protein Centre Erlangen (APCE)

### **Memberships / Activities at Friedrich-Alexander University Erlangen-Nürnberg (FAU)**

- **11/2010 – present:** Mitglied des Prüfungsausschusses für Chemie, Molecular Science (Diplom, Bachelor, Master)
- **10/2011 – 10/2013:** Mitglied der Kollegialen Leitung Department Chemie und Pharmazie
- **10/2013 – present:** Mitglied des Fakultätsunterausschusses für die Verwendung der Studienzuschüsse in der Lehrereinheit Chemie
- **05/2013 – present:** Beiratsmitglied des Universitätsbundes Erlangen-Nürnberg e.V.
- **05/2014 – present:** Mitglied des Wissenschaftlichen Beirats der FAU University Press
- **10/2014 – present:** Mitglied des Promotionsausschusses der Naturwissenschaftlichen Fakultät