

Tabular CV, scientific track record and additional activities

Prof. Dr. Ulrich S. Schubert

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Date of birth: July 17th, 1969 (married; three daughters)



Research highlights:

- Metallo-supramolecular polymers, self-assembly, conjugated polymers
- Tailored functional macromolecules and nanoparticles
- Drug delivery systems & bio-compatible materials
- Responsive, self-healing and shape responsive materials
- High-throughput experimentation, (co)polymer characterization
- Inkjet printing functional materials
- Energy creation and storage (batteries), OLED's, sensors
- Nanolithography and nanochemistry

Education and scientific career:

1988-1993 Study of Chemistry, University Frankfurt and University Bayreuth
1993 Diploma in Chemistry, University Bayreuth
1993-1995 PhD studies, University Bayreuth (Prof. Eisenbach) and University of South Florida/USA (Prof. Newkome); PhD thesis in Bayreuth
1995-1996 Postdoc, Université Louis Pasteur Strasbourg/France (Prof. Lehn, Nobel laureate 1987)
1996-1999 Habilitation in Chemistry, TU Munich (Prof. Nuyken)
1999 Venia legendi in Chemistry, TU Munich
1999-2000 Substitution of professorship (C3), Center for Nanoscience, LMU Munich
2000-2007 Full Professor, Laboratory for Macromolecular Chemistry and Nanoscience, Eindhoven University of Technology/Netherlands
2005-today Scientific Chairman Technology Area HTE, Dutch Polymer Institute/Netherlands
2007-today Professor and chair (W3), Friedrich-Schiller-University (FSU) Jena

Administrative duties and memberships:

Since 1999 Member of CeNS/Munich and member of the advisory board ENAS/ Fraunhofer Chemnitz (2008-2016) and DKI/Darmstadt (2007-2012)
Since 2002 PI in more than 20 projects of the Dutch Polymer Institute/Netherlands
2002 – 2006 Member of the National Netherlands Hazardous Substances Council
2002 – 2007 Board member of the Center for Nanomaterials (cNM), Eindhoven
Since 2004 (Co-)Organization of 5 ACS National Meeting Symposia, one MRS Symposium and 10 DPI Workshops
2007 – 2013 Director (“Geschäftsführender Direktor”) of the Institute of Organic Chemistry and Macromolecular Chemistry (IOMC), FSU
2008 – 2014 Spokesman of the research focus “Innovative Materials and Technologies”, FSU
2010 – 2013 Vice Dean of the Faculty of Chemistry and Earth Sciences, FSU
Since 2010 Coordinator of the DFG Priority Program (SPP 1568) “Design and Generic Principles of Self-healing Materials”
Since 2011 Director of the Jena Center for Soft Matter (JCSM), FSU
Since 2012 Member of the Faculty Board, FSU
Since 2013 Member of the Board of the Division Macromolecular Chemistry of the German Chemical Society
Since 2013 Dean of the Faculty of Chemistry and Earth Sciences, FSU
Since 2014 Vice-Spokesman of the Research Profile Line “Light”, FSU
Since 2014 Member coordination group “research region Jena”, FSU, State of Thuringia

Prices, honors, and scientific ranking:

725 publications in refereed journals/proceedings, 32 patents, editor of two books, guest editor for five special issues in *Macromol. Rapid Commun.* and *J. Comb. Chem.*, author of the textbooks on “Modern terpyridine chemistry” and “Terpyridine-based materials – For catalytic, optoelectronic and life science applications”

>23260 citations, h-index: 74 (Web of Science 12/14); Essential Science Indicators ranking: Chemistry #173 (out of 879700 chemists), Materials: #193 (out of 455000 materials scientists)

1995	Scholarship for graduation, FCI
1996	Bavarian habilitation award (Zehetmair Price)
1998	Habilitation award, GDCh (Section Macromolecular Chemistry)
1999	Heisenberg scholarship, DFG
2000	Lecturer scholarship, FCI
2003	Guest professorship Université Catholique de Louvain, Belgium
2004	VICI award of the Netherland Organization for Scientific Research (1.25 M€)
2007	W3 calls to Jena (accepted) and to Stuttgart as well as to Hamburg (declined)
2008	RSC Travel Award, UK
2009	Jan Pieter Lemstra Innovation Award, Dutch Polymer Institute
2010	International Biannual BPG Award, Belgian Polymer Group
2011	Innovation awards, Dutch Polymer Institute, The Netherlands
2012	ACS Division of Polymer Chemistry, POLY Distinguished Service Award, USA
2013	Call to London (University College London/UCL), Director Centre for Materials Discovery and Professor Materials Discovery (declined)
2013	Molecular Science Forum Professorship, Institute of Chemistry, Chinese Academy of Science (CAS), Beijing (China)
2014	Innovation awards, Dutch Polymer Institute, The Netherlands
2014	Fellow of the Royal Society of Chemistry (FRSC), RSC, UK
2014	ISI “Highly cited researcher” in Materials Science

Education and teaching (last 5 years):

Graduation of 45 Ph.D. students, supervision of 60 Diploma/Master theses, mentor of two habilitations, involvements in summer schools and Ph.D. education programs in the Netherlands, the Czech Republic and Germany, undergraduate and graduate courses in Organic Chemistry, Macromolecular Chemistry, Nanoscience, Material Science and Analytical Chemistry in Eindhoven and Jena.

Memberships in editorial advisory boards / Associate Editor:

Soft Matter, *Macromol. Rapid Commun.*, *Macromol. Chem. Phys.*, *Polym. Chem.* and *J. Polym. Sci., Part A: Polym. Chem.*, *ChemistryOpen*; Associate Editor *ACS Comb. Sci.*

Conference organizations:

5 Symposia at ACS National Meetings on “metallo-supramolecular and metal-containing polymers”, symposium on “microwave-assisted polymerizations”, workshop of the Dechema on “high-throughput formulation”, symposium at a MRS Meeting on “combinatorial material research”, 10 workshops of the Dutch Polymer Institute

Ten important publications of the last five years:

- A. T. Press, A. Traeger, C. Pietsch, A. Mosig, M. Wagner, M. G. Clemens, N. Jbeily, N. Koch, M. Gottschaldt, N. Bézière, V. Ermolayev, V. Ntziachristos, J. Popp, M. M. Kessels, B. Qualmann, U. S. Schubert, M. Bauer
Cell type-specific delivery of short interfering RNAs by dye-functionalised theranostic nanoparticles
Nature Commun. **2014**, 5:5565 (1-13) (impact factor 10.7)
- F. Kretschmer, U. Mansfeld, S. Hoepfener, M. D. Hager, U. S. Schubert
Tunable synthesis of poly(ethylene imine)-gold-nanoparticle clusters
Chem. Commun. **2014**, 50, 88 – 90 (impact factor 6.7)
- Almut M. Schwenke, Steffi Stumpf, Stephanie Hoepfener, **Ulrich S. Schubert**
Free-Standing Carbon Nanofibrous Films Prepared by a Fast Microwave-Assisted Synthesis Process
Adv. Funct. Mater. **2014**, 24, 1602 – 1608
- T. Janoschka, A. Teichler, B. Häupler, T. Jähnert, M. D. Hager, U. S. Schubert
Reactive inkjet printing of cathodes for organic radical batteries
Adv. Energy Mater. **2013**, 3, 1025 – 1028 (impact factor 14.4)
- M. J. Barthel, T. Rudolph, A. Teichler, R. M. Paulus, J. Vitz, S. Hoepfener, M. D. Hager, F. H. Schacher, U. S. Schubert
Self-healing materials via reversible crosslinking of poly(ethylene oxide)-*block*-poly(furfuryl glycidyl ether) (PEO-*b*-PFGE) block copolymer films
Adv. Funct. Mater. **2013**, 23, 4921 – 4932 (impact factor 10.4)
- A. C. Rinkenauer, A. Schallon, U. Günther, M. Wagner, E. Betthausen, U. S. Schubert, F. H. Schacher
A paradigm change: Efficient transfection of human leukemia cells by stimuli-responsive multicompartement micelles
ACS Nano **2013**, 7, 9621 – 9632 (impact factor 12.0)
- S. Bode, L. Zedler, F. H. Schacher, B. Dietzek, M. Schmitt, J. Popp, M. D. Hager, U. S. Schubert
Self-healing polymer coatings based on crosslinked metallosupramolecular copolymers
Adv. Mater. **2013**, 25, 1634 – 1638 (impact factor 15.4)
- U. Mansfeld, S. Höpfener, U. S. Schubert
Investigating the motion of diblock-copolymer micelles in ionic liquids by in-situ electron microscopy
Adv. Mater. **2013**, 25, 761 – 765 (impact factor 15.4)
- J. Perelaer, R. Jani, M. Grouchko, A. Kamyshny, S. Magdassi, U. S. Schubert
Plasma and microwave flash sintering of a tailored silver nanoparticle ink yielding 60% bulk conductivity on cost-effective polymer foils
Adv. Mater. **2012**, 24, 3993 – 3998 (impact factor 15.4)
- G. R. Whittell, M. D. Hager, U. S. Schubert, I. Manners
Functional soft materials from metallo- and metallosupramolecular polymers
Nature Mater. **2011**, 10, 176-188 (impact factor 36.4)

Recent third-party projects (since April 2007):

BMBF "Spitzencluster" PhoNa, DFG "Normalverfahren" and cooperation with Japan, DFG SPP 1568, BMBF "Wachstums Kern Unternehmen Region" BASIS, 11 DPI projects, EU FW7, Carl-Zeiss-Foundation (W1 Professorship, "Strukturantrag", Fellowships), BASF, Bayer, Evonik, Konarka, Ivoclar, Talga, etc. (>21 M€)

Currently, the Schubert-group consists of 10 Postdocs/junior group leaders and 34 Ph.D. students as well as 8 technical staff members from 10 nations.

Additional activities/interests

Concerts as clarinet player in chamber music ensembles and orchestra (e.g. Alte Oper Frankfurt, Markgräfliches Opernhaus Bayreuth, Prinzregenten-Theater München, Gasteig München, Philharmonie Bratislava, Tampa Bay Performing Art Center Florida): chamber music courses with Prof. Alfons Kontarsky, Hagen-String-Quartett, Abegg-Trio, Jan Doormann (Soloclarinet Staatskapelle Weimar), Prof. Francois Benda (Musikhochschule Basel) and others.

Founder and artistic director of the concert series "Forum Junger Musiker" and the "INTERNATIONALE JUNGE ORCHESTERAKADEMIE", artistic director ("Intendant") of the Bayreuther Osterfestival (www.osterfestival.de).

Organization of more than 500 benefit concerts for children with cancer in Germany, the Netherlands, Austria, the Czech Republic and the Slovak Republic (raising > 1.000.000 € for dedicated projects), production of 19 benefit CD's.

Establishment of a foundation in Bayreuth (Kultur- und Sozialstiftung), "Vorstandsvorsitzender" (chairman of the board).

Establishment of a foundation in Jena (Foundation Nanotechnology), "Vorstandsvorsitzender" (chairman of the board).