

Carmen Scholz, Ph.D.
Professor of Chemistry
Member Executive Editorial Board *Polymer International*
Fellow of the ACS POLY Division

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Education:

July, 1987

Diploma (MS) in Polymer Chemistry

University of Technology, Dresden, Germany

Thesis Subject: "Structure and Dyeing Kinetics of High Wet Modulus Fibers"

November, 1991

Dr. rer.nat. (Ph.D.) in Chemistry

University of Technology, Dresden, Germany

Thesis Subject: "Dyeing Behavior of High Wet Modulus Fibers"

Research and Professional Experience

2025- Chair Faculty Senate Research Committee
2021-2022 President of the Faculty Senate
2017-2018 President of the Faculty Senate
2015-2017 Interim Department Chair
2009- Professor, Department of Chemistry, University of Alabama in Huntsville, AL
2004-2009 Associate Professor, Department of Chemistry, Univ. of Alabama in Huntsville
1998-2004 Assistant Professor, Department of Chemistry, Univ. of Alabama in Huntsville
2004/2005 Assistant Department Chair
2000-2010 Adjunct Professor, Department of Chemical Engineering, UAH
2001- Faculty Member of the Biotechnology and Engineering Ph.D. Program, UAH
1999- Faculty Member of the Materials Science Ph.D. Program, UAH
1996-1998 Research Associate, Department of Chemistry, University of Massachusetts,
Lowell, MA
1994-1996 Research Scientist, International Center for Biomaterials Science at Science
University, Tokyo, Noda-Campus, Japan
1992-1994 Postdoctoral Research Associate, Department of Polymer Science and
Engineering, University of Massachusetts Amherst, MA
1991-1992 Senior Research Assistant, University of Technology, Dresden, Germany
1987-1991 Research Assistant, University of Technology, Dresden, Germany

Other Professional Experience

2022 Organized ACS symposium on: Translational Polymer Research
2021/22 UAH: Provost Search Committee
2014 UAH: Search Committee: Dean of Science
2014 Sabbatical: Martin Luther University Halle, Germany (1 semester)
2013 - Associate Editor: *Journal of Bioactive and Compatible Polymers*
2013 UAH: Search Committee: VP for Research
2011, 12, 13 Fulbright Selection Committee
2012-2013 Technical Editor: *Journal of Bioactive and Compatible Polymers*

2008, 10,12, 14, 16, 18 Organized/ Co-organized 9th, 10th, 11th, 12th, 13th, 14th Biorelated Polymers Symposium within International ACS Conferences

2010, 2012 Org. Committee: Internat. Conf. on Biomaterials 2011 and 2013, Tsukuba, Japan

2010-2012 UAH Research Council

2009 UAH Realignment Committee

2009 Editorial Board *Journal of Polymers and the Environment*

2009 Executive Editor: *Polymer International*

2008, 11, 14, 17 Organized Biomaterials Session at Mexican-American Polymer Symposium

2007-2013 Advisory Editorial Board *Journal of Bioactive and Compatible Polymers*

2007 Co-founded Alamanda Polymers, Inc.

2006 Sabbatical: University of Tokyo, Tokyo, Japan, (1 semester)

2005-2009 Associate Editor North America for *Polymer International*

2005 Organized ACS symposium: Degradable Polymers and Materials

2003-2011 Consultant Biodegradable Products Institute, New York, NY

2002/2003 Visiting Lecturer, Martin-Luther –University, Halle-Wittenberg, Germany

2002 Visiting Researcher, Tufts University, Medford, MA (summer 3 months)

2002-2005 Chair: University Laboratory Safety Committee

2002-2012 Member Boston Retinal Implant Project

2000, 2001 Visiting Researcher, University of New South Wales, Sydney Australia

Current International Collaborations

University of Technology, Dresden, Germany (contact: Dr. Gerlad Gerlach)
 Martin Luther University, Halle-Wittenberg, Germany (contact: Dr. Joerg Kressler)
 Oyama National College, Oyama, Japan (contact: Dr. Michihiro Iijima)

Editorial Boards:

Polymer International:	Executive Editorial Board
Journal of Bioactive and Compatible Polymers	Associate Editorial Board & Technical Editor

Students:

Graduated with Ph.D. degree:

Dr. Jeff Sparks,	1 st employed by: Celsion- Egen	Ph.D. advisor
Dr. Luke Theogarajan, at MIT	1 st employed by: Asst. Professor at UCSB	Ph.D. co-advisor
Dr. Madan Gopal,	returned to India	Ph.D. co-advisor
Dr. Tracy Armstrong,	1 st employed by: Nektar Therapeutics	Ph.D. advisor
Dr. Keerthi Venkataramanan,	1 st employed b:: Novozymes	Ph.D. advisor
Dr. Robyn Sweitzer	1 st employed by: Redstone Arsenal	Ph.D. advisor
Dr. Javier Sanchez	1 st employed by: Lonza Biologics	Ph.D. advisor
Dr. David Ulkoski	1 st employed by: Astra-Zeneca	Ph.D. advisor
Dr. Samuel Nkrumah-Agyeefi	1 st employed by: TX Railroad Comm.	Ph.D. advisor
Dr. Unnati Patel	1 st employed by: Avanti Polaris Lipids	Ph.D. co-advisor
Dr. Kavini Rathanayake	1 st employed by: Cascadia College	Ph.D. co-advisor
Dr. Nirupama Singh	1 st employed by: Laysan Bio	Ph.D. advisor
Dr. Adekunle Akinmola	1 st employed by: Avanti Polaris Lipids	Ph.D. advisor
Dr. Leah Johnson		Ph.D. advisor

Graduated with MS degree:

Radhika Thiruvencatam,	1 st employed by: St. Jude Children's Hospital
Balamurugan Marimuthu	1 st employed by: Biomedical Device Industry

Julie Zanzig	1 st employed by: teaching at Community College
Meera Tiruvenkata	1 st employed by: Qiaqen
Mona Chaudhary	1 st employed by: Daikin, Decatur, AL
Mar Piernavieja	UAH PhD program
Stephen Bell	1 st employed by: Daikin, Decatur, AL
Luke Viegas	1 st employed by: Daikin, Houston, TX
Jonathan Kilroy	1 st employed by: PhD student Boston University
Benjamin Hession	1 st employed by: Lecturer UAH
Robert Mills	1 st employed by: PPD, ThermoFisher
Marisa Thompson	1 st employed by: NeXolve, Huntsville, AL
Carl Amborski	Alabama College of Osteopathic Medicine
Andrew Sentell	1 st employed by: NeXolve, Huntsville, AL

Advised: numerous undergraduate students

Postdoctoral Associates:

Dr. Willy Vayaboury	Alamanda Polymers, Huntsville, AL	post-doc advisor
Dr. Rodolphe Obeid	IntelgenX corp., Montreal	post-doc advisor
Dr. Javier Sanchez	Lonza Biologics, Spain	post-doc advisor
Dr. David Ulkoski	Astra Zeneca, Waltham, MA	post-doc co-advisor

Foreign Graduate Students Advised (study abroad from their respective universities)

Marcus Jenzsch	Grad. Student, Chemistry, ML University Halle, Germany
Kristin Kirchhoff	Grad. Student Biotechnology, ML University Halle, Germany
Eva Vagnon	Grad. Student, Pharmacology, Univ. Montpellier, France
Steffen Fiedler	Grad. Student, Chem. Eng., ML University Halle, Germany
Sabine Kirsten	Grad. Student TU Dresden, Germany
Carola Jorsch	Grad. Student TU Dresden, Germany
Christoph Kroh	Grad. Student TU Dresden, Germany

Teaching:

- * Polymer Synthesis and Characterization (CH 440/540, MTS 649)
- * Polymer Physics (CH 645, MTS 747)
- * Quantitative Analysis (CH 223)
- * Polymeric Drug Delivery (CH 735, CHE 559)
- * Scientific Writing (CH 711)
- * ST: Polymers in Drug Delivery, Polymeric Encapsulants, Polymer Characterization, Physical Polymer Characterization, Microbial Polymer Synthesis, Fluoropolymers,
- * Introduction to Chemical Research (CH 493, CH 492, CH 491)
- * Chemistry Seminar (CH 780)
- * Advanced Organic Chemistry Lab (CH 337)
- * Elementary Organic Chemistry (CH 113)
- * Freshmen Chemistry (CH 121)

Services to the Profession:

- * ACS (American Chemical Society): symposium organizer, reviewer
- * ACS North Alabama Section: Secretary
- * Consultant to Biodegradable Polymer Institute, New York, NY (2001-2011)
- * Bio/Environmental Polymer Society (1998-2011): membership chair

Publications:

- * 87 publications, (68 peer-reviewed, 19 conference proceedings)
- * edited one book Wiley
- * edited six books within the *ACS Symposium Series*

- * edited a special issue on Polymers in Biomedical application for *Progress in Polymer Science*
- * Patents: 2 (USP 5,925,720, WO 2006076008)

Research Projects: Current:

- * Synthesis and physical properties of poly(amino acid)s
Collaborative Research: Magnetic Clustering using Novel poly(amino acid) Corrals to Advance Magnetic Particle Imaging
NSF CBET 2305403
- * Bacterial polyesters, synthesis and polymer-analogous conversions

Research Projects: Finished:

- * Collaborative Research: Biodiesel-derived butanol: Lipid membrane vesicle mediated extraction enables continuous fermentation processes
NSF CBET 09/15-08/19
- * PEGylated poly(amino acid) a polymer platform for biomedically relevant polymers
- * Engineering Development of a Chronic Retinal Implant, funded by Boston VA Medical Center
- * Collaborative Research: Investigating and Improving the Production of Butanol
NSF CBET
- * Effect of chemical diversity of crude oil on biochemical transformation
Marine Environment Science Consortium (BP)
- * Research into Bacterial Polyesters
NSF, NASA Goodard, ACS-PRF

Awards and honors:

2021	American Chemical Society, Division of Polymer Science: POLY Fellows Award	
2014	College of Science Service Award	
2000	Student-Government Association Outstanding Faculty Award	
1994	Fellowship of the Japanese Society for the Promotion of Research on Cardiovascular Diseases	
1994	Humboldt Foundation Alumni	
1992	Feodor-Lynen Fellowship of the Alexander-von-Humboldt Foundation, Germany	
1991	graduated Dr. rer.nat. (Ph.D.)	magna cum laude
1987	graduated Dipl.-chem. (M.S.)	cum laude

Memberships

- * American Chemical Society
- * American Association of University Professors

Languages:

Fluent in English and German
Limited knowledge of Russian and Japanese