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Education

University of California at Berkeley Ph.D. 1997
Thesis Advisor: Professor K. Peter C. Vollhardt
Thesis Title: *Synthetic, Theoretical, and Structural Studies on Dehydrobenzoannulenes and Phenylenes*

Oberlin College B.A. 1992
Research Advisor: Professor Martin N. Ackermann

Positions

University of Michigan, Ann Arbor, MI 2013-present
Charles G. Overberger Collegiate Professor of Chemistry

University of Michigan Energy Institute
University of Michigan, Ann Arbor, MI 2010-2013
Associate Director for Science and Technology

University of Michigan, Ann Arbor, MI 2009-present
Professor of Chemistry
Professor of Macromolecular Science and Engineering

University of Michigan, Ann Arbor, MI 2006-2009
Associate Professor of Chemistry
Associate Professor of Macromolecular Science and Engineering

University of Michigan, Ann Arbor, MI 2000-2006
Assistant Professor of Chemistry
Assistant Professor of Macromolecular Science and Engineering

Research Experience

California Institute of Technology 1997-2000
Postdoctoral Research
Professors Robert H. Grubbs and Nathan S. Lewis

University of California at Berkeley 1992-1997
Graduate Research
Professor K. Peter C. Vollhardt

Oberlin College 1991-1992
Undergraduate Research
Professor Martin N. Ackermann

Awards and Honors

Rackham Distinguished Graduate Mentoring Award	2019
ACS Akron Section Award	2015
Charles G. Overberger Collegiate Professor of Chemistry	2013-
Imes and Moore Faculty Award	2012
Associate Editor, Crystal Growth and Design, American Chemical Society	2011-2017
American Association for the Advancement of Science Fellow	2010
Member Editorial Advisory Board of Journal of Pharmaceutical Sciences	2008-2010
Alfred P. Sloan Foundation Research Fellow	2005-2007
3M Untenured Faculty Award	2003-2004
Beckman Foundation Young Investigator	2003-2005
Ralph E. Powe Junior Faculty Enhancement Award	2002
3M Untenured Faculty Award	2002-2003
Synthesis/Synlett Journals Award	2000
ACS Division of Organic Chemistry Fellowship (stipend)	1995-1996
Syntex Fellowship in Chemistry (stipend)	1994-1995
Dow Scholarship in Chemistry (for academic achievement)	1990-1992
Jewett Award (for academic achievement)	1991

Publications

Boese, R.; Matzger, A. J.; Mohler, D. L.; Vollhardt, K. P. C., "C₃-Symmetric Hexakis(trimethylsilyl)[7]-phenylene ["Tris(biphenylenocyclobutadieno)cyclohexatriene"], a Polycyclic Benzenoid Hydrocarbon with Slightly Curved Topology" *Angew. Chem., Int. Ed. Engl.* **1995**, *34*, 1478-1481.

Baldwin, K. P.; Matzger, A. J.; Scheiman, D. A.; Tessier, C. A.; Vollhardt, K. P. C.; Youngs, W. J., "Synthesis, Crystal Structure, and Polymerization of 1,2:5,6:9,10-Tribenzo-3,7,11,13-tetrahydro[14]annulene" *Synlett* **1995**, *12*, 1215-1218.

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Cammack, J. K.; Jalisatgi, S.; Matzger, A. J.; Negrón, A.; Vollhardt, K. P. C., "Room Temperature CpCo-Mediated Cyclization of α , δ , ω -Enedynes to Rearranging Strained Tricyclic Dienes: Some Observations of Kinetic versus Thermodynamic Control" *J. Org. Chem.* **1996**, *61*, 4798-4800.

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Matzger, A. J.; Vollhardt, K. P. C., "From Phenylenes to Acenes: Flash Vacuum Pyrolytic Isomerization of Angular [3]Phenylene to Benzo[*ghi*]fluoranthene" *Chem. Commun.* **1997**, 1415-1416.

Eickmeier, C.; Junga, H.; Matzger, A. J.; Scherhag, F.; Shim, M.; Vollhardt, K. P. C., "5,6,11,12,17,18-Hexadehydro-1,4,7,10,13,16-hexaethynyltribenzo[*a,e,i*]cyclododecene: Synthesis and CpCo-catalyzed Cycloisomerization to the First Superdelocalized Oligophenylenes" *Angew. Chem., Int. Ed. Eng.* **1998**, *36*, 2103-2108.

Diercks, R.; Eaton, B. E.; Gurtzgen, S.; Jalisatgi, S.; Matzger, A. J.; Radde, R. H.; Vollhardt, K. P. C., "The First Metallacyclopentadiene(alkyne) Complexes and Their Discrete Isomerization to η^4 -Bound Arenes: The Missing Link in the Prevalent Mechanism of Transition Metal Catalyzed Alkyne Cyclotrimerizations as Exemplified by Cyclopentadienylcobalt" *J. Am. Chem. Soc.* **1998**, *120*, 8247-8248.

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Eickmeier, C.; Holmes, D.; Junga, H.; Matzger, A. J.; Scherhag, F.; Shim, M.; Vollhardt, K. P. C., "A Novel Phenylene Topology: Total Syntheses of Zigzag[4]- and -[5]Phenylene" *Angew. Chem. Int. Ed.* **1999**, *38*, 800-804.

Vollhardt, K. P. C.; Cammack J. K.; Matzger A. J.; Bauer A.; Capps K. B.; Hoff C. D., "Thermodynamic and Kinetic Study of Oxidative Addition/Reductive Elimination of H_2 and D_2 to Fulvalene $\text{Cr}_2(\text{CO})_6$: First Evidence for Relatively Strong Metal-Metal Bonds in Fulvalenedimetals" *Inorg. Chem.* **1999**, *38*, 2624-2631.

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Claypool, C. L.; Faglioni, F.; Matzger, A. J.; Goddard, W. A., III; Lewis, N. S., "Effects of Molecular Geometry on the STM Image Contrast of Alkanes and Alkanols on Graphite" *J. Phys. Chem. B* **1999**, *103*, 9690-9699.

Matzger, A. J.; Lawrence, C. E.; Grubbs, R. H.; Lewis, N. S., "Combinatorial Approaches to the Synthesis of Vapor Detector Arrays for Use in an Electronic Nose" *J. Comb. Chem.* **2000**, *2*, 301-304.

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Bell, M. L.; Chiechi, R. C.; Kimball, D. B.; Johnson, C. A.; Matzger, A. J.; Wan, W. B.; Weakley, T. J. R.; Haley, M. M., "A Versatile Synthetic Route to Dehydrobenzoannulenes via in situ Generation of Reactive Alkynes" *Tetrahedron* **2001**, *57*, 3507-3520.

Bong, D. T. Y., Gentric L., Holmes D., Matzger A. J., Scherhag F., Vollhardt K. P. C., "Synthesis of bent [4]phenylene (cyclobuta[1,2-a:3,4-b']bisbiphenylene) and structure of a bis(trimethylsilyl) derivative: the last [4] phenylene isomer" *Chem. Commun.* **2002**, 278-279.

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Côté, A. P.; Benin, A. I.; Ockwig, N. W.; O'Keeffe, M; Matzger, A. J., Yaghi, O. M., "Porous, Crystalline, Covalent Organic Frameworks" *Science* **2005**, *310*, 1166-1170.

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Wong-Foy, A. G.; Matzger, A. J.; Yaghi, O. M., "Exceptional H₂ Saturation Uptake in Microporous Metal-Organic Frameworks" *J. Am. Chem. Soc.* **2006**, *128*, 3494-3495.

Grzesiak, A. L.; Uribe, F. J.; Ockwig, N. W.; Yaghi, O. M.; Matzger, A. J., "Polymer-Induced Heteronucleation for the Discovery of New Extended Solids" *Angew. Chem. Int. Ed.* **2006**, *45*, 2553-2556. (Highlighted as an Editors' Choice in the March 31, 2006 issue of Science Magazine)

Osuna, R. M.; Zhang, X.; Matzger, A. J.; Hernandez, V.; Lopez-Navarrete, J. T., "Combined Quantum Chemical Density Functional Theory and Spectroscopic Raman and UV-vis-NIR Study of Oligothienoacenes with Five and Seven Rings" *J. Phys. Chem. A.* **2006**, *15*, 5058-5065.

Plass, K. E.; Engle, K. M.; Cychosz, K. A.; Matzger, A. J., "Large-periodicity Two-Dimensional Crystals by Cocrystallization" *Nano Lett.* **2006**, *6*, 1178-1183. (Featured in the Veeco Metrology 2007 calendar as November)

Zhang, X.; Johnson, J. P.; Kampf, J. W.; Matzger, A. J., "Ring Fusion Effects on the Solid-State Properties of α -Oligothiophenes" *Chem. Mater.*, **2006**, *18*, 3470-3476.

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