

Curriculum Vitae

ANTHONY W. CZARNIK

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Personal Information: Birthdate: November 21, 1957
Citizenship: U.S.A.
Married: wife's name, Rebecca

Academic Training:

1981-1983 Columbia University, NY, NY, NIH Postdoctoral Fellow
1977-1981 University of Illinois at Urbana-Champaign, Urbana, IL
M.S. in Biochemistry awarded January, 1980
Ph.D. in Chemistry awarded October, 1981
1975-1977 University of Wisconsin-Madison, Madison, WI
B.S. (cum laude) in Biochemistry awarded August, 1977
1974-1975 University of Wisconsin-Fox Valley Center, Menasha, WI

Professional Experience:

2014-present Board Member, Deuteria Biomaterials, LLC
2014-present Founder and Board Member, Deuteria Agrochemicals, LLC
2010-present Founder & Manager, Deuteria Beverages, LLC
2011-present Board Member, DeuteRx, LLC
2008-2011 Founder & Manager, Deuteria Pharmaceuticals, LLC
2003-present Founder, Protia, LLC
2004-present Adjunct Visiting Professor of Chemistry, Univ. of Nevada at Reno
2001-2003 CSO, Sensors for Medicine and Science, Germantown, MD
1998-2000 Co-founder & CSO, Illumina, Inc., San Diego, CA (ILMN)
1996-1998 Vice-President Chemistry, IRORI, La Jolla, CA (DPH)

1993-1996 Director, BioOrganic Chemistry, Parke-Davis Pharmaceutical
Research, Ann Arbor, MI

1983-1993 Assistant, Associate Professor of Chemistry, The Ohio State
University

Honors, Activities:

Member, Board of Directors, Deuteria Pharmaceuticals, Inc. (2011-2012)
The Authors Guild (2005-present)
Visiting Adjunct Professor, University of Nevada, Reno (2003-present)
Advisory Board, 2002 'Polymers and Organic Chemistry' International Symposium
Scientific Advisory Board, Rubicon Genomics, Inc., Madison, WI (2002-2005)
Member, Faculty of 1000 (2001-2010)
Founding co-organizer, Gordon Research Conference on Combinatorial Chemistry (July, 1999)
Founding Editor, *Journal of Combinatorial Chemistry* (1998-2010)
Founding Editor, *Solid-Phase Organic Syntheses* (1998-2008)
Editorial Advisory Board, *Modern Drug Discovery* (1998-2005)
Organizing committee, German-American Frontiers of Science Symposium (1997-1998)
Co-organizer, Bioorganic Gordon conference (1997)
Editorial Board, *Current Opinion in Chemical Biology* (1997-2006)
Editorial Board, *Combinatorial Chemistry* (1997-1998)
Organizer, NATO Workshop on 'Chemosensors of Ion and Molecule Recognition' (1996)
Associate Editor, *Journal of Molecular Recognition* (1996-1998)
Editorial Advisory Board, *Accounts of Chemical Research* (1996-1998)
Editor, WWW Fluorosensor Database [<http://BioMedNet.com/fluoro/>] (1995-1999)
Editorial Board, *Organic Reactions* (1994-1997)
Visiting Professor, Université Bordeaux (1994)
Adjunct Associate Professor of Chemistry, Ohio State University (1993-1997)
Adjunct Professor of Chemistry: University of Michigan (1993-1997). Wayne State University (1994-1997), University of Toledo (1995-1997)
Camille and Henry Dreyfus Teacher-Scholar (1989-1994)
Fellow of the A. P. Sloan Foundation (1989-1991)
Eli Lilly grantee (1988)
American Cyanamid award in recognition of excellence in the advancement of science and the art of chemical synthesis (1986)
Merck and Co. Faculty grantee (1984)
NIH Postdoctoral Fellow (1981-1983)
Hodges Scholarship (University of Wisconsin)

Service:

Organizing Committee, International Symposium on Chemical Biology & Combinatorial Chemistry, Shandong University, Jinan, Shandong, China (December 28, 2006)
Head, Editor Search Committee for new ACS Journal *Molecular Pharmaceuticals* (2002-2003)
Gordon Research Conference Scheduling & Selection Committee (2000-2004)
Advisory Board, ACS Office of Technical Programming & Conferences (2000-2005)
Member, NIH Special Study Section, Biophysical and Chemical Sciences Review Group (1998-2000)
Industrial Advisory Committee, UC-San Diego (1997-present)
Member, ACS Organic Division Executive Committee (1997-2003)
Member, Gordon Research Council (1997-present)
Ad hoc member of NIH BNP Study Section (1997)
Organizing Committee for University of Michigan Chemistry/Biology Interface Program (funded by the NIH in 1996)
Invited panel member for NSF SBIR proposals (1995)
Panel member for review of NSF postdoctoral fellowship applications (1995)
Member of NSF Triennial Oversight Committee (1993)

Publications: 116 Patents: 30 Invited Seminars: 120 Presentations at Meetings: 130

Books:

Solid-Phase Organic Syntheses: Volume 1, Czarnik, A. W., Editor, Wiley Interscience, New York, 2001

Optimization of Solid-Phase Combinatorial Synthesis, Yan, B.; Czarnik, A. W., Editors, Wiley, New York, NY, 2002

Integrated Drug Discovery Technologies, Mei, H-Y; Czarnik, A. W., Editors, Marcel Dekker, New York, NY, 2002

A Practical Guide to Combinatorial Chemistry, DeWitt, S. H.; Czarnik, A. W., Editors, ACS Books, Washington, 1997

Combinatorial Chemistry: Synthesis and Application, Wilson, S. H.; Czarnik, A. W., Editors, Wiley & Sons, NY, NY, 1997

Chemosensors of Ion and Molecular Recognition, Desvergne, J.-P., Czarnik, A. W., Editors, NATO Symposium Series, Kluwer Press, 1997

Fluorescent Chemosensors for Ion and Molecule Recognition, Czarnik, A. W., Editor, ACS Books, Washington, 1993

Current Research Interests:

Improvement of the properties of commercial chemicals via deuteration. Arsenic remediation.
Combinatorial chemistry as a tool in protein-protein inhibitor discovery. Fluorescent chemosensors of ion and molecule recognition.

Curriculum Vitae

Anthony W. Czarnik was born in Appleton, Wisconsin on November 21, 1957. He attended public schools in Appleton, Combined Locks, and Kimberly, Wisconsin, and received his B.S. (cum laude) from the University of Wisconsin-Madison in 1977. His undergraduate major was biochemistry, but he carried out undergraduate research during that time in two organic laboratories, at UW-Madison (with Prof. Vedejs) and at Argonne National Laboratory (with M. MacCoss). Dr. Czarnik received his graduate training at the University of Illinois at Urbana/Champaign, obtaining both an M.S. degree (1980) in Biochemistry and a Ph.D. (1981) in Organic Chemistry under the guidance of Prof. Nelson Leonard. From 1981-1983, he was an NIH Postdoctoral Fellow at Columbia University working with Prof. Ronald Breslow on the design of artificial enzymes. He began his academic career in 1983 at The Ohio State University, on the Faculty of the Department of Chemistry. Dr. Czarnik has received both DuPont and Merck awards for new faculty, and in 1986 was presented with an American Cyanamid award in recognition of excellence in the advancement of science and the art of chemical synthesis. He was named an Eli Lilly awardee in 1988, a Fellow of the Alfred P. Sloan Foundation in 1989, and a Teacher-Scholar Fellow of the Camille and Henry Dreyfus Foundation in 1990. He is currently serving as Editor of the ACS' *Journal of Combinatorial Chemistry* and of Wiley's *Solid-Phase Organic Syntheses* book series. He is author of over 100 scientific publications and an editor of seven books.

From 1993 to 1996, Dr. Czarnik served as Director of BioOrganic Chemistry at Parke-Davis Pharmaceutical Research. In 1996, he accepted the position of Senior Director, then Vice President, Chemistry at IRORI Quantum Microchemistry in San Diego, CA. In 1998, Dr. Czarnik became a co-founder of [Illumina, Inc.](#) in San Diego, CA. Both IRORI (NASDAQ: DPPI) and Illumina (NASDAQ: ILMN) completed their IPO's in July 2000. From 2001-2003, he served as Chief Scientific Officer at [Sensors for Medicine and Science, Inc.](#) In late 2003, Dr. Czarnik founded [Protia, LLC](#)- an intellectual property holding company based in Reno, Nevada. Dr Czarnik has filed over 250 patent applications.

Dr. Czarnik has contributed to the scientific literature instead through the publication of numerous books including titles in the two book series *Solid-Phase Organic Syntheses* (John Wiley & Sons) and *Critical Reviews in Communicational Chemistry* (Taylor and Francis) for which Dr Czarnik serves as series editor. Launched in 2006 with the publication of 2 volumes, *Critical Reviews in Communicational Chemistry* has published a further four volumes. Dr. Czarnik has served as a member of the Faculty of 1000 online service [<http://www.f1000biology.com/home>] since 2001 and in this role identifies landmark research papers in the area of combinatorial chemistry to bring them to the attention to the broad scientific research community. In addition, Dr. Czarnik served on the organizing committees for the First international Symposium on Chemical Biology and Combinatorial Chemistry at Shandong University (2006) and numerous NIH site selection committees.

Curriculum Vitae

Anthony W. Czarnik was born in Appleton, Wisconsin on November 21, 1957. He attended public schools in Appleton, Combined Locks, and Kimberly, Wisconsin, and received his B.S. (cum laude) from the University of Wisconsin-Madison in 1977. His undergraduate major was biochemistry, but he carried out undergraduate research during that time in two organic laboratories, at UW-Madison (with Prof. Vedejs) and at Argonne National Laboratory (with M. MacCoss). Dr. Czarnik received his graduate training at the University of Illinois at Urbana/Champaign, obtaining both an M.S. degree (1980) in Biochemistry and a Ph.D. (1981) in Organic Chemistry under the guidance of Prof. Nelson Leonard. From 1981-1983, he was an NIH Postdoctoral Fellow at Columbia University working with Prof. Ronald Breslow on the design of artificial enzymes. He began his academic career in 1983 at The Ohio State University, on the Faculty of the Department of Chemistry. Dr. Czarnik has received both DuPont and Merck awards for new faculty, and in 1986 was presented with an American Cyanamid award in recognition of excellence in the advancement of science and the art of chemical synthesis. He was named an Eli Lilly awardee in 1988, a Fellow of the Alfred P. Sloan Foundation in 1989, and a Teacher-Scholar Fellow of the Camille and Henry Dreyfus Foundation in 1990. He is currently serving as Editor of the ACS' *Journal of Combinatorial Chemistry* and of Wiley's *Solid-Phase Organic Syntheses* book series. He is author of over 100 scientific publications and an editor of seven books.

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In late 2003, Dr. Czarnik founded Protia, LLC- an Intellectual Property holding company based in Reno, Nevada. In his capacity as manager of Protia, Dr Czarnik has filed over 250 patent applications since 2006 - three patents regarding the use of microspheres to encode array sensors were approved in 2006 and 2007. As the manager of Protia, Dr. Czarnik is not yet at liberty to publish primary research.

Dr. Czarnik has contributed to the scientific literature instead through the publication of numerous books including titles in the two book series *Solid-Phase Organic Syntheses* (John Wiley & Sons) and *Critical Reviews in Communicational Chemistry* (Taylor and Francis) for which Dr Czarnik serves as series editor. Launched in 2006 with the publication of 2 volumes, *Critical Reviews in Communicational Chemistry* will publish a further 3 volumes in 2008 and a fourth in 2009. Dr. Czarnik is also editing an ACS symposium volume from the upcoming symposium on 'Combinatorial Chemistry and Diversity-Orientated Syntheses" at the 235th ACS national meeting. Dr. Czarnik has served as a member of the Faculty of 1000 online service [<http://www.f1000biology.com/home>] since 2001 and in this role identifies landmark research papers in the area of combinatorial chemistry to bring them to the

attention to the broad scientific research community. In addition, Dr. Czarnik served on the organizing committees for the First international Symposium on Chemical Biology and Combinatorial Chemistry at Shandong University (2006), numerous NIH site selection committees and worked with the Chairs of the 2007 GRC on Combinatorial Chemistry to ensure active participation by researchers including full registration at the meeting

Dr. Czarnik has increased his outreach to the research community in recent years through invited presentations on combinatorial chemistry across the globe as represented by presentations at New York University (2006), Hong Kong University (2007), University of Arkansas (2008), the plenary lecture at the First international Symposium on Chemical Biology and Combinatorial Chemistry at Shandong University (2006), and invited lectures at the 2006 Gordon Research conference at Queens College, Oxford, UK and the 235th ACS National Meeting (2008). His increased outreach to the research community is a contributing factor (in addition to the levels of NIH funding, increased overall research output and declining quality of directly competing journals) to the increase in submissions to and published papers in Journal of Combinatorial Chemistry. After plateauing for many years, the number published articles increased to 145 in 2007, an 18% over prior year. Likewise the number of submitted manuscripts in 2008 YTD represents a 40% increase compared to the same period last year.