Dr. Cynthia A. Maryanoff

A Tribute



Distinguished research fellow Cordis corporation

DOI: http://dx.doi.org/10.3998/ark.5550190.0011.802

This special issue of the *Arkivoc* (Archive for Organic Chemistry) is being published to honor and celebrate the remarkable careers of Drs. Cynthia A. and Bruce E. Maryanoff. It serves as a worthy tribute to two outstanding scientists who have long symbolized excellence in science while contributing to the pharmaceutical industry. Cyndie and Bruce have fulfilling, distinguished careers that are marked by noteworthy scientific accomplishments and dedicated service to the scientific community. It is my personal pleasure and distinct honor to write this tribute for Cyndie, my friend and colleague.

Dr. Cynthia A. Maryanoff is a world-class scientist who has enjoyed a rich career with a distinguished record of accomplishment in the fields of organic chemistry, chemical process research, early drug development, product development, and materials science. She excels as both a scientist and a leader, and serves the scientific community with acumen.

Dr. Maryanoff began her career in organic chemistry as an undergraduate student in the laboratories of Professor Robert O. Hutchins at Drexel University. This early research collaboration resulted in 12 scientific publications on work performed while an undergraduate student. After receiving her B.S. degree in 1972, she pursued her Ph.D. at Princeton University under the guidance of Professor Kurt Mislow, researching enantiomerically pure thiaanthracenes.

Following a post-doctoral appointment with Professor Edward C. Taylor, also at Princeton, she joined the Medicinal Chemistry group at SmithKline & French Laboratories (now part of GlaxoSmithKline) in 1977.

In 1981, she began her long tenure with the Johnson & Johnson Family of Companies at McNeil Pharmaceutical as a group leader in Chemical Development (now J&J PRD). She rose rapidly through the ranks to Section Head, Chemical Process Research (1981-1988), Assistant Director, Chemical Process Research (1991-1992), Worldwide Director, Chemical Development (1992-1996), Senior Director, (1996-2004), and Global Head/Distinguished Research Fellow, Chemical & Pharmaceutical Development/Drug Evaluation (2000-2004). During these years in the pharmaceutical sector of J&J, Dr. Maryanoff had an innovative impact on the function of chemical process research and early pharmaceutical development. She founded and developed a world-class global organization that rapidly moved new molecular entities for evaluation in toxicology studies, first-in-human and proof-of-principle studies, resulting in record cycle times relative to industry standard for drug development. Cyndie received the Earle B. Barnes Award for Leadership in Chemical Research Management in 2005 from the ACS in recognition of her inspired leadership.

In 2004, Cyndie joined Cordis Corporation, a Johnson & Johnson company, where she holds her current position as a Distinguished Research Fellow and the Head of Chemistry, Formulations, and Solid State Analysis for the Convergent Product Development Group. She fosters collaboration in a multidisciplinary research program that encompasses analytical methods, formulation, materials science, clinical supplies, support of toxicology and technical operations, synthesis of active pharmaceutical ingredients, and regulatory filing strategy to support the Cordis drug-eluting stent franchise and next generation programs.

Cyndie remains devoted to science and scientific excellence. She is a comprehensive leader, advancing company projects, contributing to the literature, and motivating people with finesse. She maintains a state-of-the-art, cutting-edge scientific knowledge in organic chemistry and in other disciplines as needed. Her managerial approach is not only to lead, but also to produce the next generation of leaders. Cyndie's superb leadership and creativity at Johnson & Johnson have contributed to significant scientific advancements in process chemistry and more recently, equally important innovative contributions to the Convergent Product Development at Cordis. She has an exceptional and unique ability to encourage scientific excellence, to move research to completion, and to inspire her colleagues to solve difficult problems. Her impact was especially notable in the development of many drug candidates in the fields of antipsychotic and antiepileptic treatments, narcotic compounds for transdermal delivery, pulmonary surfactants, compounds for treatment of female reproductive diseases, cardiovascular disease, endocrine function, and antiviral agents. She has an outstanding record of publications and patents including 95 scientific papers, 95 published abstracts, 3 books, 50 U.S./European patents issued or pending. This outstanding record is a testament to her capable leadership to coordinate and focus chemistry resources and to achieve simultaneously, scientific innovation and corporate goals.

In addition to her great commitment to process chemistry, Dr. Maryanoff is very active in the scientific community especially in the American Chemical Society (ACS) Division of Organic Chemistry (DOC), where she holds a nationally elected position on the Executive Committee (1988-present). She was Chair of the Division in 1997, the first woman to serve in this position. She has held prominent positions in several DOC committees including the Executive Committee and Travel Award Committee. Cyndie has also served the ACS membership at large by participating on the Committee on Science, the ACS Books Advisory Board, the Advisory Board of Chemical & Engineering News, the ACS Petroleum Research Fund, and the A.C. Cope Scholar Award Canvassing Committee. She has also held positions on the NSF Postdoctoral Research Fellowship Review Panel, the Medicinal Chemistry Study Section of the NIH Division of Grants, and the NCI Committee for Proposals to Synthesize Pharmaceutical Agents. She is a member of the Philadelphia Organic Chemists Club (POCC) and the Philadelphia section of the ACS. Cyndie is a Fellow of the American Institute of Chemists, the American Association for the Advancement of Science, and the American Chemical Society (ACS). Her election as ACS Fellow was especially notable in that she was in the inaugural group of 162 members chosen for that honor.

Cyndie's excellence in science and skillful management of both people and projects is recognized by the many corporate, local, and national awards she has received for her accomplishments in each of these areas. She received the ACS Garvin-Olin Medal in 1998 specifically for her scientific accomplishments in process chemistry. Her adept management and innovative ideas were again recognized on a national level by the ACS with the Earle B. Barnes Award for Leadership in Chemical Research Management in 2005, and the Henry F. Whalen, Jr. Award for Business Development from ACS Division of Business Development and Management (2007). She received a Scientific Achievement Award from the ACS Philadelphia Section (1991), a TWIN Award (Tribute to Women and Industry), a Drexel University Distinguished Alumni Achievement Award for Service to the Profession; the Philadelphia Organic Chemist Club Award (1999); a Drexel University Distinguished Chemistry Alumni Award; a University of Pennsylvania Trustee's Council of Penn: Women in Chemistry Award; the Anthony J. and Heand Silvestri Award (2008), and the Ronald Mitsch Award (2008). Cyndie was recognized internally by several awards including Johnson & Johnson's Philip B. Hofmann Research Award, the premier scientific award within J&J and an Individual Achievement Award for Affirmative Action. She received a Discovery Award for a Novel Anti-Psychotic Agent, a Team Award for the Scientific Ladder Committee, and a Pinnacle Award, an award chosen by peers for overall leadership in J&J. Recently, she was awarded a Johnson & Johnson Excellence in Science Award.

I think the main testimonial to the quality of her research and her management skill is the fact that in addition to advancing on the management leadership ladder at Johnson & Johnson, which is by itself a monumental achievement, she also advanced on the Johnson & Johnson Corporate

Scientific Ladder to the highest and most prestigious scientific level of Distinguished Research Fellow.

Dr. Cynthia A. Maryanoff has shown superlative leadership, vision, and creativity, while promoting the science of process chemistry, optimizing the operations of drug development, and serving the scientific community. She is truly worthy of this recognition by *Arkivoc*, and I am sure that I share these sentiments with all her friends and colleagues who have participated in this special issue.

Ahmed F. Abdel-Magid, Ph.D.
Executive Vice President and Chief Scientific Officer
Therchem Research Medilab