2016 COPE AND COPE SCHOLAR AWARD WINNERS

Recipients are HONORED FOR CONTRIBUTIONS of major significance to chemistry
EDITED BY LINDA WANG

THE FOLLOWING VIGNETTES highlight the recipients of the Arthur C. Cope Award and the Arthur C. Cope Scholar Awards, administered by the American Chemical Society for 2016. Vignettes for the rest of the ACS national award recipients were published in the Jan. 4 issue of C&EN.

Recipients of the Cope Award and Cope Scholar awards will be honored at a ceremony at the fall ACS national meeting in Philadelphia on Aug. 21–25.

ARTHUR C. COPE AWARD: ERIC N. JACOBSEN

Sponsor: Arthur C. Cope Fund

Citation: For seminal contributions to glycosecience by developing novel methods for oligosaccharide assembly; preparation of important glycoconjugates, and their use in biological studies.

Current position: UGA Foundation Distinguished Professor in Biomedical Sciences, University of Georgia; professor and chair, department of medicinal chemistry and chemical biology, Utrecht University

JACOBSEN on his current scientific goals: "I am very excited about connecting the worlds of small-molecule and enzymatic catalysts in meaningful ways. I hope to discover small, synthetic catalysts that use enzymatic principles to do reactions that have thus far not been possible."

What his colleagues say: "Jacobson's catalyst systems have been widely used in industry and academia, and the underlying concepts he has elucidated have served to guide research throughout the world."—Stephen L. Buchwald, Massachusetts Institute of Technology

CHRISTI S. ANSETH

Sponsor: Arthur C. Cope Fund

Citation: For contributions to glycosecience by developing novel methods to control the location and timing of chemical modifications of biomaterials.

Current position: Distinguished Professor, chemical and biological engineering, University of Colorado, Boulder

ANSETH on what inspires her: "I enjoy meeting new scientists and engineers, especially those with backgrounds that are different from mine. These interactions make me think about problems differently or see how our group's expertise might be applied in new ways. While it can be difficult to stretch your thinking or go outside of your comfort zone, I have found these types of interactions to be the most stimulating and rewarding."

What her colleagues say: "Professor Anseth's incredibly innovative work develops dynamically tunable materials to study cell fate and function. She has advanced organic chemistry. Anseth is an ideal role model for all organic chemists, from the exciting nature of her work to her productivity to her commitment to training and education."—Adah Almutairi, University of California, San Diego

GEERT-JAN BOONNS

Sponsor: Arthur C. Cope Fund

Citation: For seminal contributions to glycosecience by developing novel methods for oligosaccharide assembly; preparation of important glycoconjugates, and their use in biological studies.

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BOONNS on his biggest research challenge: "Design, synthesis, and immunological evaluation of a multicomponent vaccine that could break immunotolerance to a tumor-associated glycopeptide epitope on elicit innate, cellular, and humoral immune responses. The ultimate aim of this program is to develop a therapeutic vaccine for cancer based on a type of glycosylation uniquely found on cancer cells."

What his colleagues say: "Dr. Boon's prolific contributions to glycosecience have earned him a highly respected international reputation as a leader in the field. The high research productivity of Dr. Boon is matched by his ability to train graduate students and..."
postdoctoral researchers."—Paul Schlyer, University of Georgia

LUIS M. CAMPOS

Citation: For pioneering work in the synthesis of functional organic materials that are capable of singlet fission, a key mechanism for third-generation solar cells.

Current position: assistant professor of chemistry, Columbia University

Education: B.S., chemistry, California State University, Dominguez Hills; Ph.D., chemistry and biochemistry, University of California, Los Angeles

Campos on what excites him: "Talking to my students and other scientists who do research outside of my field, I get excited with challenges that address multidisciplinary fields, where we contribute by designing organic materials that impact electronic or biomaterials."

What his colleagues say: "Luis brings an innovative perspective to organic chemistry. Building on his strengths in physical organic chemistry, his research focuses on the synthesis of polymers for a diverse range of applications using nonconventional building blocks. He is the complete package—outstanding scholar, groundbreaking researcher, inspiring teacher, and a true builder of the 21st-century chemistry community."—Craig Hawker, University of California, Santa Barbara

MATTHEW GAUNT

Citation: For seminal contributions to reaction development using both organic and metal catalysts.

Current position: professor of chemistry, University of Cambridge

Education: B.Sc., chemistry, University of Birmingham; Ph.D., chemistry, University of Cambridge

Gaunt on receiving this award: "This award is a great honor and is a testament to the contributions of a phenomenally talented group of students and postdoctoral researchers. They strive to make new discoveries in uncharted areas of chemical research, when at the outset we don’t necessarily know where things will go or what we will achieve. I don’t know what we will accomplish in the coming years, but we will keep enjoying our research, continue to ask new questions, try to define new problems, and then see what happens."

What his colleagues say: "C–H activation is a rapidly evolving field that promises to have a major impact in catalysis and synthesis. Matt is a key player in this highly competitive field. Most important, he made his own distinct contributions in several directions related to both catalysis and synthetic applications of C–H activation methods."—Jim-Quan Yu, Scripps Research Institute, California

SETH M. COHEN

Citation: For advancements in the post-synthetic modification of metal-organic frameworks, and for insights into the identification of innovative pharmacophores for the development of metalloprotein inhibitors.

Current position: professor of chemistry and biochemistry, University of California, San Diego

Education: B.S., chemistry, B.A., political science, Stanford University; Ph.D., inorganic chemistry, University of California, Berkeley

Cohen’s scientific role model: “My early scientific role models were the great scientific ‘communicators’ of the 1980s—Carl Sagan, David Attenborough, and also my parents, who encouraged me to do well in school and pursue a career in science... Later in my life... my Ph.D. (Kenneth Raymond) and postdoctoral (Stephen Lipari) advisers were my role models—from each of them I learned and adopted certain traits to become the best researcher, educator, and mentor I can be.”—Jonathan L. Sessler, University of Texas, Austin

THOMAS KODAdek

Citation: For exemplary work in elucidating and manipulating important biological pathways using novel chemical and biochemical tools.

Current position: professor of chemistry and cancer biology, Scripps Research Institute, Florida

Education: B.S., chemistry, University of Miami; Ph.D., organic chemistry, Stanford University

Kodadek on what he hopes to accomplish in the next decade: “I’ve learned how long it takes to accomplish something really important, so 10 years no longer seems like such a long time. Nonetheless, I hope that standing of DNA damage and repair processes that impact human health.

Current position: professor of chemistry, Johns Hopkins University

Education: B.S., chemistry, New York University; B.E., chemical engineering.

Cooper Union School of Engineering; Ph.D., chemistry, Yale University

Greenberg on what he hopes to accomplish in the next decade: “In terms of our current research program, I hope to demonstrate that at least some of what we have learned about nucleic acid damage and repair in the test tube occurs in cells, thus providing a more direct link to human health. We are also constantly trying new projects that, if successful, will lead us in entirely new research directions. Ten years from now, I hope to be carrying out research that the community would never have predicted we would be involved in.”

What his colleagues say: “Greenberg is a respected leader in his field. His work is important, scholarly, and a powerful example of how mechanistic organic chemistry impacts human medicine. His contributions reveal information about DNA lesions that can give rise to cancer, and it uncovers pathways of biological response and damage repair that are potential drug targets for cancer therapy.”—Peter B. Dervan, California Institute of Technology

MARC GREENBERG

Citation: For significant research contributions toward a mechanistic un-
we will have a new type of high-throughput screening system that would routinely provide high-affinity and -selectivity synthetic ligands to almost any biomolecule that one wished to target. Then use this system to discover antibody biomarkers that would enable the early diagnosis of many different diseases.”

What his colleagues say: “Tom Kodak has been a leading figure in the field of chemical biology for more than two decades, and he continues to push the frontiers of this field in exciting new directions through innovative technology development and a firm commitment to rigorous mechanistic understanding of complex biological processes.”—Benjamin Cravatt, Scripps Research Institute, California

LAWRENCE T. SCOTT

Citation: For pioneering research on the synthesis, properties, and chemical behavior of carbon-rich cyclic and polycyclic organic compounds.

Current position: professor emeritus, Boston College; adjunct professor, University of Nevada, Reno; visiting professor, Nagoya University

Education: A.B., chemistry, Princeton University; Ph.D., organic chemistry, Harvard University

Scott on his scientific role model: “My scientific role model is the late R. B. Woodward, my Ph.D. adviser at Harvard. He was a truly great scientist and a wonderful mentor.”

What his colleagues say: “Dr. Scott has been a leading figure in the field of synthetic and organic chemistry for more than two decades, and he has contributed significantly to the understanding of complex biological processes.”—Jonathan Ellman, Yale University

DAVID A. SPIEGEL

Citation: For pioneering work in the development of synthetic systems for human immune system.

Current position: professor of chemistry and pharmacology, Yale University

Education: A.B., chemistry, Harvard University; M.Phil., pharmacology, Yale University; Ph.D., chemistry, Yale University; M.D., medicine/psychiatry, Yale University

Spiegel on his scientific role model: “My grandfather, Harold N. Shapiro, was a professor of mathematics at the Courant Institute of New York University for over 60 years, and his contributions spanned both pure and applied topics. He made science exciting to me from a young age and was a wonderful human being. I’m honored that he and I coauthored a paper in 2013.”

What his colleagues say: “Dr. Spiegel is an exceptional candidate for this award because of his absolutely first-rate scholarship and high-impact research program at the interface between organic chemistry and immunobiology.”—Jonathan Ellman, Yale University

CALL FOR NOMINATIONS FOR INORGANIC NANOSCIENCE AWARD

The Inorganic Nanoscience Division of the ACS seeks nominations for the Inorganic Nanoscience Award, sponsored by the University of South Carolina NanoCenter. The award consists of $5,000 made out to the winner, as well as a plaque to be presented to the recipient at the fall ACS National meeting in Philadelphia. Nominations should include a curriculum vitae, a list of publications, and a short statement highlighting the key research discoveries that merit a national award in the area of inorganic nanoscience. Each nominee should also arrange for three letters of support to be sent separately. Only one of the three supporting letters can be from the nominee’s home institution.

E-mail PPDs of nominations and letters of support to Sara Skrabalak, Nanoscience Division chair, at nanowards@acs.org. Inquiries (but not nomination materials) can be addressed to Sarah Stoll at s652@georgetown.edu. The deadline for nominations is Jan. 25.

HEROES OF CHEMISTRY OPEN FOR NOMINATIONS

Nominations are being sought for the 2016 ACS Heroes of Chemistry awards, which recognize industrial chemical scientists whose work in chemistry or chemical engineering has led to the successful development of commercial products. Any private or publicly owned for-profit company may nominate an individual chemist, biochemist, chemical engineer, or team of scientists who played a vital role in the research and development of a commercial product that has had a dramatic impact on the welfare and progress of humanity. Nominees must demonstrate significant and lasting contributions through their work in chemistry.

The deadline for submissions is March 31. Award recipients will be honored at the 2016 fall ACS national meeting in Philadelphia. For details, visit www.acs.org/heroes.

NOMINATIONS SOUGHT FOR NORRIS AWARD

Nominations are being accepted for the 2016 James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry. The award is given annually by the ACS Northeastern Section and consists of a certificate and $3,000 honorarium.

Nominations should focus on the candidate’s contributions to and effectiveness in teaching chemistry. The package must include a primary nomination letter, supporting letters, and the candidate’s curriculum vitae.

Send nomination packets electronically in PDF format to Anna Singer at secretary@nesacs.org. For more information, visit www.nesacs.org/awards_norris.html. Nominations are due by April 15.

LINDA WANG compiled this section.

Announcements of awards may be sent to L_Wang@acs.org.