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H16-1915. Neckers, Douglas C.

Papers, n.d., 1965-[ongoing]. 0.50 linear ft.

Abstract

Douglas Neckers is a photochemical scientist who has had a long career in science. He is retired as the McMaster Distinguished Research Professor emeritus from Bowling Green State University, where he established the Center for Photochemical Sciences, and is currently chief executive officer of Spectra Group Inc. Ltd., a photochemical sciences company that he founded. After completing his doctorate in organic chemistry at the University of Kansas, Neckers returned to Hope as a member of the faculty from 1964 to 1971, leading an active research program involving students in addition to teaching. He subsequently taught and conducted research at the University of New Mexico until joining the chemistry faculty at Bowling Green State University as chair of the Department of Chemistry in 1973. He was at Bowling Green for the next 36 years. Under his leadership, the Center for Photochemical Sciences, which he founded in 1985 and directed until retiring in 2009, became the only Ph.D. program in the photochemical sciences in the United States. Across his tenure, he directly mentored 39 Ph.D. student graduates from 37 foreign countries, approximately 50 post-doctoral fellows and numerous undergraduates. His research interests are in photochemical polymerization, additive photo assembly and three-dimensional printing. During 45 years in the academy, he published more than 400 papers and 11 books, edited three series and invented more than 90 patents. Neckers founded Spectra Group Inc. Ltd. in 1990 to develop the then-new technology of stereolithography in medical imaging. His labs were the first in the world to print MRI and CT data as 3D models using what is now called additive 3d printing. Other distinctive applications include having assembled three "near authentic" models of centuries-old mummies for the Toledo Museum of Art. He became Spectra's CEO when he retired from Bowling Green. Neckers has won numerous awards, including several from the Inter-American Photochemical Society and Bowling Green State University. He was a Fellow of the Alfred P. Sloan Foundation, received a National Science Foundation Creativity Award in 1994, was Morley Medalist of the Cleveland Section of the American Chemical Society, is an Honorary UNESCO Professor at Mendeleev University in Moscow and a Fellow of the American Association for the Advancement of Science. His work was supported at Bowling Green by the NSF, DARPA, Office of Naval Research, Petroleum Research Fund and the State of Ohio, Office of Economic Development. His community involvement includes serving on the Executive Committee of the Board of Directors of the Toledo Symphony Orchestra and as the founder of St. Tim's Discovers, a music series at his church, St. Timothy's Episcopal Church, dedicated to discovering new and unknown musical talent for the Toledo community. He is also Henry T. King Fellow, and chair-elect of the Board of Directors, at the Robert H. Jackson Center in Jamestown, New York, the only center in the United States dedicated to the legacy of a Supreme Court justice. The collection contains biographical information and publications from the work of Neckers.

Accession No: H16-1915
Provenance: Douglas C. Neckers
Donor: Douglas C. Neckers
Processed by: Geoffrey D. Reynolds, March 2017

Biography

Douglas C. Neckers is a member of the Hope College class of 1960. He is a photochemical scientist who has had a 55-year career in science. He is retired as the McMaster Distinguished Research Professor emeritus from Bowling Green State University, where he established the Center for Photochemical Sciences, and is currently chief executive officer of Spectra Group Inc. Ltd., a photochemical sciences company that he founded.

After completing his doctorate in organic chemistry at the University of Kansas, Neckers returned to Hope as a member of the faculty from 1964 to 1971, leading an active research program involving students in addition to teaching. He subsequently taught and conducted research at the University of New Mexico until joining the chemistry faculty at Bowling Green State University as chair of the Department of Chemistry in 1973. He was at Bowling Green for the next 36 years. Under his leadership, the Center for Photochemical Sciences, which he founded in 1985 and directed until retiring in 2009, became the only Ph.D. program in the photochemical sciences in the United States. The center has graduated more than 200 doctoral alumni who are employed throughout the world in industry and the academy. Across his tenure, he directly mentored 39 Ph.D. student graduates from 37 foreign countries, approximately 50 post-doctoral fellows and numerous undergraduates.

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Scope and Content

The collection contains biographical information and publications from the work of Neckers.

Container List

Biographical, n.d., 1967-2016

Publications (ordered by date of publication)

Cyclobutylcarbinyl Free Radical Intermediates, n.d.

Organic Chemistry: Structure, Mechanism, and Synthesis-Table of Contents, n.d.

Laboratory Experiments in Organic Chemistry, n.d.

The Behavior of α -Hydroxybenzyl Radicals, 1965

Some Reactions of Cyclobutylcarbinyl Radical Intermediates, 1965

A Study of the Substitution Reactions of Benzo[b]thiophene and Its Derivatives, 1966

Photochemistry of Benzo[b]thiophenes. Addition of Acetylenes, 1969

Photochemical Reactions of Cyclic Sulphates, 1969

Photochemistry of Benzo[b]thiophenes, 1970

Project Orientation in the Organic Laboratory, 1970