



## **Richard T. Arnold**

**June 18, 1913 – January 16, 2001**

Richard Thomas Arnold was born on June 18, 1913 in Indianapolis, Indiana. His parents, Mr. and Mrs. Robert H. Arnold, were naturalized American citizens of English origin. He was educated at the Technical High School of Indianapolis through the first year of high school, and then at Collinsville High School in Collinsville, Illinois. He entered Southern Illinois Teachers College (now Southern Illinois University) in Carbondale (1930-34), from which he received a Bachelor of Education degree, and to which he would return in 1970 (see below). He carried out his graduate work at the University of Illinois in Urbana (1934-37), where he received an M. S. degree in 1935 and a Ph. D. in 1937 under the supervision of the late Professor Reynold C. ("Bob") Fuson. Fuson was Editor of Vol. 18 of *Organic Syntheses* and, as a result, subsequently became a member of the Advisory Board. Besides Arnold, Fuson also served as Ph. D. adviser to six other members of the Advisory Board who also became members (and, in many cases, officers) of the Board of Directors: Norman Rabjohn (Coll. Vol. 4; Treasurer), Blaine C. McKusick (Vol. 43; President), William E. Parham (Vol. 44; Treasurer, who became a faculty colleague of Arnold at the University of Minnesota), William D. Emmons (Vol. 47; Vice President), Herbert O House (Vol. 52) and Jeremiah P. Freeman (Coll. Vols. 7, 8, 9; Secretary).

Arnold (who was known as "Dick" among his colleagues) joined the faculty of the University of Minnesota as an Instructor of Chemistry in the fall of 1937 at an academic year salary of \$2200, following the resignation of Alberto F. Thompson, Jr. Dick married his gracious wife, Doris ("Do") in 1939, and their son, Robert, was born in August 1940, followed by their daughter, Mary Lyn (Wonderlic). Dick was promoted to Assistant Professor in 1940, at which time he had 13 publications, one based on his Ph. D. work and 12 based on his work at Minnesota, largely in the field of physical organic chemistry. In 1940 his first three Ph. D. students graduated: Harold E. Zaugg, J. C. McCool, and Fred J. Bordwell. His reputation grew, and in the words of Lee Irvin Smith on April 15, 1941: "Among chemists he is generally esteemed as the one man who can rank with Paul Bartlett in the field of physico-organic research" (Bartlett in 1932-34 had

preceded Arnold at Minnesota). Upon recommendation of three well-known American chemists, none of whom were attached to his alma mater, the University of Illinois, or to the University of Minnesota, Northwestern University made him a handsome offer of \$900 more than he was getting at Minnesota. Thus, he became an early "retention case," but with the help of his fondness for Minnesota, and some salary augmentation, he was persuaded to stay.

On August 14, 1942 Arnold and his family moved to 1573 Fulham St., St. Paul, near the University Grove faculty-staff housing area, which remained their home throughout the remainder of his career at the University of Minnesota. During World War II, besides carrying out his normal academic duties, Arnold collaborated for 51% of his time with his senior colleague (and the postdoctoral adviser of this author), Professor Walter M. Lauer, in directing an antimalarial synthesis research project assigned by the Committee on Medical Research of the Office of Scientific Research and Development (O.S.R.D.). He was promoted to Associate Professor in 1944, at which time he had 30 publications. In 1946, as outside offers became more prevalent, he was promoted to Full Professor.

In 1948-49 Arnold became a Guggenheim Memorial Fellow and spent six months at the ETH in Zurich, Switzerland and six months at the Radiation Laboratory in Berkeley, California. In 1949 he was awarded the American Chemical Society (A.C.S.) Award in Pure Chemistry for his detailed explanations of chemical reactions, following in the footsteps of his senior colleague, Professor C. Frederick Koelsch (in 1934, when it was known as the Langmuir Award) and Paul D. Bartlett of Harvard (in 1938).

During the academic year 1950-51 and the fall of 1952, Arnold served as Assistant to the Dean of the Institute of Technology, two-thirds time, while Dean Athelstan F. Spilhaus was engaged in special work on a government research project. After part of a year back full time as a Professor, Arnold took a leave of absence for the academic year 1952-53 to serve as the first Science Attaché to the U. S. High Commissioner in the newly established U. S. Embassy in Bonn, Germany (This vacancy allowed this author to become a member of the faculty at Minnesota). Upon his return to Minnesota in the fall of 1953, Arnold became Head of the Chemistry Department. Less than two years later, after 18 years on the faculty at Minnesota, Arnold resigned, effective June 15, 1955, to become Director of the Basic Research Program in Physical Sciences of the Alfred P. Sloan, Jr., Foundation in New York City. This agency awards the coveted Alfred P. Sloan Fellowships to promising young scientists in the physical sciences.

In 1960, Arnold joined Mead Johnson and Co. in Evansville, Indiana, as Director of Research. Subsequently, he became Vice-President of Research and Development, then President of the Mead Johnson Research Center, and finally Vice-President and Chairman of the Scientific Advisory Board. In 1970, he returned to his undergraduate alma mater, Southern Illinois University, as Professor and Chairman of the Department of Chemistry and Biochemistry. He left the chairmanship in 1975, but remained as Professor until his retirement in 1982. The following year he served as a Visiting Professor at Northwestern University, in Evanston. He continued to live in the Evanston area until his death at age 87 on January 16, 2001 in Evanston Hospital, following an accident at the Mather Garden Retirement Home in Evanston the week before.

Besides the A.C.S. Award in Pure Chemistry received in 1949, Arnold received Honorary D. Sc. Degrees from Northwestern University (1979) and Southern Illinois University. He had over 100 scientific publications. He was noted for his detailed explanations and keen insight into the mechanism of organic chemical reactions, including his early espousal of "quasi six-membered ring transition states." While at the University of Minnesota, he served as a chemical consultant to five major companies at various times (with the beginning year shown in parentheses): Barrett Division of the Allied Chemical and Dye Corp. (1943), E. I. du Pont de Nemours and Co. (1950), General Mills Research Laboratory (~1950-54), Parke, Davis and Co. (1953), and the Procter and Gamble Co. (1955). He was active on departmental and university committees, and as an officer in the Minnesota Section of the A.C.S. and later on National Committees of the Society.

Dick Arnold served an eight-year term on the Board of Editors of *Organic Syntheses*, and edited Vol. 32, published in 1952. Then, as is customary, he became a member of the Advisory Board and, later, was elected a member of the Board of Directors and served as its Treasurer from 1957-67 and President from 1968 until his retirement from the Board in 1980. He last attended an *Organic Syntheses* Dinner in Chicago on August 20, 1995, at the age of 82.

Dick Arnold will be remembered as a talented researcher, a skillful and enthusiastic teacher, an effective administrator, and an extremely personable individual whom you couldn't help but like. He was preceded in death by his wife, Do, and survived by his son, Robert, and his daughter, Mary Lyn Wonderlic, four grandchildren, and five great-grandchildren.

### References

- (1) Personnel file in the Chemistry Department at the University of Minnesota.
- (2) "Richard T. Arnold," obituary in the *Chicago Tribune*, Chicago Sports Final, N Edition Jan. 19, 2001, p. 9, ISSN 10856706.
- (3) Cal Y. Meyers, "Richard T. Arnold," Chemistry Department, Southern Illinois University, Carbondale, IL, Jan. 24, 2001 (Sent to the A. C. S.)

Wayland E. Noland  
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