

Wayland E. Noland 1926-2022

On October 4, 2022 the *Organic Syntheses* community, members of the wider domain of organic chemistry, hundreds of former research associates, and thousands of undergraduate students lost a friend, a colleague, a scientist, a mentor, and an educator when Wayland E. Noland died at the age of 95. He was born December 8, 1926 in Madison, WI to Lowell and Ruth Noland, both zoologists. His father was a Distinguished Professor of Zoology at the University of Wisconsin-Madison, home to the Lowell E. Noland Zoology Building. Wayland developed a love for the outdoors and scientific leanings at an early age.

Wayland excelled in school. He was selected as a Westinghouse Science talent search finalist writing on amateur weather forecasting, an early formative experience. This accomplishment included having the honor of meeting First Lady Eleanor Roosevelt on the steps of the White House. He matriculated to the University of Wisconsin-Madison in 1944 but studies there were interrupted in 1945. He was drafted by the Army and trained as a medic near the end of WWII. When an invasion of Japan did not materialize, he was discharged after 11 months, with a bank roll of \$550. Those who know Wayland will not be surprised to learn that he spent little to none of his \$50 monthly salary while in the Army, even earning a bit extra on the side by selling his cigarette rations. Wayland returned to Madison and finished his bachelor's degree in chemistry in 1948, working on orthoester chemistry in the laboratory of Professor Samuel McElvain. Wayland proceeded to Harvard University, where his Ph.D. thesis research in physical organic chemistry research was directed by Professor Paul D. Bartlett.

## University of Minnesota (TRH)

Wayland first arrived at the University of Minnesota (UMN) in 1951 as a postdoctoral researcher with Professor Walter M. Lauer. He assumed an Assistant Professorship in 1952 and rose to Professor in 1962. Although he retired officially from the UMN at the end of 2016, he continued to actively guide researchers in his laboratory until 2020. Wayland was a pioneer of scientific

investigations into fields as disparate as the Nef reaction, Diels-Alder reactions of nitrogen-containing heterocycles, condensative cyclization chemistries, nitroalkenes, and, of course, all-things-indole. Mr. Indole, as he was affectionately known to many here, taught the UMN course on heterocyclic chemistry for decades. Wayland was known for his teaching prowess, delivering the introductory organic chemistry lecture course to more than 12,000 undergraduate students. In 1999, he was named "Best instructor in Chemistry" by the Institute of Technology student board. He also served as the advisor of, literally, hundreds of undergraduate research students, many for whom he also became a caring life-long mentor, father figure, and confidant.

I had the good fortune of being one of Way's faculty colleagues for over four decades. Permit me to offer some anecdotes and reminiscences that give further insight to this wonderful person. I first met Professor Noland when he came to pick me up at the edge-of-campus Econo Lodge Motel on a cold January morning in 1976. He escorted me, on foot, to the UMN chemistry building, where I was to begin my job interview. He kindly thought to bring an extra stocking cap for my use, rightly surmising that I would be underprepared for that walk on a mid-winter early morning in Minnesota. Later I learned that is was commonplace for Wayland to collect lost items (hats, but also combs, miscellaneous clothing items of all sorts, etc.) on his many walks around the campus and surrounds and then make them available, after laundering I was also later assured, to any who might be in need.

Yet later that same day, in a private meeting in Wayland's office and shortly after my lecture, he innocently (or so I at first thought) asked, "What was the name of that acid you said you used to dehydrate your indanol derivative to the indene?" "Tosic acid," I replied. "I presume you mean *para*-toluenesulfonic acid," he politely, yet pointedly, stated. Note to self at that moment: "Here is a man to whom detail – and nomenclature –are very important." Of course, *Organic Syntheses* leadership had recognized this quality (among many others) much earlier, enlisting him as Editor in Chief of the Collective Volume VI. I have no doubt that every word in that tome passed Way's careful scrutiny.

There was often a practical life-lesson being offered by Way. Those who visited his office could not help but be impressed by the multiple piles of papers, notes, magazines, tax return paraphernalia, (later) email printouts, and the like that more or less engulfed him on all surrounding horizontal surfaces – including the carpet. One example of his sage advice, no doubt learned from firsthand experience: "It's best to not have any magazines with a glossy cover very low in any of these stacks." Another, on a different topic: "Loose-fitting clothing is the best choice in the Minnesota summertime; the mosquitoes have a harder time reaching your skin." Other lessons were more substantive, and sometimes conveyed by example rather than spoken. A former Chair of our department recounted an event when they were both onstage at a graduation ceremony to congratulate the newly minted chemistry major degree holders as each (of the ca. 100) walked on across the stage, having just received their diploma. The Chair noted that Wayland's congratulatory exchange with each student showed that he knew something specific about nearly every one of them. The Chair's valuable takeaway: "We build up, encourage, and empower those around us one by one by one by ..."

Way was an avid recycler – the epitome of 'waste not, want not.' In his world every object had value, likely a remnant from his early upbringing in the Depression years. He was also very principled. For example, an aluminum can on the sidewalk or in a trash barrel was fair game for his recycling enterprise, but one already in a recycling bin was off-limits, as that clearly reflected the intent of some unknown person having placed it there.

The following ensemble of descriptors, collectively used by those who shared remembrances at Wayland's memorial service, provide a mosaic of the man: calm, caring, patient, knowing, open, understanding, polite, cordial, compassionate, gracious, warm, thoughtful, dear, kind, giving, gentle-mannered, welcoming, never a quid-pro-quo, good-natured, every interaction a gift, cared for everyone, never a complaint, proud of his students, regarded him as family, cat lover, regular viewer of the Nightly Business Report, and loved country music (who knew!) – Loretta Lynn and Way passed away on the same day. At that memorial event Wayland was sung off by attendees to "Happy Trails to You" – 'til we meet again, Way. Whenever I pass an orphaned soda can, a smile of admiration comes to mind. As a former student wrote to me upon learning of Wayland's passing, "The heavens have no idea what a treat they are in for." Amen

## **Organic Syntheses Inc.** (CRJ)

Wayland Noland began his service to Organic Syntheses Inc. in 1969 as Secretary to the Board of Directors succeeding Henry Baumgartner. The duties of this position included the assembling and editing of Organic Syntheses, Collective Volume VI, published in 1988. In 1979, Jeremiah Freeman became Secretary and Noland continued his service as an elected member of the Board of Directors, a position he held until 2018. During those years a major task of the Board of Directors was managing its investment portfolio, which consisted largely of individual stocks. All of the members of the Board participated in the decision making, and discussion of buying and selling stocks consumed more and more of the Board's meetings. A spin-off investment committee, led by me as Treasurer but always including Way, was formed to distill ideas down to what were considered the best options before the Board meetings, but as our net worth grew, as new members joined the Board, and as new programs were taken on it became clear that outside investment management was needed. Much to Way's dismay in 2018 the decision was made to turn over investment to Vanguard Institutional Advisory Service. In the 40 years that Way served on the Board, the net worth of the organization increased by 20-fold even while the philanthropic outreach of the organization increased by 25-fold. Good investment decisions seeded by Way's ideas played a major role in this success. In 2017, Organic Syntheses, Inc. began a program funding summer research grants for faculty at principally undergraduate institutions. A bonus award is added to the highest ranked proposal; this is designated as the Wayland E. Noland Undergraduate Research Grant sponsored by Organic Syntheses, Inc.

Way knew more about more stocks than anyone that I have personally known. He was also the most aggressive investor that I have known, always invested to the hilt that margin rules would

allow. His legendary knowledge and success in investing and his frugality amazed (and amused) those who served with him.

## Some random memories:

The worn brown shopping bags used as briefcases for the documents Way brought to our meetings and to carry as many leftovers as he could from our OS dinners for the next days' breakfasts and lunches.

The partly shared copy of his monthly report from his broker that looked more like a magazine than a normal report.

At a dinner with him at Paul Gassman's home in 2009 I asked him about a company that we both had invested in. He said that he no longer owned that stock or any others with a ticker symbol that began with a letter in the first part of the alphabet – his brokerage team had quickly sold stocks in that order to meet his voluminous margin calls in the 2008 market crash.

His meticulously hand-written travel expense reports sent to me as Treasurer often included a room at the local "Y" and a box of cereal and quart of milk from a nearby Seven-Eleven.

How he could avoid a cab fare to get from downtown L.A. to Pasadena for the OS dinner using multiple buses, which his prior research had showed were free on a Sunday.

Way's three R's – reduce, reuse and recycle. Add a fourth – "reward" for good value investments.

His story of being contacted by the president of a small Colorado based oil company asking him if he was planning a hostile take-over because he had accumulated a significant number of shares. Way told him that he just liked the company and the stock was a good value. The President invited him for lunch during a Denver ACS meeting. "Pick me up at the Y" was part of Way's acceptance.

Asking Way about an article of mutual interest in that day's *Wall Street Journal*. He said he would not see it until the next day when one of his students gave him the previous day's copy after the student had finished with it.

OS (and me personally) making a great timely investment in Petroleum Development Corporation, at Way's recommendation.

Oh Way! How we miss you and how lucky we were to have known you for more than a half century. If these words reach print, may it be on recycled paper.

Thomas R. Hoye Carl R. Johnson



Wayland E. Noland 10/30/2016, sporting his ever-present smile and a fresh feverfew bloom from a still-thriving planting he gave to the photographer decades ago.

For any interested in exploring more about Way Noland's life and history, here is a website to the University of Minnesota, Department of Chemistry's "In memoriam" content.

https://cse.umn.edu/chem/news/memoriam-professor-emeritus-wayland-e-noland-12081926-10042022

## There one can also find links to:

- a video of comments and remembrances offered at Professor Noland's memorial service (October 16, 2022)
- a collection of WEN photos, shown at that memorial service