

HIST Remembers James J. Bohning

Mussorgsky's *Pictures at an Exposition* played softly barely breaking the quiet of the office. It had been selected from two ranks of well-indexed classical music CDs, housed in a drawer at the left of his desk. It was one of Jim's favorites, but a backup selection of Bach's six Brandenburg Concertos was poised to replace it in the disk drive. A battered wooden walking cane hung from the top pull handle of the adjacent file cabinet. A rusty five-inch mailing tube containing 50 mg of white crystalline disodium squarate stood balanced on the top shelf. Its red and white mailing label proclaimed it was an August 1980 gift synthesized by Professor Robert West of the University of Wisconsin. Long ago Jim had thought of incorporating the unusual substance in a p-chem experiment, but it now sat awaiting an uncertain future. Today's mail had brought in a small cardboard box with bubble wrap packing -- Jim's latest EBay purchase: an ancient handsome brass pecan nut cracker intended for addition to his substantial collection of that artifact type. His window sill sported a 4 x 12" Plexiglas case on a polished oak base protecting an inscribed maroon-colored Lionel caboose. Precision white lettering down the length of the car proclaimed not only that it was an authentic Lehigh Valley Railroad model but also that it was a special departure gift from his friends on the National Historic Chemical Landmarks Committee for Jim's 15 years of service (1992-2007). Jim -- an avid collector of model railroad cars -- highly treasured this special personal gift.



Six densely packed oak shelves threatening imminent collapse towered above and behind his work desk and sported books on history, chemistry, railroading, coal mining, and ACS. A collection of the first 35 years of the *Journal of the American Chemical Society* and its *Transactions* limited the opening of his office door because they were stacked six feet high behind the door. Jim's right foot repeatedly banged against an old Beckman DU spectrometer shoved under his desk, while its supplemental power supply rested atop a nearby file cabinet. An electric space heater's rosy glow warmed Jim's feet in an otherwise chilly office.

Jim Bohning -- chemist, academic, historian, author, oral history specialist, collector, and multi-focused scholar -- was at work bent over his keyboard. Today's research was on mining accidents from 1860 to 1900 in the anthracite coal mines owned by Eckley Brinton Coxe (1838-1895) in northeastern Pennsylvania. Jim's raw research material was several dozen rolls of microfilm he had unearthed from the Hazelton (PA) *Standard Speaker* and the White Haven (PA) *Journal Herald* newspapers. The study was to be a chapter in Jim's projected biography of Coxe. Slogging issue-by-issue for reports of accidents would take weeks, but it was typical of Jim's dogged search for documented details which enriched his writing. Accuracy, specifics, hitherto unknown tidbits, and comprehensive coverage marked each paper, seminar, or meeting presentation on which he worked. Jim had won the HIST Division's Outstanding Paper Award in 1989, and he created (and disseminated) a popular tutorial on how to conduct oral history interviews which stressed his philosophy of attention to detail.



This office, room 494 of Lehigh University's Seeley G. Mudd Building (Bethlehem, PA), was to be Jim's last scholarly home. He'd moved in after retirement as a Staff Writer in the ACS News Service. He had returned to the Lehigh Valley where he had friends and relatives and became a Visiting Research Scientist at Lehigh. Here Jim prepared papers on his wide interests in chemical history, on the ACS and its founders and presidents, on historic landmarks, on international

chemistry organizations, on coal, on Joseph Priestley, and on the winners of the Dexter-Edelstein awards. For several semesters Jim taught a Lehigh course on Scientific Writing, and he served as advisor to generations of graduate students preparing their PowerPoints for seminars. His red pencil suggestions for improvement of their seminar documents rescued many a student from the dreaded C.

Jim Bohning the historian was really the second Jim. First came Jim the professor who in 1959, fresh from his M.S. at NYU, began an academic career as an instructor at Wilkes College (now University, Wilkes-Barre, PA). He took leave from 1962 to 1964 to complete his doctorate in physical chemistry at Northeastern (PhD 1965) and returned to Wilkes as Assistant Professor. Jim rose through the ranks, served for twenty years as chair, and retired as emeritus professor in 1990. He supervised two M.S. students, served on many M.S. committees, and published several papers on photolysis of heterocyclics. Jim's interest in history had been whetted when in April 1974, he chaired the 9th Middle Atlantic Regional Meeting (MARM) in Wilkes-Barre. Jim focused that MARM on history, especially on the Centennial of Oxygen, which in 1874 had gathered America's chemists to Priestley's home in nearby Northumberland. That meeting was a contributing factor in the subsequent organization of the ACS.

Jim served as Chair (1971) and long-time archivist for the Susquehanna Valley ACS Section and became an active member of the History of Chemistry Division (HIST) which he also chaired (1985). He became the division's historian from 1988 to 2011 and its archivist from 1988 to 2009. As divisional archivist Jim, with the help of Jeff Seeman, arranged for HIST's records to be moved to a permanent home at CHF. Jim also served on the division's Cachet Committee, the editorial staff (associate editor) of its *Bulletin for the History of Chemistry*, and the National Historic Chemical Landmarks Committee.

While still a professor at Wilkes, Jim had begun working as a part-time oral historian at the Beckman Center for the History of Chemistry (now the Chemical Heritage Foundation or CHF). After retirement from Wilkes Jim joined the CHF staff then departing in 1995 as Director of Oral History for a post as Staff Writer at ACS headquarters in DC (1995-1998). His subsequent retirement from ACS brought him to Lehigh University where he conducted his most extensive research in the history of chemistry and continued to do oral histories for CHF, for the Dow Foundation, for Lehigh University, and for the Northampton County Historical and Genealogical Society. Blending his long standing interests in steam railroads, anthracite mining, and the 19th century industrial revolution, Jim commenced a history of the Coxe family, coal tycoons and philanthropists of Drifton (PA). He had completed the interviews and the research and authored two of the chapters. One of these he published as a free standing article, "Angel of the Anthracite: The Philanthropic Legacy of Sophia Georgina Coxe" (*Canal History and Technology Proceedings*, Vol. XXIV, 2005) and another was read as a paper before a reunion of the Coxe family. Alas, the complete Coxe story will never be finished.

Through 2010, severe eye disease and cancer slowed Jim's pace, although he continued to edit the newsletters he had founded: *Boltonia* (Bolton Society of CHF), *Mudd in your Eye* (Lehigh University Chemistry Department), and *Metzger Times* (a family genealogy). He laid out one last symposium on Edgar Fahs Smith for the Fall 2012 ACS National Meeting. Several brief hospital stays became longer as he received more extensive treatment for his malignancies. In July 2011, Jim signaled with a hint of humorous irony in his message because of the name's link to ACS history, that he had been admitted to a Newtown (PA) hospice known as Chandler Hall. Jim became part of the history he loved on 2 September 2011. He was 77-years old.

Jim's historical notes and files on chemistry have been transferred to CHF. His notes and documents on Eckley Coxe, a long time university trustee and benefactor, were filed in the Lehigh Archives. Jim's books were accessioned into the Lehigh University Library. Three of his antique chemistry instruments were incorporated into CHF's museum, five others are awaiting homes. Jim's many collections – pocket watches, license plates, silver christening spoons, nut crackers, blow

torches, train sets, patent medicine bottles, mantle clocks, and carved wooden gears – were placed at public auction.

Jim was one of a kind. He worked hard at his craft, and in so doing he built a network of friends, colleagues, and collaborators who will never forget this soft-spoken, kindly Renaissance man of Chemistry. Through his contributory service and caring camaraderie Jim inspired many other chemists to develop their own interests in history of chemistry. Wilkes, the Susquehanna Valley Section, HIST, CHF, ACS, and Lehigh are better places for his having passed their way.

Ned D. Heindel 2012

(Originally published in the American Chemical Society Division of the History of Chemistry Newsletter, 243rd ACS National Meeting, San Diego, CA, March 25 - 29, 2012)