
Career Retrospective –Herbert J. Sipe, Jr.

Matthew T. Miscikowski '26



The venerable Dr. Herb Sipe, having taught at Hampden-Sydney College for an astounding 58 years, is now retiring. A chemist by heart, Dr. Sipe has not only helped shape the chemistry department into what it is today but has also been a stalwart overseer of the college's progress for nearly six decades. In this retrospective we look back on Dr. Sipe's storied undergraduate, graduate, and time on the hill.

Dr. Sipe was born in Lewiston, Pennsylvania, a relatively isolated town in the middle of the state. Even before grade-school a young Herb Sipe was exposed to chemistry as a factory specializing in artificial silk production was a major employer in the town. He would frequently spend time in a chicken coop which he had converted into a "lab" for him to experiment. As he graduated from school Herb Sipe had a range of interests in STEM from psychology to mathematics, but he would find himself drawn to chemistry thanks to a particularly passionate high-school chemistry teacher.

After his time in secondary school, Herb Sipe would move onto Juniata College in 1958 which is very similar in size to Hampden-Sydney. Though he did take psychology and calculus courses for his first year it was the intro to chemistry lab which would fully turn a young Sipe onto the path of chemistry. Thanks to a National Science Foundation grant that the Juniata received, Sipe was able to dive deeper into chemistry in his sophomore year as a research assistant to a senior chemistry student. In addition to all the extra experience he got from working with the seniors he also learned about graduate school from them. Soon Herb Sipe would be set on going to graduate school and to become a college professor, of which he was enraptured by the lifestyle and career.

During his time as an undergraduate he worked on various chemistry projects. In particular he would focus on the photochemistry of azo dyes, or how such molecules respond when subjected to light. When he started to look for graduate programs he would target universities which had photochemistry programs so that he could continue the work he had grown passionate about. He did do a brief stint with the US Steel fundamental research lab the Summer before graduate school but decided that industry work was not for him. After applying to four universities and getting into all of them Herb Sipe chose to go with the University of Madison-Wisconsin for his graduate degree.

Herb Sipe graduated from Juniata College in 1962 and would leave Pennsylvania to continue his education in Wisconsin. In graduate school Sipe was unable to find a photochemistry lab to join and instead went with a research advisor who set him on studying sulfur compounds using IR spectroscopy. Though his advisor was personable and intelligent in his own right, his lack of publications and departmental politics would see him leave the University of Madison-Wisconsin. Having been stalled in his pursuit of a PhD Sipe was set back by two years as he needed to find a new advisor and project to join. Eventually he would find a new professor to continue on his graduate school career, but this time he was exposed to a new type of chemical analysis. Electron Spin Resonance was a relatively new and experimental way of looking at various molecules and Herb Sipe would learn to utilize this technique as he studied silicon chemistry. With his commitment to his education and help from his supportive research group he would finally develop and deliver his doctoral thesis which was utilizing ESR spectroscopy to identify radical anions of organosilicon substituted organometallic compounds.

Approaching the end of his time in graduate school Herb Sipe would begin looking for a job. Having already written off industrial work and not being too keen on large-scale universities due to what happened to his first advisor, he set about looking for a position at a small institution. Sipe was looking for a college that valued teaching and undergraduate research and had a strong chemistry department. It was while he was looking through Chemical and Engineering News, that he found a job posting for a physical chemist at Hampden-Sydney College. Sipe applied to four other positions at smaller institutions, but after coming to Hampden-Sydney and having an excellent interview he left impressed by the faculty and vision for the chemistry department. Sipe would join Hampden-Sydney in 1968 but was not a fully-fledged PhD yet as for his first year he was still working on his thesis for

his PhD research. Only a year later in 1969, Herb Sipe would earn his PhD after a successful defense and become a full-fledged professor at Hampden-Sydney college.



Now Dr. Sipe was first tasked with building the current project-based lab program for chemistry majors to follow. While the first two years were already established prior to Dr. Sipe being hired, both juniors and seniors still lacked a proper curriculum. This would be solved with the advent of advanced lab which would see students working with a different professor each semester to gain hands on experience in multiple fields of chemistry.

Dr. Sipe also brought the Alpha Chi Sigma honors chemistry fraternity to Hampden-Sydney College as well. Dr. Sipe's affiliation with AXΣ dates back to his days in graduate school shortly after reaching Wisconsin. Upon learning that the University of Wisconsin-Madison would not start paying his stipend for roughly two months, Sipe realized that he would need to find a solution for his room and board. After some looking, he would find the Alpha chapter of AXΣ which would provide him with a home and meals while he awaited his stipend payment. This temporary measure would extend to him staying for four years at the fraternity house as he got to know the undergraduate and graduate brothers. Unsurprisingly, he was invited to join the fraternity and would become a fully-fledged brother shortly after. He would hold a

variety of positions in the fraternity after his initiation including being the committee chair for the house, the treasurer, and finally the master alchemist or president of the fraternity.

AXΣ would find its way to Hampden-Sydney as Dr. Sipe and another chemistry professor, Dr. John Butcher, managed the chemistry juniors and seniors. Both professors would take turns holding a Friday get together at their houses with the chemistry majors. With a burgeoning sense of comradery between the students of the department and a student inquiring about what AXΣ was when he saw a labeled mug planted the seeds for the fraternity to grow. After speaking with the national branch of AXΣ, Dr. Sipe was given permission to start up the Beta Chi branch at Hampden-Sydney college. He was also given permission for STEM students outside of chemistry to join thanks to Hampden-Sydney's extensive and in-depth curriculum for the sciences. The fraternity would continue to grow and even gain their own house on the circle soon becoming one of the best-established fraternities on campus.

In addition to helping the chemistry department grow and starting AXΣ, Dr. Sipe has also watched the entire STEM departments at Hampden-Sydney grow as well. With the chemistry department trying to work in undergraduate research as a core part of the curriculum, many of the professors at the time were against the idea. As these professors retired and were replaced more professors would begin supporting the prospect of undergraduate research with it spreading to all of the STEM departments. Dr. Sipe also developed the honors program along with two other professors as they interviewed potential students and managed the scholarships handed out by the program. Finally, Dr. Sipe has also participated in the Western Culture program which allowed him to add to his own personal education but also meet other professors and students outside of those in STEM.

Though he is retiring this year, the chemistry department will arrange for him to continue to do some laboratory work so Dr. Sipe can wrap up some loose ends in his research. In his newfound free time Dr. Sipe plans to begin whittling down the massive library of books he has amassed over the years. In addition to working through the myriad of books he has, he is also planning to do some traveling as well. Even though Dr. Sipe is retiring his heart still belongs in the lab and no doubt he will continue to be an invaluable mentor to chemistry in the future and shepherd them along as he has done through his 58 years with the college.