

Chemistry—by C. William Anderson

Well, since I am writing this, the one thing it won't be is the State of the Hampden Sydney College Chemistry Department. I will give some indications of the activities of the students and faculty. I will then throw out a series of assertions, ill-formed perceptions and other things I remember but never happened. I will try to speak respectfully about most of the students. That may be the best place to start.

The bucolic setting of Hampden Sydney College during the academic year is pointed to as the perfect setting for deep contemplative thought. This place is astonishingly peaceful. And then everyone leaves after graduation ceremonies. That is when people understand what peaceful means. That is the time when uninterrupted summer research projects occupy the waking hours of several chemistry students. I will mention those students working with Chemistry Department faculty. Yes, there are Chemical and Biochemical research projects and I may mention them, too.

Nathan Houser '21, successfully struggled with DNA sequencing using the Oxford Nanopore Minion system.

Daniel Pearce '22 assessed the oxygen uptake associated with curcumin free radical metabolism.

Brennan Vaught '21, synthesis of fluorescent Schiff Base ligands.

Charlie Wolfe '20, Synthesis of heterometallic sandwich Schiff Base complexes

Brahm Dean '21, Synthesis of Zn embedded PEGDA scaffolds for tissue growth.

Titus Dowell '22, Synthesis of Schiff Base ligands utilizing click chemistry.

Andrew Hay '21, Synthesis and evaluation of fluorescent Schiff Base ligands.

One way to address the State of the Department is to examine the people who have keys to the offices. Since we are unified in our desire to effectively transfer understanding to our students, I will address how I, as a student have been influenced by those around me.

Beverly Hines has continued to shoulder responsibility, explore improvements to daily life and just make it a more pleasurable place to be. We all appreciate how close to the "Blue couch" her office is. That has provided us with a heads up of student worries and complaints. Not that the socially imperceptive chemists need help with that. She is simultaneously non-judgemental and concerned about our students as people. Thanks, Beverly. You taught me a lot.

Dr. Kevin Dunn spent the year showing us how to get interested in something. He showed me that the underlying chemistry of the most common substances can be challenging but approached. He showed us how to have a structured approach to investigations, even when those investigators may never be part of a decade-long project for more than 15 weeks. He did this while successfully maintaining a presence in "the outside world" - a place I rigorously avoid but shouldn't. While maintaining a personal interest in soap, he has guided students into the world of cannabis. While the scientific community has been encouraged to study all other plants, important aspects of this plant have been discouraged. Thanks, Kevin. You taught me a lot.



Dr. Bill Anderson is retiring from the Department of Chemistry in 2020 after 34 years at H-SC.

Dr. Nick Deifel has had a wonderful sleigh ride as Chairman of the department. There are two ways we can administer our programs, top down or distributed effort. The Chairman's duty is an interesting mix of both top and bottom. Nick has an understanding that the students are not just appendages of the chairs in our classroom. Need to talk about that unfortunate incident when your parents were out of town? There is a chair in Nick's office just for that. Just for fun, toss the phrase "as predicted by the 18 electron rule..." in the middle of a sentence and watch as the enthusiasm of his soul spills all over the place. He is adept at showing the close role his family plays. Keep showing that to the students, Nick. Frankly, things about life are more prominent when they come from those perceived as ignorant of social aspects: chemistry professors. Thanks Nick. You taught me a lot.

Dr. Paul Mueller spent this year being the thoughtful, considered soul we have come to expect. He spent time addressing difficulties of faculty and students, taking time to put himself into their shoes. Even if those shoes are penny loafers. In the lecture, his pursuit of the POGIL methodology has been relentless. That non-lecture style requires giving up much of the way we were told was central to our science. It is really hard to have students discover things for themselves, but he is good at it. For 183 years Dr. Mueller and Anderson cooperated in the first and second semester Intermediate Laboratory course. This year, Dr. Mueller ran solo with the Spring semester lab in an attempt to add a layer of coordinated collaborative exploration. His ambitious plan for examining an array of ligands fit well with the students' understanding and experience in the lab. Thanks, Paul. You taught me a lot.

Dr. Herb Sipe had a very Sipean year. Too many lecture courses in the fall followed by the JEOL ESR spectrometer coming down with some miniscule lethal problem. I am sure there was a 20 minute burst of expletives resulting in a new instrument being ordered. Dr. Sipe is spending his quarantine time with his nose pressed against the glass waiting for the new spectrometer. I have learned many new words and phrases. Having the office next to Dr. Sipe has provided me with "insight" over the course of these decades. I know of no other men of his generation that have a better understanding and demeanor with 19-23 year old men. It is astonishing to watch as he simultaneously holds feet to the fire and encourages self-belief. I will never forget my first department meeting when Herb passed out the department budget and we had a discussion as a department about how we best could meet our needs with the funds at hand. I was part of a DEPARTMENT. Thanks, Herb. You taught me a lot.

Well, I need to mention a couple more faculty:

Dr. W. W. Porterfield Exceptional Person Emeritus. On Monday, Wednesday and Friday, it was 8 AM wild ideas in his office. On Tuesday and Thursday it was 8 AM wild ideas in my office. If you weren't listening, we got most of the problems of the world all worked out. Thanks, Bill. You taught me a lot.

Dr. Michael Wolyniak has been both a willing co-conspirator and an all-too-ready critic. A strong dose of "Why not?" and a very sparing dose of "Why bother?" had made all (well, almost all) of my dealings with Mike as an all-but-paper member of this department. Thanks, Mike. You taught me a lot.

There will be a new biochemist in the pasture here: **Dr. Tim Reichart**. I think we are the luckiest place around as Tim's resume and character look like they will fit in well. He will propel us into the future. You wait: he's real good.

And I must add some non-chemists who I have taught classes with: Dr David Marion, Dr. Peter Mitias and Dr. Roxann Prazniak. Thank you, David, Peter and Roxann. You taught me a lot.

Thank you Carl, Kay, Katy, Cyndy, Anita, Eric, Alyssa, Cooper and my imaginary friends. You have taught me a lot.