Lab Lines

DECEMBER 2018

IN THIS ISSUE:

RESEARCH AND AWARDS 1

WHO'S ON TRAVEL/ PUBLICATIONS/ OUTREACH/PCOMING EVENTS 2

SAFETY CORNER 3

UMCES Environmental Summit 2018

Dr. Peter Goodwin, President, University Center for Environmental Science (UMCES), was inaugurated on November 30, 2018 at the Institute of Marine and Environmental Technology campus, located in Baltimore, MD. Dr. Goodwin spoke about the Grand Challenges in the Environment and the Future of University of Maryland Center for Environmental Science.

There were presentations and panel discussions with global leaders and participants of the summit. The discussions focused on the actions, partnerships, innovations, and technological advancements that need to be pursued to ensure the vision in UMCES' strategic plan becomes a reality.

RESEARCH & AWARDS

Dr. Andrew Heyes received an award from the Maryland Department of the Environment (October 31, 2018 - September 1, 2019). The title for this project is: *Investigation of the Concentration of Trace Contaminants in the Sediments and Biota in the Vicinity of Hart-Miller Island 2018.*

Mr. Jerry Frank received an award from the Maryland Department of the Environment (August 1, 2018 - September 30, 2019). The title for this project is: *Targeted Watershed Corsica Monitoring Project-Evaluating Progress Towards TMDL Goals through Assessment and Monitoring at Watershed, BMP, and Site.*

WHO'S ON TRAVEL

Dr. Lisa Wainger, Taylor Hollady, Faculty Research Assistant, and Kristen Hychka attended the *ACES 2018 Conference: A Community on Ecosystem Services* in Washinton, D.C. The group participated and presented in workshops and poster sessions throughout the conference.

Dr. Lee Cooper travled to Montreal Canada to attend the Board of Director's meeting of Amundsen Science (a non-profit corporation overseeing use of the CCGS Amundsmen icebreaker). Funding was provided by ArcticNet.

Hadley McIntosh, Ph.D. Canidate, attended the National Ocean Sciences Accelerator Mass Spectrometry (NOSAMS) radiocarbon facility located in Woods Hole, MA. Hadley was working with Drs. Ann McNichol, Li Xu, and Al Gagnon from November 12 through the 19th processing samples from the Mackenzie River Delta Lakes.

PUBLICATIONS

Liljestrand, E., Wilber, E., and Schueller, A. (2018). *Multi-State Dead Revocery Mark-Recovery Model Performance for Estimating Movement and Mortality Rates.* Fisheries Research.

Liljestrand, E., Wilber, E., and Schueller, A. (2018). *Estimation of movement and mortality of Atlantic Menhaden during 1966-1969 using a Bayesian multi-state mark recovery model.* Fisheries Research.

Gonsior, M., and Powers, L., *2018. Non-Target Screening of Disinfection By-Products in Desalination Plants using Mass Spectrometry. A Review. Current Opinion in Environmental Science and Health.*

OUTREACH

Through December 9, the CBL Visitor Center will be open from 9:30 to 4:30 pm on Friday's, Saturday's, and Sunday's. During the Solomons Island Christmas Walk on December 7th and 8th, the CBL Visitor Center will stay open until 8:00pm. Join us for cookies and cocoa! If you would like to purchase CBL logo merchandise for the holiday season, please plan to make your purchases before Sunday, December 9, the final day of Visitor Center operation for 2018. Campus tours have ended for 2018. Group tours can be arranged throughout the year by contacting the outreach coordinator. Learn more here.

UPCOMING EVENTS

CBL's Holiday Luncheon will be held December 14 at 1:00 p.m.

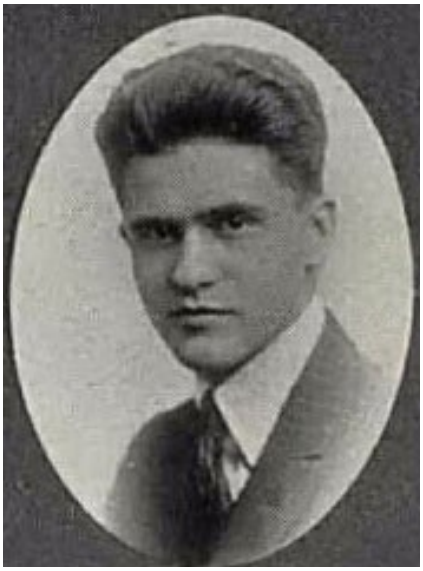
Holiday Recess: December 25 - January 1, 2019

I received this article in a newsletter and I thought it would be good to share.

Memorial

Although the headstone inscription indicates he was killed by the carelessness of others it appears that he was partially to blame for his death and the injuries incurred by others in the explosion.

William Eastman Spandow



Pictures taken by Allison Bailey, Volunteer

20 November, 1922. “The funeral of William Eastman Spandow, who was killed by the explosion in Havemeyer Hall Friday, will be held in the Chapel at 11 o’clock this morning.” This was the introduction of the obituary given by the Columbia Spectator on the unusual death of the 24-year-old chemist. According to the newspaper, Columbia University was providing advanced programs in chemistry, physics, and engineering- but no safety standards had been set. The newspaper describes common injuries such as “many eyes, fingers, and hands have been lost in such laboratories because the educational institutions… have not yet become as thoroughly convinced… that it is possible to prevent almost every type of industrial accident by the installation of proper mechanical guards, by the revision of manufacturing processes and by safety education of the workers.” If accidents like these were common, why would safety standards be so low?

William Eastman Spandow had been educated in Paris until 1914, when he returned to America to attend college at the University of Denver. He possessed “unusual attainments” and had both a B.A. and an M.A. in physics and chemistry, being also a graduate at Memphis. It is apparent that he loved experimenting and discovering ways in which chemicals work. Unfortunately, his love of learning would be cut short. On November 17, 1922 he was in the lab busy experimenting in the manufacturing of diphenylamine- a colorless element used for the preparation of dyes and the detection of oxidizing agents in analytical chemistry. Apparently the chemists were unaware that the chemical posed any danger. The concoction had produced a great pressure and shattered the heavy steel autoclave it was placed in. The shattered steel was forcefully hurled in all directions, wounding other chemists and killing Spandow instantly, who was standing directly in front of the pressure gauge. He was badly burned and cut with debris, but a large piece of metal had crushed his head, killing him instantly. The explosion was powerful enough to shatter the windows.

Spandow's surviving co-experimenter later summarized that the accident occurred because Spandow had failed to turn off the gas heater if the pressure became too high. He recalled that other students performed the same experiment and had been successful. Before he left the premises, their professor read the gauge at 112 and warned them about the heat and pressure. Just before the accident, the pressure rose to 250 lbs. per square inch, and it was concluded that the not yet extinguished gas had spread into the container and caused the explosion. Spandow is buried in Elmwood Cemetery in the Miller section. His inscription reads "Killed in chemical laboratory of Columbia University by an explosion due to the carelessness of others." It seems that whoever wrote the inscription also took issue with the college's poor safety standards.

Drug and Chemical Markets, volume 11

Laboratory Explosion Kills Student

An accidental explosion in a laboratory used by graduate students at Columbia University, on Nov. 17, caused the death of William Eastman Spandow, a graduate student, of Memphis, Tenn., and the serious injury o Reginald Gordon Sloane, a Harvard graduate and son of Mr. and Mrs. Charles William Sloane.

The students were experimenting in the manufacture of intermediate compounds for aniline dyes. The lives of at least seven other graduate students in the laboratory were imperiled by flying steel missiles which were hurled in all directions as a highly explosive compound shattered the lid of its steel container. The detonation was heard several hundred feet away.

The general opinion among the investigators for the university and the city was that Spandow, who was in charge of the apparatus for the day, in part at least had disregarded instructions given to him by the professors who direct the work in chemical engineering. He opened a valve on the side of the heavy steel apparatus before a gas flame had died out of the gas heater underneath, and a tongue of flame darted in to the chamber and ignited the imprisoned gases.

Source:

Find A Grave, database and images (https://www.findagrave.com : accessed 26 November 2018), memorial page for William Eastman Spandow (1897–1922), Find A Grave Memorial no. 8952357, citing Elmwood Cemetery, Memphis, Shelby County, Tennessee, USA ; Maintained by Mary & Kent (contributor 47170788) .