

DEPARTMENT OF CHEMISTRY  
CORNELL UNIVERSITY  
ITHACA, NEW YORK 14850

# NEWSLETTER

Issue No. 11

August 1972

## DEPARTMENT NEWS

For those of you who have not been here for some time, here are some data that might be interesting. For example, 3400 students in the Fall of 1971 and 2800 students in the Spring of 1972 were registered for courses offered by the Department of Chemistry. The faculty, responsible for this staggering formal teaching load, managed to conduct research resulting in 184 publications this past year. This was in addition to dozens of invited seminars, etc.

## FACULTY

Recognition of distinguished achievements in original research came to Lynn Hoard and Roald Hoffmann when they were elected to the National Academy of Sciences this Spring. This high honor, bringing honors to Cornell as well as the recipients, is now enjoyed by five members of the Department's faculty.

Professor Jerrold Meinwald will be leaving Cornell soon for the sunnier climate at the University of California, San Diego. His 20 years at Cornell have had a lasting beneficial effect and he will be sorrowfully missed. We wish him continued success and happiness.

Professor Jacob Papish, Professor Emeritus of Chemistry at Cornell University, died June 8, 1972 at the home of his daughter, Mrs. Dorothy B. Papish, 35 Elk Street, Hempstead, Long Island, New York. He was 85 years old.

Dr. Papish, who was a 1910 graduate of Valparaiso University, Valparaiso, Indiana, taught analytical chemistry there from 1910 to 1914. In the latter year he moved to Indiana University in Bloomington, where he served as an instructor of chemistry for two years while earning his M.A.

He was an instructor at Cornell from 1919 to 1925, receiving his Ph.D. here in 1921.

In 1925 Cornell made him a professor and he taught spectroscopy for several years. He was acting head of the Chemistry Department at Cornell from 1931 to 1939, when he returned to full-time teaching. He retired in 1950.

## ALUMNI

Dr. George R. Hill, 50, former dean of the College of Mines and Mineral Industries at the University of Utah, was named on June 6, 1972 to the post of Director of the Interior Department's Office of Coal Research.

A native of Ogden, Utah, he has been a resident of Salt Lake City since he first became associated with the University of Utah in 1946. Until 1951 he served as associate professor of chemistry; was chairman of the Department of Fuels Engineering (which he organized) from 1951 to 1965; and in 1965 became dean of the College of Mines and Mineral Industries.

A graduate of Brigham Young University in 1942, Hill received his Ph.D. degree from Cornell in 1946 in the field of inorganic and physical chemistry while working with Professor A. W. Laubengayer.

Professor Horace Judson, who received his Ph.D. degree in 1969 and is now on the faculty at Morgan State College, Baltimore, Maryland, taught our summer course in organic chemistry.

The other summer faculty member was Professor Bruce Gilbert. Although Bruce is not an alumnus, he did have a Postdoctoral appointment at Cornell. He is on the faculty at York University, England.

August Merz, class of 1893, passed away May 6, 1970. Mr. Merz bequeathed sufficient funds to the Department of Chemistry so that we now have established the Merz Fellowship for graduate study in organic chemistry. The first Merz Fellow is Brent Burdick who is doing his research under the guidance of Professor C. F. Wilcox.

### VISITING LECTURERS

The Baker Lectures will be held this year from September 10 through October 29, 1972. Professor Dr. E. Heilbronner from the Physikalisch Chemisches Institut, Der Universität, Basel, Switzerland will conduct this distinguished series of talks.

The Debye Lectures will be presented by Professor George Benedek, of M.I.T. during the period of October 30 through November 3, 1972.

### NON-ACADEMIC STAFF

Mrs. Essma Davis, who was honored last year when she completed 35 years of service in the Department, will be retiring January 1, 1973. She has been Secretary to the Chairman for a number of years and has done so many excellent things for the Department that she will truly be missed. Her memories of other years and former students and faculty are sometimes our best sources of information. Her present plans include considerable travel in a new mobile home. We wish her bon voyage and hope she will visit us whenever her caravan circles back to Ithaca.

On July 1, 1972, Dick Ellis, experimental machinist retired. Dick and his wife were the guests of honor at a Department party held this past month. Retirement plans include continuing his activities in dog obedience training which has been one of his main hobbies for several years. Dick has promised to pay us a monthly visit and pass judgement on our ability to make good coffee.

## GRADUATE STUDENTS

This June the Chemistry faculty voted to give the \$1,000 Eastman Kodak Scientific Award to Mr. Murray D. Lawless. This award is given annually to a graduate student who has shown overall excellence in his studies and research. The faculty is pleased to honor Mr. Lawless in this way.

At a recent meeting the faculty voted to award DuPont Teaching Prizes to the following teaching assistants: Alan E. Burkhardt, Avery K. Ellis, Joseph Foos, John F. Jaworski, Edward A. McNeill, Philip Y. Paden, Robert C. Pierce and David Yee. These prizes consist of a \$50 cash award, and will be presented at a meeting this Fall. The prizes recognize teaching assistants who have demonstrated excellence in teaching and the desire to upgrade the quality of undergraduate education. They are sponsored by DuPont, who for many years has demonstrated an interest in education and has assisted this Department in helping to improve the quality of undergraduate education.

Harold Mattraw

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CORNELL SOCIAL HOUR

TUESDAY, 29 August 1972

WALDORF-ASTORIA

at 5:30 p.m.

Jansen Suite Salon

## Chairman's Column

This summer has sped by much too fast, and the new academic year is almost here. I have tried to spend the bulk of my time during the summer thinking and writing about research, but only can claim partial success in my attempts.

The Chemistry Department is looking forward to another successful year, although a number of problems remain to be solved. The job situation for our graduates has improved somewhat, although by no means is approaching the glory years of the 1960's. Still the industrial job market seems to have bottomed out and now is improving, while the academic job market seems to be remaining quite steady. The research funding both nationally and in our department has stabilized. The National Institutes of Health continues to receive substantial budgetary increases. Unfortunately the picture is not so rosy with the National Science Foundation. Although their budget appears to be increasing, this is illusory as they are mainly initiating new programs and picking up grants from other governmental agencies which no longer support research. The actual budget for basic research in chemistry has remained essentially constant for several years, which in view of inflation represents a significant decrease. Even more alarming is the band wagon trend of the National Science Foundation to support applied research. While applied research is of national importance, basic research should not be sacrificed for it. In the long run basic research is vital for the health of the nation, and only the National Science Foundation is in a position to provide the necessary support. I hope that Congress and the administrative officials of the National Science Foundation can be persuaded to reverse the present trend.

A major problem still facing our department is the remodelling of the remainder of Baker Laboratory, which predominately involves undergraduate laboratories. These ancient facilities are still functional, but they do not permit us to give the Cornell students the very best in education, which they deserve. Unfortunately we have not been

successful in raising money to complete the renovation in these difficult economic times. Maybe this will be our year! On the positive side, this next year marks the complete conversion to our new integrated laboratory curriculum and the initiation of a course in environmental chemistry. We will, of course, continue to strive for progress and innovation in teaching and research.

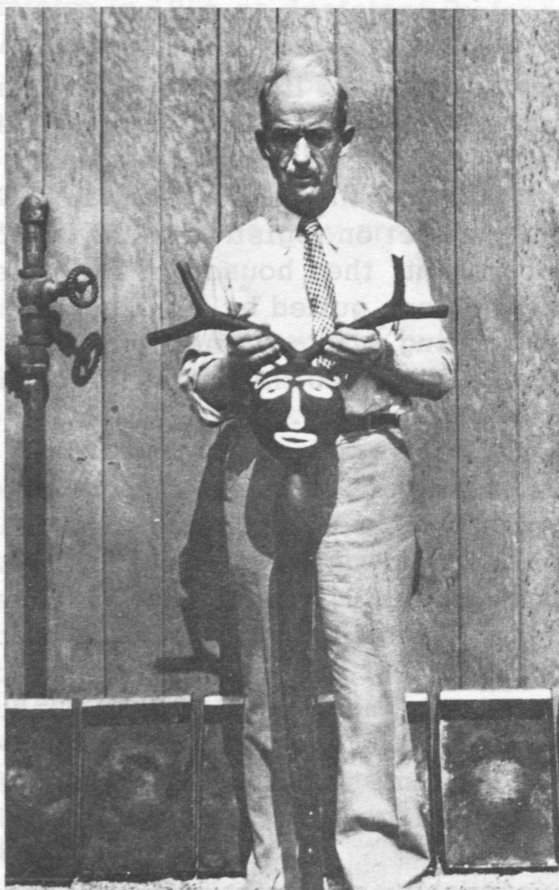
Gordon G. Hammes

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Annual Open-House in Baker Laboratory at Reunion Time

Two years ago the custom of holding an open-house for returning Cornell Chemists was initiated, on the spur-of-the-moment. This last June the event was formally scheduled in the Reunion Program, and on Friday afternoon returning chemists were invited to come to Baker to meet members of the faculty and swap memories with other alumni. A goodly number attended, especially those of the classes of '22 and '27. Emeritus Professors Clyde Mason, Lynn Hoard, Al Blomquist and Laubengayer, as well as numerous members of the active faculty hosted the affair. The Departmental pictures were on display and wives had great fun trying to identify their husbands when . . . Coffee and tea were on tap. Tours of the new laboratories were enjoyed and the chance to see the campus from the roof of the towering research wing was popular. Plans are to make this open-house a regular event for each Reunion Time, so be sure to fit it into your schedule.

GEORGE W. CAVANAUGH



(Photo Courtesy of  
Eleanor F. Horsey — B.A. '36, M.S. '38)

## Lauby's Recollections

George W. Cavanaugh

As a freshman arriving in Ithaca via the Ithaca-Auburn Short-line in the Fall of 1917, I was pounced on by a Rooming Agency Compet who promptly stowed me away in a rooming house halfway down Williams Street below the White Gateway. Climbing up that nearly perpendicular street on registration day, I found my way to the Chemistry Department, then housed in the roofed-over ruins of Morse Hall which had been gutted by fire the preceding February. There, in my first meeting with a Cornell professor, George W. Cavanaugh, I was initiated into the mysteries of the B. Chem. curriculum.

In those unhurried days a chemistry undergraduate had as advisor each year a senior professor, changing each year, so one was sure to get to know at least four members of the faculty. In 1917 some sixty of us freshmen for the B. Chem. courses were welcomed individually by Professor Cavanaugh who made our problems his. On a Saturday afternoon later that Fall I washed the windows of the Cavanaugh home to earn a much-needed dollar, and got to know Mrs. Cavanaugh, a gracious small lady who was a semi-invalid. She welcomed me and helped me forget my disappointment in not being able to attend the football game with my better-heeled classmates.

George Cavanaugh was strictly a Cornell product and, following in the footsteps of Professor Caldwell, he spent his whole career in the service of the University and the farmers of New York State. Professor Caldwell, one of the first four professors picked by Ezra Cornell, was an innovator in the application of chemistry to agriculture and made Cornell a leader in this field in the days when the U.S. economy was still predominately agrarian.

Georg Cavanaugh, born in Watertown, N.Y., in 1870, entered Cornell in 1889 to become one of Caldwell's proteges and, as a



junior, became Assistant Chemist in the Cornell Agricultural Experiment Station. He qualified for the B.S. in 1896 and remained in Ithaca as Assistant Agricultural Chemist under Professor Caldwell. In 1903 he was appointed Assistant Professor of Chemistry in the College of Agriculture when Caldwell retired. He transferred to the Department of Chemistry in 1905 as Assistant Professor of Chemistry in It's Relation to Agriculture, becoming Professor in 1909. (In those days, because of strenuous faculty action, the degree of Associate Professor was not used at Cornell). In 1914 Cavanaugh was named Professor of Agricultural Chemistry. He retired as Emeritus Professor on July 1, 1938 and died July 2, 1938. He is unique in the history of the Chemistry Department as the only professor not having an advanced degree.

Professor Cavanaugh, as I knew him, was of medium height and slight build, with thinning gray hair and a mustache. He would peer quizzically over his glasses, a quick twinkling of his eyes enlivening his lectures. He and Henry Feehan, our Irish stockkeeper, were great friends and met frequently at Henry's window to laugh over the latest Irish jokes. Because Cavanaugh's courses in food and agricultural chemistry were not required for the B. Chem. degree, he was not as well known to chemistry majors as other professors in the Department.

As a senior I benefited from Cavanaugh's course in Food Chemistry. He was a natural teacher, presenting his subject matter in an interesting and convincing manner and interlarding his remarks with many personal experiences and humorous incidents. He took a keen interest in his students.

Professor Cavanaugh believed in carrying science to the farmers of the State. His engaging personality and ability to make clear the application of chemistry to agriculture made him a welcome lecturer at Farmer's Institutes. He realized the necessity of utilizing surplus agricultural products and was particularly interested in dairy problems. The economical production of powdered milk was an important development resulting from Cavanaugh's investigations. Later he became interested in the possibility of utilizing giant kelp as a source of

iodine, vitamins and trace elements. In the picture he is holding a decorated specimen of kelp, showing that he attacked this problem with characteristic high spirits and good humor.

Professor Cavanaugh always entered into Departmental social doings with enthusiasm. Vividly remembered is a mock Ph.D. exam performed at an evening Get-to-gether of faculty and students in the main lecture room of Baker Lab. Cavanaugh and two other senior professors formed the committee and grilled a younger member of the faculty, to the delight of everyone. He was an active honorary member of Al-Djebbar, a chemistry convivial group of the '20's and '30's, and regularly attended its initiation dinners and generously transported student members. One remembers driving to a meeting at Freeville Inn and overtaking Cavanaugh's car which was listing heavily to port. Fearing for his safety, I pulled along side only to find that "Tiny" Robey (a graduate student of some 350 pounds) was one of the passengers in the back seat.

Although slight of build, Cavanaugh was fully capable of defending himself vigorously. He delighted in telling of his encounter with a drunk on a Lehigh Valley train. This pugnacious fellow undertook to vent his spleen on the small professor. Cavanaugh doubled up in his seat and let fly with his legs, sending the bully crashing down the aisle, a very surprised and humbler man.

With Cavanaugh's retirement the courses in food and agricultural chemistry were transferred to the College of Agriculture. When his laboratory was liquidated I acquired several cases of cider jugs which still play an important role in my home winemaking activities.

A. W. Laubengayer

Faculty Members

(Fall Term 1972)

A. C. Albrecht	M. J. Goldstein	R. F. Porter
S. H. Bauer	G. G. Hammes	R. R. Rye
C. A. Brown	R. Hoffmann	H. A. Scheraga
J. M. Burlitch	R. E. Hughes	F. R. Scholer
W. D. Cooke	F. A. Long	A. G. Schultz
V. du Vigneaud	G. M. Loudon	M. F. Semmelhack
E. L. Elson	H. C. Mattraw	M. J. Sienko
R. C. Fay	F. W. McLafferty	D. A. Usher
M. E. Fisher	W. T. Miller	W. I. White
G. A. Fisk	F. A. Momany	B. Widom
J. H. Freed	G. H. Morrison	J. R. Wiesenfeld
	R. A. Plane	C. F. Wilcox

Emeritus Faculty

A. T. Blomquist	J. R. Johnson
J. L. Hoard	A. W. Laubengayer
M. L. Nichols	

Department of Chemistry  
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FIRST CLASS MAIL