DEPARTMENT OF CHEMISTRY
CORNELL UNIVERSITY
ITHACA, NEW YORK 14850

NEWSLETTER

Issue No. 3 March 1969

This issue of the Newsletter brings forth another first — the inclusion of a photograph which you will see in Lauby's Cornell Recollections. We hope to insert other photographs of interest in future issues. If any of you have such photographs, please send them on to Lauby or myself. The circulation of this Newsletter continues to go up; we are approaching 1,500. Please let me know if you know of someone who is not receiving the Newsletter and we will add their name to the list. Evidence of the increased circulation is the tremendous attendance at the Cornell Social Hour at Atlantic City last Fall. If this keeps up we may start competing with the general mixer as far as attendance goes. Incidentally, we will again be having a Social Hour at the ACS meeting in Minneapolis; it will be held on Tuesday afternoon at 5:30 in the Jackson Room of the Leamington Hotel. I hope to see many of you there.

The start-up of Baker renovation was imminent at the time of the last Newsletter and shortly thereafter became a reality. Renovation started in mid August and has been going at a very rapid pace ever since. The completion date is December 1st of this year and by the looks of things it may even be done before then. The outside of Baker is not being touched. The inside is where the action is; however, the basic floor plan will remain the same. A few walls will be added, mainly to cut down the size of large laboratories and also to make a few more offices; but basically the renovation is to put in modern heating, plumbing, electrical system, air conditioning, and modern laboratory furniture and equipment. It will be a truly elegant building both inside and

(continued on page 4)

Chairman's Column

Bob Plane's current sabbatical leave in Berkeley provides me with a unique opportunity to address Cornell's chemical friends and alumni. Everyone is aware that these are turbulent days on the academic scene. I think we all look forward to the time when the basic causes of much of this unrest will no longer be with us. For the present, let's examine some aspects of the situation at Cornell.

Within the chemical microcosm, we face a number of problems. As Bill Gurowitz has pointed out, there has been a significant reduction in the level of support that the federal granting agencies, such as the National Science Foundation and the National Institutes of Health, have been able to provide. The University itself is in delicate financial condition, since expenses are going up faster than income. In spite of help from industry, these developments have a serious impact on our research programs.

There are a number of other difficulties concerned with the shortage of money. Thus, there have been severe cutbacks in some of the programs which provide fellowship support for faculty members going on sabbatical leave. The uncertain national economic atmosphere seems to have reduced the demand for chemists both in industry and in the academic world. Beyond all this, the military draft poses a potential threat to many of our graduate students, and makes long-range planning very difficult. Overall, our situation right now has a rather unsettling character.

Gertrude Stein, dying, is said to have asked, "But then what is the answer?" She lay silent for a moment, and said, "But then, what is the question?"

One clear result of the current series of crises is that we are at least beginning to realize what some of the questions and problems are. At the simplest level, we have reexamined our undergraduate chemistry major curriculum, tried to introduce new

flexibility by having less rigid requirements. At the same time, we are placing much greater reliance on giving each student thoughtful, personal advice about what program would be most relevant for his own needs and interests. We hope that the result of these changes will be a program which not only remains attractive to the student whose interests lean strongly toward medicine, biology, physics, or other less closely related disciplines.

We have also given considerable thought to the process of graduate education and to the ever present conflict between the continuing need for a broadly based education and the growing pressure to become really expert in one small area of chemistry. Language requirements are being reconsidered at both the graduate and undergraduate level, and laboratory courses are undergoing complete reorganization in an effort to restore excitement to experimental work and to reestablish the importance of experiment in chemistry.

While these are unquestionably troubled times and while many of the basic problems are a result of circumstances beyond our control, at least in our role as teachers and chemists, the outlook is by no means bleak. The Cornell Department of Chemistry remains a very lively place, in which both teaching and research are enthusiastically carried out. Now that so many problems have been recognized and so many questions asked, the groundwork is laid for developing constructive solutions.

In fact, the entire University is now engaged in a massive effort to contribute to the solution of the many social and educational problems that confront us. If good will and hard work is sufficient for this purpose, there can be no doubt about the success of this undertaking.

As far as chemistry itself is concerned, I think that our future will involve a reemphasis of those aspects of our subject that led most of us to become chemists originally: the esthetic

 (continued on page 8)

(continued from page 1)

out when it is completed. The project is a costly one and we are still actively seeking support for it from the chemical industry and persons associated with it.

CORNELL SOCIAL HOUR

ACS Spring Meeting

Tuesday, 15 April, 5:30 p.m.

Jackson Room

Leamington Hotel

Minneapolis, Minnesota

See you there!

Our Social Hour has traditionally been held on Tuesday at 5:30 during an ACS meeting. This very often conflicts with other social hours, usually of other colleges. Some thought has been given to the idea of social hours at future ACS meetings being held on Monday at 5:30 instead of Tuesday. I would like to get your opinions on this. The conflict on Monday would be with the Social Hour before the President's dinner. Please let me know by mail or by seeing me at the Minneapolis meeting which day you would prefer.

Cornell was very much in the news at the Atlantic City meeting. It was announced at the Atlantic City meeting that Professor Roald Hoffmann won the ACS Award in Pure Chemistry. The cover picture and lead story of the September 16, 1968

C&E News featured Professor Hoffmann. Professor Hoffmann will be receiving the Award and presenting his Award address at the Minneapolis meeting. In addition, Professor Hoffmann has just been selected as the 1969 recipient of the Phi Lambda Upsilon Fresenius Award. This Award recognizes "outstanding contributions to chemistry in the area of research, education, or administration." Professor Hoffmann will also be receiving this Award at the Minneapolis meeting.

Another happy event at the Atlantic City meeting was the paper presented by Professor Hans Muxfeldt on "The Total Synthesis of Terramycin". This was complete with press conference with all news services in attendance and international newspaper, radio, and television coverage. As a hint of things to come, I think we can look forward to more such outstanding syntheses in the near future.

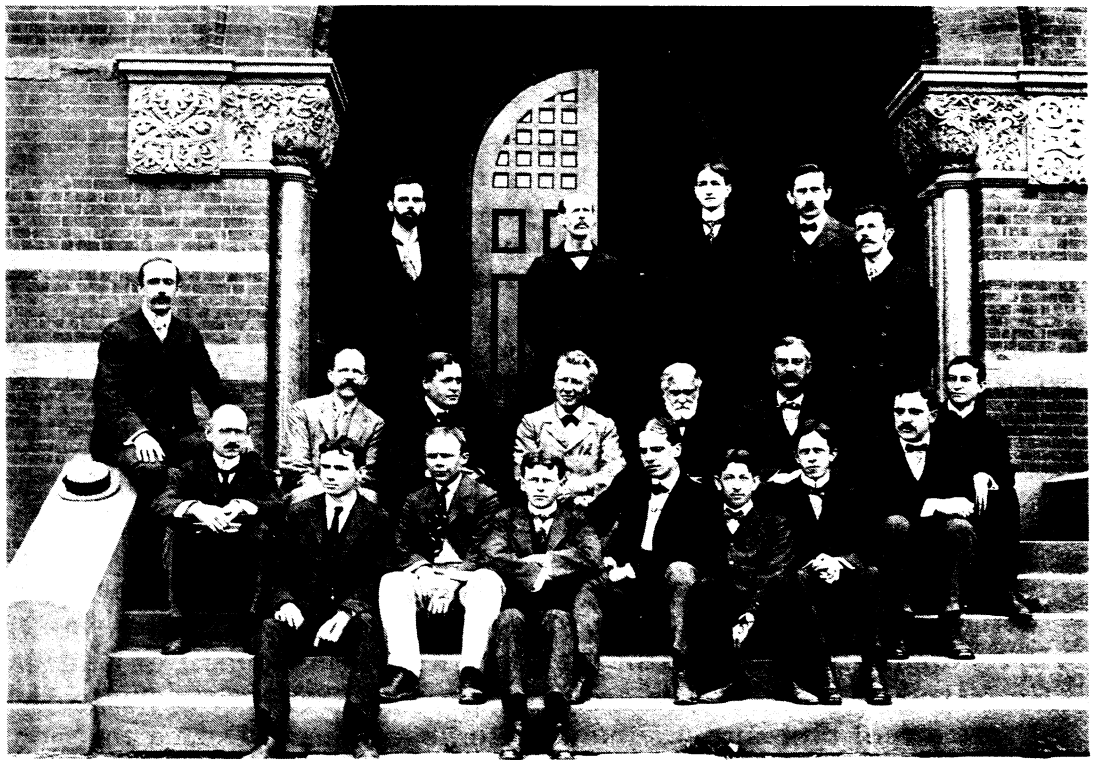
Another significant event was the awarding of the Nobel Prize to Professor Robert Holley last December. Professor Holley is a colleague on the faculty here. He received his Ph. D. in this Department under the guidance of Professor A. T. Blomquist. During World War II he worked with Professor V. du Vigneaud on the penicillin project. Professor Blomquist just won't stop carrying Professor Holley's thesis around with him.

Visiting Lecturers. We have had a truly excellent series of lecturers this academic year. The Fall term Baker Lecturer was Dr. Gerhard Herzberg of the National Research Council of Canada. He talked on the "Spectra and Structures of Simple Free Radicals". It was a real pleasure having Dr. Herzberg here. During the month of February, Professor Alan Battersby was here as the National Institutes of Health Biophysical and Bio-Organic Lecturer. Professor Battersby is from the University of Liverpool in England, and spoke on "Researches on the Biosynthesis of Natural Products"; his lectures were masterpieces of both scientific research and

 (continued on page 9)

Lauby's Cornell Recollections

This column will occasionally be enlivened by reproductions of pictures which may trigger memories. My first choice features the staff of the Department of Chemistry as of 1901. It includes men who were actively associated with chemistry at Cornell from 1887 through the 1930's. Many of you alumni will have known some of them or at least have heard of them. Fortunately, an accurate key is available so the names can be given, from the left, row by row.



Back: B. B. Turner, H. Feehan, G. H. Burrows, H. R. Jessel, E. M. Chamot
3rd: H. R. Carveth, W. R. Orndorf, W. D. Bancroft, J. H. van't Hoff and G. C. Caldwell, L. M. Dennis, T. Whittelsey
2nd: J. E. Trevor, G. A. Smith, B. Dales, E. S. Hall, B. S. Cushman
Front: J. E. Teeple R. Fischer A. R. Middleton

Note the high collars (celluloid?) and ascot ties, cutaway jackets, cuffless trousers with bottoms trimmed high (to allow easy access to high-buttoned shoes?), handlebar mustaches, and even sideburns. Of those pictured, the following made outstanding contributions to chemistry at Cornell.

G. C. Caldwell: One of the first four professors appointed by President White in 1867; he organized the first instruction in chemistry at Cornell. As Head of the Department until 1902, he recruited an outstanding group of young faculty who developed a well-rounded curriculum, set high standards of instruction, and innovated new areas in American chemistry.

L. M. Dennis, "The King": Came to Cornell in 1887 to teach inorganic and analytical chemistry. Head of the Department from 1902 - 1933, he nursed it through the critical years of building the Carnegie Annex to Morse Hall, managed the recovery from the disastrous Morse Hall fire of 1916, planned and supervised the building of Baker Laboratory, and initiated the Baker Non-Resident Lectureships.

W. R. Orndorf, "Uncle Billy": A student of Ira Remsen of Hopkins, he joined the faculty in 1887 to inaugurate courses in organic and biological chemistry. He died in 1927.

E. M. Chamot, "Chammy": Started as a student at Cornell in 1887, later became professor and developed courses in chemical microscopy, metallography, and forensic chemistry. He retired in 1938 but continued to come to Baker until his death in 1950.

W. D. Bancroft, "Banty": Joined the faculty in 1895 in the then new area of physical chemistry. He introduced courses in the phase rule, colloid chemistry, and electrochemistry to American students. His application of structural theory to account for "blue eyes and blue feathers" attracted much attention. His

students were continually amazed by his "photographic memory". Struck by an automobile in 1938, he was so badly injured that he was confined to his room, but he continued to welcome his colleagues and students until he died in 1953.

J. H. van't Hoff: Visited Cornell in 1901, in line with the tradition started by Andrew D. White of bringing distinguished visiting lecturers to the campus.

Henry Feehan: Last but not least in the memory of Cornellians, "Henry" was stockroom clerk from 1882 to 1936. His role in the Department was so unique that I propose to devote my column in the next issue to him. I invite those of you who knew him to send me anecdotes and pictures (these will be returned if requested) so I can do justice to him.

Finally a word of appreciation to you who have contributed stories, pictures and other materials for my files on the history of the Department of Chemistry. Please keep them coming.

A. W. Laubengayer

(continued from page 3)
beauty of an orderly world, the chance to understand the physical basis of life processes, the challenge to create something genuinely new, and the sheer fun of working with chemicals and solving problems. These are still exciting and attractive pursuits, and as long as the University itself continues to maintain its equilibrium, the outlook for chemistry at Cornell seems very bright.

Jerrold Meinwald

(continued from page 5)

presentation. He is a "delightful Englishman" and a very stimulating person to have around. Shortly after Professor Battersby left, Professor William N. Lipscomb of Harvard University arrived to deliver the Spring term Baker Lecture series. Professor Lipscomb is discussing "The Relation Between Atomic Structure and Function of Proteins". Professor Lipscomb's arrival was somewhat complicated by the fact that he was due to leave Boston the day after the first of their series of big snow storms. He anticipated arriving here Tuesday afternoon but didn't actually make it until Friday afternoon. We are all busy looking at large molecules in three dimensions by means of stereo slides, models, etc. His lectures are very interesting and exciting.

So far the draft has not hit this Department very hard and we have been able to maintain our teaching and research functions at the usual level. However, what the future holds is still unknown.

The same cannot be said about the reduction in research support by the federal government. This hit very hard, starting last summer and continuing throughout the year. The toughest were the NSF budget cuts which came after we were into this fiscal year. These were tough since two months of the year had gone by before the fiscal year reductions were announced. Spending was relatively normal during those first two months so, in order to cut spending, the subsequent months were indeed very tight. Other federal budget cuts were felt in the reduced size of renewal or continuation grants along with an increase in the number of turndowns. So far no great problems have been encountered, due to everyone's cooperation; however, it has meant a slowdown and lower productivity in the research programs.

News of the Faculty. As is evidenced from the Chairman's column, Professor Robert Plane is currently on sabbatic leave at

Berkeley for the Spring semester. While he is on leave, Professor Jerrold Meinwald is Acting Chairman. Professor F. A. Long will be stepping down as Vice President for Research and Advanced Studies and will be devoting his full attention to being a Professor of Chemistry. He will continue his research program and also initiate a new program studying the impact of science on society. Professor Gordon Hammes is spending the academic year on sabbatic leave at Stanford University. Professor Robert Hughes is currently Director of the Materials Science Center and also Professor of Chemistry. Professor Fred McLafferty is currently Chairman of the Analytical Division of the American Chemical Society and Professor Jerrold Meinwald is currently serving as Chairman of the Organic Division of the American Chemical Society. Professor David A. Usher was recently awarded a National Institutes of Health Career Development Award. Professor Benjamin Widom is spending the Spring term on sabbatic leave in England.

That is about all the news for now. I hope to see many of you at the Cornell Social Hour in Minneapolis.

Bill Gurowitz

Faculty Members

(Academic Year 1968-69)

A. C. Albrecht
S. H. Bauer
A. T. Blomquist
J. M. Burlitch
R. A. Caldwell
W. D. Cooke
V. du Vigneaud
E. L. Elson
R. C. Fay
M. E. Fisher
G. A. Fisk
J. H. Freed
M. J. Goldstein
W. D. Gurowitz
G. G. Hammes
J. L. Hoard
R. Hoffmann
R. E. Hughes
E. S. Kostiner
F. A. Long
F. W. McLafferty
J. Meinwald
W. T. Miller
G. H. Morrison
H. Muxfeldt
R. A. Plane
R. F. Porter
R. R. Rye
H. A. Scheraga
M. F. Semmelhack
M. J. Sienko
D. A. Usher
B. Widom
C. F. Wilcox

Emeritus Faculty

J. R. Johnson
A. W. Laubengayer
M. L. Nichols
J. Papish

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FIRST CLASS MAIL