

DEPARTMENT OF CHEMISTRY
CORNELL UNIVERSITY
ITHACA, NEW YORK 14853
U.S.A.

NEWSLETTER

Issue No. 22

March 1978

We begin with this issue the eleventh year of publication of this Newsletter. This issue, as you can see from the masthead, is number 22 (because the previous issues were 21, 20, 19, etc.). In case you wonder why this first issue of our eleventh year is not No. 21, the reason dates back to 1971 when we went from No. 7 in March to No. 9 in August. I know not why.

We also begin with this issue with a new editor, if that be the appropriate word. Let me introduce myself. My name is Earl Peters and I am the new Executive Director of the Department. Twice a year I have the pleasant task of coordinating the preparation of this, your Newsletter. I stress that this is your Newsletter because not only do we hope to communicate to you what's going on in the Department, but perhaps this Newsletter can also serve as a vehicle for communications among those of you who are Cornell Chemists. I'd like the contents of the Newsletter to reflect what you would like to know. I would like to meet each and every one of you so you can tell me in person, but until we do meet, perhaps you'll drop me a note.

Now let me tell you a little bit about myself. I attended Oberlin College, Yale University and the University of Buffalo from which I received a Ph.D. in organic chemistry in 1958. Prior to this time, I worked for two years at the Sprague Electric Company in North Adams, Massachusetts as a polymer chemist and at the Polymer Structure Section of the National Bureau of Standards as a guest-worker while serving in the U.S. Army. After postdoctoral work at Buffalo for a year, I spent the next thirteen years with Milliken and Company and Burlington Industries in the Carolinas in various textile research, development and technical management positions. In 1973 I came to Cornell Uni-

versity and for four years I taught and did research in textiles in the Department of Design and Environmental Analysis of the New York State College of Human Ecology.

And now I am here. My predecessor, Harold Mattraw, was such a capable administrator that it has been very easy for me to take over the management of this rather large and complex chemistry department. We are all grateful to him for his many years of dedicated and effective leadership.

I have enjoyed my first few months here very much. I find a faculty who are both outstanding researchers, as is attested to by the over 200 publications that issued from this department last year, and dedicated and capable teachers of both undergraduate and graduate courses and seminars; a bright and hard-working student body; a committed, diligent staff. Together we shall continue to make this one of the outstanding chemistry departments in the country and in the world.

Earl Peters

FACULTY NEWS

Jon C. Clardy has joined the staff as Full Professor. "He was a Visiting Professor during the lovely Spring of 1977 and claims that he was scandalously misinformed about the weather in Ithaca. He arrived permanently in January and has enjoyed both the 100 inches of snowfall and the two sunny days." (Editor's note: (1) We have had 114.9 in. of snow so far this season. The most to fall in one whole winter, since records started being kept in 1879, was 115 in. (2) We have had at least 3 sunny days since 1 January by my count.) His work deals with the organic chemistry of biologically active substances and relies heavily on x-ray diffraction. After completion of his Ph.D. research at Harvard, he joined the staff of Iowa State Uni-

versity in 1969. He has received fellowships from the Camille & Henry Dreyfus Foundation and the Alfred P. Sloan Foundation. Currently he is determining "whether someone raised in the South can learn to ice skate at the age of 34. This activity has provided much amusement for his wife and two young sons."

Jack H. Freed is spending a part of his sabbatical leave as a Visiting Professor at the Technical University in Delft, The Netherlands, and a part in residence at Cornell writing papers.

Roald Hoffmann is spending a part of a sabbatical year at the University Chemical Laboratory at Cambridge University in England.

Patrick S. Mariano is a Visiting Professor this semester from Texas A & M University, College Station, Texas. His research interests are in organic photochemistry and synthesis; he is a Camille & Henry Dreyfus Foundation Teacher-Scholar Awardee for 1975-80. He is teaching the undergraduate organic laboratory course here.

Richard F. Porter is spending a sabbatical semester in the Chemistry Department at Brookhaven National Laboratories on Long Island.

Thor N. Rhodin, Professor of Applied Engineering Physics, is now a member of the Field of Chemistry. The Field of Chemistry consists of a group of faculty members which administers the graduate program in the Graduate School of Cornell University. Rhodin's research interests center on questions relating to the chemical reactivity and chemical physics of atoms and molecules and their interactions with solids, particularly at surfaces and interfaces.

Harold A. Scheraga, who is spending this semester at the Weizmann Institute in Rehovoth, Israel, will return briefly to the U.S.A. in March to receive the ACS Award in Colloid or Surface Chemistry sponsored by Kendall Company. Scheraga will give the award address, "Interactions in Aqueous Solutions" at 11:00 AM on Tuesday, March 14 at a session of the Division of Colloid and Surface Chemistry in the Anaheim Room, Lobby Level, Anaheim Convention Center.

Benjamin Widom is spending a sabbatical semester in the theoretical Chemistry Laboratory of Oxford University in Oxford, England.

Chairman's Column

From the Chairman's perspective, two particularly important staff changes took place in the Department last fall. In the first place, as you may recall from last summer's issue of the Newsletter, Dr. Harold C. Mattraw stepped down from his position as Executive Director of the Department and retired to an active life in Ojai, California. Harold originally took over the Director's position from Bill Gurowitz (now Vice President for Campus Affairs), in August 1971. He soon established himself as a calm, unflappable director who knew what went on in every corner of the Department and was sensitive and understanding of the concerns of all. He was particularly helpful to graduate students and postdocs needing advice regarding positions in industry. As a new chairman, I found him a ready and reliable source of information and advice. Harold was a very modest man and would not allow us to mark his retirement in a formal way. Nevertheless, a few informal luncheons by faculty and others were held to say good-bye and tell him and his wife Afra that we in Ithaca would miss them. I want to take this opportunity to wish them both a happy and refreshing new life in retirement.

The second staff change, of course, concerns the appointment of Dr. Earl Peters as the new Executive Director. Earl has introduced himself within this Newsletter. I do want to express my gratitude to him for agreeing to take on the job so soon after it was offered to him. Indeed, for the two and a half months before Christmas, Earl effectively held down two jobs! Thus, he continued his teaching, research, and administration in the College of Human Ecology, while at the same time coming regularly to Baker to cope with the day-to-day chores and to start on the longer-range tasks that arrive on the Director's desk. At this time, Earl Peters is truly at home in Baker and rapidly becoming well-known, well-liked and well-respected by all of us. We look forward to a long and fruitful association with him.

Lastly, one more staff change concerns me since it affects

my own position as Chairman! My three-year term will be completed this summer and on July 1st I will hand over the reins to my successor, Professor Benjamin Widom. Ben, a theoretician like myself, has agreed to take on the chairmanship for a three-year term. By happy coincidence, he had arranged to take this current semester as a sabbatic leave in the University of Oxford in England. Thus, he will come fresh to the job of chairman — and has also been spared the uncommonly heavy snowfalls, blizzard conditions and flooding that have struck Ithaca recently.

Ben will take over a department that has changed little in the last three years. Currently, we have about 29 full-time faculty, (not counting some very active emeritus professors), 75 postdocs and 135 graduate students. There have, of course, been some changes in faculty. Associate Professor Marc Loudon left us last September to take up a position at Purdue University. To the disappointment of us all, we will also be losing Professor Earl Muetterties to Berkeley at the end of this academic year. On the other hand, we have been delighted to welcome back to Cornell, Professor Jon C. Clardy of Iowa State University. Jon visited us last Spring and presented a most stimulating course and set of lectures on organic structural determination by x-ray diffraction. He now joins us permanently as Full Professor. His arrival follows shortly on the establishment of a Departmental X-ray Facility incorporating a Syntex P2₁ Diffractometer purchased last fall with the aid of a major equipment grant from the National Science Foundation and matching funds provided by the University.

The Department has also been fortunate in continuing to attract outstanding young chemists to our junior faculty positions. Barry Carpenter and Paul Houston joined us in 1975 (in physical-organic and physical chemistry, respectively). This last fall Edward Grant (in physical chemistry) and Lawrence Que (in bioinorganic chemistry) started their terms as Assistant Professors. Within the last few weeks, Dr. James Rasmussen, currently at Harvard, has accepted our offer of an Assistant Professorship in bioorganic chemistry, to start next fall.

The Department thus remains strong and vigorous. As chairman,

Ben Widom will also find that our staff, students and faculty are a most loyal, supportive, and cooperative body of women and men. The University scene, however, presents a changing outlook. The new President, Frank Rhodes, has certainly made his presence felt on the campus but the final shape of his new policies for the University, especially as they affect the large research and teaching departments, remains to be seen. Currently, both the College of Arts and Sciences and the College of Engineering are searching for new Deans. The individuals filling these positions will undoubtedly play an important role in the future health of the University. Despite the pressures which Cornell, like other universities, continues to endure, I feel that an optimistic view of our future in Chemistry is still the best guide.

Michael E. Fisher

ALUMNI REUNION

During the annual Cornell Alumni Reunion, which this year takes place June 8 - 11, we will again have an Open House in the Lobby of Baker Lab. The date is June 9 and the time is from 1:30 to 4:00 PM. The hosts will be Professor A. W. Laubengayer and several emeritus professors and members of current staff.

Please do return to Ithaca for all the happy events that take place during Alumni Reunion, to get together with your friends (who will all seem to appear a little older than they used to whereas you haven't changed a bit since graduation in 1958) and especially to come by Baker Lab at either the above time and date, or really at any time, to say "hello", join us in some refreshments, perhaps have a tour of the laboratories and get together with former professors and colleagues.

Lauby's Recollections

For some thirty-six years I had the privilege of close association with Al Blomquist and valued him as a first class scientist, outstanding teacher, and genial friend. He and Sarah were members with us of Grad-Fax, a unique social organization of Cornell graduate students and faculty which started back in the twenties and has held monthly dances and dinners down through the academic years. Probably the only group in the country which still has program dances and sports tuxedos and long dresses, it provides a campus-wide mix. Grace and I often exchanged dances with Al and Sarah and found them elegant partners.

When World War II occasioned an exodus of many senior faculty members to areas of war work, Al and I were brought close in the struggle to keep instruction going and adapt the course schedules to meet the demands of Army and Navy for accelerated instruction for military contingents. And this was combined with much traveling and consulting on urgent research for the war effort. They were strenuous years but lightened greatly by the sympathetic understanding and strong backing of Professor Debye, who was then Chairman of the Chemistry Department. Al did a tremendous job helping to carry the Department through those demanding years and make it possible for rapid post-war resumption of normal academic activities.

In later years, when Al made consulting trips to Goodrich at Akron and I traveled to Cleveland for Sohio, he frequently provided pleasant companionship on railroad and plane. The door to his third floor red-carpeted Baker office was always open to colleagues and students. His place in the history of chemistry at Cornell is outstanding.

Harold Scheraga, Charles Wilcox and Jerry Meinwald have written about Al in the collection of "Memorial Statements of Cornell Faculty" for 1976-77. This is such a fine tribute and summary of Al's career that I have obtained the authors' permission to reproduce it here in toto, because the publication is not circulated to alumni.

A. W. Laubengayer

ALFRED THEODORE BLOMQUIST

November 16, 1906 - January 15, 1977

Alfred T. Blomquist, one of the outstanding organic chemists of his generation, had a relatively unconventional career compared to that of most academic scientists. A native of Chicago, he received his B.A., M.S., and Ph.D. degrees all from the University of Illinois. It was also at the University of Illinois that he met and married Sara Moffat. He had always been a brilliant student, and on completing his doctorate under the supervision of Professor Carl ("Speed") Marvel, he was awarded a prestigious National Research Council Postdoctoral Fellowship. He used this fellowship to pursue organic chemical research at Cornell and had intended to follow a career as a research scientist. The death of a key person in his father's clothing business, however, caused him to revise his plans; he declined an attractive offer from the DuPont Company when his fellowship appointment came to an end in order to return to Chicago as a partner in his father's firm. He spent the next eight years in the family firm and undoubtedly gave up any hope of being able to use his organic chemical training again.

World War II, however, brought Al Blomquist back to the academic world by temporarily depleting Cornell of its entire organic chemistry faculty. Professor J. R. Johnson had always wanted to bring Al back to chemistry, and he was finally successful in an appeal to Al to forsake his life in Chicago and to return to Ithaca to help out in this emergency. When Al claimed that he had forgotten most of his chemistry and had certainly failed to keep up with any new developments, Professor Johnson simply sent him a set of Chemical Society annual reports for the appropriate years, along with some recent texts and monographs, and told him to do some homework. While the practice of organic chemistry had not changed significantly during the 1930s, there had been very important advances in electronic theory and in the understanding of reaction mechanisms. The task of digesting these new developments in a few months must have been enormous. Nevertheless, Al Blomquist prepared himself the best he could, joined the Cornell University faculty as an assistant professor of chemistry in 1941, and soon found himself teaching all the organic chemistry courses and directing the research of all of the organic chemistry graduate students. It was under these strenuous circumstances that Professor Blomquist launched his academic career.

During the war years, Professor Blomquist was deeply involved in a number of research projects closely connected with problems of national defense. His true love, however, was organic chemistry per se, and he soon developed an international reputation on the basis of his many investigations in this field. His principal contributions to science were largely concerned with organic synthesis, and he published classical series of papers dealing with the preparation and reactions of strained, small-ring molecules, the chemistry of many-membered rings, and the synthesis of novel monomers and polymers. Later in his career, he became interested in the chemistry of amino acids and of low-molecular-weight peptide hormones. He edited an excellent series of monographs on selected topics in organic chemistry. In 1960, he became the third member of the Cornell department of chemistry to be elected to the National Academy of Sciences.

Professor Blomquist served as a chemical consultant to the B. F. Goodrich Company for twenty-five years, and he received a grant from Goodrich in support of his own research program at Cornell during most of that time. Especially in its early years, when federal funds in support of chemical research were not yet readily available, this grant provided invaluable support to a succession of very able graduate students.

Al Blomquist's prime personal qualities were his warmth, his generosity, and his empathy with students and younger colleagues. He consistently attracted a bright, diverse, and dedicated research group, and the Blomquist research group was always one of the largest and happiest in the chemistry department. He paid particular attention to helping his students get the best and most appropriate positions upon leaving Cornell, and he kept track of and helped each one during the subsequent years whenever necessary. He could count among his coworkers Bob Holley, who went on to become a Nobel laureate in chemistry, and Liang Huang, the woman who now leads a major research effort on the synthesis of antifertility steroids in the People's Republic of China.

As a colleague, Al was especially helpful to the younger members of the chemistry department. He understood the special insecurity that most assistant professors feel, and he was always available for an unhurried discussion of any problem, from the most personal to the strictly professional. In this quiet and totally unobtrusive way, he contributed greatly to faculty morale and to the well-being of the entire department.

Al Blomquist's life appeared to be dominated by his professional activities. In his earlier years, however, he was an avid stamp collector, and he and Sara were enthusiastic ballroom dancers. He always took great pride in his family. While he had few hobbies, he was a devoted gardener, and he derived particular pleasure from the cultivation of his roses. Throughout his life he maintained a certain elegance in his style of writing, in his speech (which he would occasionally grace with an apposite Latin phrase) and in his dress that

marked him as a scholar and a gentleman. Those who knew him will long remember him with deep affection.

Harold A. Scheraga
Charles F. Wilcox
Jerrold Meinwald

Faculty Members

(Spring Term 1978)

A. C. Albrecht	E. R. Grant	R. F. Porter
J. M. Burlitch	G. G. Hammes	L. Que, Jr.
B. K. Carpenter	R. Hoffmann	T. N. Rhodin
J. C. Clardy	P. L. Houston	H. A. Scheraga
W. D. Cooke	R. E. Hughes	A. G. Schultz
E. L. Elson	F. A. Long	M. F. Semmelhack
R. C. Fay	F. W. McLafferty	M. J. Sienko
M. E. Fisher	J. Meinwald	D. A. Usher
J. H. Freed	G. H. Morrison	B. Widom
B. Ganem	E. L. Muetterties	J. R. Wiesenfeld
M. J. Goldstein	E. Peters	C. F. Wilcox

Emeritus Faculty

S. H. Bauer	J. R. Johnson
V. du Vigneaud	A. W. Laubengayer
J. L. Hoard	W. T. Miller
M. L. Nichols	

CORNELL CHEMISTS

Please inform us of any changes of address or circumstances by completing this form and mailing it to Earl Peters, Department of Chemistry, 122 Baker Laboratory, Cornell University, Ithaca, N.Y. 14853. Thank you.

NAME: _____

ADDRESS: _____

YEAR OF GRADUATION: _____

CORNELL SOCIAL HOUR

175th National ACS Meeting

Tuesday, March 14, 1978

INN AT THE PARK

Terrace II

Anaheim, California

5:30 PM

**Department of Chemistry
CORNELL UNIVERSITY
Ithaca, New York 14853
U.S.A.**

FIRST CLASS