Badger chemist : a newsletter from the Department of Chemistry--University of Wisconsin--Madison. Newsletter 31 Winter 1984

BADGER CHEMIST

A Newsletter from the Department of Chemistry—University of Wisconsin—Madison

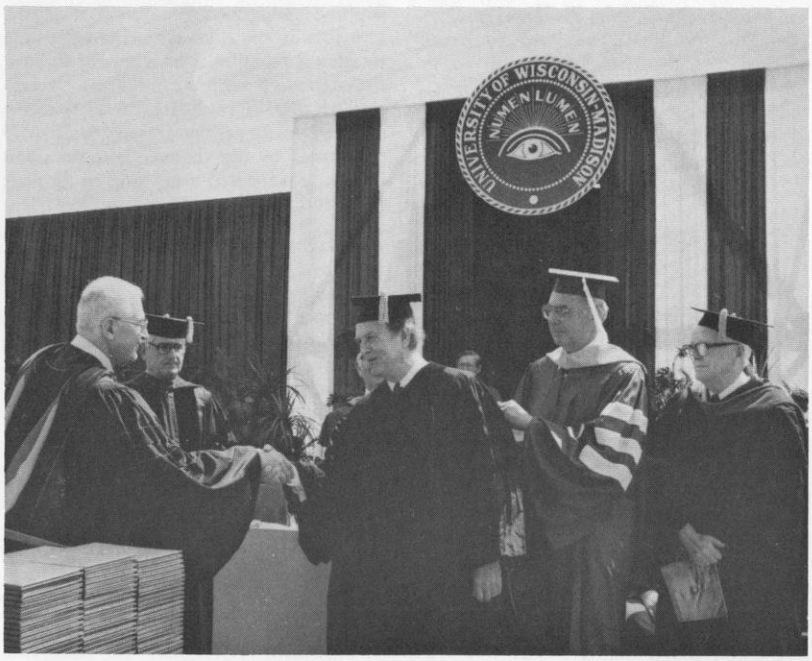
Newsletter 31 **Winter 1984**

Apr '85

CHEMISTS MONOPOLIZE HONORARY DEGREES

The discipline of chemistry figured prominently in honorary degrees awarded during the commencement ceremonies in Camp Randall Stadium in May 1984. Of the five honorary degrees awarded, four went to chemists or biochemists, one of them to departmental alumnus **Russell Peterson,** BS '38, PhD '42 (Walton). Other chemists who received honorary degrees were **Alfred Bader, Orville Bentley,** and **Evelyn Steenbock.** Paul Vanderbilt, who is Emeritus Curator of Iconographic Archives for the State Historical Society of Wisconsin, was honored for his pioneering work in using documental photography as a cultural and historical resource.

Joyce Carol Oates (MA '61, English) was to receive the Litt.D. for her novels, poetry, and critical essays; however, an illness in the family prevented her coming to Madison. She will receive her degree at a later date. Alan Schneider (BA '39) was to have received the D.H.L. for his leadership in avant-garde theater but was killed in a motorcycle accident before commencement.



Russell Peterson being congratulated by Chancellor Shain while Professor Joseph Hickey, far right, watches with approval. Hickey, Emeritus Professor of Wildlife Management, served as Peterson's escort.

Russell Wilbur Peterson received the LL.D. His career includes distinguished work in chemistry, politics, and conservation. Born in Portage, he entered the UW in 1934 as a student in the Chemistry Course. After graduating with high honors he continued graduate studies in general and organic chemistry. He served as a teaching and lecture assistant in freshman chemistry, and completed his thesis under Prof. J. H. Walton. He joined the duPont research department immediately after graduation where he spent twenty-seven years in the development and production of textile fibers. He took Dacron from the lab through to the design of the first Dacron plant, and managed its start-up. He has received the Parsons Award of the ACS and the Proctor Prize of Sigma Xi.

In 1968 Peterson was elected Governor of Delaware and during his four-year term he brought about reform of the state's government, humanized its prison system, reformed its criminal laws, and

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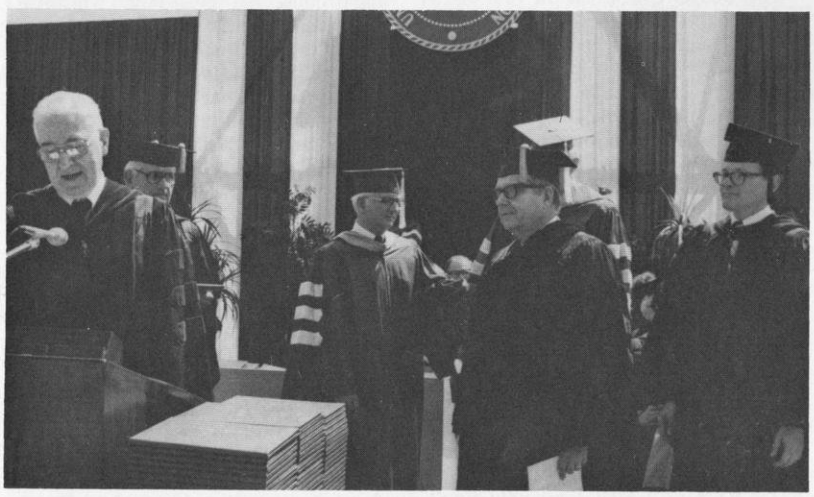

Shain reading the citation as Alfred Bader, center foreground, and escort Phillip Certain await awarding of the degree.

BADGER CHEMIST

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OVERVIEW

State of Wisconsin

Like the rest of the nation, Wisconsin is enjoying continued economic recovery--so say the number crunchers at the state's Department of Industry, Labor & Human Relations. Unemployment in the state dropped from 9.9% in January to 7.2% in December. According to figures supplied by the Department of Development, this happier economic situation is due at least in part to the proliferation of small firms (those that employ 100 or fewer people). Roughly three-quarters of the new jobs in the state are being generated by such companies, which appear to have the attractive attribute of being "recession-proof." Even during the 1981 recession, when large firms were laying off employees by the thousand, these small businesses reported a net gain in number of jobs.

The cheery economic news, however, does not include agriculture. A recent *Wisconsin State Journal* article noted that more than 2,000 farmers went out of business in the state during 1984. As in other farming states, agricultural leaders and politicians are trying to cope with what appears to be the demise of the family farm.

Wisconsin followed another national trend when it raised the minimum drinking age for alcoholic beverages to nineteen. This legislation, which had previously generated much controversy and many headlines, quietly went into effect on July 1.

The *sturm und drang* that often characterizes politics was no less in evidence in 1984 than in other election years. All that turbulence, however, was but a tempest in a teapot compared to the tornado that ripped a 100-mile path through southern Wisconsin last June 8. The storm, with wind velocities exceeding 250 mph, struck just after midnight. It killed nine people, eight of them in the rural community of Barneveld, located thirty miles west-southwest of Madison. Tornado damage was estimated at $26 million, $10.5 million in Barneveld alone. The village, including its commercial district, was nearly leveled. Wisconsin residents contributed more than $300,000 in disaster aid, and donated truckloads of furniture and clothing to tornado victims.

City of Madison

According to the Greater Madison Chamber of Commerce the city now boasts a population of 172,583. Greater Madison (a.k.a. Dane County), the area represented by the Chamber, has a population of 336,005. Government and education continue to pay most salaries. The largest single employer is the State Government, with approximately 34,000 people on the payroll. The University is next, employing 17,110 people. Other major

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The Editor Speaks

This *Badger Chemist* is the first one in fifteen years that has been produced without the careful and loving attention of Aaron Ihde. Readers of the BC know that Aaron has retired and has passed the editorial reins to others. Our former editor is doing well and enjoys the additional time he has with his wife and family. Not being one to take it completely easy, Aaron is hard at work completing the *History of the Chemistry Department at Wisconsin.* More about that later.

Loyal readers may also notice other subtle and not so subtle changes. One change that has been noted by many of you is the later publication date of the newsletter. This is not an intentional change, but is definitely brought about by the change in the editorial staff. I don't know if anybody ever realized how much time and organization went into each issue of the *Badger Chemist.* I certainly didn't. Each issue that Aaron produced was a labor of love and many readers have noted how much they appreciated the lines of communication that were kept open. I apologize for the tardiness of this issue and promise that future issues will adhere more closely to the previous publication schedule. In light of his yeoman effort in producing the *Badger Chemist* for so many years, we have nominated Aaron for both knighthood and sainthood, and put his name on the masthead as the Editor Emeritus. I hope you don't mind, Aaron.

This issue of the *Badger Chemist* is the result of several people's extraordinary effort. A major contributor to the effort is Judith Jansen, who is listed in the masthead as Managing Editor. That title is an understatement of Judy's work. Without her expertise in writing and publishing, this issue would be languishing on a desk somewhere in the Chemistry Building. Thank you very much, Judy. Other major contributors of articles and advice are Aaron, Phil Certain, and Ed Larsen. All of your work is appreciated very much. Accurate recordkeeping and typing are essential to producing a newsletter. For this we are grateful to Bette Germann, Joyce Griesbach, Pat Fleming, and Shiela Aiello.

And finally, a word of thanks to the large family of friends of the *Badger Chemist.* It is you who keep this whole thing chugging along. It is both your contributions and interest that make the newsletter possible. I cannot guarantee that I can jump as high as Aaron and click my heels when donations are received, but I can assure you that any donation is deeply appreciated. Also, any information about Badger chemists and their activities is gratefully and enthusiastically accepted. It is this information that makes *Badger Chemist* unique among newsletters. When you correspond with us, it would be extremely helpful if you would include your degree and year of graduation or affiliation. Unlike Aaron, I do not have the long historical tradition with the Department and cannot associate names with years or even eras.

P.F.S.

THIS 'N' THAT ABOUT OUR ALUMNI

Mary Ann Allen, BS '60, continues as Professor of Biological Sciences at Wellesley College. She reports that she recently completed a sabbatical year divided between Wellesley and the University of Minnesota where she was the first Malcolm Moos Visiting Professor at the Grey Freshwater Biological Institute.

We hear from **Frank Pilar** that **Alexander R. (Sandy) Amell,** PhD '50 (Daniels), is back teaching after having spent two years as Interim Dean of the College of Engineering and Physical Sciences at the University of New Hampshire. An avid cross-country skier, Amell has covered most of the state and other parts of New England on his skis.

Eric J. Amis, PhD '81 (Yu), who was a postdoc with Ferry, has joined the faculty of the Chemistry Department at USC as an Assistant Professor.

Laurens Anderson, Steenbock Professor of Biomolecular Structure at the UW-Madison, has been chosen to receive the ACS's Claude S. Hudson Award in Carbohydrate Chemistry, honoring his contributions to carbohydrate research over a thirty-five-year period.

We have learned that **Rafael Arce,** PhD '70 (Willard), Professor of Chemistry at the University of Puerto Rico, spent the 1983-84 school year on sabbatical in Professor Larry Kevan's research group at the University of Houston and at the Center for Fast Kinetic Research at the University of Texas.

Robert A. Arnott, PhD '68 (Haskin), writes that he is currently Assistant Director of the Colorado Department of Health. He is responsible for the state's air, water, waste management, radiation control, disease control and epidemiology and consumer protection programs. "Quite a task," says he. According to Arnott, the Denver area has a large number of UW PhD alumni, at least four of whom he knew during his graduate years in Madison.

J.N. Ashworth, PhD '48 (Ferry), says, "No change in address. No new news. Keep BC coming. It's terrific."

Robert J. Athey, PhD '54, confirms his interest in the BC but reports no other news from Wilmington.

Paul R. Austin, BA '27, reports that he is active in R&D on a part-time basis in the College of Marine Studies, University of Delaware.

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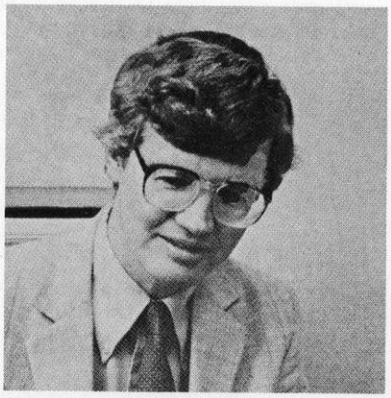

Dennis Evans

Evans Named Meloche-Bascom Professor of Chemistry

In action last March, the UW Board of Regents named **Dennis H. Evans** the first Meloche-Bascom Professor of Chemistry. The Board cited Professor Evans for his distinguished record in research, teaching, and service.

Born March 28, 1939, in Grinnell, Iowa, Professor Evans took his BS in Chemistry with Honors at Ottawa University, Ottawa, Kansas, in 1960. He took his MA ('61) and PhD ('64) at Harvard University, the latter degree with J.J. Lingane. As a student, Evans was named Woodrow Wilson Fellow (1960-61), Danforth Graduate Fellow (1960-64), and NIH Predoctoral Fellow (1961-64). He served as instructor in chemistry at Harvard from 1964-66, and joined the Wisconsin faculty as Assistant Professor of Analytical Chemistry in 1966. He was promoted to Associate Professor in 1970, and to Professor in 1975.

Evans' research interests are electroanalytical and organic electrochemistry. His principal research objective, he says, is the complete characterization of electrode reaction mechanisms. He uses the electrochemical technique of cyclic voltammetry to study multi-step electrode reactions in which the gain or loss of an electron at the surface of an electrode is coupled to other reactions that occur in the solution. In particular, he has been able to characterize conformational change(s) and isomerization reactions associated with electrode reactions. In order to probe the details of the electrochemistry near the surface of an electrode, Professor Evans has developed both new experimental techniques and theoretical models. His advances and insights, resulting in more than seventy published papers, have provided new directions to the field of electrochemistry of organic molecules.

In addition to these accomplishments, Evans has directed the research projects of seventeen PhD and fourteen MS students, developed the honors course in general and analytical chemistry, and enriched the curriculum in electrochemistry and its analytical applications. He also taught numerous short courses to chemistry professionals under the auspices of the American Chemical Society.

Professor Evans' service record matches his research and teaching work. He has served with the Honors Program of the College of Letters and Science, the Chemistry Division Advisory Committee of the National Science Foundation, the Advisory Board of *Analytical Chemistry,* and numerous other departmental and university committees. He was Chairman of the Division of Analytical Chemistry, 1975-77; Department Chairman, 1977-80; and is currently Associate Dean (Natural Sciences), College of Letters and Science.

* * * * * *

The Meloche-Bascom Professorship in Chemistry links the name of Villiers Wilson Meloche, Emeritus Professor of Chemistry and alumnus of the University, with that of John Bascom, distinguished scholar and University President.

V.W. Meloche (1895-1981) retired in 1966 after forty-one years of teaching and research in analytical and inorganic chemistry (BC #28, p. 1). He produced more than sixty technical and scholarly publications and directed the research efforts of forty-four PhD students, twenty-six MS students, and 136 senior thesis students. He was a pioneer in the development and application of instrumental methods of analysis, especially polarography, spectrophotometry, and flame photometry. Meloche developed the first instrumental analysis course and founded the departmental instrument center. He is also credited with the creation of the placement service for departmental graduates.

Meloche's long and illustrious career was marked always by his willingness to help other researchers, and his commitment to his Department, his University, and his community. He served on numerous committees and was a member of many professional and community organizations.

The Meloche-Bascom Professorship is awarded to a faculty member in the Department of Chemistry in recognition of outstanding teaching, research, and service. It provides the recipient with an annual auxiliary allocation to be used in support of scholarly activities.

Honorary Degrees . . .

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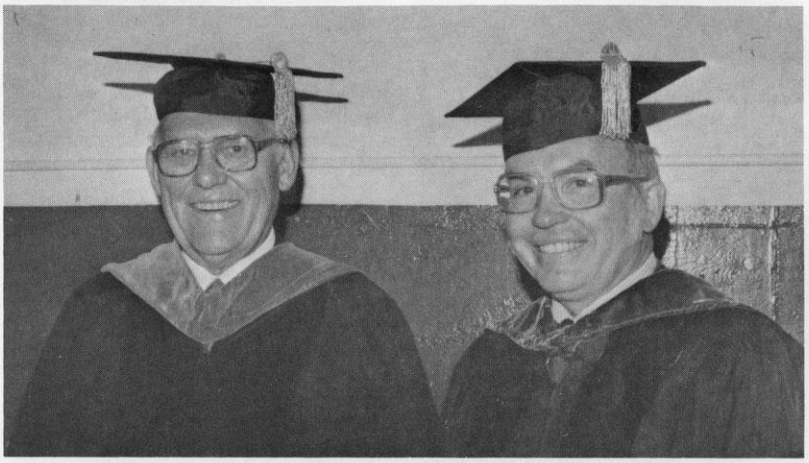
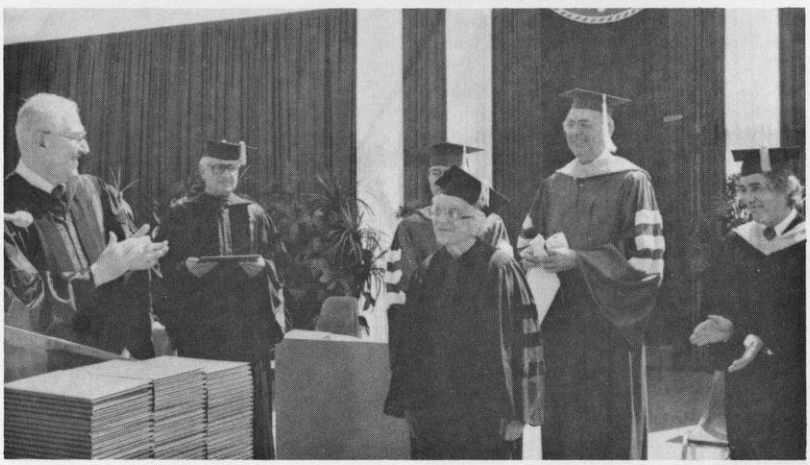


Assistant Secretary of Agriculture Orville Bentley and escort Dean Leo Walsh, UW College of Agriculture and Life Sciences.



Evelyn Steenbock at the ceremony while Shain and escort Hector DeLuca applaud. DeLuca was Professor Harry Steenbock's forty-sixth student to earn the PhD (1955) and is now Chairman of the Biochemistry Department. During his distinguished research career, DeLuca has further clarified the nature and function of Vitamin D.

protected its environment. The coastline bill, which he signed into law in July '71, stopped industry from locating new factories on Delaware's ocean, bay, and river coastlines. This law, the first of its kind in the U.S., specifically banned oil refineries, petrochemical plants, steel mills, paper mills, and bulk transfer terminals on the waterfronts. Despite resistance from industry, the Governor held fast to his position favoring conservation over irresponsible industrial growth.

Following defeat for a second term, Peterson served as Chairman of the Executive Committee of Nelson Rockefeller's Commission on Critical Choices for America. In fall of 1973 he appeared on the Washington scene as Chairman of the President's Council on Environmental Quality. During that period he once pointed out that each $1 billion spent on pollution control translates into about 67,000 jobs, thereby refuting those arguments that pollution control must be postponed because it creates unemployment.

In fall '76 Peterson left CEQ to become Director of New Directions, an organization founded by John Gardner, Father T. Hesburgh, Margaret Mead, and others to address problems of a global nature (see BC, Oct. '76, p. 17). He left his position in January '78 to become Director of the Office of Technology Assessment, the arm of Congress that advises on scientific and technological problems.

Since '80, as President of the National Audubon Society, he has been a leading voice in the American conservation movement. During this period, despite his affiliation with the Republican Party, he has been a vocal critic of recent policies of the Environmental Protection Agency.

Alfred Robert Bader received the Sc.D. He is the former President and now Chairman of the Board of the Aldrich Chemical Co. of Milwaukee. He has had a distinguished career as a research chemist, corporate executive, art collector and historian, and community leader. Born in Vienna in 1924, he was sent as a child to England to avoid life in Nazi Germany. He received the BS in '45 at Queens College in Canada, then took three degrees at Harvard, including the PhD in '50 in organic. After four years at Pittsburgh Plate Glass, he became Chief Chemist at Aldrich where he soon rose to the presidency. Under Bader's leadership, Aldrich gained a leading position as a world supplier of organic chemicals and became a source of information to the chemical community. Bader has also become a collector, restorer, and expert on painting, concentrating his efforts on the seventeenth century works of the Dutch and Flemish artists; Dr. Bader has shared his expertise on art problems with the UW, The Milwaukee Art Center, and many other groups.

Orville George Bentley, who is currently serving as Assistant Secretary of Agriculture in Washington, also received the Sc.D. He took a UW PhD in biochemistry in '50, working in Paul Phillips' research group. His subsequent career as an investigator at several universities led to his post as Dean of the College of Agriculture at Illinois, a position he held for seventeen years. Born on a farm in South Dakota, he studied at Brookings before coming to Wisconsin for his grad studies. His research work dealt with minerals, vitamins, energy, and proteins in the nutrition of farm animals.

Evelyn Steenbock received the D.H.L. in recognition of sixty years of association with the UW as student, nutrition investigator, and benefactor. As Evelyn Van Donk she was an undergraduate in home economics and nutrition, taking her BS in '27. She later did graduate work in the biochem laboratory of E.B. Hart and took the MS in '32. For a period in the thirties she remained in the department as a collaborator of Professor Steenbock. When World War II began, she took a position at Lederle Laboratories. In March 1948 she married Harry Steenbock and they spent nearly two decades together in work, travel, collecting art, and as benefactors to worthy projects in science, education, music, and art. Since his death in 1968, Mrs. Steenbock has continued to live in Madison. Quietly and without fanfare, she has continued her commitment to the University and the community.

The awarding of her honorary degree was recognized by a spontaneous standing ovation.

Overview . . .

(Continued from Page 2)

employers (in order) are the Federal Government, UW Hospitals and Clinics, Oscar Mayer, and the Madison School District.

For much of 1984, one of those top employers was engaged in a heated pay dispute with its union workers. Oscar Mayer Foods Corp. cut the wage for production workers from $10.69 to $8.25 an hour, a reduction that company officials said was necessary if Oscar Mayer was to remain competitive in an industry of increasingly low profit margins. Even with the drastic pay cut, workers here rejected a strike.

After nearly a decade of debate, the Madison Area Technical College began construction of a new campus at Truax Field. Construction on the $59.5 million project, which includes remodeling the downtown and Technical Center buildings, is scheduled for completion by the fall of 1987.

The South Beltline controversy was finally settled when a compromise plan to restore wetlands cleared the way for the construction of a six-lane freeway across Mud Lake Marsh. Work on the $55 million-plus project, which will stretch from Fish Hatchery Road to the Interstate, could begin this fall and be completed in 1989.

UNIVERSITY OF WISCONSIN SYSTEM

At its November meeting, the UW Board of Regents approved UW President Robert O'Neil's proposed $2.6 billion biennial budget request, $1.1 billion of which would come from state tax money. In related action, the Board endorsed O'Neil's controversial faculty salary recommendations.

Faculty pay (see BC #30, p. 10) has continued to be a hot issue, and O'Neil's recommendations added fuel to some fires, especially those burning on the four-year, non-doctoral campuses. O'Neil's pay package provides a 15% catch-up raise for Madison and two-year center faculty, 11% for UW-Milwaukee faculty, and 9% for other four-year campus faculty. The package includes the following raises for academic staff: 13.9% at UW-Madison, 10.2% at UW-Milwaukee, 6% at other four-year campuses, and 17.6% at two-year centers.

O'Neil's recommendations are based on findings of a faculty salary committee appointed by Governor Anthony Earl and a UW System committee appointed to study academic staff salaries. Both committees compared UW salaries to those of similar institutions and found UW salaries not to be competitive.

These recommendations have received preliminary approval from the Governor and the Department of Administration. The $44.9 million package now awaits final legislative action.

Fall '84 enrollment at the twenty-three units of the University of Wisconsin System was reported to be 161,936.

UW-Madison

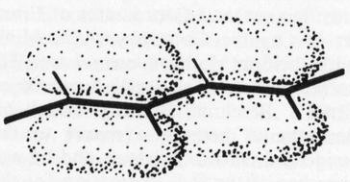
Enrollment on the Madison campus for the '84 Fall Semester broke all previous records. More than 44,100 graduate and undergraduate students registered for classes.

In late '84, the UW-Madison dedicated its new west side research park on Charmany and Rieder farms, a 328-acre parcel that formerly was used for agricultural research. Plans call for the phased development of about 130 acres for research facilities and office space, fifty acres for housing, and much of the remainder for commercial and office space. Such development will generate jobs, housing, taxes, revenue for the University, and will promote University-industrial interaction.

The Southeast Recreational Facility, nicknamed SERF, opened a year ago. The 116,000 square-foot structure is located on Dayton Street on the southeastern edge of campus. With its 65-meter swimming pool, two gymnasiums, twelve racquetball courts, etc., SERF takes some of the pressure off the Natatorium complex.

Other major construction projects on campus include a six-story, $7.7 million addition to the biochemistry building on Henry Mall, and a seven-story, 58,000 square-foot addition to the computer science building on West Dayton Street. The biochem addition is scheduled for completion by fall '85, and the computer science project by fall '86.

UW-Madison has also added two new academic and research programs. The Max Kade Institute for German-American Studies was dedicated recently, as was the Robert M. LaFollette Institute of Public Affairs.



ABOUT THE FACULTY . . .

Fleming Crim participated in the Informal Photochemistry Conference (Harvard) and attended the Conference on Laser Studies in Reaction Kinetics (Tutzwing, W. Germany). He presented lectures at Ohio State, University of Pittsburgh, National Research Council (Ottawa), and the University of Maryland.

Larry Dahl spent two weeks during October 1983 at the University of Leeds (U.K.) as a recipient of the Brotherton Research Professorship. During this time he gave five lectures at Leeds, and a departmental colloquium at the University of Bristol. In June 1984, he participated in a special Memorial Symposium at the University of California-Berkeley for the late Professor Earl Muetterties. In May 1984, he was a lecturer in an Inorganic Symposium on Chalcogenide Complexes at the ACS Joint Great Lakes/Central Regional Meeting (Western Michigan Univ., Kalamazoo), and in August 1984, he participated in a Symposium on Structure, Bonding, and Reactivity of Metal Clusters at the 188th National ACS Meeting (Philadelphia). Other activities during the 1983-84 academic year include an ACS Tour in February with lectures at West Virginia University, Western Maryland Section, Ohio University, Marshall University, and Kanawha Valley Section together with colloquia at Central Michigan University, Bell Laboratories (Murray Hill), and Central Research and Development Department at E.I. duPont de Nemours & Company (Wilmington). At the 186th ACS National Meeting (Washington, D.C.), one group member (**Bob Bedard**) participated in a Symposium on Inorganic-Organometallic Electrochemistry, and at the 187th ACS National Meeting (St. Louis, MO) five group members (**Kim Martin, Curt Pulliam, Charles Gibson, Bill Olson,** and **Mark Englert**) presented papers on their research. Selected by the Royal Society of Chemistry as the 1985/1986 Nyholm Lecturer, Larry will present six lectures during a two-week tour of the U.K. As a 1985 recipient of a Senior U.S. Scientist Humboldt Award, he also plans to spend six months on research in the Federal Republic of Germany.

Arthur Ellis reports that he and Susan had a son, Joshua Trebach Ellis, in August.

(Continued on Page 6, Col. 1)

Faculty . . .

(Continued from Page 5)

Dennis H. Evans was named Meloche-Bascom Professor of Chemistry in early 1984, and he has been Associate Dean of the College of Letters and Science since January 1, 1983. During the last year, he presented papers or lectures at the following: 34th Meeting of the International Society of Electrochemistry (Erlangen, Germany); Universities of Constance, Freiburg, and Dijou (France); Marquette University, SUNY-Buffalo, UW-Milwaukee, and University of Pittsburgh; Sixth Australian Electrochemistry Conference (Geelong, Victoria, Australia); Summer Symposium in Analytical Chemistry, American Chemical Society (Washington, D.C.); 35th Meeting of the International Society of Electrochemistry (Berkeley, CA); and the NATO Advanced Workshop on Organic Electrosynthesis (Oxford, England). Dennis organized a Symposium on Analytical Voltammetry for the August 1983 ACS Meeting in Washington, D.C., and served on the External Review Committee for the Department of Chemistry, University of Michigan at Ann Arbor. He is a member of the Board of Directors of the Society for Electroanalytical Chemistry; the Chemistry Research-Evaluation Panel for the Directorate of Chemical and Atmospheric Sciences, Air Force Office of Scientific Research; the Advisory Board of the ACS journal, "Analytical Chemistry," and he has been selected Secretary-Treasurer of the Organic and Biological Electrochemistry Division, Electrochemistry Society.

Edwin M. Larsen gave two presentations on "Tritium Systems for Fusion Power Plants: Their Present Status and Future Data Requirements" at the International Fusion Technology Facilities Workshop held during the last two weeks of May 1984 at the Kernforschemgszentrum outside of Karlsrude. The Larsens also spent a week in England on a pleasant and leisurely hotel-barge trip down the Thames from Oxford to Windsor. This last September, he represented the Department at the Council on Chemical Research annual meeting held in Oakland, CA. (The CCR is an organization of industrial and academic chemical engineers and chemists that was designed to increase interaction between industry and academia.)

Steve Nelsen made a fifth visit to Berlin last June to continue his collaborative pulse radiolysis work with Dieter Asmus at the Hahn-Meitner-Institute. While in Europe, he gave lectures at Bochum, Basel, FU-Berlin, Mulheim, and Saarbruchen, and attended the Fourth International Symposium on Free Radicals at St. Andrews, Scotland, in July. In September, he participated in the NATO Advanced Workshop on Electrochemistry (Oxford, England), and lectured at Bristol, Leicester, and University College (London). In October, he presented seven lectures in China as a guest of the Academia Sinica.

Marion O'Leary and **Elizabeth Kean** spent July, August, and the first half of September in Indonesia working on projects in chemical education. They spent the first weeks at the Institut Pertanian Bogor (IPB), in Bogor, as part of a long-standing cooperative effort between IPB and the UW-Madison College of Agriculture. Their principal task was to develop an undergraduate program in chemistry and biochemistry—from course design to selection of textbooks and laboratory experiments. They spent the last part of their trip to Andalas University, Padang, Sumatra, where they consulted with staff on methods for improving the existing undergraduate chemistry program.

James Tobin continues to collect awards and honors. In 1983, he received the Dreyfus Foundation Grant for Newly Appointed Young Faculty in Chemistry, the Eastman Kodak New Faculty Incentive Grant, the Petroleum Research Fund Type G Grant (ACS), and the Cottrell Research Grant (Research Corporation). In 1984, he received a Rohm and Haas Fellowship, and became a member of Sigma Xi. He also gave an invited talk at the National APS Conference in Detroit.

Barry Trost received the Alexander von Humbolt Senior Scientist Award. He was Scherer Lecturer at the University of Southern Florida, Arnold Lecturer at the University of Southern Illinois, First Bachman-Pierce Lecturer at Purdue University, and 3eme Cycle en Chemie Lecturer in Switzerland. He also presented lectures at a number of regional, national, and international meetings: 6th Princeton Organic Symposium; Gordon Research Conference on Natural Products; Swiss Chemical Society in Zurich; National Organic Symposium at Perth, Australia; and the School on Organic Synthesis at Ischia, Italy (this last location is described by Barry as a "beautiful, resort island in the Bay of Naples"). He has become Chairman, NIH Medicinal Chemistry Study Section, and Coordinator of Frontiers in Organic Chemistry (ACS Mini-Course held in Madison every June). He also served on the National Academy of Science's Research Briefing Panel on Chemistry to prepare a report to the Presidential Science Advisor, and he was a member of the U.S. delegation for the U.S.-Swedish Workshop on the Future of Chemistry held in Saltsjobaden, Sweden. Other members of the U.S. delegation were Professors Pimentel, Lester, Taube, and Birely. Barry also co-edited a book, *Selectivity—A Goal for Synthetic Efficiency,* published by Verlag Chemie.

Edwin Vedejs was named an Alexander Von Humbolt Fellow, and spent six months (January-July, 1984) in Gottingen, W. Germany. In 1984, several research projects came together after many years: 12-membered macrolides, 11-membered carbocyclic cytochalasins, 11-membered pyrrolizidine dilactones, 1st aliphatic thioaldehyde, and others.

Since January 1984, **Robert West** has given invited lectures at the University of Utah, the Organosilicon Symposium in Schnectady, the ACS meeting in St. Louis, the University of Pennsylvania, the University of West Virginia, Pennsylvania State University and Brandeis University. In August, he visited the People's Republic of China, and spent about three-quarters of the month at the Institute of Chemical Physics in Lanzhou, Gansu Province, presenting a short course on organosilicon chemistry. About half of the audience of forty-five people were staff and students from the Institute; the rest were chemists from other cities throughout China who were brought to Yanzhou to hear the lectures. His talks were translated by Ms. Chen San-Mei, who had spent almost two years with his group in Wisconsin. He also lectured in Shandong University in Jinan, Shandong Province, and at the Chemistry Institute of the Academy of Sciences in Beijing. On leave for the '84-85 Fall Semester, he gave the plenary lecture at the International Symposium on Organosilicon Chemistry in Kyoto, Japan, in September. This talk was the front page headline story in MAINICHI SHIMBUN, one of Japan's two leading daily newspapers. He also lectured at Tsukuba and Hokkaido Universities, attended a workshop on Organosilicon Reactive Intermediates in Sendai, and the Symposium on Applications of Organosilicon Chemistry in Kiryu. In October, he gave invited lectures at the FECHEM Symposium in Cap d'Agde, France, and the EUCHEM Symposium in Burghausen, Germany. He is currently Visiting Professor at Justus-Liebig University in Giessen, West Germany, and has lectured at the University of Wurzburg, Freie University Berlin, University of Bielefeld, University of Dortmund, University of Marburg, University of Stuttgart, University of Munchen, Technical Hochschule Munchen, and the Technical Hochschule Graz.

(Continued on Page 7, Col. 1)

Faculty . . .

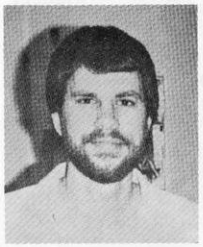
(Continued from Page 6)

John Wright has been awarded a Romnes Faculty Fellowship by the Graduate School Research Committee. The fellowships include $25,000 for research purposes from the Wisconsin Alumni Research Foundation. The awards are named for the late H.I. Romnes, a U.W. alumnus who was Chairman of the Board of AT&T and who served as former president of WARF trustees.

Hyuk Yu, the recipient of a Guggenheim Fellowship, reports his activities from Mainz, West Germany, where he spent the fall semester at the Institut fur Physikalisde Chemie, Johannes-Gutenberg-Universitat. His family, except for the eldest son, accompanied him to Mainz. The two younger boys attended a German gymnasium and had a great time. Earlier in 1984, Hyuk went to Eastman Kodak in Rochester, NY, with two of his students, **Taihyun Chang** and **Mike Landry,** to give the annual research progress summary in connection with the research grant given to his group by Kodak. He gave the following invited talks: Gordon Research Conference at Oxnard, CA, in January; University of Maryland in February; S.C. Johnson & Son, Racine, WI, and Exxon Research & Development Company, both in March; U.S.-France Joint Seminar on "Chemistry and Physics of Gelation" at Valbonne, France, in April; Case Western Reserve University in May; seven different universities and research institutes, Korea, in June; MIT Chemical Engineering in July; CRM at Strasbourg, France, and at the University of Koln, Germany, in October; and at the Universities of Freiburg and Bielefeld in November. He was the Vice Chairman of the Polymer Physics Gordon Research Conference in 1984, and will serve as Chairman in 1986.

Howard Zimmerman reports a very busy year. In January, he participated in a National Academy Round Table discussion in Madison. In March, he gave a Colloquium at the University of Toronto. In April, he attended a JACS Editorial Board Meeting in St. Louis. He then traveled to Washington, D.C., for a meeting of the Board on Chemical Sciences of the NRC and a National Academy Meeting. In May, he was a Plenary Lecturer at the Combined Midwest ACS Meeting in Kalamazoo. In July, he embarked on a European lecture trip and gave Coloquia at Bochum, Hamburg, Braunschweig, Frankfurt, Gottingen, Karlsruhe, Tubingen, and Freiburg—all in Germany. He also gave a Colloquium at Brussels where his former student, *Jacques Nasielski,* is department head. Following the lecture trip, he attended the 10th IUPAC Symposium on Photochemistry at Interlaken, Switzerland, of which he was session chairman. Howard notes that among the attendees were six of his former UW research students: **Dietrich Dopp** (Prof. at Duisburg), **David Schuster** (Prof. at NYU), **Diego Anmesto** (Prof. at Madrid), **Christopher Bender** (Prof. at Lethbridge, Canada), **Nick Bure Virist** (Asst. Prof., CNRS in Nancy, France), and **Mitch Winnik** (assoc. Prof. at Toronto). **Dave Schuster** gave a piano recital at the start of the meeting.

EDIGER JOINS FACULTY



Mark Ediger

Mark D. Ediger has joined the faculty as Assistant Professor in the Physical Chemistry Division. He recently received his PhD from Stanford University on the basis of his thesis, "Electronic Excited State Transport in Finite Volume Systems: Micelles and Polymers," under the direction of Michael D. Fayer. Mark's work in Fayer's research group also generated seven other papers.

At Stanford, Mark held an NSF Predoctoral Fellowship from 1979-82, and was named a Shell Faculty Fellow upon joining the faculty at Wisconsin. He has presented papers at the IBM Research Laboratory, San Jose; Dept. of Chemistry, Univ. of Kansas; Rohm and Haas Research Laboratories, Bristol, PA; Dept. of Chemistry, Univ. of Wisconsin; duPont Central Research and Development, Wilmington, DE; and at the Gordon Research Conference on Polymer Physics, Andover, NH.

Here at Wisconsin, Mark plans to continue his investigations of the structure and dynamics of amorphous condensed phase systems using the techniques of picosecond spectroscopy. He is particularly interested in the study of local segmented motion in polymer melts and the structure of low temperature organic glasses.

A native of Kansas, Mark was born and grew up in the community of Newton. He took his BA ('79) in chemistry and mathematics from Bethel College in North Newton, and then left for California to pursue his doctoral degree at Stanford. He confesses that he is "happy to be back in the Midwest."

SHAKHASHIRI TO NSF POST

Bassam Z. Shakhashiri, Professor of Inorganic Chemistry, Director of the Institute for Chemical Education (ICE), and Coordinator of the General Chemistry Program, has been appointed Assistant Director of the National Science Foundation in Washington, D.C. On leave from his faculty post at Madison, he now heads the revitalized Directorate for Science and Engineering Education.

Bassam Shakhashiri

Shakhashiri's appointment coincides with increased federal interest in and support of science education. As head of the NSF education directorate, Shakhashiri will play a leading role in setting the directions for science education in the next decade. (See December 14, 1984, issue of *Science* for article.)

Shakhashiri's absence from the Department necessitated some personnel adding and shifting. Fortunately, **W.T. Lippincott,** Professor of Chemistry at the University of Arizona, agreed to come to Wisconsin and undertake the directorship of ICE. Lippincott, whose credentials include a ten-year stint as editor of the *Journal of Chemical Education,* has achieved international recognition in the field of chemistry education. His able associate is **Glen Dirreen,** PhD '72 (Treichel), who was formerly the Director of General Chemistry Laboratories. Dirreen has also been assigned to the position of Coordinator of the General Chemistry Program.

Replacing Dirreen as Lab Director is **Gery J. Essenmacher,** MS '74, PhD '76. After graduating from Paul Treichel's group, Essenmacher worked for Dow Chemical in Midland, MI. He started as a Senior Research Chemist in the Catalytic Processes group with Central Research, and then became a project leader in Plastics Technical Services and Development. His MS and PhD research was in low-valent complexes of chromium with aryl isocyanide, carbonyl, and substituted arene ligands.

HIRSCHMANN LECTURE SERIES

A new continuing lecture series honoring **Ralph F. Hirschmann,** PhD 1950 (William Johnson), has been established at Wisconsin.

Ralph F. Hirschmann was born in Bavaria, Germany, on May 10, 1922, and came to the United States during his teens. He attended secondary schools in Kansas City, Missouri, and obtained a Bachelor's Degree from Oberlin College in 1943. During World War II, he served three years in the United States Army, two of which were spent in the Pacific Theater of War. After completion of his military service, he commenced graduate studies at the University of Wisconsin, where he received a Doctorate Degree in Organic Chemistry with Professor William S. Johnson in 1950.

He joined Merck & Co., Inc. that year as a Chemist in Developmental Research, was promoted to Senior Chemist in Process Research in 1954, and to Section Head in 1957. He became a Research Associate in Fundamental Research in 1958, was appointed Assistant Director of Exploratory Research in 1964, and Director of Peptide Research in 1968. He became Director of Protein Chemistry in 1969, and Senior Director of New Leads Discovery in 1971. In 1972, he was appointed Head of Medicinal Chemistry, West Point, and, in 1974, was promoted to Executive Director. In 1976, he was elected Vice President for Basic Research, and in 1978, Senior Vice President for Basic Research.

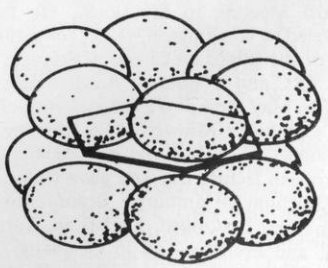
For his contributions to research, he received an Honorary Doctor of Science Degree from Oberlin College, and was named recipient of the Intra-Science Research Foundation Award for 1970. He was a Visiting Professor at the University of Wisconsin in 1973. He was a member of the Board of Editors of the "Journal of Organic Chemistry," and he currently serves on the Editorial Board of "Organic Reactions." He was elected Co-Chairman of the 1978 Gordon Research Conference on the Chemistry and Biology of Peptides, and Program Chairman of the ACS Medicinal Chemistry Symposium in 1980. He is a member of the Medicinal Chemistry 'A' Study Section (NIH) and he was elected to membership in the American Society of Biological Chemists, the Association of Research Directors and the Board of Trustees of the Gordon Research Conferences. He was selected a fellow of the American Academy of Arts & Sciences in 1981. In 1982 he was elected to the National Academy of Sciences.

Dr. Hirschmann's principal research interests are in the field of natural products chemistry, specifically steroids and peptides. He led the Merck team which, in 1969, announced the synthesis of the enzyme ribonuclease-S. His contributions to synthetic methods in the peptide field include the development of novel general protecting groups and the introduction of the N-carboxyanhydride method of forming a peptide bond. Recently Ralph Hirschmann and his associates at Merck have been working on the chemistry and biology of the hypothalmic factor, somatostatin, and thyrothropic releasing factor (TRF). One of the exciting results of this research is the development of a cyclic hexapeptide that is a potent mimic of somatostatin. This could lead to advancements in the treatment of diabetes.

In the field of steroid chemistry his principal contributions include the discovery of the C-nor-D-homo rearrangement, and the recognition of the stereoelectronic control of this rearrangement. This work also shed light on the biosynthesis of the alkaloid jervine. He is a discoverer of the phenylpyrazole group as the most potent enhancer of activity of the antiinflamatory steroids. The first successful synthesis of a 21-phosphate of an 11-hydroxylated antiinflamatory steroid was accomplished in his laboratory. This led subsequently to the preparation of other clinically important steroid 21-phosphates. He discovered the first practical process for the introduction of the 9-alpha-fluorine into anti-inflammatory steroids. A publication from his laboratory in 1964 relating to the synthesis of 11, 17-dihydroxy-3, 20-dione-1,4-pregnandien-21-yl-2-acetamido-2-deoxy—D-glucopyranoside describes a conceptually novel approach to drug lantentiation.

The Hirschmann lecture series is the third such series funded by Merck, Sharp and Dohme Research Laboratories at Wisconsin. Wisconsin is unique in being honored by Merck in this manner. The two previous lecture series, the Louis Sprague Lectures and the Karl Folkers Lectures have enabled the Department to invite many outstanding chemists to Wisconsin.

The inauguration of the Ralph Hirschmann Lectures will be marked by a special symposium scheduled for October 21-22, 1985. The first Ralph Hirschmann Lecturer will be Dr. David Evans of Harvard University. Helping to initiate the series will be three former Merck, Sharp and Dohme Lecturers, Dr. **William Johnson** of Stanford University, who was Ralph Hirschmann's PhD advisor at the UW, Dr. Donald Cram of UCLA, and Dr. Albert Eschenmoser of the Swiss Federal Institute of Technology (ETH). The symposium will also feature lectures by several Madison faculty: Prof. **Barry Trost,** Prof. **Charles Casey,** Prof. **Howard Zimmerman** (all in the Chemistry Department), and Prof. Dan Rich in the School of Pharmacy. Also on the program is a poster session highlighting work of the graduate students at the UW. For anyone planning a trip, October will be an exciting time to schedule a visit to Madison.



PROMOTIONS AND RETIREMENTS

F. Fleming Crim, BS '69 Southwestern University, PhD '74 Cornell University, has been promoted from Associate Professor to Professor, Physical Chemistry, effective 1984-85 academic year. His research group is studying molecular dynamics, specifically, state-to-state chemical reactions and molecular energy transfer.

Arthur B. Ellis, BS '73 California Institute of Technology, PhD '77 Massachusetts Institute of Technology, has been promoted from Associate Professor to Professor, Physical and Inorganic Chemistry, effective 1984-85 academic year. His research program focuses on the excited-state properties of a wide variety of inorganic and organometallic systems.

H. A. Schimming, Building Manager, retired on November 9, 1984, after thirty-six years of service in the Chemistry Department. He began employment on October 1, 1948, as Laboratory Supply Clerk. He was promoted to Administrative Assistant 1 on December 12, 1951; to Administrative Assistant 3 on December 1, 1955; to Educational Services Assistant 2 on September 1, 1967; and to Administrative Assistant 4 on May 1, 1968. Many generations of students and faculty owe Harold a tremendous debt of gratitude for assistance with purchasing and building construction and maintenance. His home address is 119 Lathrop St., Madison, WI 53705.

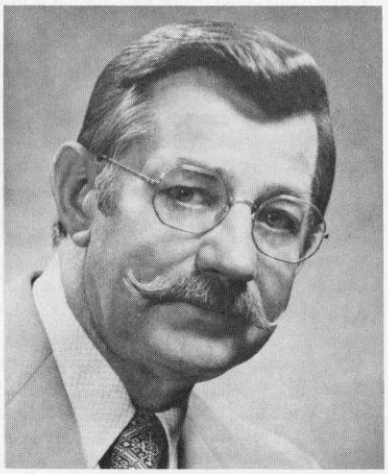
In Memoriam

Inez (Williams) Dadswell, BS '23, passed away on July 19, 1984, according to a letter from G. A. Dadswell.

Olive Bell Daniels and great-grandson.

Olive Bell Daniels, widow of Farrington, died on March 7, 1984, at the age of 92. She was active in various projects until near the end. Born in Oxford, England, the daughter of American missionary parents, she spent most of her childhood in Minneapolis, and took her BA at Oberlin in 1913. She became acquainted with Farrington through church and youth activities in Minneapolis. They married in 1917, while he was on the faculty of Worcester Polytechnic Institute. She is survived by four children: Farrington, Jr. of New York, Mrs. Florence Drury of Lawrence, KS, Mrs. Marian Ludwig of Corvallis, OR, and Dorin of Ontario, OR; one sister and two brothers; twelve grandchildren; and six great-grandchildren. A memorial service was held for her on March 24, at the First Congregational Church. Besides favorite organ hymns, prayers and readings (including poetry of T.S. Eliot, Emily Bronte, and Wm. Wordsworth), there were personal statements by Mrs. Connie Elvehjem, Christopher Daniels, and Reverend Alfred Swan. Grandson Christopher's remembrances were particularly sensitive, reflecting the sincerity and concern of his grandmother.

Guido Daub, BS '44, PhD '49 (W.S. Johnson), died on June 4, 1984, of viral cardiomyopathy. He had been a faculty member of the Department of Chemistry at the University of New Mexico since 1949, serving as Chairman from 1970-81. He had a distinguished career as a teacher, administrator and researcher. He was known especially for his contributions to the synthesis of polycyclic aromatic compounds and scintillators. He is survived by his wife, the former **Katherine Powell,** MA '48, and three children, all of whom have pursued careers in chemistry. Guido William received his PhD from Stanford with Van Tamelen, and is now an Associate Professor of Chemistry at Harvey Mudd College in Claremont, CA. He and his wife have two sons. Elisabeth is in biochemistry at MIT (with Chris Walsh) and hopes to finish her graduate work in two years. John received his PhD from Caltech (with Ireland), and has started a research position at duPont in Wilmington, DE. He and his wife have twins, a boy and a girl.



Guido Daub

Donald H. Everman, BS '31, died in Beaver Dam, WI, in October, 1983, according to the *Wis. Alumnus.*

J. Alfred Hall

John Alfred Hall, BA '21, PhD '34, died in April, 1984. After taking his MS, he served as research chemist with the California Fruit Growers Exchange and Liggett & Meyers Tobacco Co. In 1930 he joined the U.S. Forest Products Laboratory in Madison as a biochemist. At that time, he undertook studies with Dr. Earl Sherrard for his doctorate in Forest Products Chemistry, presenting a thesis on oleoresin formation in *Pinus* species. He left the laboratory in 1937 for successive administrative positions in state and federal forest service, but returned in 1951 as Director of the Forest Products Lab. Following retirement from the lab in 1959, he continued to be active as an industrial consultant. His research interests were in plant biochemistry, particularly volatile oils, and in forest utilization.

Alfred J. Johnson, BS '16, died on February 25, 1984, at Medford, NJ. He was born in Eau Claire, WI, 91 years ago. His parents farmed near Stanley, where he became valedictorian of his high school class in 1912. He took his degree in chemistry at the UW and, before completing his MS, he joined the US Bureau of Chemistry in Washington. A bit later, he joined the Army. When WWI ended, he joined the duPont Company where he spent forty years as a researcher on dye chemistry. This work yielded a number of patents as well as several textbooks. He was an avid photographer from boyhood on; during his later years, he documented, through research and photos, the wild flowers of the New Jersey Pine Barrens. After retirement, he became a self-trained artist and continued his interests in fishing and golfing. Our thanks go to his daughter, Doris Johnson Allenbach of Philadelphia, who realized that he enjoyed the *Badger Chemist,* for reporting the above.

Alfred Johnson.

David Malcom McQueen, PhD '33 (Sorum), died November 20, 1983, in Wilmington, DE. He was the retired Director of the duPont Experimental Station's Central Research Department. He joined duPont as a chemist at the Experimental Station in 1934, became Research Supervisor in 1941, and Assistant Laboratory Director in 1946. He was promoted to Assistant Director of Research in 1951, and became Director of Research in the old Chemical Department. He was named Director of Central Research in 1967. His early work laid the foundations for the company's successful production of water repellents for textiles. He later directed research in photochemistry, photography and polymer chemistry. He pioneered the research program in solid state physics at duPont. He held thirty-nine patents for his inventions at duPont, most of them in the field of photographic chemicals and polymers.

Willard F. Spengeman, PhD '35, died at his home in Carrcroft, DE, on November 24, 1983, according to a newspaper item sent by Charles Krister. After taking his doctorate, Spengeman went to work for the Kimberly Clark Corp. here in Wisconsin. He joined duPont in 1937 as a

(Continued on Page 10, Col. 3)

NATIONAL RANKING

According to the recently published (1982), five-volume "Assessment of Research-Doctorate Programs in the United States," the University of Wisconsin-Madison continues to rank as one of the top academic and research universities in the country. This assessment, which is considered one of the most comprehensive surveys of graduate education in the U.S., polled 5,000 faculty members who rated 228 universities on the basis of faculty reputation, program effectiveness, program size, characteristics of recent graduates, library size, amount of research support, and number of articles published by faculty members.

Graduate education at the UW-Madison was ranked eighth in the nation, a standing shared with UCLA and the University of Michigan. Those listed ahead of UW-Madison included the University of California-Berkeley, and private institutions Stanford, Harvard, MIT, Princeton, and the University of Chicago.

The chemistry graduate program at Madison was ranked eighth overall, behind (in order from the top) California Institute of Technology, University of California-Berkeley, Harvard, MIT, Columbia, University of Illinois-Urbana/Champaign, Stanford, UCLA, and the University of Chicago.

Undergraduate education at Madison also received high marks in a *U.S. News and World Report* survey of 662 college and university presidents. Among public schools, the UW-Madison was ranked fourth, with the University of California-Berkeley on top, followed by the University of Michigan and the University of Illinois-Urbana/Champaign. Among all universities (public and private institutions combined), UW-Madison and Carnegie-Mellon University were tied for eleventh place.

The National Science Foundation ranked UW-Madison third in total funding spent ($158 million in fiscal year 1982) for research and development among all U.S. universities. Outspending Madison were Johns Hopkins University and MIT, both of which draw much of their support from U.S. Department of Defense contracts. The UW-Madison derives little of its funding from such contracts, obtaining its research dollars from a wide variety of sources—foundations, industry, and the State, as well as from the federal government.

STUDENTS WIN FELLOWSHIPS

Steven M. Penn, Craig J. Carriere, and **Larry J. Sanders** are recipients of graduate fellowships this year.

Steven M. Penn, a fourth-year physical chemistry graduate student in Fleming Crim's research group, was one of ten graduate students in the College of Letters and Science to be awarded a Dean's Fellowship for 1984-85. Penn earned his undergraduate degree from Kenyon College, and began his graduate work at the UW as an NSF Fellow. He was named Procter and Gamble Fellow for the 1983-84 academic year. Penn is studying the molecular dynamics of energy transfer and chemical reaction by preparing molecules in excited states with a laser pulse and spectroscopically monitoring their subsequent behavior. His goal in this work is to remove the averaging usually present in chemical reactions.

The IBM Corporation recently named **Craig J. Carriere,** a graduate student in John Schrag's research group, recipient of an IBM Fellowship in Polymer Chemistry, one of eight awarded nationally. This Fellowship program encourages the training of student researchers in the field of Polymer Chemistry. Each candidate was evaluated on the quality and novelty of the proposed research and on his/her background and accomplishments. Carriere is exploring the motional dynamics associated with rigid-to-flexible molecule transitions. His research will provide valuable and currently non-existent information for theoreticians working on semi-flexible chain models.

Larry J. Sanders, a third-year graduate student in physical chemistry, has been named Kodak Fellow for a three-year period. After receiving his BA in chemistry from Macalester College in 1980, he worked at Detector Electronics and Oscar Mayer before beginning graduate school.

The Kodak Fellows Program supports one graduate student in about ten outstanding departments each year. The program also includes site visits to Eastman Kodak in Rochester, NY, during the second and third years of the award.

Sanders is working on gas phase ion spectroscopy and dynamics with James Weisshaar. Their experiment creates ions in a fast flow reactor at He buffer gas pressures of about 1 torr. The ions are probed by a pulsed, tunable dye laser. Optical absorption spectra can be obtained by detecting either excited state fluorescence or photodissociation using a photomultiplier tube or a quadrupple mass spectrometer. In particular, Sanders has focused on small polyatomic hydrocarbon cations such as cyclopropane cation and linear propargyl cation.

In Memoriam . . .

(Continued from Page 9)

research chemist at the Newark pigments plant, and in 1945, he became a research leader in that field. In 1946, he was promoted to Assistant Chemical Director in charge of dry colors at Newark; in 1949, he became Supervisor of the Color Sales Services Laboratory. He was transferred, in 1956, to the Wilmington office as Manager of Technical Sales. In 1958, he was named Director of the Chestnut Run Technical Services Laboratory. He retired from that position in 1972, after thirty-five years with duPont.

John Vernon Steinle, BS '20, MS '21, PhD '24, died in Racine last July. He did all of his work toward his degrees with Professor Kahlenberg. He served briefly on the Marquette faculty, then joined Johnson Wax as its entire scientific department. Upon his retirement as Vice-President for Research and Development in 1963, the laboratory employed more than 300 people.

Earl Lester Whitford, MA '22, PhD '24 (Walton), died in 1983 in Naples, FL, according to the *Wis. Alumnus.* He was associated for his entire career with the Oldbury Electro Chemical Co. at Niagara Falls, first as Works Manager, and after 1935, as Sales Manager.

This 'n' That . . .

(Continued from Page 3)

Robert L. Baldwin, BA '50 (PhD '54 Oxford), reported in but sent no news.

Karen Bartelt, BS '71, an instructor at Montana State, is teaching some freshman labs.

Edwin N. Becker, PhD '53 (Willard), retired from his position as Professor of Chemistry at California State University-Long Beach in December 1983.

Irwin Billick, PhD '55 (Ferry), is at the Gas Research Institute in Chicago.

Jean Naw Baerstein, BS '47, writes from Upland, CA, that she is still teaching, and husband Dan is practicing pediatrics. She reports that though their own lives are fairly settled, the doings of their extended family keep them from relaxing much.

James A. Bain, BS '40, sends us tangible encouragement from Decatur, GA.

Al Baker, PhD '64, and his wife, Mary, send encouragement to Aaron Ihde for his in-progress history of the department. He also promises to send a copy of a letter Mary's father (Glenn Skinner, Assistant Professor of Chemistry at UW in the early

(Continued on Page 11, Col. 1)

This 'n' That . . .

(Continued from Page 10)

'20s) sent from France during WWI. At that time, Skinner was working at the Sorbonne with Professor Grignard on chemical warfare.

Monte Blau, PhD '52 (Willard), retired from his position as Chairman of the Department of Nuclear Medicine of the State University of New York-Buffalo in 1983, and is now working part-time at the Harvard Medical School.

Carl L. Blesch, BS '74 (MA '75-Journalism), writes that he is back at AT&T Bell Laboratories headquarters in New Jersey after a four-year stint at the company's Naperville, IL, facility. He is currently editing Bell's bi-weekly newsletter and managing a variety of other communication jobs. According to Blesch, the BC provides him with more news about Madison and UW happenings than he gets from relatives (including two UW profs) who live here.

Toby Block, PhD '76 (Fenske), continues as laboratory coordinator at Georgia Institute of Technology. Her lab manual, *Experiments in General Chemistry,* has been published by Kendall-Hunt. She reports that Charlie Liotta, who roomed with B. Shakashiri at Maryland, is also a professor at Tech.

Wilbur Bridgeman, PhD '37, of Worcester, MA, continues to support BC.

Nila Bremer, MS '75, reports faithfully from Des Moines.

J.W. Brooks, MS '36 (PhD '41 Iowa), Naples, FL, has not forgotten BC, nor have we forgotten him.

Harry F. Brust, BS '38, has checked in but sends no news from Midland, MI.

David H. Buchanan, PhD '38, writes from Eastern Illinois University that he was Acting Dean of the Graduate School last year while the "Real Dean" was on leave. In that capacity, he attended the annual meeting of the Council of Graduate Schools and was on hand to applaud **Chris Gudeman,** PhD '82, when he was presented with the CGS/University Microfilms International Distinguished Dissertation Award.

Howard Burkett, PhD '42, and his wife, Lucille, sent us a detailed report of their trip to South America in the summer of 1983. The Burketts spent two weeks as volunteers at a hospital located in a remote Ecuadorian village. Burkett continues to teach part-time at DePauw University.

George B. Caflisch, PhD '79, is still working at Kodak's Eastman Chemical Division Research Labs in Kingsport, TN. He and his wife Emily now have three daughters.

(Continued on Page 14, Col. 1)

HOFFMANN-DREYFUS DISTINGUISHED LECTURES

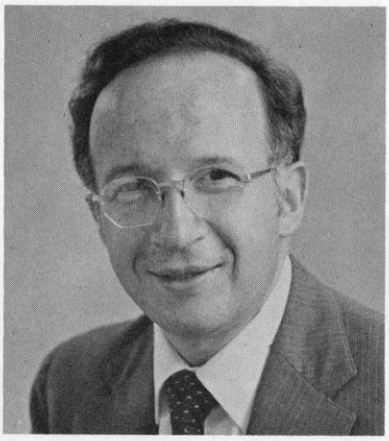
Recently the Camille and Henry Dreyfus Foundation asked the Department to host the Camille and Henry Dreyfus Lectures by Distinguished Scholars on the UW-Madison campus. The Foundation established this grant program to promote an interchange between distinguished scientists, faculty and students at academic institutions in the United States, thereby encouraging pioneering efforts in chemistry. The Foundation stipulates that the host institution select a distinguished scientist on the basis of achievement, ability and renown.

The Department's unanimous choice was **Roald Hoffmann,** John A. Newman Professor of Physical Science at Cornell and 1981 Nobel Laureate in Chemistry. Professor Hoffmann accepted the Department's invitation, and in September, he spent two weeks on campus.

Best known for research in the theories of stable and unstable molecules and of transition states in reactions, Professor Hoffmann has made important contributions to the understanding of the structure and reactivity of organic, inorganic and organometallic molecules. His first major contribution was the development of the extended Huckel method for calculating the electronic structure of molecules. His second major contribution was the discovery, with R.B. Woodward of Harvard, of simple but powerful arguments to predict the products of concerted reactions. These Woodward-Hoffmann rules have been of remarkable predictive value, and have stimulated much productive experimental research. Recently Professor Hoffmann has turned to the study of extended solid state structures.

Professor Hoffmann was born in Zloczow, Poland, in 1937. Having survived the Nazi occupation, he arrived in the U.S. in 1949 after several years of post-war wandering in Europe. He received his BA, *summa cum laude,* in chemistry from Columbia University in 1958. He went on to do graduate work at Harvard, earning his MA in physics in 1960, and his PhD in chemical physics in 1962. His thesis work was done under the joint supervision of Martin Gouterman and William N. Lipscomb. In 1962, he was elected a Junior Fellow in the Society of Fellows of Harvard University where he remained until 1965, when he accepted an appointment at Cornell University as Associate Professor. In 1968, he was promoted to Professor, and in 1974, he was named John A. Newman Professor of Physical Science.

Professor Hoffmann has received many awards in addition to the Nobel Prize. He



Roald Hoffmann

is a member of the American Academy of Arts and Sciences and the National Academy of Science. He is the recipient of honorary degrees from the Royal Institute of Technology (Stockholm), Yale, University of Hartford, Columbia, City University of New York, University of Puerto Rico, University of Uruguay, and University of La Plata (Argentina). He has received many national awards from the American Chemical Society, and is the first person to receive major awards in two different fields: The Cope Award in Organic Chemistry (1973) and the Monsanto Award in Inorganic Chemistry (1982).

During his campus residency, Professor Hoffmann interacted with more than five hundred students and faculty members. He presented a series of lectures dealing with his current research interests, *Moving from Discrete Molecules to Extended Structures: A Chemical Approach to the Solid State,* and spent a considerable number of hours in consultation with individuals and small groups. He also gave talks at UW-Milwaukee, Carthage College, and the UW-Madison Physics Department.

In addition to the scientific presentations, Professor Hoffmann spoke on the relationship between science and art to an all-campus audience in the State Historical Society Auditorium. In his lecture, entitled "One Culture," Professor Hoffmann took issue with C.P. Snow's claim that an unbridgable gulf exists between scientists and humanists. Using examples from chemistry, poetry, painting and ceramics, Professor Hoffmann made a case for an underlying unity in science and art. The common elements of these human activities, he said, are creation with craftsmanship and concise communication in a cross-cultural and altruistic way.

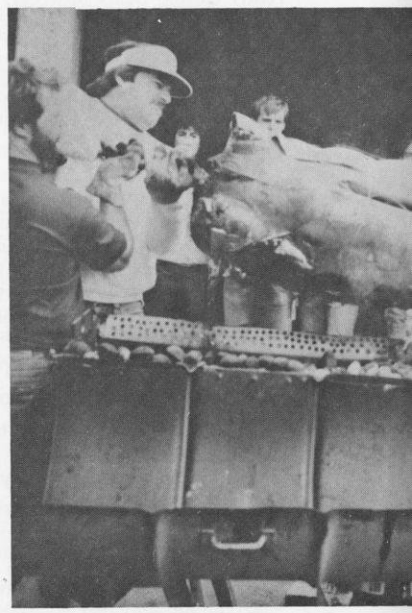
GREATER CHEMISTRY SNOUT OUT!

The Department held its First Annual Greater Chemistry Snout Out on September 15, 1984. More than 325 people—students, faculty, staff, and guests—gathered at Westmorland Park to eat, drink, and be merry.

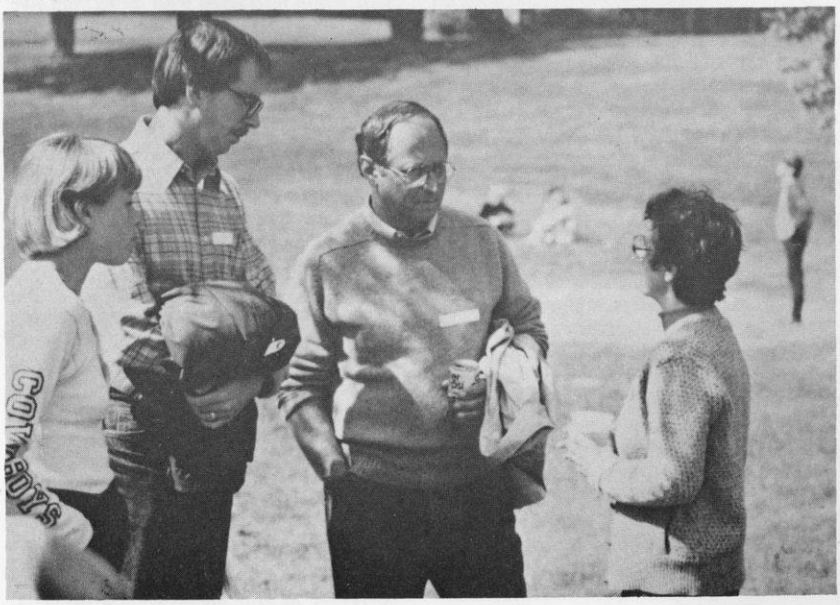
Snout Outers ate 500 pounds of meat, 150 pounds of potato salad, 90 pounds of baked beans, and drank four half-barrels (that's one hogshead, American measure) of beer. Afternoon amusements included games of frisbee, football, and volleyball.

Lab technician Steve Moder and a small army of faithful helpers organized the event. Steve has a practiced hand with this sort of thing, having now roasted a total of fourteen pigs.

The event was commemorated with an official T-shirt. Here, Department Chairman Phil Certain is presented with his shirt by Karen Rulland (center left), Organic Division secretary, and Jean Moder (far right), Business Office. Melinda Certain (far left) checks out husband Phil's new attire.



Making sure that the guest of honor is both com
Kesselmeyer, grad student; Jeff Burkett, lab techni
student; and Steve Moder, lab technician.



Jennifer Gelder, Visiting Lecturer John Gelder, and ICE Fellow Ron Perkins chat with Betsy Kean of the Chemistry Tutorial Program.

The picnic was a good opportunity for new grad students to become acquainted with the "old hands" and the staff. Serving themselves from the groaning board are (left to right) Steve Springer, Gail Ghastin, Pat Green, Unidentified comely guest, George Ganzer, and Charley Amling. Larry Wainschel waits patiently in the background.

e and accessible are (from left to right) Mark
ry Forbes, machine shop; Mark Lautens, grad

Howard Whitlock collects his swag from the pork barrel.

This 'n' That . . .

(Continued from Page 11)

Don Cameron, PhD '53, and **Trarte Barde Cameron,** BS '51, are alive and well in Wilmington, DE.

Michael Carpenter, PhD '84 (Ellis), is with General Motors.

John E. Castle, PhD '44 (Adkins), sends news of his post-retirement (from duPont in '78) work as Adjunct Professor with the College of Marine Studies at the University of Delaware, which offers the MS and PhD in marine chemistry and biochemistry as well as the usual marine biology, oceanography, etc.

Craig Caufield, PhD '84 (Zimmerman), is on an NIH postdoc with Clark Still at Columbia.

Dominic M.T. Chan, PhD '82 (Trost), who was your Ed.'s T.A. some six years ago, reports that he is in Central Research at duPont, Wilmington, DE.

Taihyun Chang, PhD '84 (Yu), is looking after Hyuk Yu's research group during the latter's absence. He will join **Charles C. Han** as a post-doctoral research associate at NBS in January. Han, who was a former member of Yu's research group, received the First Dillon Medal from the High Polymer Physics Division of APS at Detroit last March.

Leland Chinn, PhD '52, and his wife, Wilberta, reside in Glenview, IL.

Marcella B. (Mrs. Kenneth W.) Chretian, BS '29, sends encouragement from Armonk, NY.

Roger M. Christenson, BS '41, PhD '44, will retire from PPG Industries in early '85 after forty years of service. He extends greetings to former BC Ed. Aaron Ihde, and tells us that **Stewart Gloyer,** one of Aaron's contemporaries, has returned to Wisconsin and is now living in the Waukesha area.

Kenneth Collins, PhD '61 (Willard), and his wife, **Carol** (postdoc with Goering), who are faculty at the University of Campinas, Sao Paulo, Brazil, report a scheduled 50% salary increase from the university "to counter" an "official" inflation rate of 220%, and a devaluation of the cruceiro in terms of Uncle Sam's greenbacks up 400%.

Alan Comyns (postdoc with Willard, '54), who is Chief Scientist with La Porte Industries of Widnes, England, is serving as a visiting lecturer in industrial chemistry at the University of East Anglia, India.

Don Cromer, BS '47, PhD '51, and his wife, Marjorie, wrote of their recent, leisurely, backroad excursion through Europe. Cromer has been recognized as the most cited scientist at the Los Alamos National Lab, and as one of the most cited in the world. His work in x-ray crystallography with a plutonium metallurgy group has generated some 140 papers published in refereed journals. Cromer's name appeared on the list of 1,000 authors most often cited in scientific papers for work published from 1968-78. The list reveals that Cromer has been cited 8,778 times, more than twice the 3,811 citations of the average author on the list.

Glen Cunkle, PhD '84 (Nelsen), is a postdoc with Prof. Eaton at the University of Chicago.

Roger DeKock, PhD '69 (Fenske), who is at Calvin College in Grand Rapids, spent the '82-83 academic year at the Free University in Amsterdam as a Fulbright Scholar in theoretical chemistry. He reports that he and his family took the opportunity to trace their Dutch ancestry.

Richard B. DeMallie, Jr., MS '61, wants the BC to continue to appear at his residence in Pittsford, NY.

(Continued on Page 15, Col. 1)

GETTING THE TEACHING JOB DONE

Each semester, more than 5,000 undergraduates receive approximately 19,000 credit hours through the Chemistry Department. In order to meet these enormous instructional needs, the department relies, in part, on the services of visiting faculty and other chemists with temporary appointments. Among those who have helped with the teaching effort this year are:

Charles F. Anderson, (PhD '73 Stanford University, SB '68 MIT) was a Lecturer for Chem 561 during the Spring Semester, 1983-84. Anderson is Associate Scientist in Record's research group.

Richard N. Biagioni (PhD '81 UCLA, BS '74 Illinois-Urbana) was a Lecturer in the freshmen program for both semesters of the 1983-84 academic year. A postdoc with Ellis (1981-83), Biagioni has accepted a faculty appointment at Grinnell College.

Steven D. Burke (PhD '78 Pittsburgh, BS '73 UW-Eau Claire), Visiting Professor from the University of South Carolina, taught an advanced organic synthesis course during the Spring Semester, 1983-84. He is a recent recipient of the Presidential Young Investigator Award.

John I. Gelder (PhD '75 Arizona), Visiting Professor from Oklahoma State University, taught general chemistry during the Fall Semester, 1984-85, and will continue in the Spring. Gelder received his MS from the department in '71 (Treichel). He is an expert in the use of computers in undergraduate chemistry education.

John E. Hanson (PhD '64 Purdue) is a Visiting Professor from Olivet Nazarene College in Kankakee, IL. He taught general chemistry during the Fall Semester, and will stay through the spring to conduct research in West's group.

Ulrike Kiesele-Lang (PhD '75 Institute of Physical Chemistry I, Freiburg, W.G.) was a Lecturer in analytical chemistry during the Fall Semester, 1984-85.

David A. Knodel (PhD candidate with Curtiss, BS '78 North Dakota State) was a Lecturer in the General Chemistry Division for the Fall Semester.

Karsten Krohn (PhD '71 University of Kiel, W.G.) is Visiting Professor from the Institut fur Organische Chemie der Technischen Universitat Braunschweig. A leading researcher in the synthesis of antitumor agents, Krohn lectured in introductory organic chemistry during the Fall Semester, 1984-85.

W. Thomas Lippincott (PhD '54 Ohio State) has a two-year appointment (1984-86) as Visiting Professor from the University of Arizona. In addition to teaching freshmen chemistry, he is serving as Director of the Institute for Chemical Education (ICE) during BZS's leave.

MCELVAIN AND WILLARD LECTURE SERIES

During the last year, the Department hosted two major lecture series: the Samuel McElvain Lecture Series (May 7-12, 1984) and the first John E. Willard Lectures (October 30-November 1, 1984).

The McElvain Lecture Series was delivered by Martin Karplus, Professor of Chemistry at Harvard University. Professor Karplus is a leader in applying quantum mechanical methods to the electronic structure of atoms and molecules, the rates of chemical reactions, and the dynamics of polymers. While in Madison, Professor Karplus was the honored guest at a social evening hosted by Tom Farrar. Farrar was a research student with Karplus at the University of Illinois.

The Willard Lectures were delivered by Richard N. Zare, Shell Distinguished Professor at Stanford University. Professor Zare is recognized for using lasers to investigate the dynamics of chemical reactions and to study molecular spectroscopy.

INDUSTRY COURSE

A special topics course offered during the 1984 Spring Semester presented students with an in-depth look at research in a large drug company. Arranged by Professor Barry Trost, the course featured research chemists from the Merck, Sharp & Dohme Research Laboratories in Rahway, New Jersey, as guest lecturers. Each lecturer spent from two to three weeks in Madison, so students and staff were able to interact with the visitors on an individual basis.

The visiting chemists from Merck, Sharp & Dohme were D.F. Veber (Peptide Synthesis of Somatostaton Analogs), E. Grabowski (The Design and Development of Practical Organic Synthesis), B.G. Christensen (Chemistry and Total Synthesis of B-Lactam-Antibiotics), A.A. Patchett (Design of Enzyme Inhibitors), R.A. Firestone (Diradical Mechanism and Linnett Theory), G. Albers-Schonberg (Isolation and Structure Determination of Bioactive Natural Products), J. Kollonitsch (Methods for the Fluorination of Organic Compounds), and R. Smith (Some Typical Medicinal Chemistry Problems).

This 'n' That . . .

(Continued from Page 14)

Armin de Meijere, Visiting Professor '78, writes from West Germany that after six years at Hamburg University, he has established a solid group of twenty coworkers.

Douglas DeYoung, PhD '84 (West), is with the Owens-Corning Fiberglas Corporation.

Ray A. Dickie, PhD '65 (Ferry), sends us encouragement from Birmingham, MI. He is interested in both the "demonstrations" book and the "history." He will be pleased to learn that the latter will be a "*more* rather than less complete version" (see article this issue).

Mary Brasure Dodd, MS '35, writes that she and husband **Leonard Dodd,** MS '36, continue to make their home in Crystal City, MI, where they have lived since University days. Leonard retired from Pittsburg Plate Glass Industries several years ago; since then, the Dodds have spent the winter months in Florida.

Royce Donkle, BS '43, reports from Long Beach that after retiring from Shell in '73, he spent the next ten years helping real estate developers disassemble a 275-acre Shell synthetic rubber complex (located near the junction of the Harbor and San Diego Freeways), which was replaced with industrial R&D and office structures.

Dwight B. Easty, who was a postdoc with Walt Blaedel, 1967-69, sends appreciation for BC from Appleton, WI.

Carl Eggert, BS '31, says that though he has little to report, he does look forward to reading news of his classmates.

John H. Enemark, Professor of Chemistry at the University of Arizona, writes that he enjoys news of the Department. He was Visiting Professor with Dick Fenske, 1974-75.

Alden Erikson, BS '50, has been named Senior Research Associate, PPG Industries, Allison Park, PA.

Herbert H. Espy, PhD '56, is now Manager of the Technical Information Division at the Research Center of Hercules Incorporated, Wilmington, DE.

Door H. Etzler, BS '35, retired in 1980. He reports keeping busy as a Rotarian, having served recently as Governor of District 516 (California) of Rotary International.

Alanah Fitch, Postdoc '83-84 (Evans), is working as a postdoctoral research associate in the Department of Chemistry, Northwestern University.

E.M. Fitchett, BS '24, who was Lecture Assistant to J.H. Walton, Jr., 1924-26, continues to support BC and its hard-working staff from his home in McFarland, WI. He was kind enough to send us a copy of recent correspondence with **Harriet Mausfield Thomson,** BS '25. She makes her home in Olive Bridge, NY, near her son, Dick, and his family.

Steven Fleming, PhD '84 (Zimmerman), has taken an NIH postdoc with Al Meyers.

Robert P. Frankenthal, PhD '56 (Shain), with AT&T Bell Laboratories since '72, received that company's Distinguished Member of Staff Award. He lives in Summit, NJ.

Stephen E. Freeman, PhD '35, writes than an item in the #30 BC stirred some old memories. That issue (p. 18) contained references to the limnological work on Wisconsin lakes carried out by Professors Birge and Juday. Freeman worked on the project under Professors Juday and Meloche in the years 1931-35. He recalls taking temperature and pH measurements on several lakes in the Trout Lake vicinity, using what was then a quite new electric cell to determine the pH. Freeman, who lives in Mequon, WI, is the retired President of the Freeman Chemical Corporation of Port Washington, WI, which he founded in 1949. The Freeman Chemical Corporation does substantial business in the national and international resin markets and is now a wholly-owned subsidiary of the H.H. Robertson Company of Pittsburgh.

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ICE UPDATE

Under new director **W. T. Lippincott,** ICE continues to pursue its ambitious goals of improving and maintaining the vitality of chemistry teaching at all educational levels nationwide (BC #30, p. 23). The Institute held successful workshops in Madison during the past two summers, and in 1985, it will conduct similar programs at the Universities of Arizona, Maryland, and California-Berkeley.

These programs include a content mastery course for high school and college teachers of introductory chemistry, demonstration workshops, experiment-developing sessions, chemistry camps for students in grades six through eight, and sessions introducing teachers to principles and uses of modern chemical instrumentation. In Madison, ICE has scheduled a new program to train science education faculty in chemistry demonstration techniques. All programs will prepare participants to conduct workshops for other teachers in their own communities.

Through the 1985 summer programs, ICE expects to reach about 660 teachers directly. Lippincott anticipates that these teachers will reach as many as 10,000 other teachers and a half-million students during the 1985-86 school year.

To supplement the above-mentioned programs, ICE fellows **Rodney Schreiner** and **Ron Perkins** are preparing a series of curricula and handbooks for elementary, middle and high school teachers. With the help of ACS, ICE is also developing a high school course that presents chemical principles as they affect social issues and industrial problems. Other projects include the preparation of an industrial and engineering chemistry sourcebook for college-level physical chemistry teachers, a proposal to develop chemistry-education-specific software, and a proposal to engage faculty fellows to study problems in chemical education.

This 'n' That . . .

(Continued from Page 15)

Dick Fronko, PhD '84 (Treichel), has accepted an NRC postdoctoral fellowship at the Naval Research Labs in Washington, D.C.

P.K. Gallagher, BS '52, PhD '59 (King), has checked in from Basking Ridge, NJ, as has **Robert J. Gander,** BS '40, MS '42 (PhD '44 IL), of Whitehorse, NJ.

Robert J. Gertschen, BS '73, files this address change: P.O. Box 2166, Sun Valley, ID 83353.

Jeffrey M. Gold, BS '78, reports that he is still with Xerox in the Chemistry of Materials Area (formerly the Polymer Sciences Area) and has recently married. He wishes the new BC Ed. good luck, a sentiment that may be particularly heartfelt as Gold has recently become editor of *Genesee Valley CHEMunications,* the ACS Local Section Publication for the Rochester (NY) Section.

Thomas Gover, PhD '60 (Willard), has been named Assistant Dean for General Education at Gastavus Adolphus College in St. Peter, MN. He continues as Professor of Chemistry and still coordinates microcomputer usage on the campus.

Jack Graybeal, PhD '55, at Virginia Polytechnic University, and wife, Dale, enjoyed vacationing in New England during the summer of 1983. They took in the Cool Jazz Festival in New York, the Boston Symphony at Tanglewood, and the Pops in Boston.

Fred Granberg, BS '39, reported from Knoxville that his F.M. Granberg Company (licensed contractors for residential, commercial, and industrial building) is mainly involved in consulting work for the paper industry. He remembers misspelling C.J. Krister's (MS '37) name on a quant. quiz back in 1936.

Eleanore Benner Gray, BS '32, of Niagra Falls, remembers her student days when she was "working in the labs, poring over the books and doing everything but blowing up the place." After graduation, she worked first with Pittsburgh Testing Labs in Buffalo, then with Mathieson Alkali Works, later with Hooker, and finally, with R.B. MacMullin Consultants. Now retired from chemistry, she keeps busy with a large number of activities and hobbies. Her husband, at the age of eighty, still practices law. Mrs. Gray's father, Raymond C. Benner (PhD), and daughter, Nancy Soule (BA), both graduated from the UW, though not from this department.

We regret to report that the evil spirit with an appetite for issues of BC addressed to **Gary Grunewald,** PhD '66, managed to evade the hex placed on it by former Ed. Aaron Ihde. For the third year in a row, Grunewald did not receive his copy of BC. Even so, he continues to support our efforts. We are mailing this issue to his office in Malott Hall, Department of Medicinal Chemistry, at the University of Kansas in Lawrence.

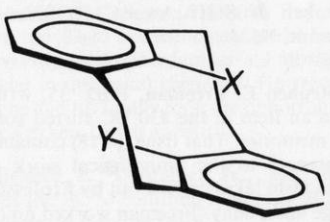
Christopher Gudeman, PhD '82 (Woods), is the recipient of the Council of Graduate Schools/University Microfilms Dissertation Award in the Mathematical and Physical Sciences. This award is the second national award received by Gudeman on the strength of his PhD dissertation. Earlier, he and his supervising professor, R. Claude Woods, received the Nobel Laureate Signature Award (see BC 30, p. 17).

Ronald G. Haas, PhD '70 (Blaedel), enjoys the overviews of Madison news and politics printed in BC, even though he lives nearby in Marshfield. He is still (eleven years) with the Marshfield Clinic/St. Joseph Hospital Joint Venture Laboratory.

Stan Hager, PhD '74 (Willard), continues to lead a group involved in polymer characterization at Union Carbide's Technical Center in South Charleston.

Rolfe Hahne, PhD '63 (Willard), has left his position with the State Hygiene Laboratory of the University of Iowa to become Research Leader in the Health and Environmental Industrial Hygiene Laboratory of Dow Chemical Co., Midland, MI.

Ruth Goodrich Haines, PhD '67 (Treichel), writes that she is now Deputy Director of the Center for Chemical Physics, National Bureau of Standards. She and her family moved to Maryland from Honolulu, Hawaii, where she had been on the faculty at Chamenade College.



NEW EQUIPMENT FOR THE INSTRUMENT CENTER

The Chemistry Instrument Center is in the process of installing new Fourier Transform-Nuclear Magnetic Resonance (FT-NMR) equipment worth more than one million dollars. This equipment consists of a multinuclear 12.0 Tesla, 500MHz proton instrument; a 4.7 Tesla, 200MHz $^{13}C/^{1}H$ instrument; and a wide bore, multinuclear 8.5 Tesla, 360 MHz ^{1}H instrument. These instruments expand the Department's capabilities greatly, providing much-needed resources for Two-Dimensional FT-NMR and other advanced techniques.

Additional NMR and x-ray diffraction instruments and a new departmental computer system will be added in the near future. The purchase of this equipment is supported by NSF and NIH grants, University funds, and industrial gifts.

Larry Haskin, who was a member of the Department from 1960-73, is Chairman of the Earth and Planetary Science Department at Washington University in St. Louis. He is also on the Chemistry Department Faculty. He says that the Chemistry Department at Washington has just hired eight new faculty, some to rebuild the department and some to replace retiring faculty. The Earth and Planetary Sciences Department has grown from seven to fourteen members, and, he hopes, it will continue to grow until it reaches twenty.

The article about the Old Red Gym (BC #30, p. 26) found an appreciative audience in **John R. Hayes,** BS '37 (PhD '41 Penn State), who remembers playing water polo for Tripp Hall's High House in the Gym's old pool. He writes that he and his wife enjoy a different form of recreation now. From their home base in State College, PA, they have traveled (via their Airstream trailer) to all forty-eight of the contiguous states while checking up on widely scattered children and grandchildren. Hayes reports that the traveling and keeping **Jack Schempf,** BS '34, out of serious mischief keeps him well-occupied.

Don Henderson, PhD '68 (Willard), who has served as Technical Director of Borden Chemical Co. in Columbus, OH, and Research Director for Hexcel Corp. in San Francisco, writes from the Bay area that he has started his own high-tech

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This 'n' That . . .

(Continued from Page 16)

company, Orthomatrix, to develop and manufacture implantable devices for the orthopedic and dental markets.

Bill Herdle, PhD '75 (Trost), remains at Union Carbide's Tarrytown Technical Center where, he says, he has consistently worked his way upward over the years "...with respect to the size of the molecules I'm working on, at least." His current targets are some unusual silicon polymers.

William Hobson, PhD '84 (Ellis), is with Bell Labs.

Carl A. Hoeger, PhD '83 (Reich), is a postdoc with Okamura at UC-Riverside.

Larry A. Holmes, PhD '68 (Harriman), reports that he is still Marketing Vice President of Southwest Chemical Services. His company is now owned by Morton Thiokol, Inc., which—among other things—is the world's largest salt company.

M. Leslie Holt, Emeritus Professor, reportedly still plays golf and goes downhill skiing.

Henning Hopf, PhD '67 (Goering), sends congrats to the new Ed. and encouragement from the Institute of Organic Chemistry at the University of Braunschweig. He was Dreyfus Distinguished Lecturer at the University of Oregon during the summer of 1983.

Jimmy W. Hosch, MS '72, is in Dallas, TX.

Monie S. Hudson, MS '39, a consulting chemist in Spartanburg, SC, has reported no new news.

Carl A. Hultman, BS '66, now Associate Professor in the Chemistry Department of Gannon University in Erie, PA, wants to be kept on the BC mailing list. He has been appointed Co-director of the newly-formed Metalliding Research Institute at Gannon University. The Institute was established as the result of GE Corp.'s donation of the metalliding surface alloying technology to Gannon. Hultman received the 1983 Outstanding Member Award, Erie Section of the ACS.

Peggy Hurst, PhD '56, checks in faithfully from Bowling Green.

George E. Inglett, MS '51, Chief of the Cereal Science and Foods Laboratory, Regional Research Center, USDA, Peoria, received the Award for the Advancement of Application of Agriculture and Food Chemistry of the ACS Division of Agricultural and Food Chemistry. He was cited, according to an item in *The Hexagon,* "for his research contributions in enzymology and carbohydrate chemistry."

Joachim Ippen, who was a postdoc with Barry Trost, 1976-77, writes from Cologne, West Germany, that he wants to continue receiving the BC.

Reese Jenkins, PhD '66 (History of Science, Inde), is developing a graduate program in the history of technology at Rutgers, audio-visual programs on the history of electrical engineering, and preparing for the publication of the *Edison Papers.*

Tom Johnson, PhD '46 (Wilds), writes from the Sterling Winthrop Research Institute in Rensselaer, NY, that he especially enjoyed the 1941 photo of the Organic Division in BC #29. His brother, Wm. S. Johnson, was on the faculty at that time.

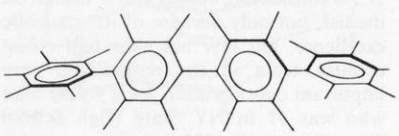
Thomas O. Jones, PhD '37, Visiting Scientist '54, has retired from his position as Director of the Antarctic Program of the National Science Foundation. He is currently working on a book on international cooperation in the use of the Antarctic for scientific investigations, and is also serving as a consultant to the Irish government on the operation of national science programs.

Hong Yol Kang, PhD '66 (Willard), formerly President of the Korea Research Institute of Chemical Technology, is now President of the Korea Standards Research Institute in Chung Nam.

Robert A. Keller, BS '51, MD '58, has reported in from Sheboygan, WI.

Martha J. Kelly, PhD '83 (Reich), is a postdoc with Oppolzer in Geneva.

Jerry Kessler, MS '76, informs us that he is moving to Algonquin, IL, in January of '85. He continues to work for Quaker Oats, though he did switch two years ago from the foundry-oriented Chemical Division (since then, sold) to Foods R & D. He describes this move as a "successful transition from the sandbox to the kitchen!"



John Korth, MS '40, and his wife, Henrietta, write from Goldsboro that during their retirement, they are busy indeed. They recently enjoyed trips to Spain, Morocco, Yugoslavia and Greece.

Ludwig C. Krchma, BS '31, continues to support our efforts from Kansas City.

Curt Kreil, BS '77, sends us the following update. He received the PhD in organic chemistry at UCLA with Professor Orville Chapman. His thesis work focused on the detection and structure determination of reactive intermediates by matrix isolation techniques. Kreil is now Senior Chemist at 3M in St. Paul. He describes his current research in process design and applications of radiation chemistry as "quite challenging." He also reminds us to continue sending him BC, as it is his source of information about the place and the people who gave him his start in chemistry.

Carl Krieger, BS '73, writes that because of his recent move to Salt Lake City, he failed to receive #30 of BC (Patty Meloche had informed him that it was out). We sent the missing issue to his new address at 1245 East Murray Holladay Road.

Charles (Kris) Krister, MS '37 (Hall), a certified arbitrator under the regulations of the Federal Mediation and Conciliation Service and the rules of the American Arbitration Association, observes that arbitration may well be the wave of the future, given our "litigious and highly technical society." He suggests that Chemistry Departments might do well to take note. Krister also nudges Aaron Ihde about his once-upon-a-time intention to publish the many entertaining stories told by and about Professor Kahlenberg. Krister was 1984 Chairman of Chem Vets of Delaware Section of the ACS.

David W. Kurtz, who did a postdoc with Zimmerman, '71-73, continues as Professor of Chemistry at Ohio Northern University. He says he has little news, other than that the chemistry program continues to grow.

Robert Kusel, BS '36, still makes his home in Waco, TX.

Walter M. Kutz, PhD '30 (Adkins), continues to keep in touch from Santa Rosa, CA.

Michael Landry, who will finish his doctoral work (Yu) in February, and **Christine Martell** (Schrag) were married last May. He plans to do a postdoc with

(Continued from Page 18, Col. 1)

This 'n' That . . .

(Continued from Page 17)

Tim Lodge, PhD '81 (Schrag), at the University of Minnesota.

Robert W. Laundrie, BS '42, sent us cards from each of his three businesses: Attorney, Consultant on Compliance with Government Regulations (air, water, hazardous wastes, safety and hygiene), and Manager-Ecology, Safety and Health Engineering for General Tire & Rubber Co. He reports that he is still going strong in all three with little thought of slowing down, even though he is sixty-five. Just to keep life interesting, he has gone back to school for an MBA.

Alvin C. Lavoie, PhD '81 (Trost), who is with Rohm & Haas, married Mary Catherine Staab on November 26, 1983. Their address is 533 Midtown Road, Chalfont, PA 18914.

M.B. Lele, MS '50, writes from Bombay, India, that BC #30 brought him the sad news of the deaths of **Mrs. Jean Schuette** and **Gerald Harlow,** PhD '51 (Schuette). Lele remembers having coffee with **Harlow, Stephen Nicksie,** PhD '52, and **Robert Meyer,** all of whom were Dr. Schuette's students. He also recalls a very special evening when he and fellow student Mangala Prasad, MS '49, enjoyed dinner and a game of bridge with Dr. and Mrs. Schuette. Though Lele hopes soon to enjoy a peaceful retired life, he is currently Technical Manager (Quality Control) for Apar Private Ltd. at its Special Oils Refinery in Bombay. Before joining Apar in 1970, he was with Stan Vac/ESSO at its petroleum refinery in Bombay from 1954-70. He has two sons, the eldest is a librarian with the British Library and the younger is continuing his postgraduate studies in medicine. Lele also asks to be remembered to **Harold Schimming,** a gentleman who was a good friend.

Samuel Lenher, MA '24 (PhD '26, Univ. College, London), pronounced the #30 BC particularly good, and continues to support our efforts. He says, however, that he has no personal information to contribute.

Juliana Li, BS '72, is a chemist for the alcohol research group at UC-San Diego. She says she works with a first generation G-C from Hewlett Packard and though she finds this "antique" interesting, she would like to use something more contemporary.

Bill Libbey, PhD '69, is Section Director in the Chemicals Research Division of Conoco Chemicals, which is now a part of duPont. He wants BC to continue to reach him in Ponca City, OK.

We hear from **Wendell A. Lindbeck,** PhD '40 (Kahlenberg), that since retiring as Professor of Chemistry from Northern Illinois University in 1978, he and his wife have been wintering in San Diego. They also enjoy—periodically—the activities of their five grandchildren.

William E. Link, PhD '54 (Schuette), is Director of R&D at Sherex Chemical Company in Dublin, OH. Sherex is a subsidiary of Schering A.G. of West Berlin.

Shu-kai Liu, MS '50 (Schuette), sends us news that he is Professor and Head of the Chemical Engineering Department and Vice-President of the College Academic Degree Granting Committee of Wuxi Light Industry College, Wuxi, Jiangsu, China. While at Wisconsin, he held an assistantship with Farrington Daniels and worked on extracting and isolating the chlorophyl from green leaves for photosynthesis chemical research. His letter relates his indebtedness to Alma Mater and his wish that the "friendship of America and China roll on like the Mississippi and Yellow Rivers ever-flowing."

John B. Lohman (PhD '51 Brown), now living in Arlington, VA, has reestablished contact. He tells us that he did operations research (then a new field) for the Navy on a contract basis for twenty years. Since his retirement, he has pursued his interest in community planning, especially in transportation.

James T. Lowe, PhD '35 (Steenbock), keeps the Wisconsin spirit alive in Indianapolis. He was associated with WARF from 1935-45, and then worked with Dow Chemicals Co. until his retirement in 1973. Lowe is Past President of the Indianapolis Chapter of the Wisconsin Alumni Club.

Alan G. MacDiarmid, PhD '53 (Hall), is Professor of Chemistry at the Univ. of Pennsylvania. MacDiarmid, who also holds a PhD from Cambridge ('55), received the ACS Kippling Award in 1971.

Ron Markezich, PhD '71 (Whitlock), is with Occidental Chemical Co., and his wife, Bev, works at the local hospital. Their daughter, Amy, is caring for her Cabbage Patch dolls and their son, Ron, Jr., is considering colleges. UW is high on the list, not only because of its academic excellence, but UW has "the best cross-country team in the nation"—a very important consideration for a young man who was #1 in NY State High School Cross Country in 1983.

Ralph R. Marquardt, BS '28, sends support from Sauk City, WI.

James E. Mars, BS '54, lives in Vashon, WA, but writes not one word of his activities.

Tomokazu Matsue, a postdoc with Evans 1983-84, is a member of the faculty at Tohoku University, Sendai, Japan.

Bruce N. McBain, MS '41 (McElvain), has retired from PPG Industries. He says he has found a pleasant life in the "Land of Enchantment," otherwise known as New Mexico.

Pat McDougal, PhD '82 (Trost), has joined the faculty at Georgia Institute of Technology as Assistant Professor.

Mike McKenna, PhD '70 (Berson), has been working on developing new polymers as thermoplastic elastomers for duPont at the Experimental Station in Wilmington. His wife, **Nancy McFadden McKenna,** MS '70 (West), taught school for several years and is now very much involved in adoption advocacy. She is serving on a state board to review the status of children in foster care.

G. Patrick Meier, PhD '81 (Vedejs), writes from Seattle that he and his wife, Kay (PhD '81-Pharmacology) are now settling down. After graduation, they both took NIH postdoctoral positions in California: Kay at UC-San Diego and Patrick at UC-Irvine under Larry Overman (PhD '69, Whitlock). After celebrating the birth of their son, the Meiers moved to the University of Washington. Kay has taken a second postdoc fellowship at the Howard Hughes Medical Institute, a branch of the Pharmacology Department, and Patrick has joined the faculty as Assistant Professor in the Department of Medicinal Chemistry. He reports that he is developing a research group and "still doing synthetic organic chemistry, but with a slight biomedical slant."

Keith Meyer, PhD '76, reports that he has accepted a position in the laboratories of Kraft Foods in Glenview, IL. His wife, the former **Phyllis Anderson,** MS '69, PhD '84 (History of Science), now teaches chemistry at Triton Community College. They and their daughter, Magueretta, continue residence at 720 Newberry, LaGrange, Park, IL.

Michael Michalczyk, PhD '84 (West), is a postdoc with M.F. Lappert at the University of Sussex, Brighton, England.

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This 'n' That . . .

(Continued from Page 18)

George A. Miller, BS '50 (PhD '55 U. of Mich.), who is at Georgia Tech, sends greetings to his freshman chemistry prof., Aaron Ihde, and to former Georgia Tech colleague, Claude Woods.

Nels Minne, PhD '32, sends encouragement but no news from Winona, MN.

Stan Mirviss, PhD '51 (McElvain), who is with Stauffer Chemical Company, writes that **Ina (Shaw) Mirviss,** MS '49 (Steenbock), received the Chemical Manufacturers Association Catalyst Award for excellence in teaching high school chemistry, in addition to receiving local teaching honors. Ina has been teaching at Westhill High School in Stamford, CT, for the past fourteen years. She has also been active in the Western Connecticut ACS Section.

G. Therold Moeller, PhD '38, sends us notice that two more volumes of the Gmelin *Handbuch* were scheduled for publication in 1984. These should, he says, complete a project that expanded from a projected single volume to a total of six volumes. On the occasion of his retirement from Arizona State University in May 1983, former students, friends and colleagues contributed funds to establish the "Therold Moeller Award for Outstanding Scholastic Achievement and Professional Promise in Chemistry." The award will be presented each spring to a junior student in chemistry at ASU.

Jonathon Morse, BS '77, sends support from Midland, MI.

Charles Muckenfuss, PhD '57 (Curtiss), checked in, but sent no news.

R.D. (Dick) Mullineaux, PhD '51 (McElvain), writes from Houston that though he retired from his position as General Manager-Health, Safety and Environmental Support with Shell Oil Co. in March 1983, he has plenty of projects to keep him busy. One of the most interesting, he reports, was a 3½ month stint as advisor on industrial pollution control to the State Minister of Population and Environment of the Republic of Indonesia. Dick and his wife, Karen, are enjoying their children and grandchildren, all of whom live in Houston.

David Nagel, BS '75, checked in from Houston, but sent no news.

News has reached us of **Najdat B. Nazhat,** MS '65 (Willard). He went on to take his PhD at the University of Newcastle, and spent a year as a postdoc at the Hahn-Meitner Institute in Berlin. He then returned to his home in Iraq where he held a lectureship at the University of Sulaimaya for two years, followed by service with the Ministry of Oil and the Iraq National Oil Company. Since 1982, he has been back at the University of Newcastle where his wife, Rajiha, is studying for her PhD in chemistry.

Ambrose Nichols, PhD '39 (Walton), provides encouragement and tangible support from his home in Santa Rosa, CA.

Stephen W. Nicksic, PhD '52 (Schuette), has reported in, but sends no news from Brea, CA.

We have received a press release from PPG Industries informing us that **Peter Nowakowski,** PhD '75 (West), has been appointed Research Associate in the Research and Development Center, Coatings and Resins Division. He has been with PPG since 1977, and resides in Glenshaw, PA.

Kathleen M. O'Connell, PhD '82 (Evans), is now Senior Scientist at Instrumentation Laboratory, Inc., Lexington, MA.

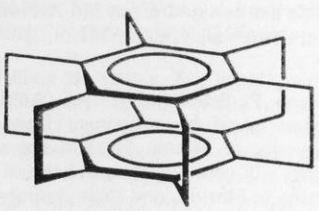
Maurice Oehler, MS '61, teaches chemistry and physics at Prairie du Chien (WI) High School. He is also a partner in the Fritz-Oehler Insurance Agency—a business venture that allows him to continue teaching, says he.

Michael Olken, PhD '84 (Ellis), is a postdoc with Geoff Ozin, Toronto.

Dean L. Owens, BS '42, is enjoying his retirement in Whittier, CA. In addition to R&R, he is doing some consulting and is writing a book on ion exchange water treatment.

Richard Pagni, PhD '68 (Zimmerman), is on the chemistry faculty at the University of Tennesssee. He asks that we continue to send BC to him in Knoxville.

Wilfred O. Parrish, BS '41 (MS '71 UW-Milwaukee), and his wife, the former Hope Matthes, are enjoying life in the Ozarks. They moved to Arkansas after Wilfred's 1972 retirement from A.O. Smith Corporation. He says that the BC stimulates fond memories of the old AXE house and old friends.



William H. Pearson, PhD '83 (Trost), sends his greetings to the new Ed. along with an address change. Pearson has moved from New Haven to 2553 Miller Road, Ann Arbor, MI 48103. He joined the chemistry staff at Univ. of Michigan as an Assistant Professor, and received the Dreyfus-Young Faculty Award upon assuming his position.

Ralph A. Petersen, PhD '83 (Evans), is an electrochemist at Johnson Controls, Milwaukee.

Russ Peterson, BS '38, PhD '42 (Walton), received the LL.D. from his Alma Mater at the spring commencement (see article, this issue). He continues as President of the National Audubon Society, and describes himself as deeply involved in world conservation matters. His training in chemistry, he says, continues to serve him well in his wide-ranging activities, "from the maintenance of biological diversity to the development of renewable energy to the long-term consequences of nuclear war."

Frank L. Pilar, who is Chairman of the Department of Chemistry at the University of New Hampshire, expresses his appreciation of BC and its news of old friends. Though not a UW alumnus, he spent the 1953-54 year in Madison as a graduate student, and returned in 1970-71 as Visiting Professor. He is especially pleased that Tally continues to make news, and that Joe Hirschfelder recovered from his by-pass operation. Pilar tells of renewing his acquaintance with Ed and Katie Larsen during the 1983 Council for Chemical Research meeting in Boston. Ed used to teach in the NSF Summer Institute for High School Teachers in New Hampshire, and is considered an honorary UNH alumnus. Pilar also sends us welcome news of **Sandy Amell** and **Gary Weisman** (see Alphabetical entries).

Helmut F. Prahl, PhD '59, has "formally" retired to Florida, though he admits to spending much time in his personal laboratory in pursuit of various problems in molecular neurobiology. The Executive Director, Emeritus, of the Dynatron Research Foundation, he can still be reached through the Foundation's address: P.O. Box 4098, Madison, WI 53711. He sends congratulations and condolences to the new Ed., best wishes to the former Ed., and a "stimulating" check to the BC endowment.

A.K. Prince, PhD '56, with Dow Chemical Europe, writes from his so-called "hardship" post in the Zurich area that he and his wife are "like children in a chocolate shop."

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This 'n' That . . .

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Everett Pryde, PhD '49, has contributed to the well-being of BC, but offers no news.

Bill Ramsden, PhD '84 (Zimmerman), is in Minneapolis with 3M.

Romer A. Romero, MS '77, writes from Maracaibo, Venezuela, that he is very interested in Professor Shakhashiri's *Chemical Demonstrations: A Handbook for Teachers of Chemistry* (BC #30, p. 1). He says he is still using the *General Chemistry Audio-Tape Lessons Kit* given to him by BZS seven years ago.

Robert M. Rosenberg, Robert McMillan Professor at Lawrence University, wrote in to clarify some misinformation in #30. He spent several leaves at Madison in order to work with Marion O'Leary. "[T]he instrumental facilities are great," he says, "but incidental to my coming to Madison." (Happy to set the record straight. - Ed.)

Robert W. Rosenthal, PhD '49 (Adkins), writes that he has been at Miami International University for the past nine years as an Adjunct Professor in organic chemistry. His and his wife's hobby of teaching arts and crafts on cruise ships has taken them on Caribbean, Mediterranean, North Cape (Norway), Canal Transit, and Alaskan cruises. Rosenthal reports that both sons are optometrists—one in Tampa, the other in Houston.

Harold K. Salzberg, PhD '29, writes from his retirement home in Cape Coral, FL, that he lives in the fastest growing county in the state. Current interests include the plants and flowers of Florida, genetic engineering, and philately. He says that Wisconsin is often in his thoughts: the pages of names in BC stimulate memories, and then, too, his son, Karl, and family live in Beloit. Salzberg retired from the Borden Chemical Division as Senior Scientist in 1966. He is a former Mellon Institute Fellow on pine tree products (Pine Institute of America) and dairy by-products (Borden).

Donald F. Saunders, PhD '50 (Daniels), retired from Texas Instruments after thirty years in petroleum and minerals exploration geochemistry. He has formed a new company, Petrominex, Inc., to continue those endeavors and, he says, "to keep myself out of mischief." Saunders and his wife, the former Winnifred W. Miller, BS '49, live in Dallas.

Clair N. Sawyer, BS '30, PhD '38, writes from Sun City, AZ, that he has finally retired after forty-five years of teaching and consulting in the water and waste water treatment field. He and Mrs. Sawyer (the former Orphelia Ckeck, BS '25) thoroughly enjoy the Arizona sunshine and "take great satisfaction in knowing, when the weather gets uncomfortable outside, we can retire to the comfort of our air-conditioned home."

William J. Scanlon, BS '69, has left El Cerrito for Park Ridge, IL. Notice of this move accompanied his advance order of Aaron Ihde's forthcoming history of the chemistry department.

Matthew F. Schlect, BS '75 (PhD '80 Columbia), is another of the unfortunate alumni who received an abbreviated copy of BC #29, though he did not realize he had missed anything until he read BC #30. The raves about the McElvain pictures took him by surprise. Since Schlect considers himself the intellectual grandchild of McElvain (having taken his PhD with **Gilbert Stork,** PhD '45-McElvain), the photos are of great interest to him. Now Assistant Professor at Polytechnic Institute of New York, he enjoys the memories evoked by BC. These memories include his being taught (by your Ed.) to use the Varian EM 360 NMR.

Mark Schmidt, PhD '84 (Treichel), has a postdoc with Angelici at Iowa State.

Howard A. Schneider, BS '34, MS '36 (PhD '38 Biochem), adds his name to the very long list of BC readers singing the praises of former Ed. Aaron Ihde. He comments that "pieces such as 'The Old Red Gym' and 'Tarkow, CCC, and the Arboretum' ...are very successful. They lift the BC above the parochial, and remind the alumnus of that larger university that provided an important part of his environment during his Madison years."

Elliot Schubert, PhD '50, has retired and moved to San Diego. We received this bit of information from **Robert W. Rosenthal,** PhD '49.

Barbara Schumacher, BS '52, asks us to note her new address at 216-A Fiddick Lane, Grass Valley, CA 95945.

Harry P. Schultz, PhD '46 (Adkins), informs us of his retirement from the University of Miami. He and his wife, Pearle, will continue to spend the winter months in Florida, and their summers in the mountains of Wyoming.

Javan Shelly, PhD '75, is working in the area of polyethylene catalyst development at U.S. Industrial Chemicals Co., Cincinnati.

As many others did, **Irwin Siegelman,** PhD '59 (Sorum), responded to Aaron Ihde's final warning to recalcitrant alumni and claimed that he would be bereft if he did not receive BC. The newsletter allows him to follow the trials and triumphs of such old friends as Paul Treichel, who was a student in his section of Sorum's Chem 4A-4B, and John Harriman, who was an undergrad classmate at UW, and especially, Harvey and EmmaLou Sorum. Siegelman provided this autobiographical update. After graduation, he taught for five years, first at the University of Pennsylvania, then at Florida State University. He handled freshmen general chemistry (a task for which, he says, he was exceptionally well-trained by Harvey Sorum) and taught high school teachers enrolled under a variety of NSF grants. In 1963, he left the classroom to pursue a career in educational publishing. He is currently editorial director for *WEEKLY READER Secondary Periodicals,* Xerox Education Publications, in Middletown, CT. He and his bride of twenty-five years, the former Sharon Katch, have three children. The eldest, a son, is in real estate investment in Boston *and* a French major in college; the second son is a freshman law student in San Diego; and the youngest, a daughter, is a sophomore at the New School in New York City.

D.J. Siehr, BS '51, writes from Rolla, MO, that he and his wife had plans to attend the Wisconsin-Missouri football game even if the temperature did reach 90° in the shade. He says that after more than twenty years, he still can't take Missouri's hot summers. On the other hand, he recollects that Madison was pretty hot when he and his wife returned for her 35th high school reunion during the summer of '83. Siehr enjoys BC, and has been passing it along to **Lou Biolsi,** PhD (Curtiss), a member of the chemistry staff at the University of Missouri-Rolla. (We have added Biolsi to the mailing list.-Ed.)

Rex M. Smith, BS '50, will continue to receive BC at his home in Sacramento.

Marshall R. Sprinkle, PhD '32, reports a visit from **Nevill Isbell,** PhD '31, and his wife, Katherine, who have a home in Wake Forest, NC, and a winter residence in Clearwater Beach, FL. Sprinkle had his first chemistry course at Wake Forest College under Isbell back in 1926. Prof. **Harvey Sorum,** PhD '27, also stopped in

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This 'n' That . . .

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for a visit when he was in Charlottesville to play in the Senior Clay Court Tennis Tournament.

Pamela Meyer Steffen, BS '73, writes from Sheboygan that she has switched jobs from Donohue Analytical Inc. to Kohler Co. She took two history of science courses from Prof. Ihde, and so especially enjoys the historical articles in BC.

Larry Stein, PhD '52, is still enjoying research in Inorganic Fluorine Chemistry at Argonne National Laboratory, an activity he hopes to keep up until retirement. He makes his home in Downers Grove, IL.

Charlene Steinberg, BS '47, MS '48, writes of trips to New York to see Pavarotti at the Met, and to Long Beach Island, New Jersey, for beach walking and a visit to the gaming tables of Atlantic City.

Max H. Stern, PhD '45 (Klein), retired from Eastman Kodak after nearly thirty-eight years with the company. He maintains his residence in Rochester, NY, but chooses to spend the winter months in Florida. He remembers Aaron Ihde as "a fine teacher and a wonderful gentleman," and wishes him a healthy future.

W.G. Stevens, PhD '66, supports the BC, but, alas, he sends no news from San Diego.

Dan Stogryn, PhD '59, sends this bit of news: he is on the faculty of the Physical Sciences and Mathematics Department and Coordinator for Computer Services at Mount St. Mary's College in Los Angeles.

H. Stephen Stoker, PhD '68, wants to find BC in his mailbox, but sends no news from Ogden, UT.

Gilbert Stork, PhD '45 (McElvain), Higgens Professor of Chemistry at Columbia, has received the 18th Pauling Award Medal of the ACS Puget Sound and Oregon sections. The award honors Stork's thirty-five years of pioneering research and teaching in the field of organic chemistry.

Roger A. Strehlow, BS '47, PhD '50, reports that a major revision of his combustion text, *Combustion Fundamentals,* has been published (April 1984) by McGraw-Hill. Last May, he became Professor Emeritus in the Aeronautical and Astronautical Engineering Department at the University of Illinois at Urbana-Champaign. He has also been appointed U.S. Editor of the journal, *Combustion and Flame.*

Glenn R. Svoboda, BS '52, finally embarked on a long-planned African safari (destination: Zimbabwe) with his two sons. Svoboda is Vice-President for R&D, Freeman Chemical Corp., Port Washington, WI. He reports that he has also been appointed Vice-President and General Manager of a new joint venture between Freeman Chemical and UCB of Brussels, Belgium. The venture, called Radcure, Inc., will operate in the field of energy curable resins (polymerized by ultraviolet or electron beam accelerators).

Rich Swafford, PhD '84 (Zimmerman), is with Dow Chemical in Midland, MI.

F. Lowell Taylor, BS '30 (PhD '35 Minnesota), who retired from Dow Chemical in 1970, has favored us with his recollections of some of the people who were on the Juday-Birge summer teams at Trout Lake between 1929 and 1932. He was on Prof. Meloche's team, along with Frederick Stare, BS '31 (PhD '35, Biochem; MD, Chicago), Willis Tressler, and Edward Scheeberger. Taylor has in his possession a number of photographs of the crew taken by Tressler, and has offered to pass them on. He says one of the privileges of being on the Trout Lake team was sharing three meals a day with Prof. Birge, who was then President of the University. Taylor's letter includes many fascinating reminiscences that reveal the intellectual climate of the Department during the late '20s. Lowell and his wife, Grace, are so active that they can't accurately be described as retired. They are passionately interested in the educational structure in the United States, especially with simplifying arithmetic. Both are avid computer users, and Lowell has written programs that simplify the teaching of math. The Taylors have four children, all boys. Kenneth and Richard are math teachers in the Ann Arbor, MI, school system; Curtis is a Captain with United Airlines; and Jerry is Vice-President of MCI in Washington, D.C.

Robert F. Taylor, PhD '41 (McElvain), sends his "buck-a-year" contribution from White Bear Lake, MN, which he describes as being "on the outskirts of Madison."

William H. Taylor, Jr., BS '37, writes from Wilmington, DE, that he enjoys his retirement from duPont Chemical Research Department. He keeps busy with volunteer work at the Hagley Museum and as assistant librarian at the E.I. duPont High School.

Charles Templeton, PhD '48, with Shell Oil in Houston, writes that he and his wife enjoyed a two-week trip to Paris and London last spring.

This winter, **Glenn Terry,** PhD '51 (Larsen), marks his 11th anniversary with the Nuclear Regulatory Commission, Office of Nuclear Safety and Safeguards, Division of Fuel Cycle and Material Safety. His offices are in Silver Spring, MD. He and his wife would welcome a call or, better yet, a visit from old friends when they are in the Washington, D.C. area "We are listed in the Maryland telephone directory," he says.

John S. Thayer, PhD '64 (West), was dismayed by an error in #30 BC; his advisor was listed as Cornwall. He says, "My research advisor was Professor **Robert West**—a fact for which I am quite grateful." His book, *Organometallic Compounds and Living Organisms,* published by Academic Press, is dedicated to West. Thayer is with the University of Cincinnati, Department of Chemistry, and edits its newsletter.

Charles W. Tulloch, PhD '38 (McElvain), sent us the obituary of **David McQueen,** PhD '33. Tulloch wrote, "Dave was a great guy, and an inspiration to all. In addition to his scientific background, his knowledge of Scottish songs—which he sang very well—was profound.

H. Wilco VandenBorn, PhD '74 (Evans), writes from Edmonton, Alberta, that he has been with Dow Chemical there for more than ten years now, the last four in personnel. As manager of the Employee Relations Department, he doesn't do much chemistry, but he is, as he says, "near the stuff." The Edmonton plant employs more than 900 people in the manufacture of chlorine, caustic ethylene oxide, ethyleneglycol, ethylene dichoride, vinyl chloride monomer, and styrofoam insulation —together, enough to fill about fifty railroad tank cars a day. The company continues to expand on that site. It is now building a new, low-density polyethylene plant, and expects to hire an additional 160 employees. Though the Edmonton area suffers a high unemployment rate, it is clear that Dow has been immune to such troubles. On the personal side, VandenBorn reports that the family is well. Last summer, they rented a camper van and toured Europe for four weeks. They spent most of their time in the Netherlands, checking out the country of their "roots," and then traveled through Belgium and France to Paris.

John F. Vozza, PhD '48, wishes the new Ed. a worry-free tenure. He recalls (he says, "with pleasure") his and your Ed.'s joint teaching experiences in Or-

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ganic Chemistry Lab during summer sessions. He is now retired and lives in Tucson.

Thomas G. Waddell, BS '66 (PhD '69 UCLA), who is Alumni Distinguished Professor in the Department of Chemistry, University of Tennessee at Chattanooga, confirms his interest in receiving the BC.

Cynthia Wadsworth, PhD '84 (West), works with the Chemistry Tutorial Program here at the UW.

Jerome Walsh, PhD '77 (Gaines), is with the University of North Carolina at Greensboro. He remembers well the history of chemistry courses he took with former Ed. Aaron Ihde in 1971-72, and reports that he includes segments on the history of chemistry in his own classes.

Lewis A. Walter, PhD '34 (McElvain), is still enjoying surf fishing, bridge, and chemical lectures (as a listener) at Drew University.

Dorothy Dana Walton, widow of Prof. James Walton, sends kind regards and encouragement from New York City.

Mark P. Warchol, PhD '78, enjoys receiving BC in Houston, but sends no news of his own.

FIFTY-YEAR MEMBERS OF ACS

Badger chemists honored for a half-century of membership in ACS in 1984 are:

Leslie H. Andrews, BS '27, of Green Bay, WI.

James D. D'Ianni, PhD '38, of Akron, OH.

Harrison H. Holmes, PhD '34, of Wilmington, DE.

Erwin W. Hopkins, BS '27, of Oak Brook, IL.

Frederick W. Koerker, BS '34, MS '36, of Midland, MI.

Glen M. Kuettel, MS '30, PhD '33, of Lakehurst, NJ.

Roger H. Lueck, MS '21, of Saratoga, CA.

Lloyd R. Setter, BA '28, of Deer Park, WI.

James M. Sprague, PhD '34, of Doylestown, PA.

John Steiner, BS '29, PhD '33, of Milwaukee, WI.

Frances Helders Webb, PhD '56 (Ferry), sent us her new UW campus address in the Department of Molecular Biology.

Gary R. Weisman, PhD '76 (Nelsen), has been promoted to Associate Professor of Chemistry at the University of New Hampshire. He and his wife, Donna, have three children: Chris, Kurt, and Emma. Donna works in the Emergency Department of Wentworth Douglas Hospital in Dover, NH, often with **John Estabrook,** MS '73, who is now an MD specializing in emergency medicine.

Tom Welter, PhD '77 (Zimmerman), writes from Rochester, NY, that all goes well with him at Eastman Kodak.

Don B. Wetlanfer, BS '46 (PhD '54 Biochem), hopes his contribution will ensure the postal delivery of BC at his Newark, DE, address.

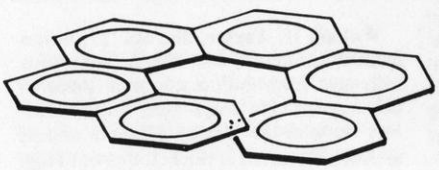
Jonathon Mark Wiggins, MS '82 (Goering), asks us to note the following change of address: 403 School Street, North Wales, PA 19454. No other news.

Donald R. Williams, BS '37, has indicated that we should continue to send BC to him in Sparta, WI.

Emeritus Professor **John Williams,** whose research during and after WWII focused on the purification of gamma globulin, reminds us that last year marked the 100th anniversary of the birth of The Svedberg, the Swedish chemist and Nobel Laureate who invented the ultracentrifuge. Svedberg conceived of and first tested the device while he was Visiting Professor at Madison in 1923, although the research version of the instrument was developed later at Upsala, Sweden. The ultracentrifuge paved the way for the development of the plastics industry and the purification of gamma globulin.

Jane Buttles Wilson, BS '25, checked in but sent no news from her home in Santa Fe, NM.

Linda S. (Whatley) Wilson, PhD '62 (West), writes from the University of Illinois at Urbana-Champaign where she is Associate Vice Chancellor for Research and Associate Dean of the Graduate College. After a round of service on the National Commission on Research and a National Academy of Sciences Committee on Government-University Relationship in support of Science, she spent a sabbatical leave at the Science Policy Research Unit at the University of Sussex, England (Jan.-June '84). By now, she has begun a four-year term on the Board of Directors for the American Academy of Arts & Sciences in addition to her U. of I. work. She runs into Dean **Robert Bock** and Assoc. Dean **Marvin Ebel** on occasion. "We seem to worry about the same sorts of problems for our institutions," she says.



Lloyd Withrow, PhD '25 (Walton), living in Rochester, MI, found the Ihde "Swansong" and the story about new ACS president Warren Niederhauser, PhD '44, to be most interesting in the last issue of BC.

Ivan A. Wolff, PhD '40, Oreland, PA, says that he has now retired twice from Federal employment, the second time from a position as a reemployed annuitant. His current title is Director Emeritus of USDA's Eastern Regional Research Center. Consulting activities continue to occupy him part-time, and he has also seen the publication of CRC's three volume reference work (under Wolff's editorship): *Handbook of Processing and Utilization in Agriculture.*

Y. Stephen Yamamoto, BS '65 (PhD '71, Penn. State), is now senior editor of *Ullman's Encyclopedia of Industrial Chemistry,* the standard reference work in industrial chemistry in German-speaking countries. He is in charge of the editorial branch office of Verlag Chemie International in Deerfield Beach, FL. **Ralph Hirschmann,** PhD '50, is on the Editorial Advisory Board, and other Badger Chemists are writing articles for the Encyclopedia. Yamamoto informs us that his two sisters, also Departmental alumni, earned PhDs, both in organic chemistry. **Diane,** BS '68, is a Research Investigator for American Critical Care in McGraw Park, IL. **JoAnn,** BS '75, is a postdoc at Michigan Molecular Institute, Midland, MI.

Mary Zawadzki, PhD '83 (Ellis), is a postdoc with Art Adamson at USC.

Steve Ziman, PhD '71 (Trost), says that since he is "out of chemistry as such," BC allows him to follow the activities of both faculty and old students. He does what he calls "air issue work," for USA Western Region Production Department in Concord, CA, in its Process Emergency and Environmental Group. He has been contract coordinator for large scale air modeling projects in both Kerr (San Joaquin Valley), and off Santa Barbara. His work, which focuses on ozone formation, has caused him to become an amateur meterologist. Judging from the photograph he sent, he seems to be enjoying himself.

Steve Zimmerman, BS '79, son of Prof. Howard Zimmerman, received his PhD from Columbia, and is going to work with Battersby, in England, as a NATO postdoc.

New Badger Chemists

Between July, 1983, and June, 1984, forty-six students received the Bachelors, eight the Masters, and twenty-seven the Doctor of Philosophy. New alumni of the department are listed below; major professors are shown for the PhDs.

Bachelors Degrees

ARNDT, Michael F.
BEHNKE, Robert Edward
BRUGGINK, Joan Lynn
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STATZ, Cheryl Ann
WADZINSKI, Brian Ervin
WALLS, Dennis John
WANAMARTA, Gunadi
WENDT, Michael David
WHITE, Teresa Marie
ZABINSKI, Victoria Ann

Masters Degrees

DE VITO, Valentino Ludovico
JORDAN, Karen Tracy
LINK, Brett Radford
NELSON, Cynthia Lynne
NIKAIDO, Selene Setsuko
SCHROEDER, Mel Conrad
SMILEY, Patricia Marie
WONG, Mei Ying Shirley

Doctoral Degrees

ADAMS, Bruce Roger (Trost)
BULLOCK, Ronald Morris (Casey)
CHANG, Ding-Kwo (Record)
CHANG, Taihyun (Yu)
ENGLERT, Mark Howard (Dahl)
FINK, Mark Jason (West)
HOEGER, Carl Andrew (Reich)
HOLMER, Bruce K. (Certain)
HWANG, Kirk Kweng-Shung (Cooper)
KELLY, Martha Jean (Reich)
KOSKELO, Aaron Clyde (Wirth)
LARSEN, Scott Douglas (Vedejs)
MAN, Victor F. (Schrag)
MAZUR, Sharlyn Janice (Record)
MHO, Sun-Il (Wright)
MILLER, Stephen Paul (Whitlock)
PETERSEN, Ralph A. (Evans)
RAMSDEN, William Donald (Zimmerman)
REID, John Gregory (Vedejs)
RIZZO, Thomas Ralph (Crim)
ROESKE, Christine Ann (O'Leary)
SANDERS, Matthew Joseph (Wirth)
STEEHLER, Gail Ann (Gaines)
SWAFFORD, Richard Lance (Zimmerman)
ULKUS, Richard Alan (Ellis)
WESSON, Jeffrey Alan (Yu)
ZAWADZKI, Mary Elizabeth (Ellis)

Placement

During the 1983-84 academic year, eighty-six persons used the Placement Service. Recruiters representing seventy-six companies conducted 928 interviews in the Department. Of the students who used the service, forty-eight (50%) completed and returned questionnaires from which the following information was gathered.

Of the eighteen postdoctoral associates who used the service, nine returned questionnaires. Of them, six accepted industrial positions, one accepted an academic position, and two continued postdoctoral appointments. The average starting salary in industry was $39,163.

Thirty-eight PhD candidates used the service, and twenty-one returned questionnaires. Of them, twelve accepted industrial positions, one accepted an academic position and eight accepted postdoctoral appointments. The average starting salary in industry for this group was $35,900.

Seven MS candidates used the service, and six returned questionnaires. Of them, four accepted industrial positions, and two continued in graduate school. The average starting salary in industry was $24,600.

Of the twenty-three BS candidates who used the service, twelve returned questionnaires. Eleven of them accepted positions in industry, and one planned to attend graduate school. The average starting salary in industry was $21,667.

Major employers were Dow Chemical, duPont, 3-M Company, Celanese, Monsanto, Abbott Laboratories, Bell Laboratories, Eastman Kodak, Eli Lilly, General Electric, Merck, Sharp & Dohme, and Rohm & Haas Company.

Postdocs received an average of 3.2 offers each; PhD candidates, 2.1 each; MS candidates, 1.7 each; and BS candidates, 2.25 each.

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DEPARTMENT HISTORY: PROGRESS REPORT

The history being written by Aaron Ihde is still unfinished. Prospects for its completion are now vastly improved! The UW Press reviewed seven chapters several years ago, and accepted the history for inclusion in its publication list. However, the Press estimated it would need insurance funding of about $20,000 in case sales do not match expectations. This blow discouraged everyone and Ihde, while not abandoning the history entirely, turned to other projects.

A year ago things began to happen. Chairman Phil Certain persuaded Ihde that the department was serious about wanting the history published not as a simple chronicle but in the broad form originally envisioned—as a book which revealed the department in its interaction with other sciences, technologies, and professions within the UW and in other schools, in industry, and in government.

Late in 1983 Certain and Ihde conferred with the new Director of the Press about potential economies which might be explored. None appeared productive of substantial savings and all threatened the quality of the book. Inquiry to the Graduate School produced the information that the School was already subsidizing the Press so could hardly justify insurance for a specific book. Dean Bock did offer useful advice, particularly that a book of broad interest would have greater acceptance than one of strictly institutional interest. Other potential avenues for publication proved productive of little savings.

In the meantime, Ihde completed a chapter on "Food Controls under the 1906 Act" which appeared in *The Early Years of Federal Food and Drug Control,* J. Harvey Young, ed., which was published in 1982. He also prepared his history of chemistry, *The Development of Modern Chemistry,* for republication in paperback by Dover Publications. It came off the press in early summer of 1984. It is not a revised edition but contains changes which clarify several ambiguities in the 1964 edition, completed life-spans for chemists who died since publication of the hardcover edition, and an update of the appendixes dealing with "Discovery of the Elements" and lists of "Nobel Prize Winners in Chemistry, Physics, and Medicine."

The departmental insurance problem for the history was suddenly resolved last winter when a departmental BA Alumnus, who remains anonymous for the moment, deposited a check with the Wisconsin Foundation to cover the insurance, with any residue to apply to the *Badger Chemist* endowment fund. We are exceedingly grateful to this alumnus who was a freshman chemistry student of Professor Ihde and a senior thesis student of Professor Adkins. After taking a PhD at Harvard he joined the faculty of a prestigious American university. [Our thanks to the generous donor.]

With this encouragement, Professor Ihde has placed the history manuscript back on the front burner and is moving forward steadily and methodically. He is presently dealing with chemistry during the Van Hise presidency—the period when Kahlenberg became chairman (1907) following the retirement of the W. W. Daniels, and the subsequent rapid growth of the department in the hands of Victor Lenher, F. Koelker, Richard Fischer, F.C. Krauskopf, James Walton, and the youthful J. Howard Mathews. It was also the period when the central unit of the second Chemistry Building was constructed on University Avenue (1905) and expanded westward in 1913, the period when the Chemistry Course was created (1907) and the graduate program began to flourish. There were eight chemistry majors graduated in 1903 when Van Hise became prexy (including J. Howard Mathews), and thirty-one in 1916, Van Hise's last pre-war commencement. There was one chemistry PhD in '03 (Gus Fernekes); there were six in '16 (including H. A. Schuette).

Prospects now look good for completion of the MS in 1985 and publication in 1986.

DEPARTMENTAL HISTORY

Pre-Publication Order Form

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Madison, WI 53706

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I wish to reserve a copy of Aaron Ihde's soon-to-be-published History of the Chemistry Department at Wisconsin.

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