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James Foght '63: Investment Banker to the Life Science Industry

At the peak of his career, Foght is president of Vector Securities International, a company he founded in 1988 with two colleagues from Kidder Peabody. As the sole investment banking firm that provides services exclusively to the life sciences, Vector Securities has been achieving revenue growth of 20%-25% annually.

Foght and his colleagues established the company to capitalize on the exploding life science technology which, they expect, will radically alter the practice of health care and provide unparalleled opportunities for both well established and embryonic companies. He predicts that "the big events are yet to happen because biotechnology is an enabling tool that we are just beginning to learn to utilize."

Although the company offers a wide range of services, Foght is primarily involved in the investment banking services that provide creative solutions and strategic advice for corporate structurings, partnerings, mergers and acquisitions. Companies using biotechnology need novel approaches to structural and financial issues because the discontinuity caused by scientific discoveries in the life sciences are occurring in a rapidly changing economic and social environment.

In the biotech era, embryonic companies that are generating the scientific advances usually cannot get adequate funding solely from public markets. Their survival often depends on "partnering" with a big company that has a good resource base. Conversely, large companies have discovered the efficiency of decentralized R & D and often prefer partnership arrangements with small biotech firms to carrying out complex research programs themselves.



James Foght abroad . . .

Economic pressures are rising. Populations age and require new types of health care. The cost of developing new drugs is spiraling as the "life expectancy" of new drugs is shortening due to increased stringency in testing and the rapid rise of competitors. Around the world, countries are experimenting with new models to meet the costs of health care. In the long run, the new scientific tools will make health care more effective but the problems of survival and growth in the health care industry, especially as it moves into global markets, are extremely complex.

From bench chemist at DuPont to president of Vector Securities is a long road but Foght sees his career as providing the appropriate stepping stones that prepared him for the present. Soon after joining DuPont in 1963, he graduated to managing research teams. Gradually he was given responsibility for managing and for starting businesses within DuPont. He was appointed managing director of DuPont U.K. in 1979 with responsibility for approximately 4,000

employees and revenues of \$700 million annually. In 1981 he was given the opportunity to start DuPont's pharmaceutical business in Europe which is now DuPont/Merck. He was responsible for every detail: clinical research, regulatory affairs, licensing, manufacturing, sales and distribution, even the location of the company headquarters.

In his final years at DuPont, Foght established a worldwide Technology Evaluation and Acquisitions Group for bio-medical products. He developed expertise in the technology seeking and negotiating business, and expanded his global network of contacts to cover virtually "all the players." In 1986 he moved to Kidder Peabody as co-head of the Life Sciences/Medical Products Corporate Financial Group. At Kidder he worked closely with D. Theodore Berghorst and Peter Drake with whom he founded Vector Securities two years later.

As a leader of the firm's investment banking and corporate financial services, Foght has been active in all the major financial transactions that are memorialized in the window bay of the company's front office in the plastic coated "tombstone" announcements from *The Wall Street Journal*. Among the most notable were Vector's representation of F. Hoffmann-La Roche in its acquisition of the



polymerase chain reaction (PCR) technology from Cetus Corporation, Vector's representation of F. Hoffmann-La Roche in the divestiture of its worldwide microbiology business to Becton Dickinson and Company, and Vector's representation of Hafslund Nycomed AS in its acquisition of Austrian-based CL Parma AG.

Backing the corporate finance arm of the business is the equity research program directed by Peter Drake, who has developed a model for valuing a business, such as a biotech company, that has no current revenue stream. Vector also has its own trading floor and makes a market in about 50 biotech stocks.

Within the last year, Vector securities has begun money management. Its first fund is called the Vector Late Stage Equity Fund and invests in companies in the "mezzanine stage", that expect to go



and at home

public within the next 12 to 18 months. The fund has already grown to about half its expected size.

The most recent venture is Deerfield Partners, which takes long and short positions in highly volatile biotech stocks. About half of the current revenues of Vector Securities come from overseas because Foght brings outstanding experience and an enormous range of contacts from his many years in DuPont's overseas businesses. The people and types of business issues he deals with are very similar to those that concerned him at DuPont. The difference is that Foght is no longer working from within a company that has vast resources of its own, and that he sits at a "different table" in the negotiations.

The Early Years

Foght came to the U. of I. in 1958 after receiving his B.S. from the University of Akron. He credits his graduate training with teaching him "to analyze a problem and come up with a logical solution, which is what you're supposed to learn in graduate school." Foght took his Ph.D. degree with Professor Kenneth Rinehart and appreciated his advisor's collegial approach to students. Rinehart awoke his interest in the application of technology to human health problems. Foght never took a formal course in finance but received a great education in that field by working for DuPont for 23 years. After starting, managing, and closing a variety of businesses within DuPont he can "figure out any spreadsheet."

Both Foght and his wife earned graduate degrees in chemistry at the U. of I. His wife received an M.S. degree with John Bailar who "had a huge impact on our lives". In gratitude for the help that Bailar provided during a difficult period, the Foghts have made a significant contribution to the Bailar Fellowship Fund.

At one time during his years at the U. of I., Foght and his wife were both graduate students, living in a small apartment on a small income with three children under four years of age. Looking back, he thinks that this was an important part of his training "because nothing since then has been quite as tough."

Foght still maintains a grueling work schedule, alternating weeks in the US and abroad. He flies an average of about 500,000 miles annually and has been presented the million mile platinum card from American Airlines. To escape from the unrelenting pressures, Foght and his wife take offbeat adventure travel trips at least once a year. They enjoy traveling with a guide to places that are unknown to the casual traveler. This summer, they plan to go to southern Ethiopia and to Yemen, "one of the most fabulous places in the world."

Another hobby is an antiquarian bookstore in Norfolk, UK, that Foght runs with a partner. The store specializes in travel and African books and has developed a line of historical cookery. "It's a lot of fun", he says, "and works well with my schedule since I am in London about every other week." Foght also collects sculptures from his third world

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Sligar Becomes School Director

In April, Stephen Sligar took over as director of the School of Chemical Sciences. Professor Sligar knows the School well, since he holds joint appointments in two of its three departments. His full title is Professor of Biochemistry, Chemistry, Physiology and Biophysics; Beckman Institute Professor and Janet and William Lycan Professor of Biochemistry. He also knows the University of Illinois from a student's perspective, having earned his M.S. and Ph.D. degrees in Physics here. Five years on the faculty of Yale University has added an important dimension to his experience since the University of Illinois is gradually becoming more like a private institution than like the land grant college of its origins.



Stephen Sligar

Professor Sligar intends to expand the resource development efforts of the School to bring it in line with modern realities. As he points out, "The game has changed since the post-Sputnik era of virtually unlimited federal coffers and generous state input. With the constriction in funds, we need to find new resources to maintain our excellent educational programs, faculty and research infrastructure."

A second task in which Sligar will concentrate his efforts is to build bridges between Departments and Divisions within the School of Chemical Sciences and other Schools and Colleges within the University to elicit synergistic attack into the emerging areas of interdisciplinary specialization. "The most exciting areas of research", he said, "are at the interfaces of traditional fields. Unfortunately, these are also the most difficult areas to support financially because of the time required to bring funding mechanisms in line.

Not surprisingly, many of our best students are moving towards interdisciplinary programs. Students at both the graduate and undergraduate level often find themselves "lost between the cracks" in trying to decide a Department or Division that most closely matches their interests. Our recent initiative in forming a Program in Biomolecular Chemistry serves

as an excellent example on how to effectively organize education and research across multiple disciplines.

"As educators, we must bring our educational programs and research infrastructure up-to-date. This means that we need to rethink some of our course content and to create a modern teaching and learning environment for our students.

Training and re-training industrial scientists in the continually evolving technologies will also become a new role for the University in the coming decades. In order to meet these challenges we will need to find funds to modernize and equip our teaching laboratories and classrooms."

The third major area that Sligar would like to emphasize is the provision for an expanded infrastructure, the network of services that is second to none and that has given Illinois its outstanding reputation through faculty recruitment and research discovery. One of the reasons that our infrastructure is so important is that it encourages innovation. As Sligar pointed out, "When you have to pay the full costs of services, a new research idea becomes prohibitively expensive. You cannot follow a hunch when the price is \$50,000 or \$100,000 but when the price is between \$2,000 and \$5,000 plus your extra time and effort, you are more likely to try the untried and bring an innovative idea to fruition. An environment that encourages innovative research attracts the most creative faculty. Since both federal and state sources of support for our infrastructure is shrinking, we must find new sources of support for our equipment and technical staff."

It is not simple coincidence that meeting all of these challenges requires money. Professor Sligar has pledged his energies to make certain the Campus Administration places highest priority on maintaining our excellence, in working closely with the Foundation in development programs targeted directly to the School of Chemical Sciences, and exploring new vistas of collaboration with industry. Clearly he has a full agenda but also a dynamic vision for the future. He hopes to have many opportunities to welcome alumni, to show them our accomplishments and to lead them through our new building.

Sharp '69 Wins Nobel Prize

For the discovery of "split genes" Phillip Sharp shared the 1993 Nobel Prize in Medicine or Physiology with Dr. Richard Roberts, director of the New England Biolabs. Dr. Sharp is head of the Department of Biology at MIT and, until recently, director of their Center for Cancer Research. From 1987-92 he held the John D. MacArthur Professorship at MIT.



Phillip Sharp

In announcing the prize the Nobel committee said, "The discovery of split genes has been of fundamental importance for today's basic research in biology, as well as for more medically oriented research concerning the development of cancer and other diseases."

The research has led to the prediction of a new genetic process, known as splicing, and to the recognition of two different sequences of genes known as introns and exons.

Dr. Sharp received his undergraduate degree in chemistry and mathematics from Union College in Barbourville, Kentucky and earned his Ph.D. in chemistry with Professor Bloomfield at the University of Illinois.

Before moving to MIT, Sharp worked at the Cold Spring Harbor Laboratory on Long Island, New York. In 1978 he was instrumental in founding Biogen, a company that uses genetic engineering techniques to produce human interferon.

Dr. Sharp has received numerous other awards and prizes. He is a member of the National Academy of Sciences, the Institute of Medicine of the NAS, and the American Philosophical Society. He is a Fellow of the American Academy of Arts and Sciences and of the American Academy of Microbiology. In 1991 he received an honorary Doctor of Humane Letters from Union College.

SCS Offers New Program in Biomolecular Chemistry

Graduate students applying to the U. of I. chemical sciences program have a new option. In addition to entering one of the three major departments, chemistry, biochemistry and chemical engineering, they can enter the "Graduate Studies in Biomolecular Chemistry."

As currently conceived, the program will not offer a new degree but a broader view of graduate training in the chemical sciences. A student enrolled in biomolecular chemistry will receive the core traditional training offered by one of the three departments. In addition, the student will be required to select specified electives and to take some additional courses that will provide sufficient background in the other disciplines to facilitate interdisciplinary collaboration.

A very permeable membrane will separate students in the three departments from those in the biomolecular chemistry program. Students will be able to move into the new program after beginning graduate studies in one of the three departments. Alternatively, students who decide that the more traditional program seems preferable, should be able to make that move without difficulty.

The new program has been designed to capitalize on recent scientific and technological developments in the field to capture those aspects that bridge the chemical and biological sciences. For instance, in the last ten years, the growth of computer modeling has spawned an array of theoretical approaches for the understanding of biological materials at the molecular level. Looking at the newcomers to the field and their research objectives, it has become increasingly apparent that modern chemists need to become familiar, for instance, with the tools of molecular biology and modeling in order to break new ground in the study of proteins.

In designing the new program, representatives of the three chemical science departments have assembled a list of core areas of knowledge that students in this specialty will need to master: physical structure and modeling methodology, biochemical structure and molecular biology, and chemical structure relating to synthesis, spectroscopy and mechanisms. The courses that students will be advised to take will depend on their background. Just as traditional organic chemistry students were expected to take some coursework in analytical, inorganic and physical chemistry to broaden their knowledge of the field of chemistry, chemistry stu-

Graduate Studies in Biomolecular Chemistry



University of Illinois at Urbana-Champaign

dents in the biomolecular program will need to add some coursework in the biostructure and modeling areas. Possibly two extra courses may be required.

A seminar/tutorial for biomolecular chemistry students from all three departments will be offered to give cohesion to the program. The seminar will provide a common sense of identity for the students enrolled. Advising will be handled on an individual basis by participating faculty. The overall purpose of the program is to provide a multidisciplinary exposure to the student without eroding disciplinary competence in the student's major area. Students should exit this program both with a sound knowledge of their own field and a facility for action as knowledgeable collaborators with those whose specialty is in another related area.

According to Professor John Katzenellenbogen, who has spearheaded this new initiative, "The biomolecular chemistry subspecialty aims to train students realistically in the way they really need to operate in the marketplace. In the past, when organic chemists worked separately from physical chemists and separately from biochemists, strictly disciplinary training made sense. This is not true any more. The major job opportunities today are no longer in the big pharmaceutical firms but in the small, venture capital firms where your vision has to be broad enough to work with colleagues from

many backgrounds. This program ought to be a great asset to students entering the job market."

While the program is still in the late phase of conception and will begin in earnest with the class of graduate students starting this fall, Dr. Katzenellenbogen looks forward to the future when he hopes that the program will flourish and attract additional financial support in the form of fellowships through federal training grant programs and industrial sponsors.

Help Us Complete Alum Database

Despite our best efforts, our SCS alumni database remains very incomplete. For many alums we lack a current mailing address. For even more, we lack a current business address. The best solution for us would be to receive a copy of your most recent resume. Then we could record your previous as well as current employment, degrees you have received outside the U. of I., and your honors and awards. Some of this information comes to us as your news and gets published in each issue of the newsletter, but, as you can see, we need historical information as well. For this, we will need your help.

Facilities Update

by Denton Brown, Associate Director

Our new Chemical/Life Sciences Building

Our dream come true is beginning to resemble a building rather than a hole in the ground. The foundation walls are nearly completed and structural steel is about to begin. Most major utility work under the basement floor slab is in place and part of the slab itself. The project is about 15% completed and only four months behind schedule.

Renovations

We are moving just as far and as fast as state funds permit, starting with the most pressing problems. It is clear that our students will need up-to-date chemistry instruction in order to compete effectively in the labor market. Our instructional facilities must be equipped with modern instrumentation that is compatible with that of industrial labs.

Many of you will remember those dark, overheated and smelly instructional chemistry labs in the Chemistry Annex and Noyes Lab. In order to lift basic chemistry instruction out of the 1920s and into the 21st century, these will need to be renovated. Plans have been drawn up for a complete overhaul. As money becomes available, the plans will become reality.

In **Noyes Lab**, current renovations are concentrated in the organic and biochemistry instructional labs which showed the most dire need. The "new" labs will feature lab benches with modern utilities, new flooring and lighting, a fully functional ventilation system for fume

exhaust, and air conditioning and heating. The labs will include the latest in safety technology and will have adequate space for instrumentation in controlled environments. They will be fully networked with the latest in computer technology to bring our undergraduate instruction to the level of the best in the country. Under a separate program, we expect to receive state funding to improve handicapped accessibility, including a handicapped entrance, new elevator, and rest room renovations.

In the **Chemistry Annex** state funding has allowed us to begin work on one of the three general chemistry labs. The renovations will be similar to those planned for Noyes Lab. Those of you who studied in the Annex will agree that the other three labs need similar treatment and the sooner the better.

The ChemE 2000 campaign has provided leadership to create an up-to-date learning and research environment in **Roger Adams Lab**, which was originally constructed in 1947. Major effort is required to bring the old section of RAL up to code for issues of environmental health, safety, and handicapped accessibility. A capital project has been submitted to the state legislature to request funding for heating, ventilation and air conditioning and for repairs to the building infrastructure. Air quality remains a critical issue.

Unlike Alice in Wonderland we hope that our work on the facilities will do more than keep us running in place. Our needs are undeniable and our plans are realistic. When you come and visit, we will take you on a tour to show off the significant improvements that have already occurred.

Moore to Study Problems in Material Chemistry



Jeffrey Moore

Last August Jeffrey Moore joined the chemistry department to help develop a new initiative linking organic chemistry and materials science. The objective of his research is to design large, structurally well defined synthetic

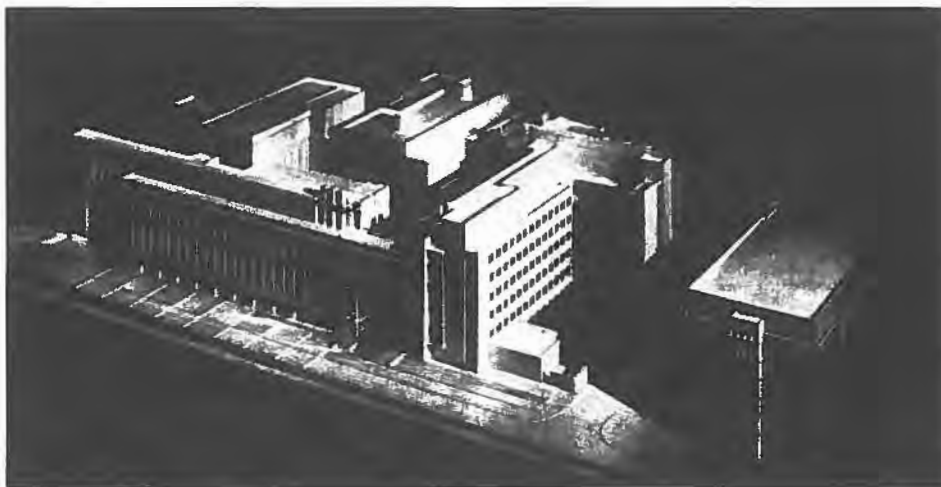
molecules with specialized functions to better understand and control how molecules organize in the solid state.

Moore is new to the chemistry faculty but not to Illinois, where he received his B.S. degree in chemistry and his Ph.D. in material science in 1989. Thereafter he completed a postdoctoral fellowship at Cal Tech and served as professor of chemistry at the University of Michigan. He was attracted back to Illinois by our first class Materials Research Laboratory, our excellent materials science department, and the world class standing of our chemistry department.

According to Moore, "The research infrastructure here is as good as it gets anywhere. I could move with confidence."

He has completed the transition and already has a large group of "good people", 3 postdocs and 8 graduate students who are "committed to the program and enjoy science." His move was facilitated by a very good start-up package including funds donated by Dr. Charles Walton, a 1930 graduate who has been providing generous research support for young faculty.

Jeff Moore has received a Young Investigator Award from both the NSF and the Office of Naval Research. His work is currently supported by several governmental and private industrial sources.



Grinstaff and Suslick Win Award for Sonochemistry

The Nobel Laureate Signature Award for Graduate Education in Chemistry is the only ACS award that recognizes graduate students in addition to faculty. This ACS Award takes its name from the bronze plaque that comes to both awardees: etched on the plaque are all the signatures of past Chemistry Nobel Laureates. In the 16 years that it has been awarded, this is the first time that the recipients were at the U. of I. Mark Grinstaff earned his Ph.D. under the supervision of Professor Kenneth S. Suslick. The award winning work is part of Suslick's earlier, pioneering research on the chemical effects of ultrasound: sonochemistry.

The physical phenomenon responsible for the chemical effects of ultrasound is cavitation, shown schematically in Figure 1. In response to the acoustic pressure of sound waves, small gas bubbles form, grow, and implode in a liquid irradiated with ultrasound. The figure shows the compression and expansion phases of the sound waves at the top and the simultaneous growth and decay of gas bubbles in the lower section.

Collapse of cavitation bubbles produces microscopic hot-spots with temperatures of more than 9000°F (5000 °C). As a point of reference, these hot-spots



Grinstaff (at left) and Suslick (at right) receiving Nobel Signature Award from Dr. John B. Covington, Ph.D. '78, Director of R&D for J.T. Baker, Inc.

cavitation in liquid-solid slurries produce high-velocity interparticle collisions, the impact of which is sufficient to melt most metals.

These hot-spots occur in a cold liquid, and hot products are therefore cooled

microspheres whose shells are composed solely of proteins, shown in Figure 2. These microspheres are smaller than red blood cells and can pass easily through the blood stream. Because nonaqueous materials such as organic liquids, pharmaceuticals, and lipid-soluble substrates can be trapped within the spheres, these microspheres have important potential applications for drug delivery and medical imaging.

Grinstaff demonstrated the mechanism of formation of the protein microspheres by using a series of radical trapping experiments. Grinstaff and Suslick have found that ultrasound does double duty in making the microspheres. First, it disperses small droplets of air into the liquid. Second, ultrasound makes the microspheres permanent by forming chemical bonds between protein molecules. The bonds are created from reactions with superoxide HO_2 , a highly reactive ion produced in the cavitation hot-spot during ultrasonic irradiation of aerated water.

The second application studied by Grinstaff is the synthesis of amorphous metal powders. By producing and cooling metal atoms at more than a billion degrees per second, the metal solidifies before it can crystallize. This forms a coral-like, porous "metallic glass" with properties very different from ordinary crystalline metals, shown in Figure 3.

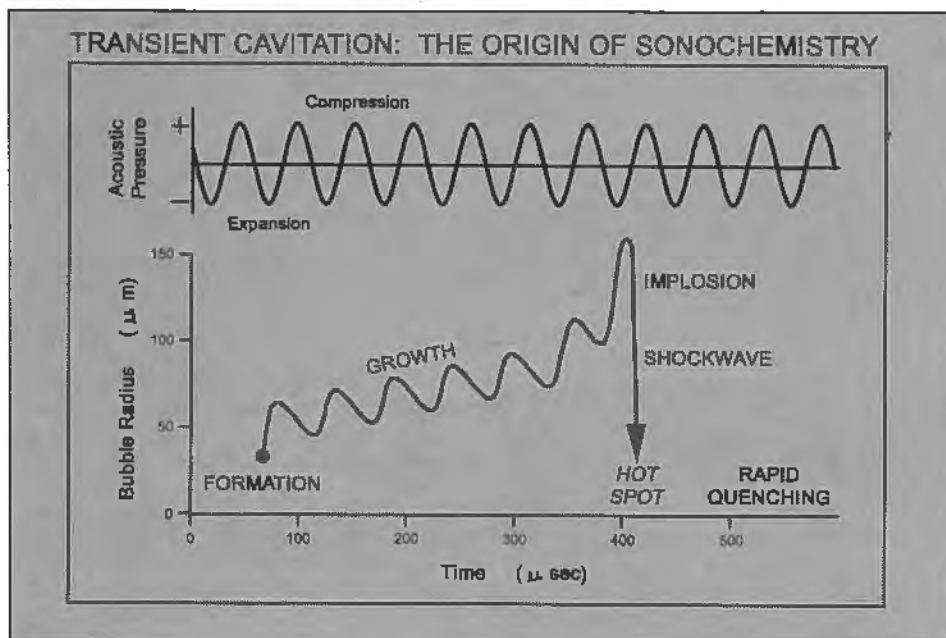


Figure 1

can be as hot as the surface of the sun, with pressures as great as on the bottom of the oceans, and lifetimes shorter than a strike of lightning. Shock waves from

with extraordinary rapidity. In his thesis work, Grinstaff demonstrated two important applications of this phenomenon. The first is the synthesis of long-lived

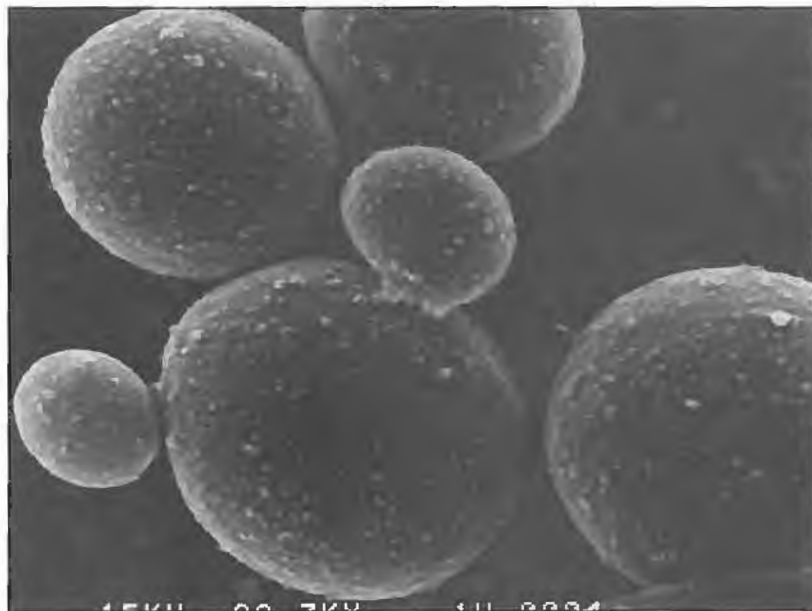


Figure 2. Microspheres

In the study of sonochemically prepared iron, Grinstaff and Suslick discovered that the amorphous powder had important catalytic and magnetic properties. The catalytic activity of the powders has potential applications in the production of pharmaceuticals, fine

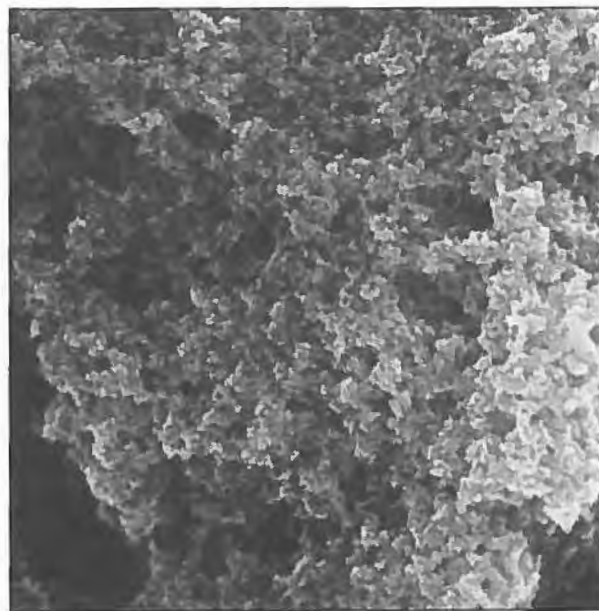


Figure 3. "Metallic Glass"

chemicals and gasoline, and in the conversion of coal to useful chemicals. The powders also have the characteristics of a very soft ferromagnet, (i.e. no memory of prior magnetization), which has potential applications as power transformer cores.

The Grinstaff thesis bears out Suslick's prediction for the field in a review article in *Science* in 1990 (v. 247, p. 1445). "Sonochemistry is in the midst of a renaissance, but remains in its infancy. Its potential impact on the scientific community is large and still developing."

Faulkner Promoted Again



Larry Faulkner

Friends of Larry Faulkner, Professor of Chemistry, will be pleased to learn that he has become the new Provost and Academic Vice Chancellor of the University of Illinois. Faulkner has been at the University of Illinois since 1973. In 1984, he became head of the chemistry department. From 1989 to 1994 he served as dean of Liberal Arts and Sciences, the largest college in the University. This year he moved up once more within the administrative hierarchy. We miss him at the School of Chemical Sciences but wish him all the best in his new post.

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Conference for Chemistry Teachers

On March 4, 1994, the general chemistry program hosted a conference for over 100 Illinois chemistry teachers to share ideas and to learn new ways for "Enhancing Chemistry." The conference is an annual event. This year, under the direction of Dr. Roxy Wilson, the conference emphasized engineering and material sciences. The two formal presentations in the morning were given by Professors James B. Adams and Waltraud Kriven, both of the Department of Materials Science and Engineering.

The afternoon was devoted to informal workshops with ideas for new methods of presentation and for involving the students. In addition, the conference was open to exhibitors to show laboratory equipment and textbooks. Several interspersed their serious exhibits with colorful T-shirts for chemistry and physics teachers and their admirers.



Professor Stan Smith describing his multimedia program



Dr. Roxy Wilson, conference organizer, with Steve Vaughn, workshop leader.

Dow Supports Laboratory Modernization



The commemorative plaque permanently displayed in 124 Noyes Lab.

On October 18, 1993, a Dow Chemical Company team lead by Dr. Steve Martin '78, Senior Associate Scientist, Analytical Sciences Laboratory, joined U. of I. chemistry department staff and visitors in dedication ceremonies for the refurbished physical chemistry laboratory.

The ceremonies celebrated a long-standing partnership between Dow and Chemical Science at the U. of I. . . .

and marks the midpoint of an ongoing collaboration to bring laboratory instruction at the U. of I. "as close to the state of the art in physical chemistry as one can approach at the undergraduate level."

Dow responded to the U. of I. desire to modernize the physical chemistry laboratory facilities because our chemical science program has been an excellent source of new employees for Dow and the company stood to benefit from high quality educational preparation. Currently, over 130 U. of I. alumni are working at Dow Chemical Company. A greater number of the company's Ph.D.s are from the U. of I. than from any other school.

Many U. of I. alums have made major contributions to the company and risen to the top of the hierarchy. Dr. Jack Ehrmantraut '61 is Research Director, Corporate and R & D and former Vice President, Dow Europe. Dr. Robert Novak '56 was Chief Scientist and Director of Central Research and Dr. Lu Ho Tung '51, who has just retired, held the company's highest title, Research Fellow, and is a Dow Medalist.

The physical chemistry laboratory is pivotal to preparation of undergraduates because it houses one of three core laboratory courses taken by both chemistry and chemical engineering majors in their senior year. The project to modernize these facilities had also demonstrated its importance by attracting other funding sources. The labs received NSF funding for research equipment and state funding for physical remodeling. The Dow gift provides financial support for the development of new experiments to illustrate recent scientific advances.

Dow Chemical Company is very selective in the universities chosen to receive large grant awards such as this one. We are very proud that the company selected us as a recipient of this program and grateful to Steve Martin, the project's enthusiastic spokesman and champion.



Dow visitors attend dedication ceremonies. At left is Marty Neil '75, Plant Superintendent, Dow North America, in center, Dr. Alan Shrock, Ph.D. '84 Group Leader, Polyurethane Production Research and at right is Dr. Steve Martin, Ph. D. '78, Senior Scientist, Analytical Sciences Laboratories.

Bailar Fellowship Drive Nearing Goal



John C. Bailar

As of February, 1994, the Bailar Fellowship Fund stood at \$204,000, counting gifts, pledges, firm promises and company matches. Our goal is an endowment of \$250,000 to fund supplementary stipends for five chemistry graduate student teaching assistants annually. The program should become a reality next year when income will become available to award our first Bailar Fellowships.

The status of the fund is a testament to the work of the Bailar Fellowship Fund Committee, and the untiring efforts of Clayton F. Callis, chairman of the drive.

John Bailar had many friends. At last count, 227 had made gifts to the fund in his honor. Those who sent messages along with their gifts showed clearly their admiration, respect, and affection for the man whom they regarded as a giant in his field and in their lives.

One donor summed up the feelings of many when he said, "I just hope that the fellowship program will give us another John Bailar."

To recognize major donors, the chemistry department will hang a plaque in its brand new Chemistry and Life Sciences Building, listing all those who have contributed \$1,000 or more before the end of 1994. The names of these charter members will be permanently on display, a testament to the stature of John Bailar and his undisputed standing in the history of chemistry at the U. of I.

Professor Snyder Dies at 83

We were all saddened to learn of the death of Harold Snyder on March 8, 1994. He was the last of the four famous chemists of the "Golden Age", along with Adams, Marvel and Fuson. Professor Snyder was a classical organic chemist who had made important scientific contributions and was co-author of two important textbooks in general organic chemistry.



Harold Snyder

After completing his B.S. at the U. of I. in 1931, he received his Ph.D. from Cornell University in 1935. He worked for one year at the Solvay Process Company in New York before joining the chemistry faculty at the U. of I. in 1937. From 1957-1960 he was Associate Head of the Chemistry Department and from 1960 until his retirement in 1976 he took on the added responsibilities as Associate Dean of the Graduate College and Secretary of the Research Board. During WWII, Snyder carried out work for the National Defense Research Committee, the Committee on Medical Research and the W.P.B. Rubber Research Program.

Professor Snyder has successfully supervised 125 Ph.D. candidates but his relationship with them extended well beyond the formal. His well known

weekly "seminars" in the basement of his home combined probing critiques of chemistry research with ample food and informal discussions of sports, cars, and vacation plans. After graduation, the Snyder students continued the tradition with annual dinner reunions at the September ACS meetings.

In 1990, at the initiative of Wyvona Lane '46, the Snyder students organized a fund raising drive under the chairmanship of Robert Jones '45 to establish an endowment in Snyder's

name for undergraduate research support. The recipients, known as "Snyder Scholars," are given a stipend for a semester of full time research in a U. of I. laboratory. The objective of the program is to give undergraduate chemistry majors an opportunity to experience the satisfaction and challenge that a professional research career might offer. Professor Snyder followed the progress of the Snyder Scholars and appreciated the esteem of his students as reflected in this extension of his career as scientist and educator.

A memorial service will be held on Saturday, May 21, 1994 at 1:30 PM at the Unitarian Universalist Church, 309 W. Green Street, Urbana, IL 61801.

Many Thanks for a Win-Win Gift

Dr. Richard Hasbrouck '38 and his wife have set up a charitable annuity trust which will provide them an income during their lifetimes and give the School a significant gift after they pass away. Under this arrangement, everyone gains. The Hasbroucks will gain a charitable tax deduction now plus a yearly income during the lifetime of either donor. Since they are funding the trust with appreciated securities, they are not subject to capital gains tax from the sale of the securities. In addition, the Hasbroucks will specify in a trust agreement exactly how they wish the remainder to be used by the School. They anticipate designating the funds for equipment, facilities, and the chemistry library.

Dr. Hasbrouck has been a good friend to the School for many years and made a significant gift towards our chemistry library endowment. We appreciate his many contributions. For those made during his lifetime we can convey our thanks in person. For those made thereafter we can assure him that the money will be well used, as he has designated. Between now and then, we hope that he and his wife will enjoy their income.

For further information about deferred giving, contact the Trust Relations Department, University of Illinois Foundation, 1305 W. Green, Urbana, IL 61801, telephone 317-333-0810.

Biochemistry Symposium Honors Conrad

Professor H. Edward Conrad retired twice; from the U. of I. Biochemistry Department in 1989 and from Glycomed in Alameda, California in 1993. For his 65th birthday, the two combined to give him the Conrad Biochemistry Symposium, featuring presentations by a number of his former students. His friends and colleagues returned to the U. of I. on April 15-16 to honor the contributions that Conrad has made to his students and to the field of biochemistry.

The speakers included Jeffrey Esko of the University of Alabama, Paul Sandford of the Islet Transplant Center in Los Angeles, Thomas Kindt of NIH, Donald

Koeltzow of the USDA Division of Grain Inspection, Jack Shively, Chairman of Immunology at the City of Hope, Pat Shaklee of Glycomed, Diane Blake of Tulane University School of Medicine, Thomas Schmid of Rush-Presbyterian-St. Luke's Medical Center in Chicago, Michael Bienkowski of Upjohn and Neal Fedarko of Johns Hopkins University School of Medicine.

Professor Lowell Hager of the Department of Biochemistry presided over the banquet where Ed Conrad, now Professor Emeritus, was royally roasted by friends, students, current and former colleagues.



H. Edward Conrad

AIChE Seeking Alumni Mentors



Kathy O'Brien, chemical engineering student, chats with Ron White, P&G recruiter, during AIChE reception.

The AIChE student group is organizing a new program that will connect undergraduate students with alumni of similar interests for a variety of informal activities. The initial impetus for the program came from alumni who indicated to Professor Richard Alkire, department head, that they would like to help undergraduate students. The students responded enthusiastically and hope that this "mentoring" program will become "a means of connecting chemical engineering students to the working world through practicing chemical engineers... and an avenue of communication between today's engineers and future ones."

The program is designed for undergraduate students, especially sophomores and juniors, who are still asking very basic questions, such as: Why am I in this program? What could I be doing when I finish? This is not a job search program but students may want to "discuss" with their mentors how to initiate a job search, how to write an effective resume, or how to prepare for an interview.

The students anticipate that pairing will occur on the basis of common interests e.g. a student who leans toward a career in petroleum refining may be paired with someone from the petrochemical industry.

The students hope contacts will occur at least monthly through whatever channel of communication appeals to both members of the pair: telephone, personal visits, or e-mail. The students are particularly partial to e-mail. They have just

acquired their own e-mail account and hope that prospective mentors will also have access. The AIChE address is aiche@aries.scs.uiuc.edu.

Eric Sweeney, current AIChE student president, emphasized that the group had already benefited greatly from group plant trips and mock interview programs arranged by alumni and other industrial recruiters. They hope that the mentoring program will add an informal supplement such as, an opportunity for a student to follow a mentor throughout a workday and obtain a feeling for the "real" job environment.

Eric reported that the student group is very grateful to their industrial sponsors for financial support and for help in arranging student activities. Among their industrial friends are Amoco Corp., Air Products Chemicals Inc., Eli Lilly & Co., FMC Corp., Morton International, National Starch & Chemical Corp., Procter & Gamble Co., Texaco Inc., and UOP Inc.. Additional financial support has been provided by the chemical engineering department. The student AIChE group has recently undertaken a number of new initiatives, one of which is the mentoring program, which has been successful with several engineering groups on campus.

Alumni who would like to become mentors should contact:

President, AIChE
217 RAL, Box C-3
600 S. Mathews
Urbana, IL 61801
Tel: 217-333-1587

Thank You Alumni and Friends

Thank you for sending us your news and your checks. We are very proud of you and your very significant accomplishments and will continue to make your news our first priority.

With your checks and your help, we will continue to offer a program that gives us great pride.

James Foght *continued from page 2*

travel and decorates his office with items from his collection.

Finally, he owns a home on Bonaire, a small, remote island in the Dutch West Indies. It is located 40 miles off the coast of Venezuela with good airline connections to the rest of the world. For a family that is water oriented it is the perfect vacation spot. You can dive off your own front porch and don't have to worry about tourist invasions because there is no beach. One of his "retirement" projects is to rebuild this house.

However, true retirement is not an option, only gearing back on his day-to-day involvement. Looking back, Foght is amused at the circularity of his career. His first research under Rinehart was in the biosynthesis of antibiotics from natural products found in the soil. Today, he is working with Pharma Mar, a young company located in Spain that is searching for antibiotics in natural products found in the sea. Rinehart serves on its board of directors. The two events are separated by 30 years and a lifetime of other experiences, every one of which was a building block.

His advice to young people is to avoid overplanning. "you have to be opportunistic," he counsels. "Recognize your special qualities and take advantage of the opportunities as they arise." He adds, "I feel blessed that I have enjoyed what I was doing, earned a reasonable income, and have been able to do things that have benefited mankind. I always thought that I wanted to be a translator from technology to marketing and I couldn't have written a better recipe if I had tried."

Graduate Student Wins ACS Award

Homer Z. Chou, received the award for Best Student Poster at the ACS meetings in San Diego. The cash award recognizes excellence in graduate research by the Division of Colloid and Surface Chemistry. Mr. Chou is completing his Ph.D. under the direction of Professor Kenneth S. Suslick in collaboration with Professor Paul W. Bohn. His research involves the use of self-assembled monolayers for non-linear optical devices.

May Contributes to Reports on Weapons Destruction



Walter May

Walter May, Professor Emeritus of Chemical Engineering, has been an active member of two panels of the National Academy of Sciences, concerned with the disposal of chemical weapons. The question is not whether

the chemical weapons will be destroyed but how. The US is obligated to complete the destruction by 2004 to meet its obligations under the Chemical Weapons Convention.

The studies were conducted by the National Research Council under the auspices of the National Academy of Sciences. The first panel on which May served was charged with compiling a list of alternative methods of disposal. The second was asked to evaluate the alternatives and make recommendations, which the National Academy reported to the U.S. Army, the instigator of the studies.

The panel concluded that moving forward with disposal programs, especially by burning, posed fewer risks than keeping the chemicals in storage for years while alternative technologies for destruction were developed. To further

minimize risks, the panel proposed the addition of charcoal adsorption filters at the final stage of the process.

The panel pointed out that the recommended process was tested at a prototype plant on the Johnston Atoll in the Pacific Ocean and showed smaller amounts of toxic smokestack emissions than municipal incinerators that burn common garbage. Nevertheless, critics argue that release of any possible carcinogens, no matter how minimal, should not be permitted. The charcoal adsorption filters have been recommended for incineration as the best answer to this fear.

One alternative was recommended for research and development: a chemical detoxification followed by any one of several processes, e.g. biodegradation for destroying the detoxified material. This recommendation was made, recognizing that public opposition to incineration might delay the program.

Professor May also reminds us that we will soon need to deal with the problems of nuclear weapon destruction which are even more complex and more expensive than those associated with chemical weapons. Just lurking on the horizon are the issues surrounding disposal of our vast quantities of low level nuclear wastes, such as those generated by medical procedures, which pose problems of horrendous proportions.

Johnson '62 Wins Mosher Award

Carl R. Johnson, Professor of Chemistry at Wayne State University, Detroit, has received the 1992 Harry & Carol Mosher Award of the ACS Santa Clara Valley Section. The award was established in 1980 to recognize and encourage outstanding work in chemistry, to advance chemistry as a profession, and to recognize service to the ACS.

Dr. Johnson is particularly noted for the development and application of organocopper and organosulfur reagents in organic synthesis. He received his Ph.D. degree at the U. of I. under the supervision of Professor Nelson Leonard and completed postdoctoral work at Har-

vard University. Since that time he has served on the faculty of Wayne State University and was named Distinguished Professor of Chemistry in 1990.

Among his many awards and honors were an Alfred P. Sloan research fellowship in 1965 and a NATO fellowship in 1973. In 1982, he received Wayne State University's President's Award for Excellence in Teaching. In 1990 he received an Alexander von Humboldt Senior Scientist Award. He has served on the advisory boards of the Journal of Organic Chemistry and Organic Synthesis and is currently associate editor of the Journal of the American Chemical Society.

Faculty Honors

Kenneth S. Suslick, Professor of Chemistry, and his student **Mark W. Grinstaff**, have won the 1994 Nobel Laureate Signature Award for Graduate Education in Chemistry from the ACS. See page 6.

Steven S. Zumdahl, Professor of Chemistry and Associate Head of the Department, has received a 1994 Catalyst Award by the Chemical Manufacturers Association. The award honors individuals who inspire students towards careers in chemistry and science-related fields through their excellent teaching ability in and out of the classroom.

Nancy Makri, Professor of Chemistry, has received a 1993 Packard Foundation Fellowship. Dr. Makri was also elected an Alfred P. Sloan Research Fellow for 1994.

Paul Bohn, Professor of Chemistry and Interim Director of the School, was named a University Scholar, the highest award of the University of Illinois.

Stephen G. Sligar, Professor of Biochemistry and Chemistry and Director of the School, was elected a fellow of the American Association for the Advancement of Science.

Theodore Brown, Emeritus Professor of Chemistry and former Director of the Beckman Institute, has been elected a fellow of the American Academy of Arts and Sciences.

Edmund G. Seebauer, Professor of Chemical Engineering, has been selected an Alfred P. Sloan Research Fellow.

Harry G. Drickamer, Professor of Chemical Engineering, Chemistry and Physics, has been elected Doctor Honoris Causa of the Russian Academy of Sciences.

Kenneth L. Rinehart, Jr., Professor of Chemistry, has been elected Vice President of the American Society of Pharmacognosy.

Peter Beak, Professor of Chemistry, has been appointed an associate in the Center for Advanced Study for the 1994-95 academic year.

Vera Mainz, director of the NMR laboratory, has received an LAS Academic Professional Award.

Rebecca Simon, director of the undergraduate advising and placement office, has received a 1994 LAS academic advising award.

In Memoriam

McHenry '51 Former Senior Vice President Amoco

From 1989 until his retirement in April, 1993, Keith McHenry had been responsible for coordinating the research activities and directing pursuits of new technology for Amoco and its operating companies. He was vice president for research and development for Amoco Oil Co. from 1975-1989.

Dr. McHenry earned his B.S. degree in Chemical Engineering from the U. of I. and his Ph.D. in chemical Engineering from Princeton University.

In 1982 Dr. McHenry was elected to the National Academy of Engineering and was a member of the American Institute of Chemical Engineers, the American Chemical Society and the American Association for the Advancement of Science. He had served on the Resource Development Committee of the chemical engineering department at the U. of I., the Beckman Institute, and the Catalysis Program at the University of California at Berkeley. Dr. McHenry was also a trustee for North Central College in Naperville, IL. He died in January, 1994.

Matheson '48 Leading Nuclear Consultant

At the time of his death in August, 1993, Arthur R. Matheson owned a private consulting business which he had started in 1973. He worked with a variety of international and national companies, including the Australian Uranium Producers Forum and Science Applications, International, Inc.

Dr. Matheson had been engaged in various aspects of the nuclear energy program since 1948, working for both private industry and governmental organizations. He did research in the field of atomic energy for the Hanford Research Project in Richland, WA. He also did research on reprocessing nuclear fuels and waste disposal matters. In the 60s he was chairman of the Atomic Industrial Forum Committee on the shipment of nuclear materials

Dr. Matheson earned his B.S. and Ph.D. degrees at the U. of I. and was a student of Professor John C. Bailar. After his death, family and friends established the Dr. Arthur Matheson Scholarship Fund at the University of Illinois Foundation to honor his memory.

Walter Celmer, Ph.D. '50 (Biochemistry with Carter) died in July, 1993. He was a research scientist with Pfizer Inc. until his retirement in 1984. He chaired the Stereochemistry Committee on the editorial board of the International Journal of Antibiotics in Tokyo from 1974 until his death.

Alvin Cohen, Ph.D. Ph.D. '49 (Chemistry with Moeller) died in October, 1991. He was Professor in the Department of Geology and Planetary Sciences at the University of Pittsburgh.

David Gutman, Ph.D. '64 (Chemistry with Belford) died in November, 1993. He was professor of chemistry at Catholic University of America in Washington, D.C.

Kirby Henkes, B.S. '22 (Chemistry) died in October, 1992. He was a bacteriologist for the State Department of Public Health until retiring.

Robert E. Henry, Ph.D. '38 (Chemistry with Englis) died in June, 1993. He was associate director of research at Continental Can Company until his retirement in 1975.

Howard James, Jr., Ph.D. '74 (Chemistry with Katzenellenbogen) died in February, 1993. At the time of his death, he was employed at Eckerd's Pharmacy after receiving a degree in pharmacy in Austin, TX.

Stanley D. Koch, B.S. '47 (Chemistry) died in December, 1992. He received a Ph.D. from Cornell University in 1950. Dr. Koch retired as manager of polymeric coatings research at Enthone/OMI in West Haven, CT.

Donald F. Meisner, M.S. '43 (Chemistry) died in February, 1993.

David W. Mitchell, B.S. '33 (Chemistry) died in May, 1992. He had worked for DuPont in Clinton, IL for 35 years, retiring in 1976. Thereafter, he and his wife managed the Words of Wisdom Christian Book Store in Fulton until he retired in 1990.

George F. Scheele, Ph.D. '62 (Chemical Engineering with Hanratty) died in February, 1993. He was Associate Director of the School of Chemical Engineering of Cornell University since 1982. Dr. Scheele was a fellow of the American Institute of Chemical Engineers and received a college wide award for excellence in teaching.

Lester E. Schniepp, Ph.D. '35 (Chemistry with Marvel) died in November, 1992. He had worked at DuPont Chemical Company, U.S. Dept. of Agriculture, Quaker Oats Company, American Can Company and Zenith in the Chicago area.

Louis A. Siegrist, B.S. '21 (Chemistry) died in November, 1992. He taught chemistry and science courses at Highland High School.

Elizabeth Irwin Soukup, A.M. '49 (Chemistry) died in April, 1993. She had been a chemistry teacher at Hinsdale High School District 86.

Kenneth O. Stevenson, B.S. '37 (Chemistry) died in March, 1993. In 1946 he joined the Aluminum Company of America as a research chemist. In 1962, he became technical librarian for Gulf Research in Harmarville until his retirement in 1978. He was honored by Phi Lambda Upsilon and Beta Phi Mu Chemical fraternities and was a former secretary and director of the American Chemical Society. He was also former vice president and president of the Analytical Chemistry Group and past chairman of the Society of Analytical Chemists of Pennsylvania.

Heino Tamm, B.S. '60 (Chemistry) died in August, 1993. He retired in 1990 from the Silicon Division of General Electric.

Howard M. Teeter, Ph.D. '40 (Chemistry with Adams) died in August, 1993. He was a chemist with the U.S. Department of Agriculture's Northern Regional Research Laboratory until retiring in 1976.

Ernest W. Thiele, B.S. '19 (Chemistry) died in November, 1993. He was assistant and associate director of research with Standard Oil of Indiana before retiring in 1960. Thereafter he taught at the University of Notre Dame in the department of chemical engineering.

Richard B. Wearn, Ph.D. '41 (Chemistry with Adams) died in August, 1993. He was vice-president for research and development with the Colgate Palmolive Company in New York City until his retirement.

Robb '51 Wins National Medal of Technology

Dr. Walt Robb, retired Senior Vice President of General Electric Research & Development Center, received the award for efforts that resulted in a revolution in medical imaging. He was cited for "his leadership in the development of medical diagnostic systems that have improved people's health and maintained U.S. global competitiveness."

According to John F. Welch, Jr., '61 his former colleague and current GE chairman and CEO, "When we speak of 'bringing good things to life' in this company, we always point first to our medical diagnostic equipment - computed tomography scanners, magnetic resonance imaging systems, and the like - that are saving countless lives around the world. Walt's vision, energy, and scientific excellence led to the development and production of those systems, along with countless other technical achievements in other GE businesses."

Dr. Robb received his Ph.D. in chemical engineering with Professor Harry Drickamer in 1951. In 1973 he was made head of GE Medical Systems. During his 13 years in that post, he directed the organization's growth into the world's leading producer of medical diagnostic imaging equipment. He led the development of GE's revolutionary fast-scan, fan-beam computed tomography (CT) scanner. He also spearheaded the development of products in magnetic resonance imaging (MRI), pioneering the use of superconducting high-field magnets.

In 1986, Dr. Robb was appointed director of the GE Research and Development Center, one of the world's largest and most diversified industrial laboratories. Under his leadership, the Center moved into a variety of technology advances, ranging from improved incandescent lamps to powerful industrial lasers, from artificial intelligence-based systems to superalloys.

After retiring from GE in 1992, Dr. Robb established a consulting firm, called Vantage Management. He is a consultant to a number of worldwide high-tech companies aiming for medical advances. He serves on the Council of the National Academy of Engineering, on the Advisory Board of the New York State Science and Technology Foundation, and on the Advisory Board of the Critical Technology Institute.

Alumni News

'30

Vernon G. Parker, B.S. '36 (Chemical Engineering) has retired from the Good-year, Akron, OH patent department.

Edward H. Specht, B.S. '39 (Chemistry) was honored by the Philadelphia Section of the ACS for his research on explosives, which he carried out at the University of Pennsylvania for the National Defense Research Committee. Dr. Specht also holds several patents on the preparation of acrylic acid.

David Turnbull, Ph.D. '39 (Chemistry with Phipps) received an honorary membership in the American Ceramic Society. He is Gordon McKay Professor of Applied Physics at Harvard University in Cambridge, MA.

'40

R. Byron Bird, B.S. '47 (Chemical Engineering) was the G.N. Lewis Lecturer in the College of Chemistry at the U. of California Berkeley in '93. He is Professor Emeritus of Chemical Engineering at the University of Wisconsin in Madison, WI.

Minor J. Coon, Ph.D. '46 (Biochemistry with Rose) has received the 1993 Distinguished Achievement Award of the University of Michigan Medical Center Alumni Society. He is Professor of Biological Chemistry at the University of Michigan Medical School.

Joe Eglin, B.S. '41 (Chemistry) founded BC Laboratories, a firm that supplies environmental services to the oil and agricultural sectors in Bakersfield, CA. He started the firm in 1949 after working for General Petroleum, the predecessor of Mobil Oil.

Sr. Kathleen Hagan, Ph.D. '49 (Chemistry with Bailar) has retired as department head of the chemistry department of Mundelein College.

Lester J. Reed, Ph.D. '46 (Chemistry with Fuson) delivered the Merck Award Lecture in 1993. Dr. Reed is Ashbel Smith Professor at the University of Texas at Austin and Director of the Clayton Foundation Biochemical Institute at the University. Dr. Reed was elected to the National Academy of Sciences in 1973.

Sam Silbergeld, Ph.D. '43 (Biochemistry with Carter) retired from the US Public Health Service and Saint Elizabeth Hospital in Washington, D.C. He is a psychiatrist and currently teaches at the U. of Maryland, consults at George Washington University, and serves on the Board of Trustees of Blackburn College.

'50

Sr. Emeran Foley, Ph.D. '56 (Biochemistry with Vestling) was honored for her religious work. Sr. Foley is teaching adult education at St. Joseph School of Rockdale, which is part of Joliet Township High School District's ABE and GED programs.

Gordon Johnston, Ph.D. '56 (Chemistry with Adams) ran for representative of the 4th congressional district in Pennsylvania after retiring as professor of chemistry from Pennsylvania State University's Beaver campus.

Avron B. Magram, B.S. '56 (Chemistry) has been named Vice President, General Manager of Plastics Additives and Specialty Lubricants at Hüls America Inc. He has been with the company since 1980.

Benjamin Mosier, Ph.D. '57 (Chemistry with Laitinen) received a Space Act Award from NASA in Houston, TX. Dr. Mosier is president of the Institute for Research, Inc. in Houston, TX.

Fred W. Stone, B.S. '50 (Chemistry) has received the 1993 Bruell Award from the Fragrance Manufacturers Association (FMA). Dr. Stone is President, Chemicals, of Firmenich, Inc. and Vice Chairman of FMA's Scientific Affairs Committee.

Robert L. Wixom, Ph.D. '52 (Biochemistry with Rose) retired in 1992 as Professor Emeritus of Biochemistry, University of Missouri. He continues to serve as CoChair of the MU Environmental Affairs Council and is writing a history of the Department of Biochemistry.

Owen York, Jr., Ph.D. '52 (Chemistry with Fuson) received an honorary D.Sc. from Kenyon College on the occasion of his retirement as professor of chemistry. During his career, Dr. York received several awards for distinguished teaching.

'60

James E. Dunn, M.S. '61 (Chemistry) is Vice President of the Halstead Corporation in Greensboro, NC. Halstead is a major producer of copper tubing and rubber and plastic insulation products.

Julia B. Epley, B.S. '65 (Chemistry) is an attorney with Pillsbury, Madison & Sutro in Washington, D.C.

Ronald A. Greinke, B.S. '63 (Chemistry) was awarded the "Pergamon Prize" for the best paper published in the *Journal of Carbon*. He is a senior research associate with UCAR Carbon Company in Parma, OH.

Robert K. Howe, B.S. '61 (Chemistry) retired in 1993 as senior fellow in the environmental sciences department of the agricultural group of Monsanto Company and became a consultant in the scientific and regulatory aspects of xenobiotic metabolism and environmental fate.

Joseph L. Kirsch, Ph.D. '68 (Chemistry with Brown) has been appointed John Hume Reade Professor in the Sciences at Butler University.

Lewis M. Koppel, B.S. '63 (Chemistry) was appointed a Principal of IPC Group, Inc., a national litigation support and valuation advisory services firm based in Chicago. Dr. Koppel earned a Ph.D. in Chemical Physics from Columbia University and an M.B.A. from Harvard University.

Marilyn Magnuski, B.S. '64 (Chemistry) is senior staff analyst with Computer People Unlimited in Burlington, WI.

Steven Micko, B.S. '67 (Biochemistry) manages the flow cytometry facility at Emory University Hospital for the bone marrow transplant program.

Jacob Plattner, B.S. '68 (Chemistry) received an Outstanding Researcher Award from Abbott Laboratories. He was honored for discovering new therapeutic agents in the cardiovascular and anti-infective areas.

Robert E. Tapscott, Ph.D. '68 (Chemistry with Belford) received the 1993 Stratospheric Ozone Protection Award from the EPA. He is Director of the Center for Global Environmental Technologies at the University of New Mexico.

John Tveton, Ph.D. '60 (Chemistry with Curtin) has become a freelance naturalist, author and photographer. Until 1973 he worked for the Exxon Corporation.

James K. Witschy, B.S. '69 (Chemistry) is a psychiatrist practicing at Methodist Medical Center in Dallas, TX. He earned his M.D. from University of Texas Medical School in San Antonio in '76. Dr. Witschy was made a Diplomate, American Board of Psychiatry and Neurology in March '83.

'70

Len Adzima, Ph.D. '77 (Chemistry with Martin) is a research associate with Owens Corning. He is a product development chemist in the reinforcements and resins laboratory.

Jeffrey L. Atkinson, B.S. '78 (Chemical Engineering) is a senior staff process control engineer at Mobil's Chalmette refinery in New Orleans.

Dirk Banner, B.S. '79 (Chemistry) has been appointed air traffic automation specialist at the Minneapolis Flight Service Data Processing System.

Gary de Grande, B.S. '70 (Chemistry) is in charge of the Technical Division of 3M Pharmaceuticals in France. He received a Ph.D. from the University of Minnesota in '74 and has been with 3M since that time.

Bruce R. Harris, Ph.D. '74 (Chemistry with Beak) is chief chemist with Carroll Company in Garland, TX. He is responsible for product reformulation and new product development to meet federal and state pollution regulations for industrial and institutional specialty chemical markets.

John J. Healy, B.S. '72 (Chemistry) has been promoted to area director for the Occupational Safety and Health Administration in Englewood, CO.

Eric Hockert, Ph.D. '77 (Chemical Engineering with Drickamer) is a research manager with 3M in St. Paul, MN.

Mark Kozzarek, B.S. '76 (Chemistry) is a securities analyst with Roulston & Co. in Cleveland, OH.

Ving I. Lee, Ph.D. '75 (Chemistry with Rinehart) is Vice President of Chemical Research at Microcide Pharmaceuticals in Mountain View, CA.

James Munroe, M.S. '70 (Chemistry) has been elected vice president of the American Society of Brewing Chemists. He is product and brewing development manager in the Process Improvement and Development Department of Miller Brewing Co., Milwaukee, WI.

Thomas A. O'Brien, Ph.D. '78 (Chemistry with Gennis) is product director in the AIDS/Hepatitis business unit of Ortho Diagnostic Systems, Inc. of Raritan, NJ.

C&EN (Feb. 28, 1994, p. 37) noted that **James C. Paulson, Ph.D. '74 (Biochemistry with McClure)** was a member of a team that developed a technique for solid phase synthesis of oligosaccharides and glycopeptides that could potentially provide the basis for an automated oligosaccharide and glycopeptide synthesizer.

Randall R. Portelli, B.S. '73 (Chemical Engineering) has been promoted to business director, Industrial Resins of Borden Foundry and Industrial Resins Group in Louisville, KY.

Valeria Schiemann, Ph.D. '78 (Chemistry with J. Jonas) has taken a position as director of the global manufacturing planning center of AT&T in Princeton, NJ.

Thomas Thorpe, Ph.D. '75 (Chemistry with Natusch) is section head with Procter & Gamble in Hunt Valley, MD.

William J. Treadway, Jr., B.S. '72 (Chemistry) was awarded the NISOD Teaching Excellence Award in 1993; He earned a Ph.D. at Loyola University in 1976 and is professor of biochemistry and biophysics at Parkland College.

'80

Elise Benjamin Adams, B.S. '84 (Chemistry) received a Partners in Science Award to pursue research at Rice University in the summers of 1993-94. She teaches chemistry at Lamar Senior High School in Houston, TX.

Ciro Cirrincione, B.S. '80 (Chemistry) was inducted a fellow of the American Academy of Orthopedic Surgeons in 1993. Dr. Cirrincione practices in the northwest suburbs of Chicago, in Hoffman Estates and in Elk Grove Village.

Michael Covinsky, B.S. '82 (Chemistry) was chosen a Presidential Scholar at Baylor College of Medicine in Houston, TX.

Lara Dennis, B.S. '89 (Chemistry) is a resident in diagnostic radiology at the William Beaumont Hospital in Royal Oaks, MI. She received her M.D. degree from the U. of I. in Rockford, IL.

Roberta Farrell, Ph.D. '80 (Biochemistry with Gunsalus) is COO and Executive Vice President of Sandoz Chemical Biotech Research Corporation. She was elected to the International Academy of Wood Sciences, the first female to be inducted.

Edward B. Flint, Ph.D. '89 (Chemistry with Suslick) is a professor of chemistry at Bradley University in Peoria, IL.

Jeff Forbes, Ph.D. '88 (Chemistry with Oldfield) is an assistant professor in the Department of Chemistry and Biochemistry at the University of Maryland in College Park, MD.

Mark W. Fox, B.S. '83 (Chemistry) has completed his training in neurosurgery at the Mayo Clinic in Rochester, MN and is in private practice in St. Paul, MN.

Kira M. Glover, M.S. '86 (Chemistry) has taken a position as Environmental Affairs Officer at the American Embassy in New Delhi. The position involves reporting on local environmental conditions and managing 28 joint US/India scientific projects.

Stephen D. Harper, Ph.D. '81 (Chemistry with Ardupngo) received a J.D. degree from Widener University School of Law in 1993. He is working as a patent attorney for the ARCO Chemical Co. in Newton Square, PA.

Robert A. Haupt, B.S. '83 (Chemistry) is a research chemist with Dyno Industrier A.S. in Lillestrøm, Norway. He is responsible for development of phenol-formaldehyde resins.

Scott G. Hoffert, B.S. '88 (Chemistry) has accepted a position as compliance coordinator for WMX Environmental Monitoring Labs, Inc. in Geneva, IL.

Laura Hrdina, B.S. '85 (Chemical Engineering) is a loss prevention consultant in Mount Prospect, IL.

Ronald Huss, Ph.D. '85 (Biochemistry with Glaser) received the 1994 James M. Van Lanen Award of the ACS Division of Biochemical Technology. Dr. Huss is director of research and business development at BioTechnical Resources L.P., a limited partnership between DuPont and ConAgra Inc.

Keith A. Kastelic, B.S. '85 (Biochemistry) received his M.D. degree from the U. of I. in 1993. He is a resident in radiology at St. Lukes Hospital and Trauma Medical Center in Kansas City, MO.

Robert Maleczka, Jr., B.S. '84 (Chemistry) is a postdoctoral fellow at the University of Pennsylvania. He received a Ph.D. from Ohio State University in 1992.

R. Scott Meece, B.S. '83 (Chemical Engineering) is a patent attorney with Ciba Vision Corporation in Duluth, GA.

Vickie Groshans Mitchell, B.S. '85 (Chemical Engineering) is a management consultant in New York City. She received an MBA from the University of Pennsylvania, Wharton School in 1993.

Glenn Munkvold, B.S. '84 (Chemical Engineering) has taken a position as research engineer for AMOCO Corporation.

Michael D. Olgren, M.S. '87 (Biochemistry) graduated from medical school at Loyola University in Chicago in 1991. He completed a residency in emergency medicine in 1994 and accepted a position at St. Mary's Hospital in Grand Rapids, MI.

Robert Sawicki, B.S. '80 (Chemistry) is a physician with the Family Practice Associates of Central Illinois, located in Bloomington. He received his MD from Rush Medical College in Chicago and is board certified in family medicine.

Phillip W. Twaddle, B.S. '82 (Chemical Engineering) is a manufacturing process supervisor for E.I. DuPont.

Wanda Walczak, B.S. '86 (Chemical Engineering) received a Ph.D. in Polymer Science and Engineering from the University of Massachusetts at Amherst in 1993. She is taking a postdoc at Louisiana State University in Baton Rouge, LA.

Michael J. Watson, B.S. '84 (Chemistry) is a product development specialist at Dow Corning Corporation in Midland, MI.

Elizabeth Wetzel, B.S. '85 (Chemistry) has been recognized as an outstanding graduate by the American Association of Community Colleges. She received her MD at Rush Medical College and is a family practitioner at St. Elizabeth Medical Center in Granite City, IL.

Kelvin Z. Yao, B.S. '83 (Chemical Engineering) is regional manager with Blessing/White in Princeton, NJ.

'90

Nadeem Alavi, B.S. '91 (Biochemistry) is studying at the Chicago College of Osteopathic Medicine.

Craig C. Henderson, Ph.D. '91 (Chemistry with Martin) has been a member of the team that discovered a method to alter 60 atom "buckyballs" which may lead to important future developments. Dr. Henderson is a postdoc at Sandia National Laboratories.

John B. Hoesley, B.S. '93 (Chemistry) has taken a position with National Starch.

Dean Hoglen, Ph.D. '90 (Chemistry with Martin) is a senior chemist with Ceba Geiga in St. Gabriel, LA.

Warren Kaplan, Ph.D. '90 (Chemistry with Suslick) is a research chemist with the Stepan Company in Northfield, IL.

Jane M. Nosal, Ph.D. '93 (Biochemistry with Switzer) has been awarded the 1994 Anne A. Johnson Work Award for Outstanding Scholarship by a woman graduate student in Biochemistry. Dr. Nosal is a resident in dermatology at the University of Washington School of Medicine in St. Louis, MO.

David A. Selinger, Ph.D. '93 (Biochemistry with Wise) received the U. of I. Biochemistry Department's Outstanding Graduate Student Award. He is currently a postdoctoral fellow at the University of Oregon.

Thomas J. Wolak, B.S. '93 (Chemistry) is a research chemist with Lubrizol Corporation in Wickliffe, OH.

KEEP IN TOUCH

Return to: Ellen Handler
SCS Alumni Newsletter
103 Noyes Laboratory
505 S. Mathews
Urbana, IL 61801

If you know someone who would like the newsletter and is not receiving it, please send address.

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Check if new home address

Check if new business address

Your news (please include newspaper clippings, photos, extra sheets, etc.) _____

CHEMSEM '94

The almost annual ChemSem attracted over 60 students this year, the largest attendance ever. Organized by the student affiliates of the local ACS chapter, the all day event sponsored

talks by four alumni and one faculty member. According to Daun Frieders, chairman, the purpose is to give freshman, sophomore, and juniors "some ideas of what they can do with a chem science bachelor's degree once they have it. Students don't realize that there are many things they can do besides working as a lab assistant."

Each speaker received a list of questions: How did you get interested in your job? What did you have to do to get it? What do you actually do? How did you prepare for the job? Is there time in your life for fun and family? Since the speakers were all recent



graduates, presentations were tuned to students' questions and concerns. Box lunches provided opportunities for even more informal one-on-one interactions that helped fulfill the ChemSem purpose of "Bridging the Gap Between College and Career."

◀ Paul Schiller, B.S. '81 now of Amoco, and Ms. Betsey Hovey, B.S. '88, of Hallmark Cards, both ChemSem speakers, take a moment to renew their friendship.



▲ The ChemSem 94 organizers: Standing from left to right are Sara Lindberg, Tom Sternberg, and Daun Frieders, chair of the event, and seated are Chris Treadway, Liz Douglas and Bill Rooney.

SCS Alumni Newsletter
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