FROM THE CHAIR

The chemistry department has seen some major changes this past year, many of them involving substantial improvements. The most immediately apparent, of course, is the construction of the new chemistry addition. We are pleased with the progress so far and are hopeful that the Indiana General Assembly will authorize funding for the second phase, rehabilitation of our aging and inadequate existing space. We are making plans now to combine the dedication ceremony for the new addition with an alumni reunion in the spring of 1989.

We recently received a grant from the National Science Foundation to be used with a University contribution for the purchase of an ESR (electron spin resonance) spectrometer, which is particularly useful for studying structure and bonding in (paramagnetic) molecular species having unpaired electrons. This new equipment will play an important role in the research activities of Professors Caulton, Chisholm, and Christou, but will be available as departmental instrumentation for other research groups who may need it from time to time.

Our undergraduate program continues to be one of the strongest in the nation. This year the ACS ranked Indiana first on its list of American institutions granting bachelor degrees in chemistry. We rank 11th in the number of PhD degrees granted, and 14th in the nation in research dollars granted by outside agencies!

We have started three programs supported by alumni gifts that we feel will make our department a significantly better place to work and learn. In response to the initiatives of alumni Nolan B. Sommer and William LeSuer, we have set up two new lecture series endowed with gifts from former students and associates to honor two of our living professors emeriti: the Harry G. Day Lectureship and the Ernest E. Campagne Lectureship. Departmental alumni and friends employed by the Eli Lilly Company are in the process of raising gifts to endow, or partially endow, a chair in biochemistry named for the Eli Lilly alumni; this will help us materially in our efforts to recruit new biochemistry faculty.

We are very pleased to welcome a talented newcomer to our midst: Prof. William R. Roush, a young organic chemist from MIT who joined us this January. Dr. Roush and his small family are the subject of an article elsewhere in this Newsletter.

The glass shop, under the management of Don Fowler, is expecting a new annealing oven sometime in March thanks to a generous gift by Mrs. Violet West in memory of her brother, H. Arthur Doyal, who received his PhD degree from this department in 1939. The new oven replaces one approximately 40 years old, and will allow the glass shop to work with longer, larger pieces of glass. It will also enable the shop to anneal quartz, which it currently cannot do.

The monetary gifts and the moral support of our loyal alumni and friends are a source of renewed inspiration and encouragement to faculty, staff, and students of the department as we strive to continue on the path of steady improvement that has characterized this depart-

ment from its earliest days. We are proud of the many and varied accomplishments of our alumni and former associates and always look forward to welcoming any who can find their way back for a visit.

—V. J. (Jack) Shiner, Jr.

RESEARCH EXPOS

Research EXPO 1986 was held on the IU Bloomington campus on April 23-24, 1986, and was sponsored by the Office of Research and Graduate Development. The purpose of the EXPO is to provide an opportunity for business and industries to find out about important current research underway at the campus, to talk informally with IU researchers, and to visit laboratories and research centers on the campus. The EXPO also helps IU researchers gain a better understanding of the areas of research that are important to business and industry.

The 1987 Research EXPO is scheduled for April 22-23, 1987. Dr. Wightman is coordinating the chemistry department's participation in this year's EXPO. Further information may be obtained by calling him at (812) 335-5093.

REMINDER

Social Hours in 1987 for Indiana University Chemists and their friends will be a part of the ACS Alumni Hour at the National Meeting in Denver on Tuesday, April 7 from 6-8 p.m. in the Grand Ballroom, Fairmount Hotel, and in New Orleans probably on September 1. (See listing later in ACS program for the fall meeting.)
HIEFTJE, DAVIDSON, AND GRIECO HONORED

Dedamia Whitney

Professor Gary Hieftje, named distinguished professor of chemistry in 1985, was honored again in 1986 when he was chosen to receive Indiana University’s second Tracy M. Sonneborn Award for “distinction as a teacher and as a scholar.” The first recipient of this new IU award was Prof. Janos Starker, an internationally known cellist affiliated with the IU School of Music. As part of the award, Hieftje will present a lecture to the University community next November.

Hieftje this year also won the ACS Award for Analytical Chemistry sponsored by Fisher Scientific Co. He will be honored at the 193rd ACS National Meeting in Denver, Colorado, in April.

Professor Ernest R. Davidson, theoretical and physical chemist and director of the Chemistry Department’s Computational Center, was named distinguished professor at the Founders Day ceremonies this past April. The following remarks were included in the Founders Day program:

“Ernest R. Davidson, professor of chemistry in the College of Arts and Sciences since 1984, brought with him to Indiana University a reputation as one of the world’s preeminent theoretical chemists, having produced some of the most sophisticated and important research in quantum chemistry. His leadership in spearheading a major expansion of teaching and research in theoretical and computational chemistry on the Bloomington campus have enhanced his stature even more within the University and international scientific communities.

‘Davidson is also considered a ‘willing and gifted teacher, able to navigate with equal effectiveness in both freshman courses and graduate seminars,’ ‘He is far more than a scholar working in isolation,’ a colleague said of Davidson. ‘He is a stimulating, active participant in an intellectually live community which he does much to create.’ Another wrote, ‘Fellow quantum theorists, who know his work intimately, appreciate his innovative contributions immensely.’

‘Davidson’s research, which involves developing techniques for calculating molecular structures, energies, and dynamics, has led to the publication of more than 200 papers in top scientific journals. A number of these advances have now become standard in computational chemistry, influencing not only the methods themselves but also the interpretations that chemists give to theoretical calculations. Because these developments are of interest to organic, inorganic, and even analytical chemists, his influence reaches well beyond the world of his colleagues in theoretical chemistry.

‘Davidson’s honors include a Sloan Fellowship for Basic Research, a writing/research prize from the International Academy of Quantum Molecular Science, a Guggenheim Fellowship, and election as a Fellow of the American Physical Society and of the American Association for the Advancement of Sciences.’

Professor Paul A. Grieco, organic chemist at IU since 1980, has been named the new Earl Blough Professor. Grieco received his BA degree from Boston University in 1966, and his MA (1967) and PhD (1970) degrees from Columbia University. After postdoctoral work with Prof. Gilbert Stork at Columbia and Prof. E.J. Corey at Harvard, he taught chemistry at the University of Pittsburgh until he came to Indiana in 1980.

Grieco is the recipient of the ACS Akron Section Award (1982) and the ACS Ernest Guenther Award (1982). He is a past fellow of the Japan Society for the Promotion of Science (1978-79), the Alfred P. Sloan Foundation (1974-76), and the Eli Lilly Company (1973-75). In 1974 he was elected to the Collegium of 100 Distinguished Alumni of Boston University.

The Blough Professorship was established in 1973 following a bequest by Earl Blough, a LaGrange County native who came to IU in 1895, one of the 628 students on campus at the time. Blough later attended Cornell University and quickly became an important innovator in the fledgling aluminum industry. He held many patents. According to Prof. Thomas Clark, IU distinguished professor of history, “His contributions to the household utensil, automobile, and airplane industries alone are almost incalculable.”

The first holder of the Blough chair was Prof. Jay Kochi, a member of the National Academy of Sciences now at the University of Houston.

FACILITY NEWS

Architectural sketch of new addition to chemistry building as viewed from the southeast

by Jack Baker, P. E.

After nearly a decade of consultation, controversy, and debate, the construction of Phase I, a 72,000 square foot, $17.9 million addition to the Department of Chemistry began in May 1986. When the new facility is completed in May 1988, it will provide space utilization, efficiency, and safety on a par with the best institutions in the country. The addition will consist of an east wing running north/south from the 1930’s chemistry building, a south wing running east to west along the south face of the 1964 annex, and a central tower connecting the two at the southeast corner facing Jordan Hall.

The tower will become the main entrance to the Department of Chemistry building. Persons entering can proceed left or right through corridors to the south or east wings. One corridor will lead through the atrium with its view of the new courtyard and into the 1930’s chemistry building; the other will lead into the 1964 annex. A third entrance between them will lead directly into the courtyard and the south entrance to the auditorium.

Research space will occupy a major portion of the new building. Laboratories, their adjacent student offices, support rooms, and faculty office suites will be located on the second floor of the east wing and the first, second, and third floors of the south. Offices and support
rooms will be adjacent to laboratories to provide close contact with experiments and reduce disturbances from corridors.

Teaching laboratories will offer a greatly improved and safer teaching environment with modern facilities and increased workspace at benches and fume hoods. They will occupy the east wing ground and first floors. Solution and preparation areas will occupy part of the existing teaching laboratories at the east end of the 1930’s chemistry building and will serve the laboratories via a separate corridor and elevator. Students will gain entry to the new freshman laboratories and organic laboratories along an atrium corridor. Along its west side a two-story glass wall will look onto the new courtyard formed around the old beech tree and the south entrance to the chemistry auditorium.

Chemistry scientific stores, the reprocessing office, and hazardous waste storage will share the ground floor of the south wing. An adjacent shipping and receiving area will serve the entire chemistry facility with improved security and access for all materials. Flammable materials to be held or dispensed will be stored in secure areas providing explosion protection. Chemical and radioactive waste will be held in separate rooms providing secure containment and adequate ventilation while materials are repackaged for disposal.

Throughout the new chemistry addition, environmental control systems will be coordinated with safety devices to maintain safe working conditions at all times. Occupants of all laboratories will be protected from odors and toxic fumes by safety devices that maintain containment airflow at fume hoods. Corridors will be protected by devices that maintain the laboratory at slightly negative pressure and inhibit the release of odors and toxic fumes. Outside of the new laser laboratories, lighted corridor signs will signal experiments underway. The laser will stop when the laboratory door is opened from the corridor.

Phase I construction is 30% complete. The east wing concrete structure is complete, the steel roof framing is in place and covered with roof decking, most of the exterior masonry block has been laid, and exterior stonework has begun. The central tower concrete structure is complete to the first floor, the south wing to the second floor. The shipping and receiving area structure, and the concrete retaining wall around the new loading ramp are complete.

Underground utilities are in place throughout and are currently being extended toward upper floors. Ventilation and exhaust ductwork is being installed to the second floor of the east wing. Electrical conduits are extended into all completed concrete structures.

A second project is required to remedy remaining deficiencies in the original 1930’s building and 1964 annex. Currently estimated at $21.7 million, Phase II will update and upgrade both facilities and alleviate chronic problems with antiquated space configuration, an aged and inadequate ventilation system, and electrical and plumbing utilities used to capacity.

The Indiana General Assembly is now considering a request from the University for Phase II funding. As this newsletter goes to press, it is not known whether the project will be funded in its entirety. Design will begin this summer. If fully funded, construction could begin in 1988 and be completed by the end of the decade. With modern facilities, the Department of Chemistry will continue to attract superior personnel and maintain its reputation for excellence.

**FERSHT AND STILLINGER ARE MATHERS AND GUCKER LECTURERS FOR 1986-87**

Professor Alan R. Fersht, Wolfson research professor of the Royal Society of Great Britain and professor of chemistry at the Imperial College of Science and Technology of London University, was the speaker for the 1986 Mathers Lecture on October 30. His topic was “Protein Engineering of Enzyme Structure and Activity.”

Professor Fersht received his PhD from Cambridge University in 1968, working with Dr. A. J. Kirby on intramolecular catalysis. After nine years at the Medical Research Council Laboratory of Molecular Biology at Cambridge University, he took his present position at London University.

Professor Fersht was elected a member of EMBO (European Molecular Biology Organization) in 1980 and a Fellow of the Royal Society in 1983. He received the FEBS (Federation of European Biochemical Societies) Anniversary Prize in 1980 for his work on enzyme structure and activity, and this year shared the Second Triennial Novo Biotechnology Prize with Dr. G. Winter for their work on protein engineering.

Dr. Frank H. Stillinger of AT&T Bell Laboratories in Murray Hill, New Jersey, was the speaker for the 1987 Gucker Lecture this January. His topic was “Order in the Face of Chaos: Inherent Structure in Dense and Reactive Media.”

Dr. Stillinger received his PhD in theoretical chemistry from Yale University in 1958. He joined the technical staff at AT&T Bell Laboratories in 1959, where he continues his research, serving as head of the Chemical Physics Research Department between 1976 and 1978. He was elected to the National Academy of Sciences in 1984, and in 1986 was awarded the American Chemical Society Hildebrand Award.
FACULTY NEWS

Lynne L. Merritt, Jr.

Kenneth L. Busch has been exceedingly successful in his research production this past year. He lists 16 articles either published or in press and an additional three already submitted. He has received nearly a quarter of a million dollars to support his research efforts in mass spectrometry during 1986. Invited lectures include those given at the American Conference on Mass Spectrometry and Allied Subjects, Oak Ridge National Laboratory, Eastern Analytical Conference, and at Eastman Kodak and Upjohn Companies. He and his students have also presented some 17 papers at scientific meetings in the US.

Ernest E. Campagne continues to be very active, especially in the Indiana Academy of Science. He served as president of the Indiana Academy of Science in 1986, a member of the editorial board of the Proceedings of the IAS, a member of the Executive Secretary Feasibility Committee and the Logo Committee. Campagne is also a member of the editorial board of the Journal of Heterocyclic Chemistry. His community service includes membership on the Meadowood Board of Directors; president-elect and chair of the Program Committee of the Indiana University Annuitants Association; member of Futures Research in Education, IU; and a member of the Center for Excellence Task Force, Science in Education Committee, Corporation for Science and Technology.

Charles T. Campbell received an Alfred P. Sloan Research Fellowship this year. He gave invited talks at the National Symposium of the American Chemical Society and at the 6th Annual Gascification Contractors Meeting of the DOE, and a number of university colloquia throughout the country. He continues to serve as treasurer of the Colloid and Surface Chemistry Division of the American Chemical Society. Otherwise, he has been busy setting up his new laboratory and research group here. His group consists of five graduate students and a postdoctoral research fellow. This year, six of his research papers appeared in scientific journals, nine others have been accepted for publication, and five more have been submitted. He has also received three new research grants. He has also been active in renovating the equipment and curriculum in his C315 "Chemical Measurements Laboratory" course, which was made possible partly by his solicitation of industrial contributions.

Kenneth G. Caulton's group is exploring the chemistry of compounds containing, simultaneously, several transition metals, particularly with the objective of reducing small carbon oxide molecules. Caulton has lectured this year at both national ACS meetings, at Hope College, at the Universities of Delaware and Milan (Italy), at a National Research Council laboratory in Florence, Italy, and at Brookhaven National Laboratory. Recent research results provided a vehicle for attendance by Caulton and graduate student, Eric Lundquist, at a gathering of chemists and biologists in Pugnochiuso, Italy, on the subject of carbon dioxide chemistry.

Jack Crandall was on sabbatical leave doing research during '85-'86 at the University of Pierre & Marie Curie in Paris. He received a Fulbright travel grant in support of this and lectured in Belgium, England, and Yugoslavia, in addition to a number of institutions in France under the auspices of Fulbright.

Ernest Davidson was promoted to distinguished professor of chemistry last spring. In addition to research and teaching he served as director of the Chemical Physics Program and the Quantum Chemistry Program Exchange. He organized a meeting of the Midwest Theoretical Chemists that brought over 100 theoreticians to the Bloomington campus in May. Additionally, he organized a symposium on potential surfaces for the National A.C.S. meeting in Anaheim. On this high note, he was obliged to spend a week on the French Riviera while attending the annual business meeting of the International Academy of Molecular Quantum Science of which he is treasurer.

Harry G. Day continues to serve on the Bloomington Faculty Council and is a member of several University and national committees. He continues to work on his history of chemistry at IU and in the State of Indiana. In connection with this he has written separate 45-50 page biographies of H. T. Briscoe, R. E. Lyons, and F. C. Mathers. Copies will be given to alumni and others upon request, but recipients are invited to contribute to the Indiana University Foundation for Friends of Chemistry or some other organization benefiting IU. This year he is president of the IU Emeritus Club; thus he especially desires to have a large turnout of chemistry alumni at the Alumni Weekend, June 13 and 14, 1987.

Paul Greco was a distinguished lecturer at the University of Wyoming during the week of June 16-20, 1986. He also presented a lecture at the Gordon Conference on Organic Reactions and Processes, New Hampton, New Hampshire, July 14-18, 1986.

Frank R. Gauld retired as distinguished professor of biochemistry and chemistry on July 31, 1986. Frank was a member of the School of Medicine faculty at Indianapolis from 1960 to 1970. In 1970 he moved to Bloomington and was named a distinguished professor in 1979.

Felix Haurowitz has been an honored member of the chemistry faculty since 1948. He had been noted in biochemistry more than a decade. His productivity, especially in immunochrometry, accelerated at IU. The most recent contribution of note was his participation by invitation as the first speaker in a session on the history of immunology at the international meeting of immunologists in Toronto in July. It is reported on good authority that his presentation was followed by a standing ovation. The observance of his 90th birthday here, on February 28, 1986 (birthday actually March 1), included a special reception with a very large birthday cake, and the presentation of a birthday card signed by scores of faculty, staff, and students in the department. K. L. Knight, PhD '66, one of his especially accomplished students, gave a seminar: "Cloning and In Vitro Expressions of Immunoglobin in Heavy Chain Genes." This was followed by a dinner — with brief speeches — at the Woodburn House. Regrettfully, since late fall he has been ill at his home, 901 Juni-per Place, Meadowood, Bloomington, Indiana 47401. Despite his illness he continues to work at his desk at home, and he is pleased to receive visitors and mail. He is the only member of the chemistry faculty with an honorary doctorate from IU, 1975. This, in addition to many other high honors, makes him our admired number 1 colleague. His 91st birthday was March 1. A very happy birthday, Distinguished Professor Haurowitz. We hope he receives a great flood of letters this spring. It would be excellent medicine.

Gary Hieftje's activities during the past year were as hectic as usual. His group published 21 papers, two patents were awarded, and 17 manuscripts were submitted. In addition he and his group presented a total of 69 invited and contributed lectures. Among those lectures were a number overseas, including one at the University of Aberdeen's Macaulay Institute for Soil Science, one at the University of Manchester Institute of Science and Technology, one at Loughborough Institute of Technology, one at the University of Strathclyde in Glasgow, and a special award lectureship (the Theophilus Redwood Award) at the Royal Society of Chemistry meeting at the University of Warwick in Coventry. Other special presentations included the Mobay Lectureship at the University of New Hampshire, the Barnett Lecture Series at Northeastern University, and the Boomer Lecture Series at the University of Alberta.

During this last year, Gary received the Pittsburgh Analytical Chemistry Award, presented by the Society for Analytical Chemists at Pittsburgh and given at the Pittsburgh Conference. In addition to the Theophilus Redwood Award, it was also
announced that he would receive in 1987 the American Chemical Society Award in Analytical Chemistry sponsored by the Fisher Scientific Company and also the Tracy M. Sonneborn Award, given by IU in recognition of distinction in teaching and research.

During the past year, Gary served on the editorial boards of eight journals and as the editor of a new journal, *Progress in Analytical Spectroscopy*, and the book series, *Contemporary Instrumentation and Analysis*. He was the chair of the Analytical Chemistry Division of the American Chemical Society and also chaired the review team for the Chemistry Division of Los Alamos National Laboratory.

Finally, Gary worked as a consultant for a number of outside organizations, including Los Alamos, Lawrence Livermore National Laboratory, the Perkin-Elmer Company, the Upjohn Company, American Cyanamid, and SOHIO.

A. S. Lewin was chosen as an established investigator of the American Heart Association. This award is based upon an extensive review of his research and an evaluation of his potential for future productive research by the scientific review panel of the Association. The award pays his salary for five years from August 1987 to July 1992. He travelled to the joint meeting of the A.C.S. Biological Chemistry Division and the American Society of Biological Chemists in Washington, D.C. where his student, David Burns, presented an invited lecture on the kinetics of import and assembly of the mitochondrial ATPase.

Philip Magnus was on sabbatical leave during the fall semester of 1986. He was invited to speak at numerous meetings and symposia, including The Pharmaceutical Society of Japan, Chiba, Japan; The Royal Society of Chemistry, Bath, UK; a symposium on Originalité en Chimie Organique, Paris, France; and a symposium at Texas A&M University. The Japan Society for the Promotion of Sciences invited Philip to visit all of the main institutions throughout the islands of Japan during the month of November. He visited and talked at some 10 universities and three pharmaceutical companies. In the US and UK he was much sought after as a colloquium speaker during 1986. Magnus is a member of the Editorial Advisory Board of the *Journal of Organic Chemistry*, a referee for numerous other publications, and a referee for grant proposals to the NSF, NIH, the Petroleum Research Foundation, and other granting agencies.

Lynne L. Merritt, Jr. continues to be active in teaching, having taught Instrumental Methods of Analysis at the IU Northwest campus in Gary during the spring semester of 1986 and is presently teaching the same course during the spring semester of 1987. During the fall of 1986, he taught Analytical Chemistry I at IUN. He serves as the University Grand Marshal at commencements and other ceremonies and on several University committees, most notably the committee which recommended the establishment of the Wells Scholars program. The analytical group of the department has been selected by MUCIA (Midwest Universities Consortium for International Activities) to be the backup group to two Central Analytical Laboratories in Bogor and Yogyakarta, Indonesia, under a contract between the Indonesian government and MUCIA. As coordinator of the analytical group for this project, Lynne will travel to Indonesia to ascertain which members of the analytical group will be asked to go to Indonesia as short-term advisors in various fields and to schedule these visits.

Milos Novotny received the ACS award for Chromatography for 1986. The award and Novotny's lecture were presented at the April 1986, ACS meeting in New York City. During 1986, Milos was as active as always and presented invited lectures on his specialty at numerous places, including NIH, the Pittsburgh Conference, A.C.S. meetings and symposia; international and regional symposia held at such places as San Francisco, Houston, New York City, and Devil's Head Lodge, Wisconsin; Gifu and Chiba, Japan; Tamsui, Taiwan, and Stockholm, Sweden. He also lectured at the University of Minnesota, the IBM corporation, IUPUI, and an informal meeting of Purdue and IU analytical chemists held at Turkey Run Park. For an interesting overview of Novotny and his research interests and accomplishments, one should read the article about him "What's in the Brew? Separating the Substances of Life," in the October 1986 issue of the *Indiana Alumni* magazine.

Charles Parmenter's research group has become increasingly involved with detailed studies of state-to-state vibrational energy flow in large polyatomic molecules (10 atom or even six atom molecules are large). Lasers are used to excite initially selected vibrational states. Sensitive detection of molecular fluorescence or, in a recent venture, laser multiphoton ionization are used as probes of the new vibrational states reached in the transfer processes. One set of experiments probes the vibrational energy redistribution that occurs on picosecond time scales in large isolated molecules with high vibrational energies. A special type of picosecond spectroscopy has been developed for this study. Other more conventional experiments concern collisional processes in 300K bulbs, in expanding cold supersonic jets and half-collisional energy transfers after van der Waals complexes are excited. A crossed molecular beam apparatus has recently come into operation for studies of rotationally and vibrationally inelastic scattering with close control of collision energies. This is a completely new type of experiment and the first results with state-to-state scattering from glyoxal are highly promising.

Dennis G. Peters and graduate students Joseph Stemple and Matthew Vincent attended the Great Lakes Regional ACS meeting in Milwaukee, at which Peters presented an invited talk and chaired one of the scientific sessions during the first three days of June 1986.


From May 4 to May 6, 1986, Professor Peters, along with graduate students Joseph Stemple and Matthew Vincent, attended the Electrochemical Society meeting in Boston, where Peters presented an invited research paper.

On November 13, 1986, Professor Peters presented a lecture at the Department of Chemistry, Miami University, in Oxford, Ohio.

From October 29 to November 7, 1986, Professor Peters was in Japan to attend the First International Symposium on Electroorganic Synthesis held at Kurashiki, Japan; at the symposium, he presented an invited short paper, exhibited a poster paper, and chaired one of the scientific sessions. While in Japan, he presented invited research lectures at Tokyo University of Agriculture and Technology, Tokyo Institute of Technology, and Tohoku University (Sendai); at the last university, Professor Peters crossed paths with Professor Philip Magnus, who was on his own lecture tour of Japan.

In December, 1986, Professor Peters was elected a fellow of the Indiana Academy of Science.

V. J. Shiner presented an invited lecture at the International Union of Pure and Applied Chemistry Conference on Physical and Organic Chemistry in Tokyo, Japan, in August 1986, and in June 1987 he will return to lecture in Zagreb, Yugoslavia, where he spent the month of November 1985 as a Fulbright lecturer.

Gary Wiggins spent a month in Zagreb, Yugoslavia last summer as a faculty exchange fellow working primarily with the library at the Rudjer Boskovic Institute. He is currently writing a textbook, An *Introduction to Chemical Information Sources*, for which a sabbatical leave was granted during the fall 1986 semester.

R. Mark Wightman's research group had a very busy year in 1986. In December 1985, Jonathan Howell received his PhD and went to work for Bioanalytical Systems in West Lafayette, IN. James C. Bigelow received his PhD at the same time and is currently doing postdoctoral studies with Prof. Calvin Giddings at the University of Utah. In the spring Paul Kovach received his PhD and is now employed at Eli Lilly & Co. in Indianapolis.

(Con't. on next page)
FACULTY NEWS

Robert Wilson also received his degree in the spring and is now working for Procter and Gamble. In the fall, Mark Deakin and Werner Kuhr received their PhD’s. Mark went for an industrial postdoctoral position with IBM in San Jose, California, and Werner is doing postdoctoral research in neurochemistry at Groningen in the Netherlands.

Several Wightman group alumni have reported newsworthy events in 1986. Dr. Linda Powell, who is now a research supervisor at DuPont, had her second child, a girl. Dr. Mark Dayton, who is now in residency at the Indianapolis Medical Center, had his second child, a boy. He and Jean are enjoying life in Chicago at Baxter-Travenol. Prof. Andrew Ewing, who is at Penn State, dropped by and gave an excellent seminar at one of our research meetings.

David R. Williams has, during the past year, been invited to lecture at many industrial laboratories and universities. The industries include: Sea Pharm, Warner-Lambert, New England Nuclear (DuPont), Cambridge Isotopes Laboratory, Stuart Pharmaceuticals, Berlex Corporation, Monsanto, PPG Industries, and Pfizer. The universities include: Wayne State University, Ohio State University, MIT, and the University of South Carolina. In January 1986, he was an invited lecturer at the Eleventh Mona Symposium on Natural Products and Medicinal Chemistry at the University of the West Indies, Mona, Jamaica and in June 1986, at the 20th Great Lakes ACS Regional Meeting’s Symposium on Stereoselective Organic Synthesis. David is, as reported previously, an Alfred P. Sloan Fellow.

GRADUATE NEWS

P. Stapleton

The graduate adviser for the 1985-86 academic year was Professor Paul A. Grieco. Serving with him on the Graduate Standards Committee were professors Christou (inorganic), Gajewski (organic), Gurd (biochemistry), Peters (analytical), and Reilly (physical).

Professor David R. Williams was chair of admissions. Professors Busch (analytical), Christou (inorganic), Ewing (physical), Hites (analytical), Lewin (biochemistry), and Stryker (organic) reviewed the applications submitted for graduate work in chemistry. Forty-nine students entered the department in the fall of 1986. In spite of the intense recruiting efforts by neighboring Big Ten departments and certain east coast institutions, we significantly increased the percentage of acceptances compared to number of offers over those of previous years.

FELLOWSHIP HOLDERS: The department was able to award four industrial fellowships to upper-level graduate students in 1985-86: General Electric, Lubrizol, Monsanto, and Procter & Gamble.

David L. Clark, who received a BS degree from the University of Washington, was the recipient of the General Electric Fellowship for the academic year 1985-86. His thesis, “Tetraneuclear Molybdenum and Tungsten Clusters Formed by the Coupling of Metal-Metal Triple Bonds,” was finished in November 1986 under the direction of Professor Malcolm M. Chisholm. He has accepted a postdoc at the University of Oxford.

The Lubrizol Fellowship was awarded to Ricky D. Gaston. He is involved in a research project in Professor David R. Williams’ laboratory directed toward total synthesis of breynolide, a complex antibiotic aglycone with potent hypocholesterolemic activity in mammalian systems. Gaston received his BS degree from the University of Pittsburgh.

The Monsanto Fellowship for the academic year 1985-86 was awarded for the second time to Leonard J. Galante who is a student of Professor Gary M. Hiefke. Mr. Galante also received a degree from the University of Pittsburgh. His research involves ion chromatography.

Carl L. Winstead, a student of Professor Peter W. Langhoff, received the Procter & Gamble Fellowship for the academic year 1985-86. Mr. Winstead is a physical chemist doing research involving applications in spectroscopy of the so-called Feshbach-Fano theory. He received a BA degree from Rice University.

A National Science Foundation Fellowship was held by Lawrence M. Principe, who received his undergraduate degree

WILLIAM A. ROUSH JOINS CHEMISTRY FACULTY

Dedamia Whitney

"Many boxes," is the way Associate Professor William R. Roush, a synthetic organic chemist who joined the chemistry faculty this January, describes the current condition of his third-floor lab. Roush and his five graduate students and three postdocs are presently unpacking laboratory equipment into newly remodelled space on the third floor. When the labs are set up, Roush and his students will be conducting research in stereo and enantioselective synthesis.

Roush comes from Indiana from MIT, where he taught from 1978 to 1986. He holds a bachelor’s degree from UCLA (summa cum laude 1974) and a PhD from Harvard (1977). His dissertation, "A Synthetic Approach to Dendrobine," was the result of research conducted in the laboratory of Professor R. B. Woodward.

"The work I did as a graduate student was my own," says Roush. "Woodward spent about six months out of the year away from Harvard, and most of the contact graduate students had with him was at parties. When I decided to work for him, he insisted that I talk to other people so that I would realize that I would have to work independently. My first chemical discussion with him was nine months later." As a consequence, Roush says, "the period in his lab was a pressure-free situation. I could try anything I wanted, and I knew that even if it were totally unsuccessful scientifically it could still be successful for me.”

Roush’s experience in Woodward’s lab has influenced the way he treats his own graduate students. "Sometimes a student will come to me and ask 'How many reactions a week do we have to run?' and I tell them that's not the right question. I want them to turn even the unsuccessful experiment into an educational experience.

"I try to handle each student differently. I spend a lot of time with each one. If I have a student who needs more distance, I'll give it, but they have to earn that distance, too." Roush sees his responsibility to his students as 'keeping them focused. It's a balancing act between their needs as scientists and my concerns for accountability.' Roush said his needs are different than Woodward's were: "He had the reputation of preparing NIH proposals that said 'More of the same!'”

Roush and his wife, Rosalie, and their three-year-old daughter, Rebecca, have purchased a home on Hawthorne Street. Rosalie Roush is a native of Boston. Their decision to move to Bloomington was "a lifestyle decision," she says. "We liked the things a big city can offer, but in truth we didn't take advantage of them because it was too much hassle. We had the opportunity to go to other big cities, but we both liked Bloomington immediately."

The caliber of the department was the major factor in their decision to relocate in Bloomington. "I carefully analyzed the departments that had made us an offer, and I was impressed by how much this department had strengthened itself in recent years. This department is certainly on an upward slope, and it has the potential to continue strengthening itself."
DuPont Associate Instructor Awards: John W. Benbow, Carol A. Kreader, Cornelia S. Langer, and Jeffrey R. Millard.

from the University of Delaware. Mr. Principe’s research, under the direction of Professor Philip D. Magnus, involves the use of organocobalt chemistry for the synthesis of various cyclopenetanoind natural products.

Other fellowship winners were Werner G. Kuhr, Division of Analytical Chemistry of American Chemical Society Summer Fellowship; Mark K. Deakin, Energy Research Summer Fellowship of Electrochemical Society; Bryan W. Eichhorn, Standard Oil (Ohio) Fellowship; Jimmie L. Moore and Franklin H. White, Upjohn Fellowships.

Graduate School Fellowships were awarded to the following: John W. Chambers, Charles J. Deodene, Patrick D. Lowder, Michael A. Marks, Robert M. O’Keefe, Dale L. Rieger, and Jay P. Roberts. Carey M. Cheri and Reginald O. Stanton received Minority Graduate School Fellowships. Judith A. Edling, Leslie J. May, Ravi P. Nargund, and Leslie A. Robinson received C*POP (Graduate and Professional Opportunities Program Fellowships).

Foreign students with fellowships were: Ronaldo Barbieri, Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq; Ali Bahsas, Rudolf R. Jaffe, Jose Rodriguez, and Gabriel Salazar, Venezuelan Fellowships; and Paul Galatis, Natural Sciences and Engineering Research Council (Canada) Post-Graduate Fellowship.

ANNUAL AWARDS: At the Chemistry Department Honors Banquet in April 1986, the following students received the DuPont Associate Instructors Award for excellence in teaching: John W. Benbow, Carol A. Kreader, Cornelia S. Langer, and Jeffrey R. Millard.

Ignacio Faus, doing research with Professor John P. Richardson, was awarded the Chernin Award for outstanding C500 research. The Chernin Award was established in 1964 to honor the memory of Robert Chernin who passed away in 1963 after completing his thesis in 1961.

As a result of a generous gift to the Department of Chemistry from the family of a former student of Professor Haurowitz, the department was able to establish the Felix Haurowitz Award. The award is to be presented to the student with the best overall performance leading up to and including his or her fifth semester review. The first recipient was Constantine Douketis who is a student of Professor James P. Reilly.

The Henry R. Mahler Memorial Award given to an advanced student beyond the fifth semester examination who has done outstanding thesis research in biochemical try was awarded to Bertrand Garcia-Moreno. Dr. Garcia-Moreno finished his PhD under the direction of Professor F.R.N. Gurd.

Bryan W. Eichhorn and Joanna K. Money were joint recipients of the William Nebergall Memorial Award for outstanding graduate research in inorganic chemistry. Eichhorn is doing research with Professor Malcolm M. Chisholm and Money with Professor George Christou.

The second Reiley-Upjohn Award for a third year student who has demonstrated potential for outstanding research ability and accomplishments in analytical chemistry was awarded to George H. Vickers. Mr. Vickers is completing his PhD thesis with Professor Gary M. Hiettje.

RECENT PHDS: PhD recipients for the 1985-86 academic year include the following: Kazi J. Ahmed (inorganic, M. H. Chisholm) accepted a postdoc at Massachusetts Institute of Technology, Cambridge; James C. Bigelow (biochemistry, R. M. Wightman) went to the University of Utah, Salt Lake City, as a postdoc; Timothy P. Blatchford (inorganic, M. H. Chisholm) is a postdoc at Iowa State University, Ames.

Mark R. Busch (biochemistry, F.R.N. Gurd) is at Carnegie-Mellon, Pittsburgh, PA, as a postdoc; David L. Catlett (physical, C. S. Parmenter) accepted a postdoctoral position at the University of Minnesota, Minneapolis; Hsin-Tien Chiu (inorganic, M. H. Chisholm) is a postdoc at the University of Southern California, Los Angeles; Jae Hoon Chung (biochemistry, J. P. Richardson) returned to Korea where he is an assistant professor at the Korea Institute of Technology, Daejeon.

Robert D. Feeney (physical, P. J.
Undergraduate News

W. T. Jenkins, H. W. Willett
During the 1985-86 school year Professor W. Terry Jenkins served as coordinator of undergraduate studies, Holly Willett as academic counselor, and Esther L. Naylor as office secretary.

Second semester of 1985-86 the chemistry department had 555 undergraduate chemistry majors (compared with 557 second semester of 1984-85). We graduated a total of 136 students (78 with BA degrees - down 12 from the 1984-85 academic year) and 58 with BS degrees (20 were BS chemistry - up two from 1984-85, and 38 were BS biochemistry - down three from 1984-85). C & E News reported that Indiana University produced more new bachelor chemistry graduates (149) during the 1984-85 academic year than any other school in the country.

Twenty students participated in our Chemistry Honors Program during 1985-86, and 31 students engaged in C409 Chemical Research (an undergraduate research program entailing up to 10 hours of credit and requiring a thesis). Thirty-eight graduating seniors went on to medical school, 14 to dental school, 14 to graduate school in chemistry, 11 to graduate school in other science related fields, five to MBA programs and 35 to industry.

The Chemistry Cooperative Education and Internship Programs are under the direction of Ms. Kathy Reidhaar and Mr. Ray Easterlin at the Career and Placement Support Service Office. These programs continue to be attractive options for chemistry majors.

The Annual Chemistry Honors Banquet was held on April 17, 1986. The following undergraduate students were honored:

The Outstanding Senior Awards went to James A. Krom and Seiichi Noda. Kevin R. Edwards received the William H. Bell Award and Charles J. Paget III, the Frederic C. Schmidt Award. Kwai-Wah Leong received the Joseph B. Schwartzkopf Award, Jeffrey S. Mormal received an award from the Southern Indiana Local ACS section. Shoshanna D. Rose was awarded the 1986-87 Courson-Greeves Prize; Merck Indexes were presented to Vincent B. Delumpa, William G. Morice, and Sherry L. Voytk.

The R. J. Grim Scholarship recipients for 1985-86 were: Julie Chao, Kevin R. Edwards, Thomas W. Herendeen, Jeffrey S. Mormal, Seiichi Noda, Charles J. Paget III, Katherine L. Patterson, Shoshanna D. Rose, Paul M. Rougraff, Joseph M. Szwed, Jeffrey A. Whaley, and Mathew S. Williams.

Ira E. Lee Summer Research Scholarships for full-time summer research for 1986 were awarded to Ronald F. Baldwin, William C. Bowman, and Warren J. Chang. Harry G. Day Summer Research Scholarships for full-time research for summer 1986 were awarded to John C. Bart, Cheryl A. Christmas, Kevin R. Edwards, William G. Morice, Dallas E. Peak, Karyn W. Rahn, and Sherry L. Voytk.

Harry G. Day Academic-Year Scholarships for 1986-87 were awarded to John C. Bart, Warren J. Chang, Cheryl A.

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Summer 1986 Research Scholarship winners (either Lee or Day): front row: John C. Bart, Cheryl Christmas, Kevin Edwards; back row: Ronald Baldwin, William Bowman, Joe Szwed, Dallas Peak, Kary Rahn
STAFF RETIREMENTS

Mrs. Betty Beard, senior clerk in the Business Office, retired on May 30, 1986. Mrs. Beard, who started in the chemistry department on June 1, 1966, was the recipient of the Chemistry Staff Award for 1985-86. Betty worked cheerfully and effectively with the department’s statements of accounts and all departmental travel requests and vouchers. She and her husband are enjoying joint retirement on their acreage near Elletsville.

Mrs. Betty Grubb, most recently secretary for Professors Bair, Bonham, Huffman, Reilly, and Viola, retired on August 29, 1986. Mrs. Grubb, who worked in several capacities in the department, started in chemistry during February 1964. She was the Chemistry Staff Award co-winner in 1983. Betty’s work was of the highest quality and much appreciated by those who worked with her. Both she and her husband are thriving in retirement at their home in Sanders.

Steve Williamson, electronics technician in the electronic instrument services area since January 1967, resigned his position on September 26, 1986, to assume a pastorate in a Louisville church. Additionally, Steve is working in the electronics field at the University of Louisville.
Lyman R. Caswell, BS'49, AM'50, who went to Texas Woman's University years ago, will offer a new course this year on history and philosophy of science. He expects it to be an "experiment in rubbing together the 'Two Cultures'."

H. F. Cheng, PhD'57, and Margaret will spend the first part of 1987 at the U. of California-San Francisco where he will be on sabbatical leave from U. of Iowa.

Lisa Sanders Childers, BA'70, MS'75, MD'75, and her husband, Ray F. Childers, PhD'72, live at Carmel, IN. She is a general internist, and he is a research chemist at Lilly's.

John F. Christman, AM'46, has retired at Loyola U., New Orleans, but he is much involved in projects with computer applications. His lecturing on ACS tours continues.

William F. Coleman, PhD'70, was in 1986 the recipient of a Chemical Manufacturers' Association Catalyst Award for Distinguished Teaching. He gave a special seminar in the IU chemistry department October 24 on some of his research: "What Goes Up Must Come Down — The Relaxation of Excited States in Complexes of Chromium (III)." Also in 1986 he was elected alternate counselor of the Division of Chemical Education. At IU his research was directed by Dean Ward Schaap. He is professor and chair of the Department of Chemistry at Wellesley College.

Chester Davis, BS'44, was featured in the summer 1986 issue of the Arts and Sciences (published by the IU Alumni Association). The one page "word picture" was triggered by his great generosity in contributing major funding for undergraduate chemistry major scholarships and for research fellowships at IU, the latter for young chemists and physicists of high promise who have already made significant achievements in research. Chester comes to the campus for brief visits every few months. He is always stimulating and indeed worth listening to.

William C. Day, BS'35, continues in his diverse and innovative ways. Having produced the second edition of his Genesis on Planet Earth (Yale, 1984), he has begun to write on problems in the realm of physics. However, he is fascinated by opportunities and challenges in commercial applications of microbiological procedures and the development of new products. He is connected with the Stoller Research Company at Santa Cruz, CA. He lives at Monterey Bay. Much of his time is spent at the company's specialty mushroom farm near Santa Cruz. He gives some time to other commercial biological problems.

Robert Degan, PhD'55, hopes to attend the ACS meeting in April, perhaps with his wife, Josette. He may retire within a year, but if so he will continue to work. He comes to America frequently. The Degelis live near Paris, France, and are very active in their church, especially in singing.

John B. Dennis, AB'36, and wife were among the several chemistry majors attending the 50th anniversary meeting of his class in 1986. For a long time he was chief chemist of the Charden Rubber Company.

Bryce Douglas, post PhD'53-55, has recently retired but he has not found "the spare time which is supposed to have been created." He was vice president for Science and Technology at the Smith, Kline Beckman Corporation. He continues to serve on several boards of trustees including the Franklin Institute, Beaver College, and U. of Maryland School of Pharmacy. He and wife, Joyce, live on their "farm" northwest of Philadelphia.

Leon Ellenbogen, PhD'54, continues as chief in Nutritional Science at Lederle Laboratories where he is also senior associate director of Professional Pharmaceutical Services.

Raleigh C. Farlow, BS'75, has completed his medical degree in the Philippines and is now with BCI Consultants in California. They specialize in "Environmental and Medical Research and Systems Development."

James P. Ferris, PhD'58, has completed a sabbatical leave at the Swiss Federal Institute of Technology and has returned to Rensselaer Polytechnic Institute. In Zurich he was associated with Professor A. Eschenmoser in their common interests in primordial organic chemistry and the origin of life.

Thomas R. Fink, BA'65, works in environmental conservation with ARCO in Anchorage, Alaska. He is associated with the advisory board for the local community college that is merging with the Anchorage Branch of Alaska State University. His wife, Sylvia, is connected with a special library project supported by the State Library.

Edmund A. Flexman, PhD'67, through the success of his duPont group with their polymer, Delrin ST, has led him to focus more on the needs of the automotive industry where the new "super-tough" plastics are replacing metals in many applications. In 1986 he gave five speeches in Europe on his work. His wife, Ruth, an IU graduate, remains prominently active in the Lutheran Church.

William O. Foye, PhD'48, will see the publication of the third edition of his medicinal chemistry text in 1987. In 1986 he lectured in Glasgow, Scotland, and in Manchester, England. He was elected AAS Council Delegate as a representative of the pharmaceutical sciences. In 1987 he will be on a lecture tour in Australia, Indonesia, and India.

Stephen H. Friend, PhD'79, MD'81,
and colleagues at the Whitehead Institute for Biomedical Research and at the Massachusetts Eye and Ear Infirmary, have been in the public and professional news for isolating the gene responsible for retinoblastoma. This is a rare but often hereditary eye cancer. The Boston Globe opined that knowledge of the gene promises to add a new dimension to the understanding of the transformation of normal cells into tumor cells. The discovery was published in Nature.

Charles E. Frohman, MS’48, and wife, Evelyn Sisson Frohman, BS’43, are now retired. In the first year they devoted much time to travel in Europe and America. Evelyn is doing recording for the blind, and Charles is in training to be a docent at the Detroit Institute of the Arts.

Gerald R. Galluppi, PhD’78, a research chemist at Monsanto, is a co-author of one of the 98 cited 1983 chemistry papers as reported in the Dec. 22 issue of Current Contents. At IU he was a student of John Richardson.

Minas Georgiadis, PhD’63, declined an appointment at the University of Athens, preferring to remain head of his department at Botanicos. It has the equipment he needs, and there are several graduate students. All four of the children now have degrees in chemistry from IU and all except Greg have stayed in chemistry. Greg has a MD from IU and he is in medicine. What a family!

Jack M. Gill, PhD’63, continues his venture capital activities with his Vanguard Associates in Palo Alto, CA. The entrepreneurial interest has been extended to the Orient. With his wife, Linda, this will be carried to Taiwan early this year, in part for him to present a capital seminar.

Franz Haas, post PhD ‘63-64, is in charge of polymer production at BASF in Ludwigshafen.

Deborah Hanson, PhD’82, left Monsanto — because the department of 72 persons was closed. She is now in the new plant biotechnology group at the Argonne National Laboratory. Her home is in Clarendon Hills, IL.

Steadman D. Harrison, Jr., MS’72 (chemistry), PhD’73 (pharmacology), directs research on tumors at the Southern Research Institute in Birmingham, Alabama. At IU his research in organic chemistry was directed by M. Cramack and in pharmacology by T. Bosin.

James Hutchinson, post-PhD ’67-69, and wife, Betty, are at Middle Tennessee State where Jim is professor of chemistry.

Konrad Keck, post-PhD’58-59, and wife, Ursula, remember well his productive year here in collaboration with H. Mahler and D. Fraser, both now deceased. He is now professor of cellular and molecular biology at the U. Arizona.

Charles J. Kelley, PhD’70, continues teaching and research inorganic chemistry at Massachusetts College of Pharmacy in Boston. His newest interest is in the synthesis of organic laser dyes.

Joseph Leonelli, PhD’82, following a three-year term in the US Army as captain, assigned to the Chemical Research and Development Center, joined SRI International in Menlo Park, CA in 1985. Recently he became assistant director in the Electrophysics Systems Laboratory.

William M. LeSuer, PhD’48, is retired from the Lubrizol Corporation but in early 1987 he and his wife, Arlene, are going to Spain on a fact-finding mission for the company. Following that they will go to Nairobi, Kenya to help build an addition onto a Methodist Church. This is a continuation of the mission with others last year in Liberia. Bill continues to serve on several business boards of directors and on two college boards.

Chao, Heng Lung, AB’73, and his 8-year-old daughter visited the department briefly in July 1986 while he was in this country on a business trip. He is the director of Wing Wah Textiles, LTD in Bandung, Indonesia.

Fritz-Hans Marguardt, PhD’60, returned to his native Santiago, Chile a few years ago. He teaches and directs research in the Department of Chemical Engineering at the University of Santiago. In addition to his continuing work on natural products he is devoting time to the extraction of sulfur from mineral sources and the improvement of textiles.

Edward Tom Marquis, AB’61, and family remain in Austin, Texas. He is continuing research at Texaco. Three patients concerning his work on catalyst development are about to be issued. Several others are being prosecuted in the Patent Office.

Max Marsh, BS’47, has retired after 43 years at Eli Lilly and Company. His final title, which he held for a long time, was research advisor. His close connections with this department will be continued, particularly on molecular design projects that he began at Lilly, and in advising and giving technical support. He will use the computer graphic facilities in the Chemistry Computational Center. His many services to the department presently include membership on the Board of Overseers and the Advisory Board of the Quantum Chemistry Computational Center. His many other responsibilities include membership on the COAS Graduate School Alumni Association and the IU Institute for Molecular and Cellular Biology. In 1982 he received this department’s Award for Meritorious Service.

Donald R. Maudling, PhD’62, has worked with personnel in several American Cyanamid plants helping get his new agrochemical Scepter in production.

Dana W. Mayo, PhD’57, continues to make news concerning his development and vigorous promotion of microscale procedures for teaching organic chemistry in the laboratory. A major exposure of his advancement was at the 1986 Biennial Conference on Chemical Education held at Montana State University. He is the principal author of a new book, Microscale Organic Laboratory. It has much promise. In a continuation of Dana’s involvement in microscale development he will be prominent in the annual ACS Great Lakes Regional Meeting in June 1987.

William G. Mays, AB’70, continues to be a successful entrepreneur in combining chemistry with business. In summer 1986 the Indianapolis Star featured Mays in a special article on seminars sponsored by the Indiana Institute for New Business Ventures. His Mays Chemical Corporation was started on a “shoe-string” in 1980. It is now thriving and growing.

Astley McLaughlin, PhD’81, went from IU to Eastman Kodak. He works on underwater photography when at Grand Cayman.

John C. Meade, AB’67, is a partner in an Indianapolis law firm and seems to be pretty removed from chemistry, but the background is surely useful. His community responsibilities now include the presidency of the Indiana Chapter of the Leukemia Society. His wife, Nancy, is a part-time teacher of Nursing Nutrition at the IU Medical Center and helps teach Dietetic Technology students at Marian College.

Rodney Moss, PhD’51, went directly to Dow Chemical from IU. He still travels extensively, both foreign and domestic, for Dow in patent development work. He and his wife, Phyllis, do much skiing in northern Michigan.

William W. Paudler, PhD’59, continues as dean of the College of Arts and Sciences, Portland State University. He has managed to write a new book on NMR that will come out this year. His wife, Ronnie, paints and teaches art.

Elsa Proehl Paulsen, MA’45, is the author of “Diabetes Mellitus in Childhood and Adolescence” in Current Emergency Therapy, 3rd Ed. 1986. She is active in the American Diabetic Association and a member of the pediatrics faculty at the University of Virginia. She may attend the ADA meeting in Indianapolis this year.

Eduardo M. A. Peixoto, PhD’68, keeps close touch with the department through correspondence with his mentor at IU, R. A. Bonham. He has recently become chemistry and chemical engineering coordinator for the Brazilian National Program for Development of Science and Technology (PADCT). In addition to his heavy governmental responsibilities, among other activities, he teaches some chemistry at the Universidade de Sao Paulo. The family lives in Rio but he has to spend some time each week in Brasilia

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NEWS OF ALUMNI

and Sao Paulo as well as at home in Rio. A soccer playing son may come to IU.

Michael Poszgai, MLS’86, was one of two students completing work in the Information Specialist in Chemistry program in 1986. He is now a reference librarian at Eli Lilly in Indianapolis. The other graduate in the program was Shyamala Sivaramakrishnan, MLS’86, who has returned to Terre Haute where her husband is a chemist in the I.M.C. Company. The program is directed by Gary Wiggins, BA’66, PhD’86 (School of Library and Information Science), director of the Chemical Information Center and librarian and head of the Chemistry Library.

Andrew L. Ratermann, PhD’83, joined GenCorp in May 1986 as senior research chemist. Previously he had a post-doctoral appointment at Bristol University, England, and at Penn State.

Gerald W. Rechtenwald, PhD’55, and wife, Libby, remain at Allentown, PA. He took “an early retirement package from Air Products” that seemed to be advantageous for him, but he remains active in business. As he wrote, “It looks like a busy year ahead.”

Herbert H. Reiler, PhD’52, went directly to P&G from IU, and most of his research has been concerned with skin in relation to cosmetics and other products of that company. Soon he will retire and then probably give part time consulting service for a few years.

James K. Rice, BS’63, continues actively at the Sandia Labs in Albuquerque, NM where he is staff supervisor. Away from work he is a car enthusiast (four cars in the household), duck and goose hunter, and he teaches a Sunday School class. His wife, Linda, is prominent in piano and organ recitals as well as organist and choir assistant, and she has 47 piano, organ, and voice students. One daughter is majoring in engineering at UNM.

Roger W. Rodgers, BS’68, has a medical oncology practice, and he operates in the Bay Area Oncology/Hematology Clinic in Webster, Texas. At IU he was a part-time assistant in E. Campagne’s Antimalaria Project in his senior year. His MD degree is from Northwestern U.

P. Roy-Chowdhury, post-PhD’58-61, and his wife, Sumita, remain in India. A son, Ajoy, has a graduate assistantship at the University of Cincinnati.

James M. Robinson, PhD’44, spent about 10 years in organic synthesis, then about 15 years in rocket chemistry and engineering. After the big aerospace layoff started he changed to clinical chemistry at the USC Medical Center. He retired in 1984. All members of the family live in southern California. Mac has become a private airplane pilot and enjoys it.

Delmar Sanders, BA’72, MD’78, and his family have a lovely home in Oakland, CA. He has an active practice in neurosurgery. We are glad that he has recovered well from the surgery required by a herniated vertebral disc.

J. S. Sanders, post PhD’80-81, continues to direct research on heterocyclic synthesis at the regional Research Laboratory of CSIR, India. He follows the published work of several IU faculty, especially by Grieco, Magnus, and Shiner.

James F. Schooley, AB’53, has continued to distinguish himself at the National Bureau of Standards where he heads the thermometry group. He specializes in low temperature and superconductivity research. In 1986 the CRC Press published his impressive book, Thermometry. It is a well-written, comprehensive source book for students and professional thermometers.

Ryu Shinke, post PhD’62-63, was delighted to receive a current copy of Research & Creative Activity, a periodic publication of IU’s Office of Research and Graduate Development. The issue featured “Understanding Modern Japan.” He is professor of Agricultural Chemistry at Kobe University. The April 1986 issue of R&CA is almost exclusively devoted to the research of six IU chemistry faculty members.

Crystal Smith, PhD’85, is research chemist with HIMONT in Wilmington, DE. Some of the work involves collaboration on catalyst research with HIMONT Italia in Italy.

Curtis M. Snow, AM’46 and wife, Marcia Snow, AB’48, vacationed in the Netherlands last year in part because Marcia wanted to see the places her ancestors left when they came to the US. Their home is still in Pasadena, MA, and in company he is vice-president of technology.

Ian W. Stapleton, PhD’66, remains active in research at the Commonwealth Scientific and Industrial Research Organization of Australia. David, the eldest son of Ian and his wife, Shirley, is following in his father’s footsteps by doing research in protein and peptide chemistry. He is at the U. of Melbourne. David was born in Bloomington.

Kathy Stith, BS’85, is employed at Quad Pharmaceuticals, Indianapolis.

Barbara Wagner, BS’84, is continuing her graduate work at the U. of California-Davis.

Marlon Walker, MS’83, is continuing his graduate training at Georgia Institute of Technology in Atlanta.

John C. Warner, AB’19, AM’26, PhD’23, Hon. ScD’54, will be 90 years old May 24, 1987. He has at least a dozen honorary degrees, and there have been an extraordinary number of recognitions such as honorary memberships, appointments, and elections to positions of high responsibility, etc. He is the most honored alumnus of this department, and every honor is clearly merited. He is our top alumnus. When his grand birthday approaches in May we trust that IU alumni, friends, and all men affectionately and with pride in his spirit, unselfishness, and loyalty to IU and CMU. He lives in a pleasant retirement community near Pittsburgh, St. Barnabas Village, and he keeps active mentally and physically.

Charles W. Weber, PhD’53, and wife, Phyllis, have been at Oak Ridge, TN several decades where he is “still working and enjoying chemistry.” He coordinates the analytical support for the environmental programs at the Martin Marietta Energy Systems plants. He visited the Bloomington campus a year ago.

Richard Y. Wen, PhD’62, has worked for the 3M Company in Minneapolis since completing his graduate work under the direction of M. Carmack. A new assignment is supervision of the analytical laboratory of the Disposable Products Division. A new product is a refastenable closure tape that is a component of most of the 12 billion disposable diapers now sold in this country. His wife, Donna, is the care coordinator for an HMO for senior citizens.

Ralph White, PhD’67, has written to E. Campagne that his major repositionality at Norwich Chemicol is now in preclinical studies. He much appreciates his professor’s insistence that he minor in pharmacology.

Peter G. Wolynes, AB (with highest distinction) ’71, has been professor of chemistry and physics at the University of Illinois since 1985. Before going to Illinois in 1980 he had become associate professor at Harvard and visiting scientist at the Max Planck Institute at Gottingen, FRG. In summer 1982 he was visiting professor at the Institute for Molecular Science, Okazaki, Japan. From 1977 to 1985 he gave 47 invited lectures including two at IU and 11 in Germany (FRG), Japan, France, England, Canada, and Sweden. Also, he participated in 34 professional meetings here and abroad. Since 1981 he has chaired six symposia sessions. Since 1975 he and his associates have published over 60 papers. This is prefatory to the news that his honors in 1986 included the ACS Award in Pure Chemistry, the first Jack Merski Award Lecturer at the University of Nebraska, and a Guggenheim Fellowship. He was 18 when he graduated from IU. Moreover, his academic start was at the Northwest (Gary) campus and only the last year was at the Bloomington campus.

Julie Yang, AM’52, was in China under UN sponsorship throughout last October. The invitation was from two Chinese building materials research institutes. She gave many lectures and conducted many round table discussions. Four plants were visited.
to Shoshanna D. Rose and Sherry L. Voytk. Ronald F. Baldwin received the William H. Bell Award and Warren J. Chang was awarded the 1986–87 Courson-Greaves Prize. Kevin R. Edwards was awarded the Joseph B. Schwartzkopf Award. Vincent B. Delumpa was given the Frederic C. Schmidt Award, and William G. Morice received an award from the Southern Indiana Local ACS section. Cooperative Education Certificates were awarded to Allison A. Johnson and Rebecca A. Keith, and the Verling M. and Elizabeth Votaw Award was presented to John C. Bart and Lora A. Schweers. Merck Indexes were presented to Julie Y. Chao, Susan J. Gudeman, and James R. Stout. Warren J. Chang was a recipient of the Vice-Presidential Scholars Program Award. Shoshanna D. Rose received the Bernice Eastwood Covalt Memorial Scholarship and the prestigious ACS Charles D. Coryell Award in Nuclear Chemistry for 1987.

The R. J. Grim Scholarship recipients for 1986–87 were: Julie Chao, Robert A. Arte, Thomas W. Herendrein, Lucinda R. Hittle, Mark A. Pierce, Stephanie L. Recktenwald, Shoshanna D. Rose, Paul M. Rougraff, Christopher S. Stipp, James R. Stout, and Joseph M. Szwed.

Ira E. Lee Summer Research Scholarships for full-time summer research for 1987 were awarded to John C. Bart and Cheryl A. Christmas. Harry G. Day Summer Research Scholarships for full-time summer research in 1987 were awarded to Warren J. Chang, Stuart F. Easley, Michael A. Fowler, Lucinda R. Hittle, and Marie Pak.

Harry G. Day Academic-Year Scholarships for 1987–88 were awarded to John C. Bart, Warren J. Chang, Robert W. Chapman, Cheryl A. Christmas, Kevin R. Edwards, William G. Morice, and Sherry L. Voytk. The Harry G. Day Summer Research and Academic Year Scholarships were made possible by a generous gift from Chester Davis, BS’44. Most recipients of these awards participate in undergraduate research projects that not only develop their chemistry talents but also provide invaluable experience for those entering industry or graduate school.

Six students were recognized as superior in various freshman chemistry courses, and received book certificates. Forty chemistry majors were elected to membership in Phi Beta Kappa. Twenty-four seniors, 23 juniors, and 40 sophomore chemistry majors were on the departmental honor rolls. In 1986–87 the Chemistry Placement Office hosted 23 companies. These companies conducted a total of 256 interviews. The companies included: American Cyanamid, AMOCO, AT&T, Baxter Travenol Labs, Berlex Labs, Britsol Myers Co., Chemical Abstracts, Dow Chemical Co., DuPont, Eli Lilly Co., General Electric, Merck & Co. Inc., Merck, Sharp & Dohme, NALCO Chemical Co., National Starch & Chemical Co., Pfizer Inc., PPG Industries, Procter & Gamble, Reilly Tar & Chemical Co., Rohm & Haas, Upjohn, W. R. Grace, and Warner Lambert.

Thirty-two companies have interviewed through the Chemistry Placement Office during the 1987–88 recruitment season. Holly Willett continued as chemistry placement officer manager.

REMEMBER

Social Hours for Indiana University chemists and their friends will be a part of the Alumni Hour at the Third Chemical Congress of North America at Toronto on Tuesday, June 7, 5:30–7:30. It is scheduled for Sheraton Centre, Sheraton Hotel. The AIUC will also be present at the Alumni Hour scheduled for the fall ACS meeting.

UNDERGRADUATE NEWS

(Continued from page 8)
Chemistry Alumni Donors

Christopher P. Dellaquca, BA ’85
John B. Dennis, BA ’36
Burton D. Dietzman, MA ’40
Alan Dinner, PhD ’70
Michael Dipierro, postdoc ’84–85
Joseph L. Disalvo, PhD ’65
Gerald E. Doeden, PhD ’65
H. Arthur Doyal, PhD ’39 (in memoriam)
George G. Dobly, BA ’37
Linnaneus C. Dorman, PhD ’61
LeRoy Dougan, Jr., BS ’37
Timothy (MD ’84) & Mary Eisenhut
H. Eldridge Faith, BS ’38
Brian E. Fee, BS ’82
Joanna D. Ferguson, MA ’33
Allan (BS ’57) & Martha Fish
Becas (PhD ’58) & Sidney (PhD ’58) Fleischer
Ronald A. Forsch, PhD ’77
William O. Forre, PhD ’48
Charles E. Frohman, MA ’48
John A. Frump, BA ’50
Hugh C. Gardner, PhD ’75
Joe W. Garrison, MA ’40
Frank P. Gay, BA ’48
Robert H. Gillesepie, BS ’38
Hugh D. Graham, BA ’61
Benjamin Greenberg, BA ’36
John C. Griess, Jr., MA ’47
Charles H. Griffith, MA ’34
Frank Guthrie, PhD ’62
Ronald E. Hackler, BS ’62
Ruth T. Hall, MA ’67
Larry Hammersley, MS ’75
Carl B. Harms, MD ’74
Nancy J. Harries, BA ’56
Evelyn S. Harte, BA ’34
Miriam E. Hartzell, MA ’46
David J. Hauber, MS ’74
Kent L. Hays, BS ’85
Phil (PhD ’44) & Marian (BS ’38) Hidy
Zachary I. Hodes, MD ’81
Anne H. Hubbard, BA ’42
John (PhD ’74) & Carolyn (BA ’64) Huffman
Tony E. Hugli, PhD ’68
Monique R. Hunt, BA ’86
Neil E. Ickrick, MD ’71
John M. Johnson, MD ’70
William (BA ’30) & Jo Marie Joy
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