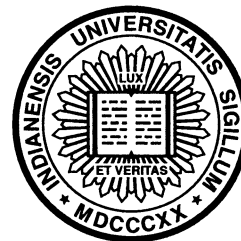


# Association of Indiana University Chemists



## NEWSLETTER



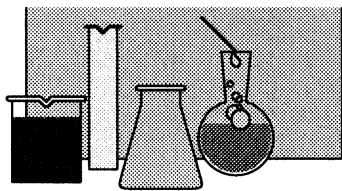
Vol. XL, No. 2

College of Arts & Sciences Alumni Association

Summer/Fall 1995

### NOTES FROM THE CHAIR

I would like to take the opportunity to invite you to a celebration in honor of Professor **Vernon J. Shiner Jr.**, who retired on May 31. Professor Shiner has been in the Department of Chemistry at IU for more than 40 years. He served two separate times as chair of our department. He was also dean of the College of Arts and Sciences. A reception and dinner are scheduled for Friday, Oct. 27. A special symposium will be held on Saturday, Oct. 28, at 9 a.m. in the Harry G. Day Lecture Hall, Chemistry Room 122. The featured speakers will be William W. Cleland, of the University of Wisconsin, Richard L. Schowen, of the University of Kansas, Dionis Sunko, of the University of Zagreb, and Max Wolfsberg, of the University of California, Irvine. For further details, please contact my office.



Our faculty members continue to receive national and international recognition. Since our last newsletter, six of our faculty have been honored. **Malcolm Chisholm** received the **Centenary Silver Medal of the Royal Society of Chemistry** and presented one of the 1994-95 Centenary Lectures in the United Kingdom this spring. The Centenary Lectureships are among the oldest lectureships of the Royal Society and are intended to bring prominent chemists from overseas to the U.K.

**Andrew Ellington** was selected by the Research Corporation as a **1995 Cottrell Scholar**. The Research Corporation is the only U.S. foundation devoted wholly to the advancement of academic science and technology. Cottrell awards are given each year to young faculty scientists striving to excel in both scientific investigation and teaching.

**Milos Novotny** was named the **1996**

**Theophilus Redwood Lecturer** by the Analytical Division of The Royal Society of Chemistry. Professor Novotny will lecture at four or five universities and research centers in Britain, beginning in March 1996.

**Charles Parmenter** was elected to membership in the prestigious **National Academy of Sciences** in April. Membership in the National Academy is considered the highest national honor awarded a U.S. scientist, other than the President's Medal of Science.

**William Roush** was appointed as **Distinguished Professor of Chemistry** at the annual Founders Day Ceremony in March. A Distinguished Professorship is the most prestigious academic appointment at Indiana University and requires significant recognition by peers, based on distinctive scholarly research or creativity or extraordinary success as a teacher.

**Ted Widlanski** was selected by the Alfred P. Sloan Foundation to receive a **Sloan Research Fellowship** to support his research over a two-year period. Selection procedures for Sloan Fellows are designed to identify young scientists who show the most outstanding promise of making fundamental contributions to new knowledge.

Congratulations to all!

Following tradition, the department will host a complimentary alumni breakfast at the summer ACS meeting in Chicago on Tuesday, Aug. 22, at 7:30 a.m., in the Gold Coast Room of the Hyatt Regency Chicago. Please make reservations with me, by Aug. 4, at (812) 855-6239, and plan to join us.

— Paul A. Grieco

### NEXT ONE TO BE IN CHICAGO

#### AIUC BREAKFAST HELD IN ANAHEIM

A standing joke among the chemists at the biennial Gordon Conference on Isotopes is that meetings held on the West Coast have much better attendance than those held in the east because most isotope chemists live in the east! However, California and Disneyland were not sufficiently attractive to AIUC members to keep our breakfast attendance at the spring meeting of the American Chemical Society in Anaheim from falling below average. Harder times and reduced travel budgets also took their toll.

The breakfast was held in the Salinas Room of the Anaheim Hilton and Towers Hotel at 7:30 a.m. on April 4. We were pleased to greet several graduates from the '70s and '80s who had not attended other recent AIUC breakfasts: **Al Sattelberger**, PhD'75, **Bill Nugent**, PhD'76, **Jonathan Lindsey**, BS'78, **Karen Peterson**, MS'88, and **David Brown**, PhD'89. Happily, two of our all-time faithful AIUC breakfast companions, **Ted Logan**, BA'53 and **Frank Guthrie**, PhD'62, were able to be with us once again. Having the meeting in Anaheim made the trip a short one for **Carolyn Dzierba**, BS'92, and **Stephen Gwaltney**, BS'91, who are doing graduate work at the University of California at Irvine. We were also pleased to welcome **Christopher Jagoe**, postdoc'92.

The IUB contingent included **Jack Crandall**, **Joe Gajewski**, **Kevin Gilbert**, **Victor Viola**, and your reporter. We are looking forward to a large turnout for our next breakfast at the ACS meeting this fall in Chicago. Mark your calendars, bring a friend, and enjoy meeting former classmates and chemistry faculty!

— Jack Shiner

## PARMENTER ELECTED TO NATIONAL ACADEMY

**C**harles Parmenter, Distinguished Professor of Chemistry, was elected to the National Academy of Sciences on April 25. Election to membership in the academy is considered one of the highest honors that can be accorded a U.S. scientist or engineer.

Parmenter was born in Philadelphia and completed his BA in chemistry at the University of Pennsylvania in 1955. Following two years of service as a lieutenant in the U.S. Air Force (technical reconnaissance), plus a year as a technical representative for DuPont (photo products), he completed his PhD in 1962 at the University of Rochester with W.A. Noyes Jr.\* After NIH and NSF postdoctoral fellowships with G.B. Kistiakowsky at Harvard, he began his academic career at Indiana University in 1964, rising to his present rank in 1988. He has had visiting appointments at Cambridge University (Guggenheim Fellowship, 1971–72), at the Joint Institute for Laboratory Astrophysics, University of Colorado (Visiting Fellow, 1977–78 and 1992), Griffith University in Brisbane Australia (Fulbright Fellow, 1980), and the Technische Universität München (Humboldt Stiftung Senior U.S. Scientist Award, 1986).

His experimental Chemical Physics Group is well known for development of electronic fluorescence spectroscopy techniques and for a series of discoveries concerning the flow of excitation energy among the electronic, vibrational, and rotational energy levels of gas phase polyatomic molecules. His early work provided the first widely recognized demonstration that an excited electronic state of a polyatomic molecule could decay nonradiatively under isolated molecule conditions without chemical reaction. His development of single vibronic level fluorescence spectroscopy in the pre-laser era of the 1960s provided the first general method for reliable vibrational assignment of electronic absorption spectra. His students also showed how that method could map out the radiative and nonradiative decay channels level-by-level as vibronic levels in collision-free polyatomic molecules were selectively excited. They discovered the unexpectedly high sensitivity of electronic state decay rates to vibrational excitation. His students also used the technique to develop a new and now widely used ap-



*A GATHERING OF SCIENTISTS: Among the distinguished members of the National Academy of Sciences are, from left, Ernest Davidson, Charles Parmenter, and Anthony San Pietro. At right is Malcolm Chisholm, a fellow of the Royal Society, London. A portrait of Professor Woodburn is in the background.*

proach for studying collisional vibrational energy transfer in large molecules. From their work came the discovery that collisional vibrational energy transfer is controlled by strong state-to-state propensity rules. Their development of chemical timing fluorescence spectroscopy provided one of the first time-resolved spectroscopic views of intramolecular vibrational redistribution (IVR), a flow of vibrational energy within isolated molecules that is central to reaction dynamics. This work led to the discovery that functional groups, particularly the internal rotation of a methyl group, could affect profoundly the rates of this energy flow. The present studies of his group include crossed-beam probes of collisional rovibrational energy transfer with large molecules, the vibrational dynamics associated with dissociation of van der Waals molecules and the interaction of internal rotation with other molecular degrees of freedom.

Parmenter served for many years as the faculty advisor of the Chemistry Honors Program and of Alpha Chi Sigma, a professional chemistry fraternity. He has been on the Chemistry Advisory Board of the National Science Foundation and has served as chair of

the Physical Chemistry Division of the American Chemical Society. He has been a member of the Petroleum Research Fund Advisory Board and the Chemistry Advisory Board of the Air Force Office of Scientific Research. He was co-chair of the first Gordon Conference on Molecular Energy Transfer, a series now in its 14th meeting. He has served on numerous journal editorial boards, and is a fellow of the American Physical Society, as well as of the American Association for the Advancement of Science. He was awarded the Spiers Memorial Lecture Medal of the Royal Society of Chemistry (Great Britain). At Indiana University, he has won a University Distinguished Teaching Award, the Sonneborn Award, and the College of Arts and Sciences Distinguished Faculty Award.

*\* W.A. Noyes Jr. (1898–1980) received his degree from the University of Paris in 1920, studying under H.L. LeChatelier (1850–1936), whose degree was in engineering. Fred Stein, PhD'71, a former student of Parmenter's points out that Charlie's postdoc with Kistiakowsky makes him a descendant of Fourcroy — an academic cousin, perhaps.*

# DEPARTMENTAL NEWS

## Around IU Chemistry

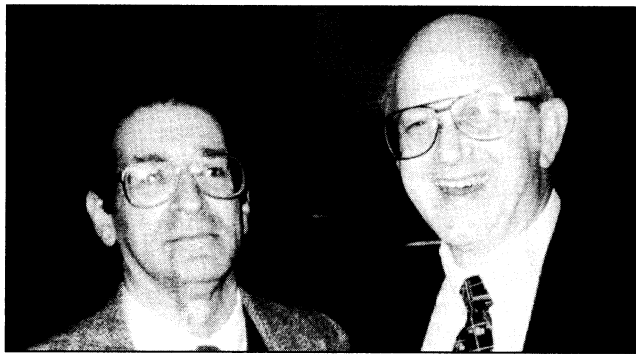
The spring 1995 semester in chemistry had a very busy Distinguished Lecture Series schedule. A unique feature of this series was the presentation of the first Briscoe Distinguished Lecture in Chemical Education on March 1 by Professor **Michael P. Doyle**. Doyle is a graduate of the College of St. Thomas. He received his PhD from Iowa State University in 1968. He began his faculty career at Hope College, moving to Trinity University in San Antonio, Texas, in 1984, where he is currently the D.R. Semmes Distinguished Professor of Chemistry. He has been the recipient of several awards for his educational, as well as his scientific, achievements. More than 80 of his undergraduate students have earned advanced degrees.

In introducing Michael Doyle, Professor **Dennis Peters** also reviewed some of the accomplishments and contributions of the late Professor **Herman T. Briscoe**, after whom the lectureship is named and who was one of the truly important faculty members in the development and growth of Indiana University, particularly of the Department of Chemistry.

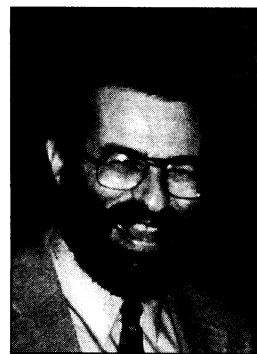
Other noted speakers who visited IU Chemistry included Dr. **Peter A. Kollman**, Department of Pharmaceutical Chemistry, University of California at San Francisco. On Feb. 22, Kollman presented a Distinguished Lecture in Computational Chemistry, titled "Molecular Dynamics Simulations of Organic and Biochemical Molecules: The Interactions Between Theory and Experiment."

On March 8, a DuPont Distinguished Lecture was given by Professor **Richard R. Schrock**, Department of Chemistry, Massachusetts Institute of Technology, Cambridge, Massachusetts. Schrock is a member of the National Academy of Sciences. His lecture was titled "Steric Hindrance in Early Transition Metal Organometallic Chemistry and Catalysis."

Another DuPont Distinguished Lecture was offered by Dr. **M. Thomas Record Jr.**, Department of Biochemistry, University of Wisconsin, Madison, on March 22. Record's subject was "*E. coli* RNA Polymerase-Promoter Interactions: Stability, Specificity, Intermediates in the Mechanism of Formation of an Open Complex."



*Peters, left, and Doyle*



*Kollman*



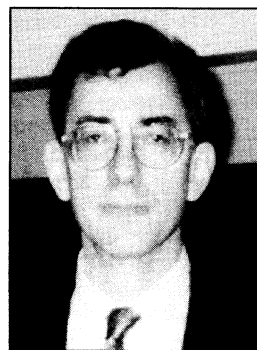
*Schrock*



*Records, left, and Andrew Ellington, 1995 Cottrell Scholar*



*Jorgenson, left, and Novotny*



*Klein*

*SPEAKERS BUREAU: 1995 lectures in chemistry enlightened and instructed.*

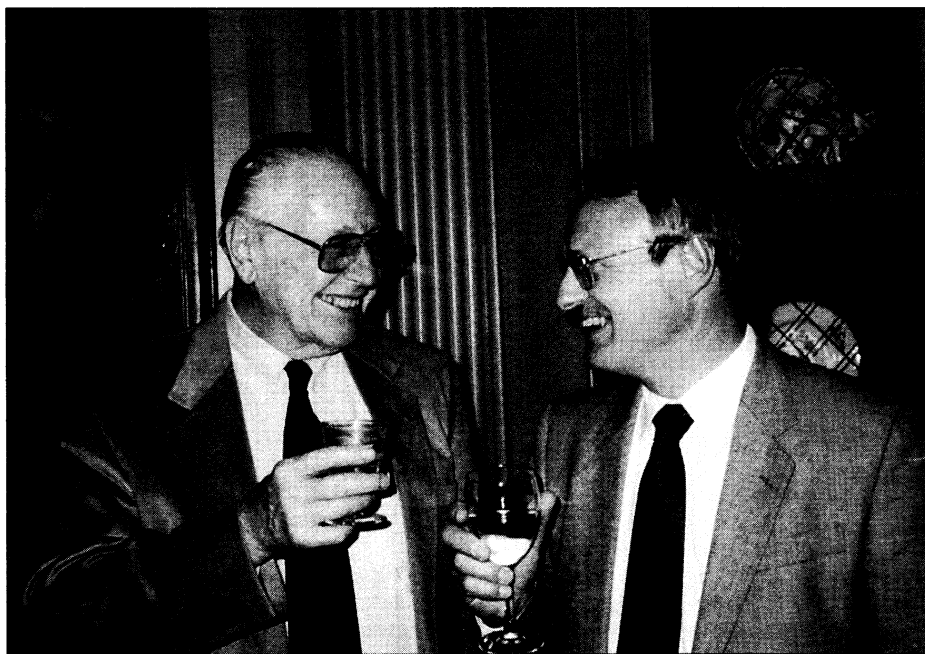
Dr. **James W. Jorgenson**, Department of Chemistry, University of North Carolina, Chapel Hill, was the Eli Lilly Distinguished Lecturer on March 29. Jorgenson is the Francis P. Venable Professor of Chemistry and director of undergraduate studies at North Carolina. The title of his lecture was "High Voltage, High Pressure, and Capillaries: Pushing the Limits of Chemical Separations." Jorgenson received his PhD at IU in 1979, working with Professor **Milos Novotny**.

The third DuPont Distinguished Lecture of the spring series was presented on April 19 by Professor **Michael L. Klein**, Department of Chemistry, University of Pennsylvania, Philadelphia. He

is Hepburn Professor of Physical Sciences, director of the Penn Laboratory for Research on the Structure of Matter, and a fellow of the Royal Society of Canada and of the American Physical Society. His lecture title was "Computer Simulation Studies of Chemistry in Solutions."

An Amoco Distinguished Lecture on April 26 was the last in the current Distinguished Lecture Series. It was given by Dr. **Edward I. Solomon**, Department of Chemistry, Stanford University, Stanford, Calif. Solomon is the first Monroe E. Spaght Professor of Chemistry at Stanford. He spoke on "Electronic Structure Contributions to Function in Bioinorganic Chemistry."

## Campaigne Lecture, reception well attended



*WELL DONE!:* E. Campaigne, left, and Pierre Vogel, who delivered this year's Campaigne Lecture, enjoy the reception following Vogel's talk.

This year's speaker for the Campaigne Lecture was Professor **Pierre Vogel**, of the University of Lausanne, Lausanne, Switzerland. Well known for his scientific efforts in glycochemistry and glycobiology, Vogel chose as a subject for his lecture "Asymmetric Synthesis of Long-Chain Carbohydrates and Polypropionates Starting with Furans."

A reception after the lecture was held in the stately Federal Room of the Indiana Memorial Union. In addition to faculty and friends, some former students and associates of Professor Emeritus **Ernest E. Campaigne** — **Burt Appleton**, PhD'58, **Tal Bosin**, PhD'67, Dr. and Mrs. **Linneaus Dorman**, PhD'61, and **Paul Krieger**, postdoc'74-'76 — were in attendance.

In 1988, friends, colleagues, and former students of **Campaigne** established the lectureship. This fund has permitted the Department of Chemistry to invite several outstanding scientists to give distinguished lectures over the past few years. Professor Vogel ably continued that tradition.

## 1995 National Science Olympiad held at IUB

One of the most prestigious science events in the nation came to Indiana University on May 18-21. This tournament lived up to its name — Olympiad. Events included everything from the Pentathlon, which not only tested students' physical agility, but also their knowledge of science, to the Periodic Table, which tested their knowledge about the elements, electron configurations, and other relationships of the elements. Other events ranged from Aerodynamics, in which students created their own paper airplanes and flight times were recorded, to Water Quality, which dealt with water cycle and aquatic chemistry, among other things.

Approximately 4,500 people were in town and on campus during the Olympiad. The university was well represented by various science departments, including chemistry, computer science, and psychology. Students took tours of various science facilities on campus, such as the chemistry and biology departments. One of the highlights of the chemistry tour was the Chemistry Magic Show, done by the master magicians of the department, **Dennis Peters** and **Alice Dobie-Galuska**.

Overall, the tournament was a tremendous success. Saying that the event would not have been possible without the support of those in the IU chemistry department, the High School Science Liaison Office thanked all who participated, officiated, and volunteered their time and services.

— Lisa Townsend

## FACULTY NEWS

**Vernon Jack Shiner Jr.** has retired, as of May 31, after 43 years of distinguished service to the chemistry department, the university, and the profession. Shiner was



the last regular faculty member appointed in chemistry at the rank of instructor. He joined the department in fall 1952 after postdoctoral appointments with Sir Christopher Ingold at University College, London, and a year with Paul Bartlett at Harvard. Jack Shiner has had a distinguished research career in the field of physical organic chemistry, with concentration in the area of deuterium isotope effects, but his major contribution at Indiana has been in teaching and administration. In addition to guiding many students to their advanced degrees, Shiner has made innovations in the way we teach chemistry, especially at the graduate level. The Introduction to Research Program for first-year graduate students, established by the department in 1957-58, was initiated by Shiner. He served as chair of the department in 1962-67 and again in 1982-88. In between, he served as dean of the College of Arts and Sciences, 1973-78. Jack plans to continue contributing to the department in retirement, but the time he used to spend grading blue books will now be used to polish and baby his beloved Series I, 1963, Jaguar XKE Roadster, which he has had completely restored.

**Marvin Carmack** returned to campus for a month-long visit in April. He has completed his moves to Green Valley, Ariz. (85614) and is now at 685 South LaPosada Circle, No. 803.

**Dennis Peters** was elected Favorite Faculty Member of the Year by the Indiana Chapter of Alpha Lambda Delta, the National Freshman Honor Society. This award was given for Peters' outstanding teaching in the freshman honors laboratory courses S125 and S126.

**Harry G. Day** was an invited participant in a minisymposium at the Experimental Biology '95 meeting in April in Atlanta. The topic was "Experiments That Changed Nutritional Thinking." He spoke on E.V. McCollum's innovative conceptualization, development, and extensive application of his unique biological method for the analysis of foods, which began at the University of Wis-

## LIBRARY NEWS

consin in 1907. This soon led to his discovery of vitamin A and other basic knowledge. Widespread participation by others in unfolding the newer knowledge of nutrition soon followed. Day was a graduate student and later a staff member in McCollum's department at Johns Hopkins before joining the chemistry faculty at IU in 1940.

**Malcolm Chisholm** presented one of the 1994–95 Centenary Lectures of the Royal Society of Chemistry, U.K., Feb. 20–March 3. The Centenary Lectureships are among the oldest lectureships of the society. They were established to commemorate the 100th anniversary of the founding of the society, and are intended to bring prominent chemists from overseas to the U.K. Chisholm lectured at Edinburgh University, Heriot Watt University, Loughborough University, Liverpool University, and Southampton University, in addition to presenting a lecture, "The Emerging Chemistry of Polynuclear Hydrido Metal Alkoxides," at a one-day symposium of the Dalton Division of the Royal Society of Chem-

istry in Burlington House, London. Other lectures included "Molecular Routes to Materials" and "Chemistry of Compounds with Multiple Bonds Between Metal Atoms." He received the Centenary Silver Medal of the Royal Society of Chemistry.

**Ken Caulton** lectured at Columbia, Yale, Rutgers, and the universities of Missouri and Toronto. He and a number of his students lectured at the national ACS meetings in Anaheim and Chicago. A summer visit to France included a lecture at the University of Paris-Sud, where he also served as outside examiner on the PhD exam of a student there. (See "Graduate News" for an update on Roger Kuhlman, one of Ken's students.)

In April, **Paul Grieco** traveled to Drew University to present a lecture on "Organic Reactions in Highly Polar Media" as part of their 1994–95 Research Scholar Lectures. He also presented lectures at North Carolina State University, Glaxo Research Institute, and the University of Mississippi.

In March, the Chemistry Library began to provide free access for IU Bloomington users to the Beilstein CrossFire data base of more than 6.5 million organic compounds. CrossFire covers organic chemistry from its beginnings to very close to the present. The IU Libraries subscribe to the data base through a cooperative effort between Beilstein Information and the CIC (a consortium of Big Ten and other Midwestern universities). This results in a savings of \$7,000 a year over the regular subscription to Beilstein and includes both the printed volumes and access to the data base.

**Gary Wiggins** has developed a World-Wide Web home page for chemical information on the Internet (<http://www.indiana.edu/~cheminfo/>). The goal of "Chemical Information Sources from Indiana University" is to put into a classified arrangement the most significant chemical information sources on the Internet, with an index of topics, detailed chapter outlines, a section devoted to the major chemical information tools, and a gateway to the chemistry courses on the Internet. Gary demonstrated the tool at the American Chemical Society Columbus and Lehigh Valley sections and at the ACS Central Regional Meeting in Akron, Ohio, this spring.

In conjunction with the School of Library and Information Science and the Department of Computer Science, we are investigating the establishment of a formal chemical information science degree program. The program would include courses in molecular modeling, computational chemistry, chemometrics, and information science.

**Roger Beckman**, assistant head of the Chemistry Library, will be on sabbatical from June 1 through Oct. 31. He plans to spend the first part of this time working as an intern at the Beilstein Institute in Frankfurt, Germany, and visiting chemical information centers in England. He also plans to write a paper on the Trailing Arbutus, IU's official flower, and one on chemical information.

## STAFF NEWS

As has become a custom in recent years, the staff reception was held at the Woodburn House in late April. Chair Paul Grieco announced that the recipient of the 1995 Chemistry Staff Award is **Marty Pagel**, who was chosen in honor of his innovative work in the NMR Laboratory. The department also recognized **Kirsten Streib** for 30 years of service, mostly in the Molecular Structure Center; **Tom Hacker** and **Mike Jackson** for 25 years in the department, both in the freshman labs; **Ray Sporleder**, computer services; **Patricia Stapleton**, graduate office; **William Streib**, various academic positions, most recently in the MSC; and **Steve Studley**, technician in Professor Hayes' group.

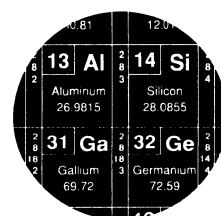
Receiving recognition for 20 years of service were **Kathy Fisher**, who worked in the graduate office prior to becoming secretary for Professor Grieco, and **Mary Swarthout**, who has served as Professor Hieftje's secretary and is now administrative assistant in the chair's office. In the 15-year honor group were **Jim Allen** director of chemistry business; **Jack Baker**, chemistry engineer; **Gayla Bradfield**, a former faculty secretary who is now administrative secretary in the chair's office; **Patricia Burner**, manager

of the scientific stores; and **Jeff Tate**, now in the mechanical instrument services. Ten-year awards were given to **Gary Fleener**, mechanical instrument services, and **Mildred Perkins**, who was in the QCPE.

There have been numerous staff changes since the last newsletter. **Elizabeth Sindors** left the storeroom for a position in HPER, and **Sherry Cai**, a technician for Dr. Newton, has left her position. **Patricia Burner**, manager of the stores for 11 years, retired on March 31. She was replaced by **Amy Van Pelt**, formerly purchasing coordinator, who will now manage both requisitioning and storeroom operations. Van Pelt has been succeeded by **Jackie Drake**, who has been with the stores since 1981. **Suzie DuMond** has been appointed as purchasing assistant. **Kathryn Shirley-Koehl**, who worked for 19 years in the freshman office and as manager for the past 17 years, retired at the end of June. She is being replaced by **Becky Vadas**, who had been with the registrar's office and, recently, in the records and admissions office of the School of Business.

**Vince DiStasi**, who completed his PhD here at IU (with Professor Chisholm) in December 1993 and has been at the University of Pennsylvania as a postdoc, joined the staff in late April as the computer specialist in the Molecular Structure Center.

—Lloyd Hudson



# STUDENT NEWS

## GRADUATE

During 1994–95, Professor Lawrence K. Montgomery was graduate adviser. Serving with him on the Standards Committee were professors Kenneth G. Caulton, Gary M. Hieftje, James P. Reilly, John P. Richardson, and Theodore S. Widlanski. Professor William R. Roush chaired the Graduate Admissions Committee. Evaluating the hundreds of dossiers submitted to the department were professors George Christou, Andrew D. Ellington, Gary M. Hieftje, Mark D. Hollingsworth, Dennis G. Peters, Theodore S. Widlanski, and David R. Williams.

### Fellowship Holders

Seven industrial fellowships were awarded to chemistry graduate students in the 1994–95 academic year.

The Abbott Fellowship was awarded to **Marta M. Piñero Nuñez**, who is a graduate student in Professor Paul A. Grieco's research group. She received her undergraduate degree from the Universidad de Santiago de Compostela in 1991. Her research involves the total synthesis of the novel C-19 quassinoid *dl*-samaderin B, utilizing a copper(II) mediated ring contraction reaction of a  $\delta$ -lactone to a  $\gamma$ -lactone; extraction and isolation of known and unknown quassinoids and other natural products from plant sources.

**Daniel L. Burden**, an analytical student working under the guidance of Professor Gary M. Hieftje, received the Eli Lilly Fellowship. He received his BS degree in 1992 from Taylor University. His research entails work in molecular fluorescence and fiber optic chemical sensors. He has been most active in the development of a novel radionuclide scintillation light source for use in nanosecond time-resolved fluorimetry. Several characteristics distinguish this source from typical nanosecond light sources such as lasers and flashlamps. For example, the scintillation source is extremely small, inexpensive, needs no input power, produces exceptionally high-output pulse rates, and requires virtually no maintenance. These qualities give the source a wide variety of potential applications, ranging from the laboratory to the field, as well as possible incorporation into novel chemical instrumentation of both macroscopic and microscopic dimensions.



*Research fellowship and award winners are: front row, from left: Matthew Lynn, NSF Fellowship; Darin Tiedtke, William Nebergall Memorial Award; William Nowatzke, Henry R. Mahler Memorial Award; Daniel Burden, Eli Lilly Fellowship and Reilly-Upjohn Award; and back row, from left: Kimberly Olsen, Kraft Fellowship; Marta Piñero-Nuñez, Abbott Fellowship and Wendell P. Metzner Memorial Award; Hilary Eppley, Procter & Gamble Fellowship; Robert Daily, NSF Fellowship.*

**Roger L. Kuhlman** is the winner of both the General Electric Fellowship and Union Carbide Student Innovation Recognition Awards. The latter recognizes outstanding postgraduate and postdoctoral students working in catalytically relevant areas in chemistry or chemical engineering. Kuhlman will make a presentation at a two-day symposium on catalysis later this year at the Union Carbide Technical Center in South Charleston, W.Va. Kuhlman completed his undergraduate studies in chemistry at Grinnell College and joined Distinguished Professor Kenneth G. Caulton's research group in fall 1991. His research focuses on the classical/nonclassical nature of osmium polyhydrides, especially the role of attendant ligands with lone pairs capable of overlap with metal orbitals. His other interests have been the unusual reactivity of a bimetallic ruthenium amide containing an agostic interaction, and the viability of the sol-gel process for heterobimetallic alkoxide precursors.

**Kimberly Groat Olsen** was the recipient of the Kraft Fellowship. A graduate of Rhodes College with a BS degree in 1991, she is a graduate student of Professor Stephen E. Creager. Her current research focuses on the preparation of improved electrochemical biosensors using electrodes coated with self-assembled monolayers and covalently immobilized enzymes. The improved sensors will find use in glucose monitoring for the treatment of diabetes and in fermentation process control.

**Julianne A. Hunt**, a graduate student of Distinguished Professor William R.

Roush, was awarded E.M. Kratz Fellowship. She received a BA degree from Harvard University in 1990. Her research focuses on the development of new methodology for the asymmetric synthesis of polyhydroxylated natural products.

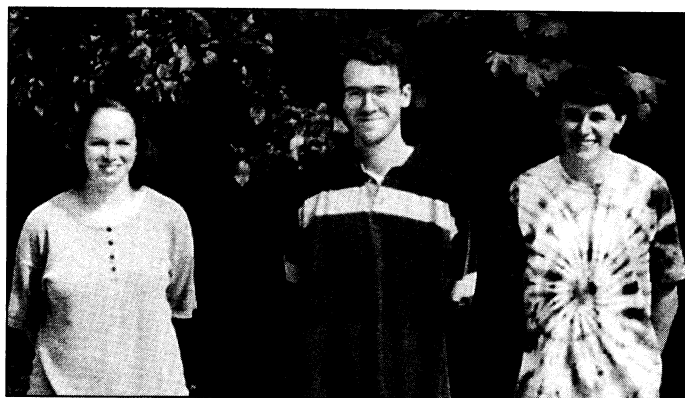
The Lubrizol Fellowship was awarded to **Nathan J. Harris**, who received a BS degree in 1985 from the University of Minnesota and an MS degree in 1991 from Miami University of Ohio. He is a graduate student in Professor Joseph J. Gajewski's research group. He has recently completed a research project involving the kinetics and mechanism for the oxyanion accelerated rearrangement of 2-vinylcyclobutanol to 3-cyclohexenol. One of his current projects involves the study of equilibrium isotope effects using *ab initio* molecular orbital theory. The fractionation factors for several small molecules have been computed and compared to experimental data for the gas phase.

**Hilary J. Eppley** received the Procter and Gamble Fellowship. She completed her undergraduate work at Franklin and Marshall College in 1991 and now works under the direction of George Christou. Her research involves the synthesis and physical characterization of a number of larger higher-valent manganese carboxylate complexes. Several of the dodecanuclear manganese compounds possess large numbers of unpaired electrons and exhibit unusual magnetic relaxation effects at low temperatures, and thus may serve as potential building blocks for molecular ferromagnets.

Two students received National Sci-



DuPont Associate Instructor Award winners are, from left, Jo Ann Currey, Dawn Brooks, and Steve Peters.



From left, are Julianne Hunt, E.M. Kraft Fellowship and Wendell P. Metzner Memorial Award; John Becker, DuPont Associate Instructor Award; and David Weis, C500 Award.

ence Foundation Fellowships this year. **Robert S. Dailey**, a graduate of Eastern Nazarene College, is a second-year student of Professor Ernest R. Davidson. **Matthew A. Lynn**, a graduate of the Ohio State University, is a first-year student of Professor Malcolm H. Chisholm.

Other fellowship winners are **Jan Sudor**, American Chemical Society, Analytical Division, Summer Fellowship; **Jill V. Lyles** and **Michael L. Zimmerman**, American Heart Association fellowships, Indiana Affiliate Inc.; **M. Cristina Rodrigues da Silva**, Conselho Nacional de Desenvolvimento Científico e Tecnológico; **Michael J. Wilson**, Graduate Division of the School of Medicine Fellowship; **Robert S. Dailey**, Los Alamos Summer Fellowship; **N. Michelle Greene**, Molecular, Cellular, and Developmental Biology Training Grant; **Kristen J. Leckrone**, National Aeronautical and Space Administration Fellowship; **Jeffrey D. Mills**, Palace-Knight Fellowship (U.S. Air Force Office of Scientific Research); **Yan Wang**, Starr Fellowship; **Elba Michelena de Baez**, Universidad del Zulia-Banco Interamericano Desarrollo-Conciti; and **Michael A. Farley** and **Aleksey V. Kazantsev**, University Graduate School Biochemistry fellowships.

**Andrew G. Baker**, **Jane T. Barry**, **Daniel L. Burden**, **David S. Coffey**, **Elizabeth F. Day**, **Bradley W. Fravel**, **Nathan J. Harris**, **Patrick P. Mahoney**, **Jason K. Myers**, **Kaj K. Olsen**, **Barry C. Peterson**, and **Jason D. Speake** received Department of Education National Needs Summer fellowships.

#### Annual Awards

At the Chemistry Honors Banquet in April, the DuPont Associate Instructor Award for excellence in teaching went to **John J. Becker**, **Dawn A. Brooks**, **Jo Ann Currey**, and **Steven J. Peters**.

**David D. Weis**, doing research with

Professor **George E. Ewing**, was awarded the C500 Research Award. **Nathan J. Harris** received the Felix Haurowitz Award. **William L. Nowatzke** received the Henry R. Mahler Memorial Award. **Darin B. Tiedtke** received the William Nebergall Memorial Award. **Julianne A. Hunt** and **Marta Piñero-Núñez** received the Wendell P. Metzner Memorial Award. **Daniel L. Burden** received the Reilley-Upjohn Award.

— Pat Stapleton

## UNDERGRADUATE

During 1994–95, Professor **Dennis G. Peters** served as coordinator of undergraduate studies and **Holly Willett** as academic counselor and manager of the Chemistry Placement Office.

This year's Chemistry Honors Banquet was held in the Frangipani Room of the IMU on April 14, with 225 students, faculty, and guests attending.

The following awards went to these undergraduate students:

Russell & Trula Sidwell Hardy Scholarship: **David S. Ginger**

Merck Index Awards: **Michelle A. Blair**, **Eric A. Bushong**, **Joshua R. Clayton**, **Lee A. Mack**

Enola Rentschler Van Valer Trafford Scholarship: **Sara K. Leisure**

Courson-Greeves Prize: **Denise M. Dorman**

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Chemistry student-athlete **Stephanie Ann Barnum**, track and field, received special recognition from Alpha Beta Honorary for having earned a B or better grade point average.

This year 26 companies recruited at our placement office. The job market for PhD and postdoctoral candidates has improved, and the job market for BS- and MS-level candidates remains strong.

— Holly Willett

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## ALUMNI NEWS

**Burton L. Appleton**, PhD'55, is our delightful and admired but at times puzzling alumnus of 40 years. He probably has broken all records for the length, variety, and inherent novelty exhibited in his Holiday Season and New York greetings for 1994. For the many readers of the newsletter who do not receive his annual letters, some clarification is due. To illustrate in some degree through a few words appearing toward the end of his letter: "By squeezing to the limit a reader's ability to penetrate this dense typographic melange, I have been able to express myself on a variety of topics ... ." It is estimated that in this letter about 2,600 words were used. Among the topics he lambasted was the apparent indolence on the part of the carrier of the *New York Times* who consistently left Burt's paper near the street level, which was about 25 feet from his door. Because Burt's repeated complaints were not satisfied by delivery to his door, he canceled the subscription. For Burt, it was a matter of principle. This was the cardinal factor in most of the other topics he presented. To Burt, civility in all human relations is most important. Are there any IU alumni who disagree?

**Ram D. Bedi**, PhD'60, and his family, in Michigan, continue to maintain a strong and still growing business with their 2V products. In addition, they are hopeful that their new ESOC project (Environmentally Safe Oil Change) will attract favorable attention. Hundreds of big trucks are included among the vehicles dependent on this new development. We hope this closely knit and hard-working family have even better success in the years ahead.

**J. William Boehne**, BS'42, and his wife, Audrey, continue to give special attention to IU. In 1994, Bill expertly refurbished a high-quality, late 19th-century double pan analytical balance and gave it to this department. It is now on display along with many other impressive memorabilia that remind viewers of the shoulders of early giants in chemistry on which we once needed to stand. In spite of his bodily handicap from polio in his youth, Bill has strong arms, and he drives the family van. Most of Bill's professional career was spent with the FDA in the Washington area.

**William S. Bowers**, BA'57 (zoology and chemistry), in 1994 received the Kenneth A. Spencer Award of the ACS Kansas City Section in recognition of his meritorious contributions to the field of agricultural and food chemistry. As stated in *C&EN* (May 1), his "work focuses on the developing biorational strategies for protecting plants and public health." His current research interests include "insect growth and behavior, regulation of allelochemicals, natural product chemistry, and chemical ecology." Among his many recognitions, is membership in the National Academy of Sciences.

**Lyman R. Caswell**, BS'49, MA'50, re-

tired in 1994, but his activities continued to focus on chemistry. Soon after, however, he began to give more time to stamp collecting and exhibitions. With his wife, Ruth, he attends various cultural and chemistry meetings. At the San Diego ACS meeting in 1994, he gave a paper in the History of Chemistry Section. Also, "Caz" is devoting extra time to polishing his Spanish. Their recent traveling has been limited to quite a few states in the U.S.A., plus British Columbia. They must at least get back to IU by 1999 because that will mark the 50th anniversary of Caz's first IU degree.

**Frank H. Cheng**, PhD'57, now retired, keeps in pretty close touch with his alma mater. Late last year, he and Margareth spent considerable time visiting China and California. Although they maintain strong ties with IU, in both scholastic and athletic interests, they are also unabashedly strong for the University of Iowa.

**John F. Christman**, MA'46, and his extended family are inextricably attached to the South. He is a regular "on the information highway," enthusiastic in communication and information analysis, and in speaking at local section meetings of the ACS. By the end of 1995, he will be the only person to have done all 27 ACS circuits. In 1994, "Chris" and his wife, Neale, first toured ACS sections in southern Illinois and Missouri; then they visited sections in southern New York; and finally they were guests at sections in northern Illinois and in Iowa. For 1995, the schedule calls for Chris to speak in Georgia-South Carolina, then Colorado-Wyoming-Utah-Idaho, and finally he will speak in Kansas in September and Tennessee in October. Much of their traveling is by car, with Neale doing all the driving.

**Lucinda Hittle Cohen**, BS'89, has completed her doctoral degree in analytical chemistry at the University of Pittsburgh. During '94-'95 she was an Alexander von Humboldt postdoctoral fellow at Munster University in Germany. Her husband Caleb Cohen was a computer programmer for Dunn & Bradstreet in New Jersey. Of course, they planned to be rejoined after her postdoc experience was completed. We still remember that, as a senior, Lucinda represented the chemistry students when the chemistry addition was dedicated in 1988. Her brief talk was so good that really she "stole the show." Continuing excellence is expected.

**Donald J. "Jack" Cook**, PhD'44, is the staunch promoter and guardian of the Percy L. Julian Memorial Lecture Series at DePauw. This program started in 1977. Jack was a speaker at the memorial service (A Celebration of Life) for the accomplished widow of Percy Julian, who died in July 1994. The service was held in the First United Church of Oak Park, Ill. The Julian family had lived in that community a long time and greatly influenced it throughout that period. Also, in 1994, Jack and his wife, Marian, celebrated the first anniversary of the Founding Day of the Victorian Society of Greencastle. This was observed in the Cook's truly historic home near the DePauw campus. The house

was built in 1868 and is furnished with appropriate period furniture and accessories. In part, the Victorian Society and the home owned by the Cooks are important in carrying on the principal purposes of the Julian Memorial Lecture Series and the Percy L. Julian Scholarship Program at DePauw.

**John Daeuble**, postdoc'93-'95, has taken a position as a research chemist with DowElanco in Indianapolis.

**Chester R. Davis**, BS'44, lives in Springfield, Ohio, but he visits the department at least once per year — especially every Alumni Weekend — and he writes constructively much more often. He is indeed alert to matters of significance, especially the education of notably promising students. He, like many chemistry alumni, is a member of the IU Alumni Association.

**Robert Degeilh**, PhD'55, has recently spent much time in China, where he is acting for his French company in setting up "a corporation on a very interesting project (making safety glass) with Chinese people." Remarkably, **S.K. Datta**, PhD'59, from India, is also involved in this truly international program. Strikingly, both these scientists received their graduate training at IU, and they maintain links with this department! Included in Degeilh's various distinctions is the fact that he was among the approximately 300 alumni and others who attended the dedication of the splendid 1988 chemistry addition. He traveled the greatest distance to be here. His graduate work was under the direction of L. Merritt. Along with other alumni of this department from other countries, he is a member of the IU Alumni Association.

**Julie Verdeyen Douglass**, BA'84, completed her residency work in pediatrics at UCLA and is now a clinical instructor in medicine at UCLA.

**Donnell D. Etzwiler**, BA'50 (cum laude), president and chief medical officer at the International Diabetes Center in Minneapolis since 1967, received a peace award from the Russian government in January. It was presented at the Russian Academy for Advanced Medical Studies (RAAMS) in Moscow. Primarily, it was in recognition of his efforts in collaboration with RAAMS in meeting the needs of an estimated 15 million diabetics in Russia and the surrounding Commonwealth nations. Among other pressing responsibilities, he chaired the WHO Collaborating Centers in Diabetes from 1988 to 1994. He holds honorary membership in the American Association of Diabetes Educators.

**Robert B. Forney**, BA'38, MA'39, PhD'48, after approximately four decades of diverse and notable scientific contributions in forensic toxicology — especially in relation to controlled substances and abuse of alcohol — became Distinguished Professor Emeritus in the IU School of Medicine in 1987. Among other contributions, he was interim director of the Indiana State Department of Toxicology 1989-91. Besides so much public and professional service, especially in speaking and consulting, he has

(continued on page 10)

## Aumni News

(continued from page 9)

authored or coauthored approximately 190 publications. Of course, he has received various awards and recognitions, including being named a fellow in the American Academy of Forensic Science. Yes, he, too, is a member of the IU Alumni Association.

**William Foye**, PhD'48, in 1994 received the Henry Hill Award of the N.E. Section of the ACS. Yes, he continues to receive recognition for significant scientific writing. The newest, we believe, is his "weighty" volume, *Cancer Chemotherapeutic Agents*, which appeared in 1995 (see page 12). In this important contribution, he had many expert helpers, each a contributor of a chapter. One was M.C. Wani. This new production has different connections with this department.

**Gregory Georgiadis**, BS'80, MD'84, eldest of the four Georgiadis brothers and sisters who majored in chemistry at IU, has recently become a member of the faculty of the Medical College of Ohio, Toledo. The father of this remarkable family, **Minos**, PhD'64, has recently retired from the Department of Chemistry in the Agricultural University of Athens. The extensive records of this department show that in no other family are there as many as five members with degrees in chemistry from IU.

**Konrad Keck**, postdoc'58-'59, with his wife, Ursula, has retired to Salt Lake City. A daughter and her family live only 10 miles from the Kecks. In 1994, Ursula visited her parents in Germany. Of course, Konrad uses his home computer to keep up — in part — with much that has special interest for him. At IU, Konrad was in productive collaboration with H. Mahler and D. Fraser, both of whom are now deceased.

**Ralph L. Kendrick**, BA'67, after a career in the U.S. Navy, retired with the rank of captain in 1993. At IU, he was especially noted as a member of the high-ranking swim team. He currently participates in U.S. Masters Swimming. He and his wife, Margaret, live in San Jose, Calif.

**William P. Klinkenberg**, BA'50, BS'54, has retired from the Macomb County Health Department in Michigan after 38 years of service. In 1994, he and his wife, Iris, toured extensively in China. They now desire to engage "in some type of hands across the border program involving public and environmental health and nursing."

**Guenther Kuehl**, postdoc'57-'59, has retired from Mobil R&D Corp. He was promptly appointed adjunct professor at the University of Pennsylvania, where he has a laboratory and good contact with others in the Department of Chemical Engineering. The Kuehls, like so many IU alumni, cannot stay away a long time. They plan to visit here sometime in the latter half of 1995. Good. While here so long ago, he worked with Dr. Nebergall.

**Mary Walton Lawson**, BA'31, is in retirement from the Memphis, Tenn., city schools, but she still "tutors an occasional algebra student." Her 1931 diploma from

## ALUMNI PROFILE

### Talmage Bosin, PhD'67, heads up Medical Sciences Program on Bloomington campus

*TALMAGE R. BOSIN, PhD'67, since 1993, has been assistant dean and director of the Medical Sciences Program (Bloomington). In a 1995 lecture at the Meadowood Retirement Community in Bloomington, he lucidly described this innovative optional feature of medical education in Indiana, which began in 1959. The program at Bloomington exceeds that of any of the several other centers started since that time. In his lecture, Tal focused on the marked evolutionary changes occurring in health care costs and the changes being necessitated both for patients and health care providers. As he pointed out, more than 30 percent of the freshmen IU medical class completed their premedical program at Bloomington. It is urgent for the program to continue its vital role in teaching and research opportunities for this important group of students.*

IU has a place of prominence in her home.

**Donald Maulding**, PhD'62, and Nancy continue to live at Somerville, N.J., and he remains productive at the Cyanamid Research Center. Some of his time is given to Moxidectin, an antiparasitic drug Don developed some time ago. A greater amount of time is now given to the development of a new herbicide for soybeans. How greatly dependent we are on productive chemists!

**John C. Meade**, BA'67, continues his practice in public finance law in Indianapolis. His outside responsibilities include membership in the Indiana State Museum Society. Also, he is active with Friends of the White River. The oldest daughter, Emily, has finished two years at IU. His wife, Nancy, has a new managerial position in the Indiana Department of Health.

**Bam D. Mehrotra**, PhD'64, and his wife, Bharati, have a daughter, Kalpna, who received a BA in economics at IU in 1993. Last December, Bam was still recovering from surgery performed in May '94, but the entire family was looking forward to a "Happy and Prosperous New Year."

**Wendell W. Meyer**, PhD'62, retired in late 1994 from Dow Chemical, where he had served in different capacities since 1962. At IU, he was one of Campaigne's many proteges. The Meyer couple is considering a relocation to Southern Indiana because it "does sound attractive."

**Rodney D. Moss**, PhD'51, a Dow Chemical chemist throughout his active professional years, and his wife, Phyllis, are living in retirement in Prescott, Ariz. During 1994, they were indeed extensive travelers — they were in Hawaii, Colorado, Nebraska, Michigan, and Minnesota, as well as in Ireland. But presumably they spent more time at home than anywhere else.

**Fred W. Neuman**, PhD'45, continues to give much time to music, golf, and travel, but he pays attention to substantial public issues including the exaggerations of some whose opinions on some environmental is-

ssues are not supported by scientific knowledge. In 1994, Fred wrote an article for a Michigan newspaper on shallow thinking in relation to the "chlorine scare." He emphasizes the importance of common sense and good judgment. All of us can agree with Fred.

**Frank P. Popoff**, BA'57, MBA'59, as reported in the May/June '95 INDIANA ALUMNI MAGAZINE, which, as IU alumni members, chemistry graduates should read, "was named outstanding business leader for 1994 by Beta Gamma Sigma honor society." When the addition to the IU chemistry building was dedicated, this highly recognized CEO of Dow Chemical was awarded an honorary ScD degree.

**Steven F. Rodgers**, BA'85, DDS'89, after a long residency is now in practice in oral and maxillofacial surgery at Newburgh, Ind.

**William G. Roessler**, BS'42, PhD'50 (bacteriology), in 1994 was, unexpectedly by him, presented the God and Service Recognition Award from the Presbyterian Church U.S.A. and the Boy Scouts of America. As Priscilla, his wife, writes, this included "a beautifully framed document accompanied with a medal — what a ceremony — it almost floored Bill!" He richly deserves it. The several Roessler children are all IU graduates with excellent records. One granddaughter graduated from IU in 1995, and another one will be a freshman here this year. But only Bill has a degree in chemistry. What a remarkable family!

**Ryu Shinke**, postdoc'62-'63, has written to us that the great earthquake in Japan on Jan. 17 did no personal harm to himself or any of his family (they live about 50 km. north from Kobe). But, he wrote, "the real disasters in Kobe were like ones broadcast worldwide by TV." As so many of us know, he is an important member of the faculty of agriculture at Kobe University. He wrote, in part, that the buildings of Kobe U. "had a narrow escape from the disasters. But inside the laboratories, including my laboratory,

there was a great confusion; books, papers, experimental instruments, were broken and spread on the floors." However, writing three weeks after the destruction, he stated, "Anyhow, school business begins to go on as usual day by day." And, in the spirit we so greatly admire, he concluded "I do hope that a more beautiful Kobe will be rebuilt in future!" We greatly appreciate that spirit, and trust that it characterizes IU alumni throughout the world.

**Gregory M. Shutske**, PhD'75, was recently promoted to research fellow at Hoechst Roussel in Summerville, N.J. In late 1993, he gave a report on his research at the Mayo clinic in Jacksonville, Fla. He continues to publish in *J. Het. Chem.*

**Meredith Pleasant Sparks**, BS'27, MA'28, has thoughtfully given us a unique book printed and copyrighted in 1931 by the industrial company in Niagara Falls, N.Y., where she was first employed after graduating from IU. The 131-page book, titled *Sodium*, was authored by Theodore T. Budrow and Meredith. In essence, "this work is an attempt to compile briefly the data relating to sodium that have been recorded in available published records and in the technical reports of the Roessler & Hasslacher Chemical Company Inc." It is amazing in its compactness, systematic and readable presentation, and comprehensiveness. There are 1,220 references, and more than 200 patents concerning sodium are cited. The informative and succinct preface by the authors is concluded with the assertion that "no references are listed that were not actually consulted." Knowing Meredith well, especially concerning her work ethic and productivity in different areas over many decades, we believe this definitely is not an exaggeration. The book will be preserved in the Chemistry Archives/Alumni Office.

**Stewart Schneller**, PhD'68, having recently become dean of the College of Sciences and Mathematics at Auburn University, is rebuilding a largely new research group that includes two postdoctoral fellows. The

move was reported in the last issue of this newsletter.

**Ian Stapleton**, PhD'66, and all of us are greatly pleased that his notably successful process for the dyeing of wool is receiving widespread and favorable attention. In November 1994, an Australian weekly magazine (*The Bulletin*) ran a special article on the application of this stunning development in the resultant "fusion of creativity, technology, and green ideals." This beginning application of knowledge from the research "led by Dr. Ian Stapleton" promises to have many other applications "of international importance," as emphasized in the article. In part, the great significance of this achievement is emphasized in the title of a report by the Melbourne College of Textiles, where Ian and his group conducted the research "Printing of wool with low environmental impact and without the problems of chlorination." It is so gratifying that this great success has occurred after Ian's years of persistent, knowledgeable, and imaginative efforts. It is appropriate to note that, at IU as a graduate student, he was under the mentorship of Marvin Carmack. Also, Ian's talent in singing was enjoyed several times by those who attended the excellent operas at IU in which he had roles.

**Helen Merriam Stewart**, MA'46, involved as usual in public matters, became chair of the Jackson County (Iowa) Federated Women's Clubs in 1994. Among other recent recognitions, she was named a Paul Harris Fellow in Rotary International. Her husband, Bill, is also active in Rotary.

**Harvey E. Wagoner**, BA'30, in a recent letter to us referred to his 40 years with DuPont at Niagara Falls. There he "handled molten sodium and generated hundreds of pounds of HCN." But, as he added, in all those years he "never had an accident." Very good.

**M.C. Wani**, PhD'62, continues to receive impressive recognitions for the breakthrough discoveries, with co-worker M.E. Wall, concerning Taxol and Camptothecin. In 1994, they shared two notable acknowledgements: the American Association for Cancer Research Cain Award and the Greater Durham Chamber of Commerce's City of Medicine Award. On receiving the latter, Wani was quoted in part, "The greatest satisfaction from [our] work is the fact that something discovered by us — especially Taxol — is going to benefit humanity for a long time to come." Also, Wani's recent scientific writing includes a chapter, with a co-author, in **W.O. Foye's** new book, *Cancer Chemotherapeutic Agents*. According to Wani's and Foye's mentor, E. Campagne, the article gives an excellent coverage of Camptothecin.

**Frank J. Welcher**, BA'29, MA'30, PhD'32, is the author of another major contribution to the scholarly military history of the Civil War. It is titled *The Union Army, 1861-1865: Organization and Operations Volume II. The Western Theater*. The Indiana University Press published it in 1993. The glowing praise of the first volume in the series, as included on the book jacket for this

production, asserts that it is "a classic of Civil War historiography — a fundamental reference work." There is every reason to believe that reviewers of this second volume will find it equal to the first. In the early years of his professional life in chemistry, Frank was the founder and primary builder of chemistry at IUPUI.

**Ralph L. White**, PhD'67, fell while skiing in February 1994 and seriously damaged a knee ligament, but before the end of the year he was in good shape. For a long time, he has been with Norwich Pharmaceutical Company (owned by P&G) at Norwich, N.Y.

**Matthew S. Williams**, BA'87, is a member of the board of directors of the IU Alumni Club of Los Angeles. He lives in Long Beach, Calif. In that area, he is a sales representative for Dow Chemical.

**Sharilyn Smith Woods**, BA'89, has become a chemical information specialist at the Dow Chemical Co., Midland, Mich.

— *Harry G. Day and Elizabeth Greene*

## NECROLOGY

We have learned of the deaths of the following alumni and others with departmental connections:

**Stanko Borcic**, died on Dec. 21, 1994. During 1977-78, he had been visiting professor in the department, and research collaborator with V.J. Shiner. Since 1967, he had been a member of the faculty of pharmacy and biochemistry at the University of Zagreb, Croatia. As reported in *C&EN*, Jan. 23, "he was best known for his work on secondary deuterium isotope effects in solvolytic reactions ... (and) he was the author (or co-author) of about 100 scientific papers, articles, and reviews."

**Veleta M. Kaslow**, widow of Christian E. Kaslow, who died on Sept. 24, 1994, died at Bloomington Hospital on Feb. 28, marking the end of this family's connection with IU, which began in 1941. A memorial service for Mrs. Kaslow was held at the Meadowood Retirement Community, where the two had lived for several years. She was an active member of the First United Methodist Church, Bloomington Garden Club, and Indiana University Women's Club. The Kaslows' daughter, Carol M. Bruce, lives in Aurora, Colo., and their son, David, lives in Berwyn, Pa. Like her husband, she was born, raised, and educated in Minnesota. In her earlier years, she was an elementary school teacher. For many years, her focus was on music, in which she received a certificate from the McPhail School of Music.

**Harold H. Zeiss**, BS'38, died on May 3, in Bloomington, where he had lived, in retirement, with his wife, Melvina Barrett Zeiss. He was a native of Evansville. The funeral services for Dr. Zeiss were held in Evansville, where burial occurred. After graduating from IU, Harold did his master's and doctoral work in chemistry at Columbia University.

(continued on page 12)

### Help Make a Difference

Hoosiers for Higher Education (H.H.E.) is a statewide organization of Indiana citizens wanting to raise public awareness about the importance of higher education for Indiana's future. We need your nonmonetary support. Please call (800) 824-3044 for more information.

## Necrology

(continued from page 11)

Following several years on the chemistry faculty at Yale and at the University of Cincinnati, he spent five years as research associate at the Monsanto Chemical Co., Dayton, Ohio. Then from 1961 to 1976, his responsibilities were turned to the Monsanto Research Division in Zurich, Switzerland, where he became the president and director of that operation. Beginning in 1976, the remainder of his active professional life was spent in the Corporate Research Department of the Monsanto Co. in St. Louis. During a portion of this period, he was the first of a series of industrial scientists who were selected by the department for its Visiting Industrial Professorship Program, which began in 1968, as described in C&EN, Nov. 4, 1968. In this program, Dr. Zeiss spent approximately a week at a time in the department during three separate visits back to the U.S.A. from Europe. Such visits were devoted to informal periods with faculty members and students, attendance at seminars, etc. At each visit, he lectured at least once. Thus he was a pioneer in the program to provide mutual benefits for industry and for students and faculty in the department.

• We have learned of these deaths also, but have no further information:

Ralph Bradley, BS'53, Oct. 27, 1994

Harry Gebel, BA'43, Feb. 22, 1994

Dr. Floyd Peyton, BA'28, July 13, 1994

Mrs. Beatrice R. McClanahan, BS'47, Aug. 16, 1994

Vernon J. Sommer, BS'40, Feb. 1, 1995

Dr. George E. Stauffer, BA'40, MD'42, Jan. 21, 1995

• Reported in *The Hexagon of Alpha Chi Sigma*, spring 1995, but without date or place of death:

Louis Marchi, member of IU chemistry faculty in 1943-44

Charles E. Short, BA'28

William H. Stevenson, BA'29

— Harry G. Day and Elizabeth Greene

## BOOK REVIEWS

*Cancer Chemotherapeutic Agents*, William O. Foye, editor. American Chemical Society, Washington, D.C., xx + 698 pp (1995).

This hefty volume, into which Foye has enticed 36 contributors, gives thorough coverage of the subject. There are 17 chapters detailing various classes of cancer chemotherapeutic agents. For example, chapter four, "Agents That React with DNA," includes sections on Nitrogen Mustards, Platinum Complexes, Nitrosoureas, Alkyl Sulfonates, Triazines, Aziridines, Procarbazine, and Hexamethylmelamine.

Indiana University is well represented in this volume. Besides the editor, **William O. Foye**, MA'46, PhD'48, Sawyer Professor of Pharmaceutical Sciences, Massachusetts College of Pharmacy, IU contributors are **Saul Schepartz**, BA'51, of the National Cancer Institute (PhD, Wis., '55), who wrote the introductory historical background, and **Mansukh C. Wani**, PhD'62, of the Research Triangle Institute, who co-wrote a chapter on "Camptothecin and Analogs."

*Radiation and Public Perception: Benefits and Risks.*, Jack P. Young and Rosalyn S. Yalow, editors. Advances in Chemistry Series No. 243, 360 pp (1995).

This book discusses radiation and its impact on society. It reviews the health effects of radiation, examines irradiated foods, radiation therapy, and other related topics, including the cancer risks among atomic bomb survivors, the genetic effects of human exposure to ionizing radiation, and the Chernobyl accident. Author **Jack Young**, PhD'55, is to

be congratulated on assembling this useful and timely report. The work includes an overview chapter by Rosalyn Yalow, Nobel laureate in medicine in 1977 for her work on radioimmunoassay techniques.

— E. Campaigne

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### Association of Indiana University Chemists Newsletter

This newsletter is published annually for graduates of the IU Department of Chemistry by the Department of Chemistry and the IU Alumni Association, in cooperation with the College of Arts and Sciences Alumni Association, to encourage alumni interest in and support for IU. For membership or activities information, call (800) 824-3044, or e-mail (iualumni@indiana.edu).

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