

# CHEM LETTER

University of  
Washington

Department of  
Chemistry

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*Inspired by the newly-established Education Division (see page three for related story), Professor Mickey Schurr enthusiastically explains the dynamics of elementary processes to spellbound Rebecca Watts, granddaughter of Chair Bob Watts, at Emeritus Professor George Cady's 85th birthday party.*

## Chairman's Message

Dear Alumni:

Once again, the Department has seen several changes since our last newsletter. This time, the major innovation has been in freshmen instruction. Following an initiative across the University originated by Provost Laurel Wilkening, the College of Arts and Sciences introduced a strongly enhanced program for teaching at the 100-level. Our Department, as a major educator of freshmen, has been able to appoint three lecturers to concentrate on revised and modernized classes at this level.

We have also formed a Division of Chemical Education, and a popular seminar series on education in chemistry is hosted by the faculty in this division. Among the exciting new programs that have already emerged are our "Women in Science" course and the International Teaching Assistant training program. The first program gives support to women with less well-developed mathematics skills, enabling them to continue in science beyond the first year.

As I write, we are going out for a second round of bids on construction of our new building. The Board of Regents voted to reopen the bidding process and if all goes well this time around, the new facility will be ready to host our instructional program by Autumn 1995. The building includes major new teaching laboratories as well as improved research and seminar space. Needless to say, we are all looking forward to its completion.

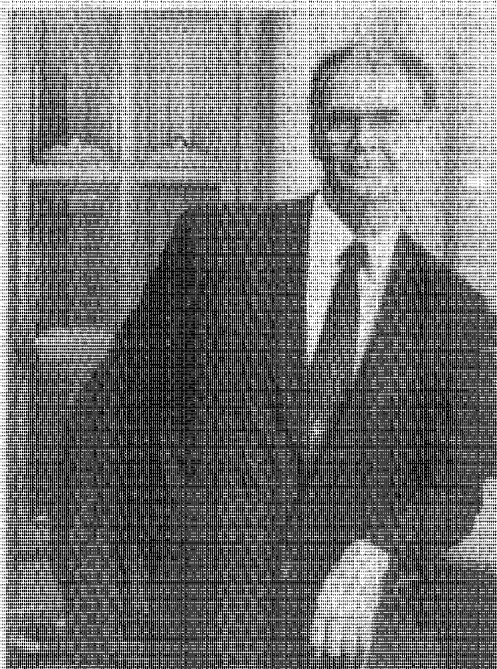
There were no retirements last year; several faculty won national awards for excellence in research, and we had one particularly pleasing prize. Professor Norm Rose was named Teacher of the Year for the State of Washington by the CASE Foundation. As most readers will know, Norm has for many years been considered an outstanding instructor by students. We were all very happy to see his contributions marked in this way.

We are pleased to bring you this latest edition of the alumni newsletter and encourage all of you to use the enclosed mailer to keep us up-to-date on your activities. Recently, the son of one of our organic faculty, William Dehn, Jr., stopped by my office to say hello. His father taught here from 1907 until his retirement in 1947 and Bill was up from California on vacation. While your tenure in Bagley Hall may not have been as long as Professor Dehn's, I encourage you to visit your alma mater and hope that you introduce yourself to me when you do.

Sincerely,



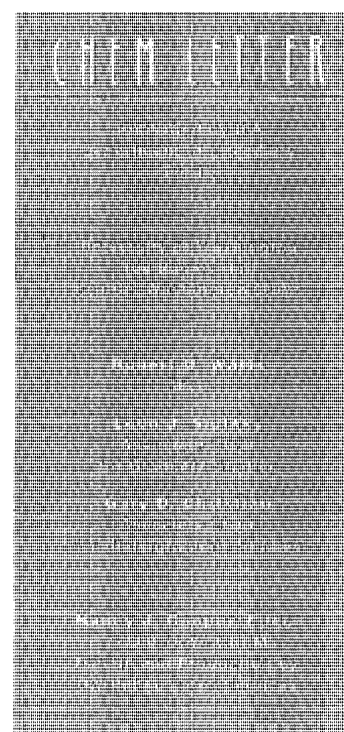
Robert O. Watts



Watts is spending the summer at the Max Planck Institute for Fluid Dynamics in Göttingen, Germany on a Humboldt Fellowship.

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The UW's Chemical Education Division is one of only four of its kind in the country. Pictured from left are Senior Lecturers Frazier Nyasulu and Sara Selfe, and Lecturer Deborah Wiegand.

## Chemical Education Division Established

**T**he recent addition of three lecturers to the faculty ranks has given Chair Bob Watts an excellent means to enhance the role of education in the Department's mission through the creation of a separate Education Division. According to the American Chemical Society, such a move at a major research institution such as the UW is nearly unprecedented.

A professorial-level appointment in chemical education was voted as the faculty's highest priority last year. When Watts began his chairmanship in the fall of 1990, he felt that an increased focus on chemical education was an obvious goal but there was no coherent mechanism for encouraging work in that area at the time. The hiring of Frazier Nyasulu, Sara Selfe, and Deborah Wiegand over the last year has provided him with an opportunity to introduce innovative educational programs into the curriculum, as well as given the Department an increased ability to reach out to high school teachers and students.

Nyasulu is a native of Malawi and received his 1985 Ph.D. from the University of Salford in the United Kingdom. Prior to coming to the UW last fall as a Senior Lecturer, he taught at Walla Walla College for five years. There, he received the Burlington Northern Faculty Award for excellence in teaching, which is the highest honor given to WWC faculty.

Selfe is an example of the best that the Department of Chemistry has to offer. She earned bachelor's and doctoral degrees here and completed two postdoctoral research projects at the UW before being hired as the Department's director of undergraduate services in 1987. Selfe worked at the Center for Instructional Development and Research (CIDR) for a year before joining the chemistry faculty as a senior lecturer last fall. She is currently the regional coordinator for a Mathematical Association of America committee and sits on an NSF steering committee for laboratory instruction.

Wiegand earned her Ph.D. from Northern Illinois University in 1990. Before completing her degree and coming to the UW as a lecturer later that year, she held positions in industry and as an instructor at a small midwest college. While she chaired the Rock River Section of the ACS in 1987, the group won

## New Building Details Revealed

**F**rom the Department of Obscure Information comes the following:

The new chemistry building will achieve "potty parity" with virtually an equal number of stalls in men's and women's restrooms. However, there will be 50% more sinks in the women's rooms.

Parallel walls are out and splayed walls are in. Plans call for the corridors at one end of the new building to be 17 feet wide while only eight feet wide at the other. The good news is that the ceilings won't slope.

And finally, the State Arts Commission has decided that the 1% of construction costs which must legally be spent on public art will go toward the addition of a bus stop outside the new chemistry building.

When completed, the five-story structure will be over 100,000 square feet and connect to Bagley Hall on every floor with totally enclosed walkways. The exception will be on the first floor, where there will be a covered walkway joining the two buildings.

The ground level will contain physical chemistry research laboratories, organic teaching laboratories will be housed on the first floor, and synthetic organic and inorganic research laboratories will be included on the second, third, and fourth floors. There will be conference and seminar rooms on every floor.

## CPAC Leadership Changes as Center Begins Eighth Year

**T**he Center for Process Analytical Chemistry (CPAC) is poised to emerge as a national leader in technology transfer as it enters its eighth year of operation. Hired recently to steer CPAC more firmly in this direction is Eugene Weissman, a scientist with nearly 30 years experience as an industrial research director.


Weissman's position as executive director is newly created and comes at the request of the Center's industrial sponsors, which currently number 44. Although CPAC qualifies for top ranking among similar centers in terms of research productivity, it has not remained immune from the nation's recession. Weissman's task will be to synergize CPAC's resources by forging new relationships with other UW departments and agencies, such as the Washington Technology Center, along with recruiting new cor-

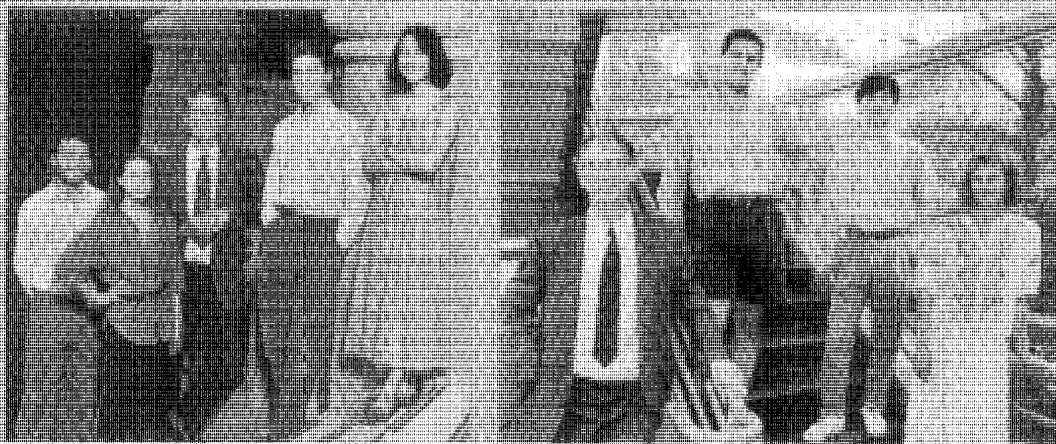
porate sponsors, and maximizing research dollars through federal matching programs.

This job follows along a natural progression for the Romanian native, who received his Ph.D. in chemical engineering from the Case Institute of Technology in 1963. After earning his doctorate, Weissman worked for General Electric for five years and then moved to Johnson Controls for another similar term. It was during this period that he completed the Executive MBA program at the University of Chicago. In 1973, Weissman, who achieved the rank of captain in the Israeli army before coming to America, joined the BASF Corporation, where he remained in various research directorship positions until retiring last year.

CPAC's coming of age is accompanied by reappraisal. The Center, which was originally funded by the

National Science Foundation, the University of Washington, and its industrial sponsors, needs to find additional avenues to commercialize the technology which is being deployed from its basic research into tangible results. Marketing this technology requires walking a fine line so that academic purity is not compromised and that respect is maintained for factors which figure into tenure decisions and educational integrity.

Weissman believes one approach to achieving this goal is the creation of special interest, or focus, groups within the CPAC sponsorship. He feels that smaller couplings of industrial benefactors could lead to generic, precompetitive technology development and could provide the ancillary mechanism which is needed to bring these ideas into the marketplace. 



### Top Students Step Up and Out

Posing in the rotunda of the Suzanne Library are 1991 graduates Anthony Diaz, Katherine Pullen, Chair Bob Watts, John Kulman, and Suzanne Ho. Diaz was the American Institute of Chemicals Outstanding Student Prize recipient and the others were Merck Index Award winners. Pullen was also named the Presidential Medalist last year for having the best record of all graduating seniors. Kulman was the Dean's Medalist in the Natural Sciences for his graduating class.

In the right photo, Watts is joined in the stairwell of the Chemistry Library Building by Brent Krupp, Yong Sun Lim, and Amy Henry. Krupp and Henry were 1992 Merck Index Award winners and Kim was selected for the AIC award. Not photographed was Man Kwan Wong, also a Merck prize recipient.



## Kowalski Named to First Endowed Chemistry Professorship

**T**wenty-three years after he received his doctorate in chemistry from the University of Washington, Bruce Kowalski has been chosen to occupy the first UW endowed professorship established through a consortium of industrial and state resources.

While the analytical chemistry professorship rewards meritorious faculty performance, Kowalski feels it is just as much a tribute to the field of process analytical chemistry as it is to himself. Largely through his efforts, the Center for Process Analytical Chemistry (CPAC) was chartered at the UW eight years ago and has grown into a national leader (see article on page four).

Kowalski plans to direct much of the professorship's income to his students. Because his work is largely in the computer-intensive area of chemometrics, Kowalski feels strongly that his students should have computer capacity slightly larger than they need at any given moment to avoid running up against a computational wall. Kowalski also plans to augment his travel budget with the money and send his students to more meetings.

The original ten companies who contributed to the endowment include Amoco, CIBA-Geigy, Dow, du Pont, Hewlett-Packard, Mobil, Olin, Perkin-Elmer, Union Carbide, and 3M. The three men who laid the early groundwork for the professorship were former CPAC Industrial Advisory Board Chair Syd Fleming from du Pont, the National Science Foundation's Alex Schwarzkopf, and former chemistry chair and current UW Vice Provost Alvin Kwiram.

Kowalski has received several national awards, including the 1985 Pittsburgh Society's Analytical Chemistry Award and the 1988 CCR MacPruitt Award for the promotion of university-industry relations. He has been on the UW faculty since 1973. Prior to his return, he worked for the Shell Development Company and taught at Colorado State University. □

### Education Division continued from page three

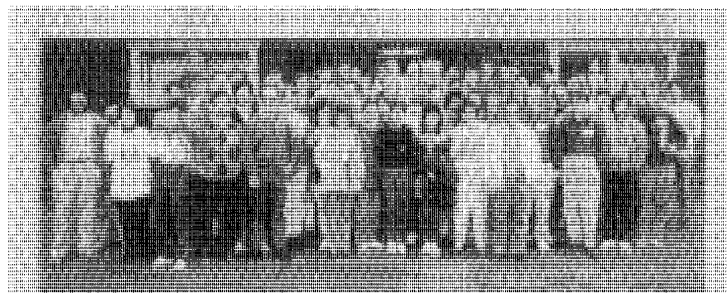
an Outstanding Section Award. Wiegand is currently an alternate councilor for the Puget Sound Section of the ACS.

Selfe has been appointed coordinator of the new division and is responsible for a new seminar series devoted to educational topics. The first speaker was UW alumnus and Washington State University Professor Glenn Crosby who spoke on "Science Education: Problems and Opportunities." He is a former chair of the ACS Division of Chemical Education.

To combat the attrition of women in the sciences, Wiegand has coordinated a "Women in Science" program which attempts to address the concerns female students have in entry-level chemistry courses. Because studies have shown that

women are better at learning in cooperative environments rather than in competitive ones, Wiegand has created women-only quiz sections and laboratories and the Department has assigned female teaching assistants to teach the sections. Regular mentoring by a female faculty member is an integral part of the program, as are special weekly meetings where a wide range of topics are discussed, such as careers, math anxiety, etc.

The Department of Energy is funding a summer program overseen by Nyasulu and Wiegand designed to introduce high school juniors to analytical chemistry. Students will receive college credit for taking "Quantitative Analysis" and it is hoped that some of the young people will be sufficiently intrigued



### Volcano Conference Erupts with Enthusiasm

Surrounded by old growth forest and in the shadow of Mt. Rainier's snow-covered Paradise ski area, inorganic faculty, graduate students, and research associates gathered last winter for the second annual Volcano Conference on Inorganic Chemistry. Conceived and organized by Professor Mike Gell, the conference brings together research groups from several universities in the Pacific Northwest and Canada for a weekend of scientific presentations and socializing. The conference is partially underwritten by the Monsanto Company. (Photo by Mike Gell.)

with the subject to choose science or engineering as a major once they enter college.

It is Selfe's hope that the new division can help combat scientific illiteracy while at the same time stemming the pipeline problem which sees large numbers of students enrolling in entry-level science courses but not graduating with science degrees. Watts has also set long-term goals for the new division and it is his intention that the group will grow to a comparable status currently realized by the more traditional divisions. A well-funded group with a national reputation enjoyed by its individual members is key to the division's success. From Watts' perspective, the division is already well on its way. □

## Bagley Briefs

### Résumé Booklet Published

This summer marks the third year the Department has offered résumé classes to its final-year graduate students and then combined their efforts into a booklet which is mailed to over 500 companies across the country who employ chemists. Several students have received job offers as a result of the résumé book, and adding to the students' satisfaction is the fact that they researched and compiled the mailing list themselves.

### New Adviser Hired

Staff reassignments in the main office have resulted in the hiring of Lani Stone, formerly an academic adviser in the Department of Electrical Engineering, to become the new chemistry and biochemistry undergraduate adviser. Prior to this work, Stone was an admissions specialist in the UW Office of Admissions and registrar at the Cornish College of the Arts.

Nancy Cooper has become the Department's director of student services, with responsibilities for undergraduate and graduate student recruiting and advising, publications, and development. Diane Hunn continues as the graduate program coordinator and her duties include the computer maintenance of graduate records and statistics.

### Four Faculty Workshops Held

Getting professors to attend two-hour faculty meetings can be hard. But Professor Paul Hopkins, outgoing chair of the Department's Long Range Planning Committee, has had little problem drawing the majority of the faculty to a series of all-day workshops which focus on topics felt to be most fundamental to the Department's mission.

Held away from Bagley Hall, these meetings have examined such issues as entry-level coursework for majors, undergraduate education for nonmajors, the graduate program, and interdisciplinary research and its impact on the future development of the Department.

The faculty make recommendations, prioritize them with a vote and then various Departmental committees are asked to more fully explore avenues necessary for the implementation of that particular goal. Among the group's recommendations are the hiring of a senior faculty member in chemical education which the Department hopes to fill sometime during the next academic year. The Department is recruiting for either a person with an outstanding record of innovation in entry-level education or excellence in minority scientific enhancement programs.

### Outstanding Student Service Award Created

Marya Lieberman, a third year graduate student in Professor Tomi Sasaki's group, and Lowell Thomson, a junior chemistry major also working for Sasaki, have been named the 1991 and 1992 recipients, respectively, of the newly created Outstanding Student Service Award.

Lieberman was recognized for her assistance with the entry-level curriculum initiative and her help with graduate student recruiting. Thomson's efforts to establish an undergraduate chemistry club, combined with his involvement with Professor Bill Zoller's Chemistry Outreach Program and membership on the committee that organized the first undergraduate research symposium in May, were the major factors which led to his selection.

### Outreach Coordinator Named

The former associate director of the Center for Process Analytical Chemistry (CPAC), Deborah Illman, has agreed to serve as the Department's outreach coordinator for the coming academic year. Her responsibilities include establishing a cooperative education program for undergraduate chemistry and biochemistry majors, overseeing parts of Professor Bill Zoller's outreach program to high school students, and assisting in the effort to attract minorities and women to science majors. She is working with Lec-



The front foyer of Bagley never looked so nice as people gathered after commencement for an afternoon of celebration. Speaker of the House Tom Foley was the graduation keynote speaker. (Photo by Gary Pedersen.)

turer Sara Selfe on a project which, if funded, would focus on Native American students and the science teachers at reservation schools.

### ACS Ranking Impressive

The latest figures released by the American Chemical Society's Committee on Professional Training shows that the UW continues to rank among the largest producers of chemists in the country. In the category of total bachelor's degrees, the UW placed 13th with 53 graduates, and seventh in the category of total certified bachelor's degrees with 34 graduates. The UW was listed as eighth in the category of master's degrees with 17, and the 36 doctoral degrees it granted made it the 13th largest school in this field. These figures reflect graduation rates during the 1990-91 academic year.

### Student Affiliate Chapter Rejuvenated

An enthusiastic group of undergraduates has banded together to start a chemistry club under the auspices of the already existing ACS Student Affiliate Chapter. Officially registered, although long dormant, the Chapter plans to schedule regular speakers and organize social events beginning next Autumn Quarter. These events will augment the quarterly gatherings that Chair Bob Watts holds with the students.



Doctoral alumna Mary Beth Seasholtz's father photographs his wife and daughter at the commencement luncheon. Seasholtz and her husband, Jon Zicman, also a recent doctoral chemistry graduate, leave soon to start their jobs for the Dow Chemical Company. (Photo by Gary Pedersen.)

### UG Research Symposium Held

Nearly 50 people attended the first annual undergraduate research symposium in late May. Sponsored by the graduate student group, the Chemical Reactionaries, the meeting included 11 undergraduates who gave 20 minute presentations and answered questions from the audience and a panel of graduate student judges. At the end of the day-long symposium, which included a Departmentally-hosted lunch for the students, prizes were awarded to the best speakers. So much excitement was generated at the event that plans are already underway for next year's symposium.

### Clean Room Certified

The complete renovation of laboratory space dedicated to the study of global change has been funded by a \$225,000 National Science Foundation grant from its Academic Research Facilities Modernization Program. Matched by \$335,000 from the UW, the renovated space, which meets Class 10 and Class 100 federal standards, will be shared between Professors Bill Zoller, Richard Gammon, and Bob Charlson.

Their coordinated research program will examine critical areas of biogeochemistry and global change, including aerosol and cloud chemistry, trace metals, and greenhouse gasses.

### Class Performance Improves After Institute

As the High School Teachers Institute starts its eighth summer of instruction, promising results were shown in a recent study which analyzed those high school students taught by past participants and the students' results on standardized ACS tests. The average improvement was 8% over the year prior to the teachers' participation in Professor Darrell Woodman's summer program.

NSF developmental funding is being phased out over the next two years and private sources are being sought to finance the program.

Thirty teachers are selected each year for an intensive, month-long session which divides its time between main theme lectures by Norm Rose on environmental chemistry, participant presentations, microscale laboratory activities, computer training, and seminars featuring speakers on contemporary topics such as the "Gulf War and Local Pollution" and "New Methods for Body Imaging."

Teachers come from Alaska, Idaho, Montana, Oregon, Washington, and Wyoming. They receive a small stipend, travel subsidy, room and board allowance, and eight academic credits in chemistry.

### Luncheon Fetes Graduating Students

Over 100 people attended last month's graduation luncheon which was held in the front lobby of Bagley Hall. Removable wall-to-wall carpet was installed for the occasion, tables were topped with white "linen," and music played softly in the background as the affair was one to remember. The graduates and their families, along with faculty and selected staff, were treated to a catered lunch and a special cake celebrating the BA, BS, MS, and Ph.D. students' graduation.

### UGs Trained as Teaching Assistants

A new course which enables undergraduates to become teaching assistants in chemistry quiz sections and laboratories is supervised by Lecturer Deborah Wiegand. CHEM 498 allows qualified juniors and seniors to function as TAs by helping them identify effective teaching, recognize student diversity, encourage classroom participation, develop methods to deal with troublesome students, appreciate diverse teaching and learning styles, and promote healthy interpersonal relationships. A large number of students who have taken CHEM 498 are planning to enter teaching as a profession and find the class to be among the most rewarding and useful they have taken at the University.



Three UW organic chemists are descendants of the E. J. Corey legacy. Pictured with him are Paul Hopkins (center) and Wes Borden (right). Not pictured is Niels Andersen.

### Nobel Laureate Presents Lecture

**C**all them prescient or call them just lucky guessers, but the organic chemistry graduate students selected Elias J. Corey as the 1991 Hyp J. Dauben Lecturer *before* he was awarded the 1990 Nobel Prize in Chemistry for his contributions to organic synthesis.

The Dauben Lectureship is an endowed tribute to the late organic chemist who was a member of the UW faculty from 1945 until his death in 1968. Dauben was renowned for his research on nonbenzenoid aromatic compounds, carbocations, and reaction mechanisms.

As the Sheldon Emery Professor of Chemistry at Harvard University, Corey is an expert in the logic of organic synthesis and in the use of computers to perform retrosynthetic analysis. His group has synthesized over 100 natural products and has developed numerous new synthetic methods. Prior to joining the Harvard faculty, Corey spent eight years at the University of Illinois, mainly studying organic reaction mechanisms.

## Donations Strengthen Department's Activities

Contributions from the following individuals, corporations, and foundations have been used in the past 18 months to either continue or establish new graduate student fellowships, fund equipment purchases which are not possible with state or federal money, finance an undergraduate tuition scholarship and two book prizes for these students, and help in the Department's graduate student recruiting efforts.

Development Committee Chair Charlie Campbell thanks each of following people, companies, and private foundations for their generous support. He urges people to call him collect at 206-543-3287 if any gifts were omitted from this list or if names are misspelled.

### Over \$10,000

AMOCO Foundation  
Chevron Research & Tech. Co.  
Ciba-Geigy Corporation  
Dow Chemical Company  
E. I. du Pont de Nemours & Co.  
Elf Aquitaine Inc.  
Hewlett-Packard Corporation  
ICI Pharmaceuticals  
Merck & Co. Inc.  
Olin Corp. Charitable Trust  
Seiko Instruments, Inc.  
Shell Development Company  
Shell Oil Company Foundation  
The Discuren Foundation  
Union Carbide Chem. & Plastics

### \$5,000 - \$10,000

Barber, Eugene John  
Dow Chemical Co. Foundation  
Dow Chemical U.S.A.  
Minnesota Mining & Mfg. Co.  
Monsanto Company  
Perkin-Elmer Corporation  
Reinleitner, Katherine M.  
Schomaker, Verner  
Shain, Irving  
Sterling Winthrop Inc.

### \$1,000 - \$5,000

Anonymous Gifts from Friends  
Barthold, Constance R.  
Benson, John W.  
Council For Chemical Research  
Hamm, Randall Earl  
Henry, Ronald A.  
Hutton, George Wilson  
Jache, Albert W.  
Kennedy, Ronald Craig  
Kohler, David A.  
Lingafelter, Edward C.  
Porter, Roger Stephen  
Ritter, Bernice C.  
Schurr, J. Michael  
Shreeve, Jean'ne M.  
Simeon, Mary K.  
Spectroscopy Soc of Pittsburgh  
Teeter, Richard M.  
Watanabe, Nobuatsu  
West, Lloyd Ellis

### \$500 - \$1,000

Advanced Research Chemicals  
Beilby, Alvin L.  
Berkelhammer, Gerald  
Dalbey, Edgar Ross  
Hsu, Jeanne Shanchi  
Kluksdahl, Harris E.  
Kwiram, Alvin L.  
Miko, Theodore S.  
Moser, Robin Emerson  
Motoyama, Yoshiaki  
Muhs, Merrill Arthur  
Murib, Jawad Hamoodi  
Osten, David W.  
Powell, John Alexander  
Supanich, Edna F.  
Tazuma, James J.  
Varanasi, Usha S.  
Wanwig, J. Daniel

### Up to \$500

Ahmad, Jacqueline Mae  
Allen, Gary W.  
Anderson, Paul A.  
Anex, Basil G.  
Arrigoni, James  
Aubke, F.  
Barnes, Robert K.  
Bacon, Edward Richard  
Bae, Nancy Soo Hyung  
Balkenhol, Wayne John  
Beaulieu, Christopher F.  
Bednekoff, Alexander G.  
Blumenthal, Vaughn L.  
Bolen, John W.  
Bomhardt, Paul A.  
Bouknight, Joseph Ward  
Bowden, Deborah  
Brewster, Betty Marie  
Brown, Bob Dale  
Brown, Christine Patricia  
Buchanan, Gary Leroy  
Burger, Leland Leonard  
Cady, Carl Marsh  
Cady, Howard H.  
Castonguay, Robert C.  
Chackerian, Charles  
Chandler, Travis  
Chow, Tsaihua James  
Christian, Gary D.  
Chun, Melanie Ann  
Church, David Alan  
Conrad, Kenneth L.  
Correa, Roy Jay  
Cowles, Edward J.

Crosby, Virginia W.  
Currie, Stephen W.  
Dalby, Glenn Robert  
Davidson, Ernest R.  
Davis, Douglas Dale  
Deming, Meryl William  
Denniston, Alan David  
Dettmer, Franz Herb  
Dickerson, Dorsey Glenn  
Diesen, Ronald William  
Dorn, Thomas F.  
Downie, Katherine Evelyn  
Elliott, Dennis L.  
Erickson, Brice Carl  
Evans, Victor John  
Fairfax, Edward J.  
Flair, Michele Marie  
Flatauer, Frank E.  
Forrest, Gary T.  
Freeman, John P.  
Freeman, Paula Briggs  
Friedle, Albert  
Fujioka, George S.  
Fuller, Lloyd F.  
Gard, Gary L.  
Gard, Richard John  
Garrison, Arlene A.  
Garvin, James E.  
Ghomashchi, Farideh Fatemi  
Gingrich, Harold D.  
Goodman, Gary J.  
Gorman, William L.  
Green, Edmond  
Gross, Robert Donald  
Grover, James Robb  
Gulick, Garth Grant  
Gunderson, Scott A.  
Haas, Alois  
Hadley, Stephen William  
Hahn, Louis Taylor  
Hammer, Robert R.  
Handy, Lyman Lee  
Hansen, Dayne Dennis  
Hansen, George Albert  
Hansen, Ingrid Wilhelmina  
Hardwick, William D.  
Harms, Nancy S.  
Harrar, Jackson E.  
Hart, Phillip A.  
Hashisaki, Geraldine A.  
Hay, Daniel Elliot  
Hedges, Peter Alan  
Hedreen, Carl A.  
Henkens, Robert W.  
Hickernell, Gary L.  
Hiemstra, Else Corine  
Hill, Brian Stevens

Hill, Martin J.  
Hinman, David C.  
Hinrichs, Roger John  
Ho, Chu-Ngi  
Hoekstra, Henry Raymond  
Holmes, Carol J.  
Hom, Tom  
Hopkins, V. Adele  
Howell, Christopher D.  
Hsu, Raymond  
Hunt, Heman D.  
Hyman, John Emery  
Ikeda, Daniel Phillip  
Ilman, John C.  
Jackson, Ruth M.  
Jaehning, Judith A.  
Jarvi, Reino A.  
Jensen, Ole J.  
Johnson, Edwin Lee  
Johnson, Jane Elaine  
Johnson, Karen O.  
Jones, Lester D.  
Joss, Jonathan Edward  
Kells, Lyman F.  
Kent, David Verne  
Kimlinger, Anne Cederquist  
Klein, John W.  
Knapman, Frederick W.  
Knoke, Donald F.  
Knox, Thomas Edward  
Kobayashi, Yoshiro  
Krick, Fred R.  
Kumar, Ramesh  
Kusumi, Raymond Satoru  
LaViolette, Duane F.  
Lai, Juey Hong  
Laity, John Lawrence  
Larsen, Marilyn Ankeney  
Latourette, Harold K.  
Leahy, Sidney Marcus  
Lee, John Howard  
Lee, Robert William  
Leinicke, Linda K.  
Lepse, Paul Arnold  
Leung, Yan Louis  
Lewis, William C.  
Limb, Glenn R.  
Lin, Yueh-Neu S.  
Lingren, Wesley E.  
Lok, Roger  
Looney, Catherine Elizabeth  
Lory, Earl R.  
Loveland, Walter David  
Lowinger, Edmund Mark  
Ludwig, Charles H.  
Lynch, John P.  
Lysaght, Michael John  
Malofsky, Bernard M.  
Masada, Gary M.  
Masada, Riyuko Irene  
Matsumoto, Alvin M.  
McCormick, Neil G.  
McDonald, Richard Norman  
McDougall, John A.  
McElroy, Donald M.  
McIntyre, Diane M.  
Meditch, James Stephen  
Mellor, William Kimball  
Metzger, Robin A.

Mews, R.  
Meyer, Roger J. C.  
Mill, Theodore  
Miller, Alex E.  
Minor, James Ernest  
Mitra, Grihapati  
Montana, Andrew Frederick  
Morosin, Bruno  
Motell, Edwin L.  
Myers, Joseph F.  
Najita, Lyle Masaji  
Natt, John J.  
Neff, Loren Lee  
Nelson, Jerry Allen  
Nelson, Michael  
Nofle, Ronald Edward  
Numata, Robert Alan  
O'Loughlin, John Fitzgerald  
O'Neill, John Reginald  
O'Toole, Cynthia Ann  
Oates, Kenneth Marshall  
Olleman, Elizabeth A.  
Ordway, Girard L.  
Osborne, Joseph Herrman  
Otto, Charlotte A.  
Pallett, Richard Dennis  
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Parker, Richard Clyde  
Paxton, Raymond J.  
Peak, Ralph F.  
Peck, Dennis F.  
Pedersen, Barbara Jean  
Pedersen, Gary N.  
Pehrson, John Ross  
Pekman, Alfred E.  
Perkins, Douglas L.  
Perry, Dennis Gordon  
Pfeifer, Delbert A.  
Plummer, David Frank  
Pollock, Robert N.  
Portelance, Herbert James  
Puziss, Paul Martin  
Rabinovitch, Ruth A.  
Raymond, Kenneth W.  
Reeder, Seth Darrell  
Reich, Ieva  
Rench, Daniel  
Rice, Sandra Colleen  
Richerzhagen, Theodore  
Robbins, David Bruce  
Roberts, Michelle Lorraine  
Rohr, Timothy Charles  
Rohrback, Gilson Henry  
Romano, Estelle  
Romberg, Harry Bernard  
Ronald, Bruce Pender  
Rose, Norman Jenisch  
Ruan, Fugiang  
Rudolph, Johannes  
Rudy, Clifford Robert  
Rueber, Mark Stephen  
Sanford, F. Bruce  
Sands, Florence M.  
Sands, Walter C.  
Schaffer, Arnold M.  
Schell, William Raymond  
Schick, John A.  
Scott, Allen B.  
Sears, Karl David



Selden, Janice Ann  
 Shackelford, Scott A.  
 Sheeran, Norman James  
 Shelton, Cyrus Quentin  
 Shibata, John Hisashi  
 Shimada, Mitsuyoshi  
 Siegwarth, David Phillip  
 Smith, Herbert Edmund  
 Spear, William Eric  
 Spitzer, Kenneth D.  
 Stachowiak, Matthew Leigh  
 Stacie, James Harley  
 Starkebaum, Mary Kathryn  
 Steele, William Arthur  
 Stell, Jane  
 Stein, John Egil  
 Stewart, Robert Daniel  
 Stogsdill, Rose M.  
 Stone, Joe Thomas  
 Stonebraker, Peter M.  
 Stoner, John Thomas  
 Storm, Daniel Ralph  
 Strelitzer, Oscar E.  
 Sutherland, David H.  
 Svedberg, Dana Paul  
 Symonds, Marilyn E.  
 Teague, Jeanette  
 Teague, Ralph William  
 Thornton, Mark M.  
 Timberlake, Karen C.  
 Todd, Seldon Page  
 Tompkins, Mary Joan  
 Tracy, Joseph Walter  
 Underwood, Bruce Kenneth  
 Van Roekel, Linda R.  
 Van Zandt, Thomas L.  
 VanMeter, Wayne Paul  
 Vandenbosch, Robert  
 Vanorum, Joel Vern  
 Vincow, Gershon  
 Virant, Frank S.  
 Vogel, Daryl Givens  
 Wasserman, Harriet M.  
 Webster, Frances A.  
 Webster, Grant A.  
 Wedlund, Peter Jeffrey  
 Weinstein, Michael Simon  
 Weinstein, William S.  
 Westman, Thomas L.  
 White, Danny Vincent  
 Whitford, Donald D.  
 Whitten, Gary Zachary  
 Whyte, James J.  
 Wilde, Richard Edward  
 Wilkinson, William C.  
 Wise, Barry Mitchell  
 Wolbach, C. Dean  
 Wong, Rebecca Kaneonapua  
 Woodley, Robert Earl  
 Wu, Chia-Li  
 Youngman, Edward A.  
 Yates, Ronald Lee  
 Yoshimura, Arthur A.  
 Young, Lyman Arnold  
 Yum, Tai Yong

## Shain Prize Established

**F**or most of Irving Shain's academic career, only the color of his booster tie changed. The initials on it remained the same.

That's because he went from seven years at the University of Washington as a student, to 23 years as a professor and administrator at the University of Wisconsin, returning to the UW for two years as provost and vice president for academic affairs. He finally settled back at Wisconsin for another decade as chancellor, a job equivalent to president at other universities.

It's only when the UW BS(1949) and Ph.D. (1952) alumnus retired from the large midwestern university in 1986 and became vice president and chief scientific officer at the Olin Corporation in Stamford, Connecticut that he could quit worrying about confusing the two UWs.

But Wisconsin remained home and upon retiring from Olin, where he continues as a board member, he returned to the university earlier this year, this time as a volunteer involved in technology transfer and marketing of the University Research Park.

Shain, and his wife Millie, haven't forgotten about that other UW, however, and recently established an endowed fund from which fourth-year graduate students can be awarded a prize for excellence. Although Shain's own research was in the area of electrochemistry and the kinetics and mechanisms of electrode reactions, the prize which bears his name is open to any outstanding student. The first recipient of the prize is Snorri Sigurdsson, a member of organic chemistry Professor Paul Hopkins' group.

After graduating from Seattle's Garfield High School, Shain spent nearly four years on a hospital ship during the Second World War. He



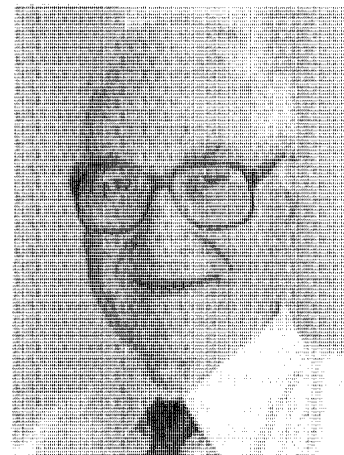
## Donor Dinner Honors Awardees

The third annual function recognizing the student recipients and donors of scholarships and fellowships for both chemistry undergraduates and graduate students was held last winter at the University's Faculty Club. Also honored at this year's dinner were chemistry faculty who had received research and teaching awards during the past twelve months.

Among the graduate students who were honored at the dinner were (pictured from left in the top row) John Tomaszewski, Brian O'Hagan, John Cort, Suzanna Kahne, Byron Kneller, and Mark Vogel (all Graduate School Scholarship recipients); pictured from left in the middle row are Seth Brown (Shell Fellowship), Stephen Alley (Ringold Fellowship), Marys Lieberman (Outstanding Service Award), Gary Wolfe (Shell Fellowship), Amy Snover (Immunex/Achievement Award for College Scientists), Greg Mills (Hertz and ARCS), Margie Solomon (Hitchings Fellowship), and Suzanna Chung (Dew Fellowship); pictured from left in the bottom row are Annabelle Reese (Weinstein Fellowship), Aljun Li (Chevron Fellowship), Susan Rempe (Shell Fellowship), and Pam Foster (Ritter Fellowship).

met his wife at the UW and together they raised four children.

The Shains still maintain a summer home on Vashon Island and have close ties to the University of Washington. Shain admits he's torn, however, and come September 12th, when the national champion Washington Huskies battle the Wisconsin Badgers on the football field, he's planning to spend time on both sides of the stadium lest he be accused of partisanship. □



Irving Shain

## Outstanding Alumni

### The Days of the Jackels

**C**huck grew up in the Twin Cities area of Minnesota. During her college years, Susan lived about 40 miles to the south. But, it wasn't until they were assigned to the same office when they entered the UW as new chemistry graduate students back in 1968 that they met.

Today, Chuck and Susan Jackels not only share the same last name but they literally share the same job. A unique arrangement with Wake Forest University's Department of Chemistry has allowed the Jackels to pursue their independent careers as research scientists and teachers under a single tenure-track faculty position. One job, one paycheck, two Ph.D.s.

The decision to job share was family-driven. Chuck was finishing his first postdoctoral job at the Battelle Memorial Research Institute in Ohio while Susan was completing her second postdoctoral job at Ohio State University. They both wanted to spend as much time as possible raising their family and believed that this arrangement's inherent flexibility would give them this option.

With this opportunity also came the realization that, in order to be successful faculty, there was no such thing as "half-time." Both were eager to conduct research, supervise students, and publish. Concessions had to be made, and among them was the stipulation that the two would not teach more or serve on more departmental and university committees than would be expected of one person.

The Jackels also insisted that the two be considered for tenure at the same time and always receive merit increases that would allow them to remain at the same base salary. From the day they met in graduate school, the two have been on parallel educational and employment tracks and they are dedicated to

making the kinds of concessions necessary to remain parallel. If this means one turns down other employment opportunities or refuses a higher raise, then that is the step that is taken.

Chuck's interest in chemistry came alive in the early 1960s, when Chem Study was new. The NSF was trying to close the "missile gap" and the country was experiencing a renaissance period in science. Susan was a child chemist whose love of science was encouraged by her grandmother. Susan still remembers the time she accidentally filled her grandmother's house with chlorine gas when one of her experiments in the basement laboratory she built went awry.

Despite this calamity, Susan is still a firm believer in home experimentation and built her most recent chemistry outreach proposal around this concept. This three-year NSF-funded project, The KIDS Program ("Kids Involved in Doing Science"), is designed to send a high school junior and senior out to selected sixth grade classrooms in the rural central and northwestern parts of North Carolina to conduct demonstrations which the younger children can then repeat at home.

Susan is chair of the departmental undergraduate research program (an NSF-REU site) and has recently stepped down as chair of the Fringe Benefit Committee, which is part of the Faculty Senate.

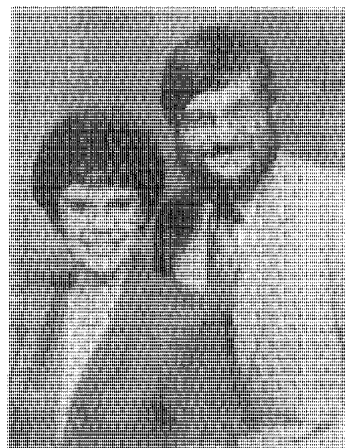
Chuck has been involved with his local ACS section over the years and has served on numerous university-wide computer committees. Currently, he sits on his College's Teacher Preparation Committee, which oversees the certification programs for primary and secondary education majors. Chuck's doctoral work was under Ernie Davidson's supervision and he recently gave an invited paper at the San Francisco

ACS meeting during an award symposium for Davidson. Chuck's research today deals with the quantum chemistry of short-lived species and reactive intermediates that are important in atmospheric chemistry. In addition to his 50% Wake Forest appointment, Chuck is also funded by NASA.

Susan remembers her Ph.D. supervisor, Norm Rose, with fondness and says she incorporates into her own laboratory much of what she learned about scientific ethics and basic human compassion from Rose. She is a synthetic inorganic chemist but her research focus expanded a few years ago when she accepted a 25% appointment in the Department of Radiology. Susan is also supported through revenue generated by a patent she received when she worked as a consultant for a French pharmaceutical company.

In their spare time, the Jackels are involved in their nine-year-old daughter's Girl Scout Troop. Both are lecturers at their church, where Susan also teaches second-grade Sunday School and Chuck has been involved in adult education.

The Jackels agree that the job sharing arrangement might never have worked if either partner was predisposed to a highly competitive position. Early on, a joint decision was made which effectively steered their lives away from the track which would have pushed their careers in the farthest direction. At some point, it is possible that one of the Jackels may be in a position to administer the other, but if and when that time comes, they will handle the situation with the same equanimity which has characterized their commitment to each other.



Susan and Chuck Jackels

## You Can Go Home Again

**T**homas Wolfe was wrong. Not only can you go home again, it can be a much sweeter place when revisited. Just ask Isiah Warner.

This fall, he will become the Philip W. West Professor of Analytical and Environmental Chemistry at Louisiana State University in Baton Rouge. Warner graduated from his Louisiana high school as class valedictorian nearly 30 years ago and then went to Southern University, an historically black school, where he graduated *cum laude* in chemistry.

After receiving his bachelor's degree, Warner took a job at the Battelle Research Institute in Richland, WA. He enjoyed his work, but after five years, was looking for more formidable scientific challenges.

That brought him to the University of Washington and into the chemistry graduate program, where he excelled as a student in Gary Christian's laboratory. Warner has become an expert in the development and applications of improved methodology for studies of complex chemical systems. Among his more specific interests are fluorescence spectroscopy, spectroscopic applications of multichannel detectors, chromatography, environmental analyses, and chemometrics.

Mother Nature had a small role in helping Warner choose his first job after graduation in 1977. He was initially attracted to an East Coast industrial position, but when he arrived for his interview and saw eight inches of snow on the ground, he remembered why he liked the South. So, he accepted a position at Texas A&M, where he stayed for five years. Leaving there with tenure, his next position was at Emory University in Atlanta, where he became full professor in 1986 and Samuel Candler Dobbs Professor of Chemistry in 1987. A twelve-month

assignment at the NSF followed, and despite numerous job offers through the years from universities and agencies across the country, Warner has again succumbed to the pleasures of southern climate and culture, and finally to the pressure to return to his family.

Despite the role model he has become to black science majors at Emory, Warner's influence is enormous and is felt as keenly by white and black students alike. This year, the top graduating senior at Emory was a white student performing research in Warner's laboratory. This student was also selected by *USA Today* for its 20-member Academic Team and when asked who had the greatest impact on his life, the student answered that it had been Warner. In the fall, this student will pass up a chance to become a Rhodes Scholar to teach chemistry to disadvantaged youth in Africa.

But not only students are changed by knowing Warner. In his first performance appraisal at Emory nearly 10 years ago, a peer evaluator wrote that the way Warner interacted with his research group had inspired him to reexamine his own relationships with his students and prompted him to hold weekly group meetings and regular social events, much like Warner did. And one of his closest friends, a former graduate student of his in Texas, indicated that he had not previously cared for black people until he met Warner. Today, this man is associate director of analytical research and an active minority recruiter for a large, multinational company.

Warner's love of teaching and of being with young people influences what he does in his spare time, as well. For the last six years, he has served as a Little League baseball coach for his two youngest sons. Warner and his wife, also a Louisiana native, serve as their church's

youth group leaders and the popularity of their Sunday afternoon meetings has become legion. Warner's oldest son is an art education major at the University of Georgia.

For many years, Warner has been active in the National Organization of Black Chemists and Chemical Engineers (NOBCCChE). Along with other NOBCCChE members, he is planning a symposium for young black faculty from majority institutions who are coming up for tenure in the next few years, focusing on what these people should do to assure themselves of receiving permanent positions.

He has served on advisory or review panels for the National Academy of Sciences, National Institutes of Health, and Oak Ridge National Laboratory. He has received awards from his local ACS section, from NOBCCChE, and from the New York Section of the Society of Applied Spectroscopy. Warner was vice-chair of last summer's Gordon Conference on analytical chemistry and will be chairing this year's meeting.

Although he has been approached about assuming leadership or administrative roles at both Emory and LSU, for the time being Warner can't imagine a job he'd enjoy more than the one he has now as a professor active in research and teaching.



Isiah Warner

## Nice Guys Don't Always Finish Last

**C**hemistry administrator Gary Pedersen has a long history of receiving prestigious awards.

In fifth grade, his hometown Vancouver, Washington newspaper gave him a prize for the best Christmas letter. This was followed by winning "Most Musically Inclined" accolades from his classmates during his senior year in high school.

But now, Pedersen's circle of recognition has expanded. His peers have named him one of 1992's UW Outstanding Professional Staff members in only the second year this competition has been held. Nearly 1500 people are employed as professional staff at the UW and only six are recognized annually with this distinction. Award winners are determined on the basis of length of service, clientele served, innovation and impact, and spectrum of professional staff duties performed.

It would be hard to find anyone else who knows where as many skeletons are buried in Bagley Hall as Pedersen. He began working in the Chemistry Department as a Purchasing and Accounting student helper in 1974. After graduating with his bachelor's degree in chemistry two years later, he became an accounting assistant and a few years after that, was promoted to P&A office manger.

Pedersen originally considered becoming a music major but soured on the idea when he more fully realized that the rigors of a performance career would keep him on the road too much and he wasn't interested in the discipline problems a high school teacher is forced to confront. Jazz wasn't a particularly strong program at the UW in the middle 1970s and when Pedersen looked at his options, he was closest to graduating with a chemistry degree.

Little did he realize that he would eventually parlay that a decade later into becoming the chief financial officer and head administrator in one of the largest departments on campus. Pedersen oversees nearly 60 staff and a budget in excess of \$11 million. He's currently involved with implementing a computerized chemical inventory system as well as serving as the Department's liaison to the architects and other construction personnel who are involved with the new chemistry building.

Pedersen has been chairman of the Department's Safety Committee for five years and serves the University through his participation on the Chemical Hazards Advisory Committee and Professional Staff Network Planning Committee.



*Pedersen is a member of the jazz quintet which plays every year at the Department's winter holiday party.*

## Staff Recognition Award Created

**A**mong the things that the first recipients of the Department's Outstanding Staff Service Award have in common is a strong belief that other people were more deserving of their awards than they.

Kathy Smith and John Peterson, 1991's and 1992's respective winners, share more than just a sense of modesty. Both came to Chemistry from other UW campus jobs, each has worked in Bagley for a relatively long period of time, and both are known for their computer expertise and willingness to help others who are less computer literate.

Smith's skills are self-taught while Peterson holds a bachelor's degree in electrical engineering. Smith's experience spans more than seven years in Bagley Hall, currently as a program coordinator, and Peterson has worked for Chemistry for six years as a research engineer II.

A high level of autonomy, openly appreciative faculty, and a family-like atmosphere among the staff she works with in Chemistry are among the reasons Smith enjoys her job. She provides clerical support for a group of about six professors who treat her as an equal member of the team. Her intuitiveness for computers is matched by her logic in dealing with problematic issues. She freely shares her time with others and she is regularly consulted by staff and faculty, alike. In addition to her work with individual professors, she also coordinates all faculty searches.

Smith and her husband enjoy hiking, gourmet and ethnic cooking, and extended travel in Europe. They are also wine aficionados who have toured many French, Italian, and Washington wineries. Smith's husband, who has a Ph.D. in biochemistry from the UW, is an enologist for a local vintner.

Peterson's responsibilities are wide-ranging. He keeps the computer net-




*Kathy Smith*



*John Peterson*



work operational and is conversant with Macintoshes, the Department VAX, and Unix workstations. He maintains all centralized printers and is in the process of setting up a centralized Appleshare file server. Peterson is also in charge of supporting the hardware and software for the Department's electronic mail service and is often asked to research and evaluate products that the Department is considering for purchase.

For Peterson, computers are his avocation as well as his vocation. In his spare time, he experiments with robotics and is nearly at the stage where he can build a prototype. He wants to program his first robot to know when to plug itself in for regeneration. If successful with this venture, Peterson would like later generations of his robot to be able to provide home security, to speak, and to vacuum. He plans to make his robot short enough to go under the furniture so that his stuff doesn't need to be moved. 

## Faculty Update

### Arthur Anderson (organic)

Although he has been retired for several years, Anderson remains an active scientist. He was invited to write a review article on azupylene for *Trends in Organic Chemistry* this past spring. In addition, he had two research papers published in 1991 and two others are in press this year.

### Wes Borden (physical organic)

From Montana to Menton is where Borden has lectured in the past year. In addition to speaking in France, he gave invited talks in Germany and Switzerland last summer. This spring he lectured at the national ACS meeting in San Francisco, at an international meeting in Tsukuba, Japan, and at Kyoto and Osaka universities. This summer, Borden gave an invited talk at the regional ACS meeting in Missoula, and in the autumn, he will return to Japan for another international meeting, at which he will give an invited lecture and chair a session. This year, Borden was appointed to the editorial advisory board of the *Journal of Organic Chemistry*.

### George Cady (inorganic)

In January 1991, Cady's colleagues and former students gathered for a special symposium and dinner party to celebrate his 85th birthday. Donations in honor of Cady are going toward the funding of a lecture-ship named for the emeritus professor of inorganic chemistry.

### Jim Callis (analytical)

Callis will be on sabbatical next year at Sussex University in Brighton, England. His leave will be partially supported by the Guggenheim Fellowship and Fulbright award he received this past spring. In addition, Callis recently received a grant from the Frasch Foundation to non-invasively study chlorophyll distribution in leaves by means of optical imaging spectroscopy.

### Charlie Campbell (physical)

Ranking at the top of the list of important accomplishments for the last year has to be the recent adoption of a baby boy by Campbell and his wife. Scientifically, Campbell's been active, as well. He published about a dozen refereed papers last year. He is the chairman-elect of the Colloid and Surface Chemistry Division of the ACS, as well as a member of the editorial board of the *Journal of Catalysis*. Last year, he received a patent for "High Flux Ion Gun Apparatus and Method for Enhancing Ion Flux Therefrom" and received new grants from the Department of Energy and the IBM/Washington Technology Center. Campbell has given talks at universities all over the country, as well as several in Denmark. During his two visits to Brazil in the last two years, he gave several invited lectures and has also spoken at meetings throughout the United States. Effective this fall, Campbell will be promoted to professor.

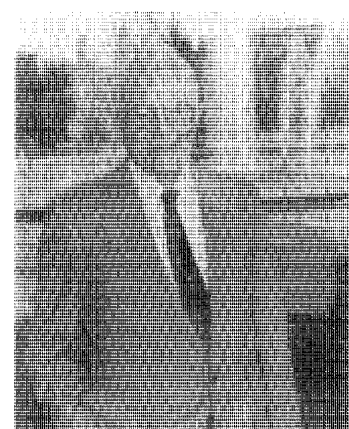
### Robert Charlson

(adjunct, Atmospheric Sciences)

Last autumn, Charlson testified before a United States Senate subcommittee on Science, Technology, and Space. He's a member of the editorial advisory boards for the *Journal of Aerosol Science and Technology* and *Tellus B*, and he's a member of the NAS/NRC Committee on Atmospheric Chemistry. Charlson's work is supported by the NSF, NOAA, and the DOE.

### Gary Christian (analytical)

In addition to his duties as Associate Chair for the Undergraduate Program, Christian has recently been appointed to the editorial board of *Fresenius' Journal of Analytical Chemistry*, to the scientific board of ANATECH '92 (3rd International Symposium on Analytical Chemistry Techniques for Industrial Process Control), and to the International Scientific Committee for the Fourth Symposium on Drug Ana-



George Cady

lysis in Belgium. Christian has given plenary talks at meetings in Australia (Second Environmental Chemistry Conferences sponsored by the Royal Australian Chemical Society), Japan (Flow Analysis V Conference), and Brazil (VI Encontro Nacional de Química Analytica). He has also given talks at universities throughout the United States and in Japan, Brazil, Canada and in Czechoslovakia, where he was an NSF delegate last year. Christian is a member of the scientific board for the 1992 International Chemistry Olympiad which is being hosted by the United States. His collaborative research with Jarda Ruzicka is funded by the Center for Process Analytical Chemistry and the National Institutes of Health.

**Gary Drobny (biophysical)**

In addition to his faculty status at the UW, Drobny was appointed Director of NMR Research at Battelle Pacific Northwest Laboratory in Richland, WA.

**Richard Gammon (environmental)**

Effective this past spring, Gammon will be awarded tenure as professor of chemistry and oceanography.

**Michael Gelb (bioorganic)**

In the past year, Gelb has received a National Institutes of Health Research Career Development Award, became a Fellow of the Alfred P. Sloan Foundation, and was named the recipient of the ICI Pharmaceuticals' Group Award for Excellence in Chemistry. He has had two grants funded by the NIH and one by Sterling-Winthrop Pharmaceuticals. Gelb attended meetings last year in Switzerland, Holland, Israel, England, and in a number of American cities.

**Martin Gouterman (physical)**

Last year, Gouterman received the UW Minority Science and Engineering Program Faculty Excellence Award for his efforts to make chemistry more accessible to students of color.

**Sen-itiroh Hakomori**

(adjunct, Biomembrane Institute)

In the past year-and-a-half, Hakomori has been made an honorary member of the Japanese Cancer Society and the Finnish Society of Science. He has also received several prestigious prizes, including the Silver Sphinx Award, presented last year at the International Conference on the Biological Function of Glycosphingolipids, the Japanese Asahi Prize for Arts and Sciences, and the 1992 Morton Prize of the British Biochemical Society. He has given invited lectures throughout the country and abroad, including the plenary lecture at the 11th International Symposium on Glycoconjugates in Canada. Hakomori continues as a recipient of the National Cancer Institutes Outstanding Investigator Award.

**Rick Heller (theoretical physical)**

UC Berkeley asked Heller to give the 5th Annual Kenneth Pitzer lecture last year where he spoke on "What's New in the Old Quantum Theory." This year, Heller gave the Jeremy Musher Memorial Lecture at Israel's Hebrew University and he recently received a Guggenheim Fellowship. Heller's research has been funded by the NSF and PRF, and a recent grant co-written with Hannes Jonsson has been funded by the DOE.

**Mike Heinekey (inorganic)**

Heinekey joined the UW faculty this January as associate professor after leaving Yale University, where he had been on the faculty since 1985. His research is funded by the PRF ("Structure and Reactivity of Transition Metal Dihydrogen Complexes"), NSF ("Exchange Coupling in Transition Metal Polyhydrides"), and Department of Energy Basic Energy Sciences ("Homolytic Activation of Hydrogen and Methane by Persistent Metal Radicals"). Since coming to the UW, he has lectured extensively at California universities and at schools along the East Coast. Heinekey is the incoming

chair of the Department's Long Range Planning Committee.

**Paul Hopkins (bioorganic)**

At the national ACS meeting this summer, Hopkins will receive an Arthur C. Cope Scholar Award. His work on DNA cross-links has been funded by the NIH and NSF, and he has spoken at several universities, conferences, and companies in the last year. Hopkins is the outgoing chair of the Long Range Planning Committee and his NIH Research Career Development Award continues.

**Rachel Klevit**

(adjunct, Biochemistry)

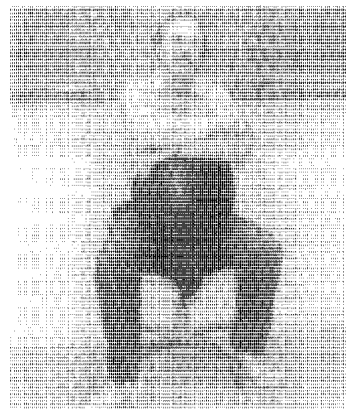
In addition to receiving tenure when she was promoted to Associate Professor last summer, Klevit continues to serve as an associate editor for *Protein Science*, on the American Society for Biochemistry and Molecular Biology's committee for Equal Opportunities for Women, as a council member of the Biophysical Society, on the nominating committees of the Biophysical and Peptide societies, and as chair of the nominating committee of the ACS's Division of Biological Chemistry. She has given several invited talks at major symposia and her work has received funding from the Office of Naval Research and the Muscular Dystrophy Association.

**Julie Kovacs (bioinorganic)**

Last summer, Kovacs was an invited speaker at the Third International Conference on the Molecular Biology of Hydrogenases in Portugal. She has been invited to write a chapter for an upcoming book on inorganic biochemistry, and she recently received funding from the NIH.

**Alvin Kwiram (physical)**

Kwiram is the 1992-93 chair of the Chemistry Section of the American Association for the Advancement of Science, is a member of the Committee on Science for the ACS, and chairs an ACS subcommittee on Federal Funding for Research in Chemistry. This latter group is currently



Mike Heinekey



Julie Kovacs

addressing whether chemistry can and should set priorities for research funding, or whether university research in chemistry is too much like a cottage industry to lend itself to such a process of "picking winners and losers." Despite the administrative demands he faces as the UW's Vice Provost for Research, Kwiram is still able to spend time on his own research and is currently involved in a joint project involving the Max Planck Institute in Stuttgart, Germany.

**Jim Mayer (inorganic)**

Solid state chemistry has been the focus of Mayer's work during his sabbatical this past year at New Jersey's AT&T Bell Laboratories. He plans to incorporate this new knowledge into his teaching and research upon his return to Seattle this summer. In the past year, Mayer has been given a Union Carbide Innovation Recognition Award, received funding from the PRF, and named the 1992 E. Bright Wilson Prize lecturer at Harvard University. Coincidentally, Wilson had been his undergraduate advisor when he was a student at Harvard in the middle 1970s. Effective this fall, Mayer will be promoted to professor.

**Yeschayau Pocker**

**(organic and biophysical)**

Pocker continues to serve on the Board of Reviewing Editors of *Science*, on the advisory board for Gonzaga University's Murdock Research Program, and on the interdisciplinary board for *Science's* Research, Discovery, and Innovation committee. As a member of the latter group, he has addressed topics such as fostering professional growth in the sciences, disseminating creative ideas, and identifying critical issues in chemical education. The UW College of Arts and Sciences has given Pocker special recognition for Excellence in Teaching. Last summer, he presented the Special Topic lecture on "Plant Carbonic Anhydrase and Photosynthesis" and gave invited talks entitled "Fast Kinetic Methods" and "Tem-

perature-Jump and Flash Photolysis Techniques" at two German universities. Students in Pocker's group recently gave four papers at the regional ACS meeting in Montana.

**B. Seymour**

**Rabinovitch (physical)**

Rab received a *Doctor Scientiarum Honoris Causa* award from Israel's Technion Institute last year and while in Haifa to receive his award, he delivered a lecture entitled "A Scientific Appraisal: Patina of Antique Silver." In addition, he lectured on antique silver this past February at the Seattle Art Museum and last year, his book *Antique Silver Servers* was published by Joslin Hall Publishing.

**Bill Reinhardt**

**(theoretical physical)**

Reinhardt joined the UW faculty last July after six years as professor (five as chair) at the University of Pennsylvania. Since arriving at the UW, Reinhardt has developed and taught a new course in Monte Carlo simulation methods in chemistry, has had his NSF grant renewed and supplemented for the development of a powerful parallel computing system, and has given seminars at the UW and at the Battelle Pacific Northwest Laboratory in Richland. Prior to his move to Seattle, Reinhardt spent part of last spring at the University of Paris (VI) in the Laboratoire de Marie et Pierre Curie working with an atomic physics group on the role of chaos and non-linearity in process involving the interaction of atoms with very intense lasers. He gave a seminar there and at the Ecole Normale Supérieure. Reinhardt has upcoming lectures scheduled at universities in New York, Oregon, California, and Japan. Prior to his tenure at Penn, Reinhardt was professor of chemistry at the University of Colorado in Boulder for ten years (three as chair).

**Norm Rose (inorganic)**

Rose received another distinguished teaching award this past year, this time from the Council for the Ad-

vancement and Support of Education. He was named the 1991 CASE Washington State Professor of the Year. Rose also chaired the Faculty Senate for the last year. He will spend the coming academic year on sabbatical.

**Mickey Schurr (physical)**

At last year's MIT-Harvard Physical Chemistry Colloquium, Schurr presented a lecture on "Bonding Dynamics of DNA and Long-Range Effect of DNA Sequence on Secondary Structure." He also spoke at The International School's "Seminar on Modern Problems of Physical Chemistry of Macromolecules" in Puschino, a city in the former Soviet Union. Along with his co-workers, Schurr presented two posters at last year's national Biophysical Society meeting in San Francisco and three posters at this year's meeting in Houston. He also presented a poster at the Gordon Conference on "Dynamics of Macromolecules and Polyelectrolytes" earlier this year in California.

**Robert Synovec (analytical)**

Effective later this fall, Synovec will be awarded tenure and promoted to associate professor.

**Frank Turecek**

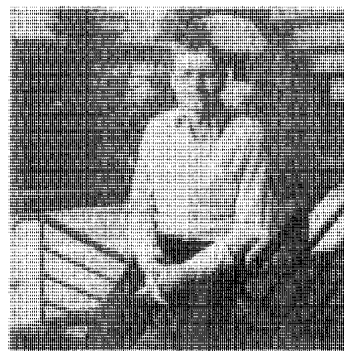
**(analytical and physical)**

At both the 39th and 40th ASMS Conferences on Mass Spectrometry and Allied Topics this year and last, Turecek gave multiple presentations and taught an Advanced Course on Spectra Interpretation for Teachers. He has also given talks at Union Carbide, Chevron Research, and Hewlett-Packard in the last few months. Turecek's work has been supported by the NSF, PRF, UW Graduate School Research Fund, and the Center for Process Analytical Chemistry. In addition, he was the recipient of a Hewlett-Packard equipment donation. Turecek has recently become the North American editor of the international journal *Organic Mass Spectrometer*.

*Continued on back cover*



Bill Reinhardt



Frank Turecek

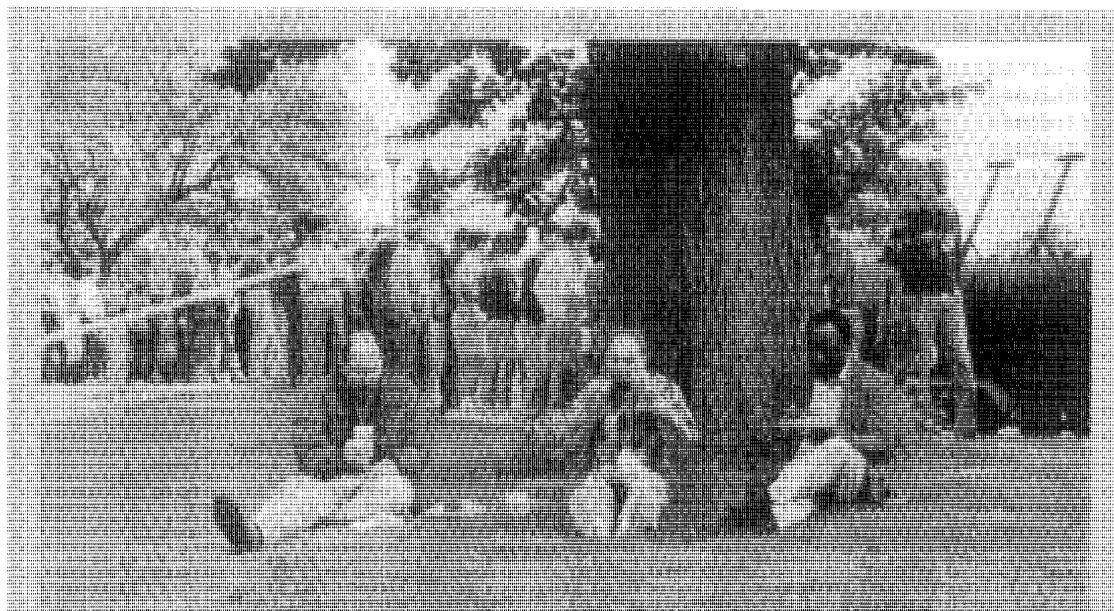
**Faculty Update.**  
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**Darrell Woodman (organic)**

Grants to support Woodman's two long-running programs have been renewed. The NSF's Teacher Enhancement and Preparation Program funds his Summer Institute for High School Chemistry Teachers and the UW has been selected again as a Research Experiences for Undergraduates (REU) site for this summer, also by the NSF.

**Robert Watts (physical)**

As well as being Department chair, Watts continues to operate a fruitful research program in chemical physics. Since the last newsletter, he has given invited talks at several universities and conferences in Australia, Germany, Switzerland, and Taiwan, as well as in the United States. He is also chair of a national advisory committee associated with the new Molecular Sciences Research Center at Battelle in Richland, WA.



**Department Hosts Annual Barbecue**

Chemistry faculty Rob Synovec, Bill Zoller, and Frazier Nyasulu just couldn't wait to begin eating at last June's Departmental picnic, held on the lawn outside Bagley Hall and catered by a local barbecue restaurant. (Photo by Gary Pedersen.)



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