# CHEMISTRY NEWS

UNIVERSITY OF OREGON • COLLEGE OF ARTS AND SCIENCES • DEPARTMENT OF CHEMISTRY • FALL 1995

### From the Department Head

One of the pleasures of being the new department head is communicating with you, the alumni and friends of the Department of Chemistry. The past year has been absolutely exhilarating, because the department continues to thrive and improve. Two examples: we had record enrollments in our undergraduate classes and brought in a record amount in grant dollars for research. These accomplishments are all the more impressive when one considers that state funding for the university was down again in 1994-95. The faculty is committed to maintaining excellence in the department, but it is getting harder to do that as state support shrinks even

That is why last year at this time we created the Chemistry Achievement Endowment Fund as an additional source of departmental revenue. As you may recall, the fund is used to support and enhance teaching and research. I thank you for your generous response to help us successfully launch

this fund. In an unusual move, the state of Oregon offered to match-dollarfor-dollar-the endowment income from contributions. The previous department head, Tom Dyke, and some of his fellow faculty members spearheaded the drive last year to establish an endowment that qualified for the state match. Many individual chemistry faculty members put up a match, too. Thus the dollars you gave were matched 4 to 1, and that doesn't include the corporate matches that are available to some alumni and friends! Thanks to your support, we are halfway to our goal. The fund is progressing, and we are still soliciting contributions.

Another highlight from the past year is our continuing celebration of successful careers with the Chemistry Alumni Achievement Awards. This annual event was initiated in 1989 as a way of identifying particularly successful alumni in the private sector, government, and academia—people who inspire future generations



of students and faculty members. In 1994 we honored a president and CEO of a major United States corporation and the head of a Department of Aeronautical and Astronautical Engineering. An article in this newsletter provides more information on these awardees and on this year's winner of the UO Alumni Association's Outstanding Young Alumna Award, who—I am happy to say—is also a chemistry graduate. The faculty, too, is receiving recognition. Two new assistant professors have won national distinction, and a senior faculty member has just won the Garvan Medal, a

national American Chemical Society award. Again, details are inside.

Finally, let me remind you that we like to hear from you. One of the most widely read sections of the newsletter is "News from All Over." It contains updates on our alumni, including postdocs and others who have been part of our departmental community. This section relies on input directly from you. Let us know what you're doing, even if it's just your current position, and we'll include the information in our next newsletter.

David Tyle





PAGE 2: Award-winners James W. Bernard and Wayne C. Solomon



PAGE 4 Geraldine Richmond receives Garvan Medal



PAGE 5: John Schellman honored for career achievements

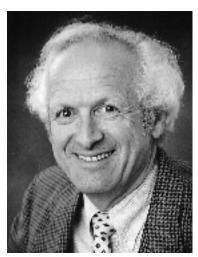


PAGE 5: Pauling Symposium held at UO

### Chemistry Alumni Achievement Awards







Wayne C. Solomon

On April 14, 1995, Alumni Achievement Awards in Chemistry were made to two University of Oregon chemistry alumni, James Bernard and Wayne Solomon, for their outstanding accomplishments. During the afternoon celebration each of the awardees related their accomplishments and memories of their studies at Oregon. In the evening the awards were conferred at a banquet in the atrium of Willamette Hall.

James Bernard received his B.S. degree in chemistry at the University of Oregon in 1960. He then took a position as a sales trainee at Van Waters & Rogers, Inc., a subsidiary of the Univar Corporation. His quick rise up the corporate ladder has been truly amazing. In 1974 he became president of Van

Waters & Rogers and corporate vice president of Univar. Then, in 1986, he took up his present position as president and chief executive officer of Univar. Univar has many subsidiary companies that are active in the fields of chemistry and marketing, oil drilling, paint, and metal mining.

Wayne Solomon is professor and head of the Department of Aeronautical and Astronautical Engineering at the University of Illinois. He received his B.S. degree in chemistry at the University of Idaho in 1956 and his Ph.D. (advised by L. Klemm) in physical organic chemistry at the University of Oregon in 1963. After leaving Oregon he was a staff scientist with the Air Force Rocket Propulsion Laboratory, a visiting professor at

the University of Göttingen, and director of research at Bell Aerospace Textron, before taking his present position at Illinois.

Previous award winners of the Chemistry Alumni Achievement Award are Claibourne Smith of E. I. DuPont de Nemours & Co., Ralph Barnhard of the University of Oregon, Chris Babcock of Bend Research, Lawrence Nafie of Syracuse University, and Maurice Schwarz while at Ciba-Geigy.

1995–96 Alumni Achievement Awardees

During the 1995–96 academic year, three awards will be made. The first awardee is Marion Hill, who received his B.A. and M.A. degrees in chemistry at the University of Oregon in 1948 and 1950 and who was direc-

tor of the Chemistry Laboratory at the Stanford Research Institute before his retirement. The second is Victor Snieckus, who received his B.S. in chemistry at the University of Alberta in 1959, his M.S. at the University of California, Berkeley, in 1961, and his Ph.D. at the University of Oregon in 1965 (advised by V. Boekelheide), and who is now professor at the University of Waterloo where he holds a personal chair endowed by NSERC/Monsanto. The third awardee, Shin-ichiro Sakai, received his doctorate with Professor Eiji Ochiai and was a postdoctoral fellow with Professor Lloyd Dolby in the early 1960s. Sakai became a professor at Chiba University at the early age of thirty-two, quite unprecedented in Japan, and has received worldwide recognition for his research on the indole alkaloids.

The award ceremonies for Marion Hill and Victor Snieckus are scheduled for March 8, 1996, with an award lecture by Victor Snieckus on Friday afternoon, March 8, and the award lecture by Marion Hill on Monday, March 11. The award ceremony for Shin-ichiro Sakai will be held later in the spring, but a date has not been set. You are all cordially invited to attend these award ceremonies.

#### Chemistry Achievement Endowment Fund

Last year's newsletter described the transition of the University of Oregon from a public university largely dependent on state support to one much more dependent on tuition and private fundraising. In order to meet department needs, such as money for seminar speakers, recruiting of graduate students, and match money for equipment grants, we decided to launch a fundraising drive. The result is the Chemistry Achievement Endowment Fund, named to honor the period between 1960 and 1970 when the department, with the help of all of you, surged from a rather low status to a place among the better known institutions.

This fundraising effort was initiated by former and present staff members of the University of Oregon Department of Chemistry, who pledged \$11,000 as a challenge grant to be matched by our alumni over a fiveyear period. The success of the fundraising drive has been phenomenal. By the end of June 1995 we had received \$27.072 in cash and \$5,450 in pledges. This has been most gratifying, and we thank you all.

The funds we have raised to date are being matched by the Oregon State Board of Higher Education. However, in view of the success of the first seven months of our fundraising drive, we have reached an agreement with the state board that our five-year goal will be raised to \$60,000, which also will be matched. If we continue to receive gifts from our alumni at the same level as we did before this challenge grant was initiated, the higher goal is readily attainable.

We offer our deepest thanks to you for your important contributions to the challenge grant and simply express our hope that in the future you will continue to remember us as you have in the past, perhaps with participation from some who have not yet contributed.

Contributors to this very successful fundraising drive are listed to the right.

#### **CONTRIBUTORS**

Air Products (R. Pinschmidt), Gregory Arnold, Dale Auvil, Ralph Barnhard, Andrew Barofsky, Virgil Boekelheide, Curtis Borchers, James Bozarth, Bruce Branchaud, Bruce Broline, Ernie Bush, Richard Chadwick, Youngshin Choi, Gary Christian, Dennis Clark, Daniel Cowles, Stephen Cross, Frederick Dahlquist, Norman Diebel, David Draper, Tom Dyke, Sandra and Andrew Fedoruk, Neil Fetter, Eric Flerchinger, Fuji Silysia, James Garbe, General Electric (K. and T. Lee), General Electric (C. Spalaris), Herbert Glick, Samuel Greenschlag, Hayes Griffith, Steven Hadley, Michael Hahn, Thomas Harris, Warren Hawkins, Gary Hedden, Marion Hill, Susan Hill, Terrell Hill, William Herzog, Harry Hofrichter, Tricia Igawa, Malcolm Jacobs, Howard Johnson, Robert Johnson, Erin Johnston, Clyde Kaneshiro, Sheri Kauffman, John Keana, Ryan Kelly, Dan Koos, Herbert Kopperman, Kwok-chen Lee, Burton Litman, Jim Long, Jennifer Lu, Vicky Lyon, 3M Corporation (J. Garbe), Donald Mack, Kent Marshall, Martin Marietta (B. Morosin), Robert Mazo, Y. and R. Merrill, Dave and Heather Messenger, Chup Mok, Molecular Probes, Russell Molyneux, Bruce Morosin, Lawrence Nafie, Nagwa Naguib, Christian Nielsen, R. and T. Norton, Richard Noyes, Joseph Owens, Urlin and Barbara Page, Tom Patapoff, Warner Peticolas, Robert Pinschmidt, Gary Riddle, Rohm & Haas (J. Owens), Charlotte Schellman, John Schellman, Maurice Schwarz, M. S. Shashidhar, Joyce Shiro, William Simpson, L. and K. Smith, Wayne Solomon, C. Spalaris, Craig Stillwell, Ronald Swisher, Syntex (G. Hedden), Timothy Thomas, Henry Tobey, Mike Uhler, Ralph Vaughn, Peter von Hippel, Jun Wang, Willamette Industries, Raymond Wolfe, Pancras Wong, Joseph Zoller and anonymous chemistry department professors.

#### Pamela Bjorkman Wins Outstanding Young Alumna Award

Each year, the UO Alumni Association recognizes one young individual from the university's alumni who has attained "extraordinary distinction in his or her chosen professional field." The 1995 winner is Pamela J. Bjorkman. She was presented the award by University President Dave Frohnmayer, at the spring 1995 Commence-

ment in Hayward Field. Pamela, who earned a B.A. in chemistry in 1978 from Clark Honors College, did her undergraduate research in the Griffith group. A native Oregonian, she went on to Harvard for her Ph.D., earned in 1984. While at Harvard, Pamela succeeded in making a major breakthrough that had important implications in



Pamela Bjorkman

medicine: she solved the first structure of the major histocompatibility complex (MHC). MHCs are protein complexes that

Continued on page 4

appear on most cell surfaces throughout the body. They serve as receptors for antigens. Understanding the MHC structure is a major step towards winning the war against viruses, from the common cold and flu viruses to HIV, and bacterial infections. Understanding MHCs is also the key to designing new drugs that can combat rejection in organ transplants and autoimmune diseases.

After two postdoctoral fellowships (Harvard, 1984-86) and Stanford (1986-89) to study immunology, Pamela, joined the faculty of the Division of Biology at California Institute of Technology, where she continues her work on the molecular basis of the immune response. She was recently promoted to associate professor and holds the title of assistant investigator, Howard Hughes Medical Institute. Pamela Bjorkman's many

awards include the Young Investigator Award, American Society for Histocompatibility and Immunogenetics (1988); Cancer Research Institute **Investigatory Award** (1989); Pew Scholar in the **Biomedical Sciences** (1989); William B. Coley Award for Distinguished Research in Fundamental Immunology (1993); James R. Klinenberg Science Award, Arthritis Foundation (1993), Camille **Dreyfus Teacher-Scholar** 

Award (1994). Most recently she was honored as the youngest recipient of the Gairdner Foundation International Award for achievements in medical science (1994).

In the history of the UO Alumni Association's Outstanding Young Alumnus-Alumna Award, there have been only two recipients from the sciences: Pamela Bjorkman and Rudy Dam, Ph.D. '77. Both awardees are from the Department of Chemistry.

### Focus on Faculty

#### Richmond Awarded Garvan Medal

Geraldine Richmond is being awarded the prestigious 1995 Francis P. Garvan-John M. Olin Medal. This national **American Chemical** Society (ACS) award is made each year to recognize distinguished service to chemistry by a woman chemist who is a United States citizen. The award was established in 1936 through a donation from Francis P. Garvan and is sponsored by the Olin Corporation. The award consists of \$5,000, a suitably inscribed gold medal, and a bronze replica of the medal. It also includes travel to the March 1996 national ACS meeting in New Orleans, where she will receive the award and give her award address.



Geraldine "Geri" Richmond

Richmond received her B.S. degree in chemistry in 1976 at Kansas State University and earned her Ph.D. in physical chemistry at the University of California, Berkeley, in 1980. As an assistant professor at Bryn Mawr College, she initiated her research in the use of laser techniques to study the structure and reactivity of surfaces and interfaces. In 1985 she joined the faculty of the University of Oregon, where she is a chemistry professor and the director of the Chemical Physics Institute.

Her teaching efforts are focused on undergraduates with a particular interest in teaching science to nonscientists. She is active on many national boards and committees that focus on scientific teaching and research in the United States. Her current research effort is in the use of pulsed lasers to investigate physical and chemical processes that occur at semiconductor, metal, polymer and liquid surfaces. As a colleague in

her field puts it: "Geri Richmond is a deep and rigorous physical chemist who investigates important chemical systems. She does challenging laser experiments that are right at the cutting edge of technology, and she is very productive."

Geri Richmond is also the recipient of an NSF Presidential Award, a Camille and Henry Dreyfus Teacher-Scholar Award, the 1989 Coblentz Spectroscopy Award, an Alfred P. Sloan Fellowship, an NSF Faculty Award for Women Scientists and Engineers, and the Iota Sigma Pi Agnes Faye Morgan Research Award. She was recently selected as one of the American Physical Society Distinguished Lecturers for the Laser Science Topical Group.

### John Schellman Celebration

After much discussion and persuasion, John Schellman was convinced to use the (approximate) occasion of his seventieth birthday to honor his many contributions to the department, to the university, and to science in general. A celebration and reunion was held on October 6 and 7, 1995, and was a rousing success!

Festivities began Friday evening with an informal buffet dinner and reunion at the University Club in Collier House. More than sixty friends and students from every era of John's long career were present. Participants thoroughly enjoyed getting together to trade stories and memories with John and Charlotte and with one another.

On Saturday morning, October 7, everyone convened in 110 Willamette

Hall for an invited all-day symposium. After an official greeting and welcome from Academic Vice President and Provost John Moseley, scientific talks were presented by invited speakers in some of the areas to which John made research contributions over the years.

Here is a glimpse of the program. The morning session, titled "Macromolecular Conformations, Interactions, and Mechanisms," included Robert (Buzz) Baldwin, Pete von Hippel, Carlos Bustamante, and Jim Hofrichter. The afternoon session, titled "Spectroscopy: Waves and Particles," included Bengt Norden, Vince Madison, and Heidi Schellman. The evening session of the symposium, "History and Perspectives," featured



Gathering at the John Schellman Celebration. From left: Howard Reese, John Schellman, Charlotte Schellman, Pete von Hippel, and Hong Qian

talks by Peter Jensen and John Schellman. The high point of the symposium was the final talk, in which John managed to amuse, inform, and reawaken (as needed) the audience with his wonderful multimedia presentation of a "Wayward History of Thermodvnamics."

Participants reconvened at 7:00 p.m. in the Willamette Atrium for a

formal banquet, after which several of John's old friends and colleagues, as well as his wife Charlotte, took turns regaling the audience with stories of significant events in John's scientific and personal life. The official program ended at about 11:00 p.m., but many stayed on to talk and enjoy one another's company into the wee hours.

## Pauling Symposium

The Pauling Medal, recognizing outstanding achievement in chemistry, is named after and inspired by Linus Pauling (1901–94), a native of the Pacific Northwest. The presentation rotates among the three Northwest Sections of the ACS: Oregon, Portland, and Puget Sound. This year the presentation of the award, a gold medal and a plaque, was made at the University of Oregon to Alexander Rich from the biology department at Massachusetts Institute of Technology. The symposium program was organized by Kenneth M. Doxsee and the local arrangements were made by James W. Long, both of the UO Department of Chemistry. Speakers for the October 28, 1995, event included Jack D. Dunitz of the Swiss Federal Institute

of Technology, Leslie E. Orgel of the Salk Institute of Biological Studies, and our own Peter H. von

Hippel.

The last time a Pauling Symposium was hosted by the UO chemistry department was in 1987. Harden McConnell was the recipient, Linus Pauling attended and gave a talk, and the event was organized by Hayes Griffith and Polly Habliston.



Pauling Symposium Banquet. From left: Jim Long, symposium chair; awardee Alexander Rich; Verner Schomaker of the Puget Sound Section; and Ken Doxsee, award chair.

## News from the Department

#### FACULTY ACHIEVEMENTS

Two assistant professors received national recognition: Michael M. Haley received a 1995 National Science foundation CA-REER Award. This program is designed to encourage the early development of academic faculty as both educators and researchers. Fewer than thirty of these awards are given nationally in all areas of chemistry. James E. Hutchison was awarded a Camille and Henry Dreyfus New Faculty Award in 1994. Only ten of these awards were made. The \$25,000 Dreyfus award is designed to support the development of chemical educators.

Geraldine "Geri" Richmond won a prestigious national ACS award—the Francis P. Garvan-John M. Olin Medal sponsored by Olin Corp. (see related article).

Bruce Hudson was awarded a NATO Collaborative Research Grant Award to participate in a project involving the transient photophysics of proteins. The research will be performed at the Rutherford Appleton Laboratory near Oxford in England. A grant from the Camille and Henry Dreyfus Foundation for the introduction of lasers into the physical chemistry laboratory, provides lasers from Russia and Ukraine. Bruce, a frequent traveler to countries of the former USSR, most recently attended the Fifth International Conference on Laser Applications in the Life Sciences held in Minsk, Belarus, in 1994.

#### FACULTY COMINGS AND GOINGS

David Tyler became head of the Department of Chemistry in July 1995. The traditional Changing of the Guard party was held in September at Hayes and Karen Griffith's home to welcome David and to say thank you to Tom Dyke. Tom Dyke was promoted

to associate dean of the College of Arts and Sciences in June 1995.

Jeffrey A. Cina joined the department as associate professor fall term 1995. He came to us from the University of Chicago, where he was assistant professor of chemistry. Jeff, a theoretician, received his Ph.D. from University of California, Berkeley, with R. Harris and held a postdoctoral position at Massachusetts **Institute of Technology** before going to Chicago. His research interests lie in the area of understanding the chemical processes set in motion and measured by ultra short light pulses in nonlinear optics experiments—a new area of theoretical expertise for the department.

Robert M. Mazo is retiring at the end of fall term 1995, after thirty-three years of service to the university. He served as department head from 1978 to 1981. Bob Mazo is a theoretical physical chemist who specializes in statistical mechanics. During his retirement, Bob hopes to have more time for research and travel. He plans to continue to teach one term a year for the next five years.

David Herrick is spending his sabbatical leave in Beijing, China. LeRoy Klemm submitted more information about alumni for the "News from All Over" section than anyone else. Thanks, LeRoy!

Minor memos: John Keana, Hayes Griffith, and Ralph Barnhard, who joined the chemistry department in 1965 or 1966, have been teaching here for thirty years.

#### STAFF NEWS

Jerry O'Bannon, formerly in charge of the NMR facility, resigned in 1995 to take a job with Borden Chemical Company in Springfield. Michael Strain is in charge of the NMR facility for the present. David Senkovich left Chem Stores to take charge of the Student Shop.



Ralph Barnhard (left) presents plaques to David Tyler (center) and Tom Dyke (right) inscribed, "Noli Carborundum Illegitimati" (Don't let the bastards grind you down). Carlos Bustamante enjoying the fun (background). Photo taken at the Changing of the Guard party at Hayes and Karen Griffith's home, September 7, 1995.

### Reflections

This column is a new addition to Chemistry News—a look back at the "way it was." Future contributions are encouraged. The following is an excerpt from memoirs of Marion Hill.

In January 1946 I registered in the College of Liberal Arts planning to major in chemistry. I was one of many returning veterans, 1,200 in the winter quarter alone. With few exceptions all were taking advantage of the famous GI Bill, which provided for tuition, books, and a living allowance. Veterans with families received an added allowance over the

division, and graduatelevel courses.

Hans Heymann, Ph.D., Harvard (1941), was at Oregon until 1949, when he returned to teach at Harvard. Later he joined Ciba-Geigy, working up to a management position. Hans taught almost all the organic chemistry courses and conducted personal research in bio-oriented compounds. He was an outstanding teacher and was principally responsible for inspiring me to continue in organic chemistry as a career.

Frank J. Reithel, Ph.D., Oregon (1942), taught all the biochemistry courses. He and Hans Heymann

Upon hearing our groans, he assured us that he was being easy on us, that he was given an unknown in Karo syrup for analysis when he was in school.

base rate—about \$96 per month—raised to \$105 if there was a child.

Three full-time professors joined the faculty at the time I arrived: Donald F. Swinehart, Frank J. Reithel, and Hans Heymann. Robert B. Dean arrived in 1947; Pierre Van Rysselberghe had arrived in 1941. The department head, Adolph H. Kunz, had been on the faculty since 1934. These men carried the bulk of the teaching load for both lower- and upper-

were my advisers on my master's degree research problem. Reithel impressed me as a hard pressing, very active, excellent scientist and teacher.

Donald F. Swinehart, Ph.D., Ohio State (1943), also was with the department until he retired in 1983. He taught us qualitative and quantitative analytical chemistry, inorganic chemistry at the undergraduate level, and advanced physical chemistry. We always had



Strolling on the boardwalk at the 1959 ACS Annual Meeting, alumnus Marion Hill (left) and Don Swinehart (right).

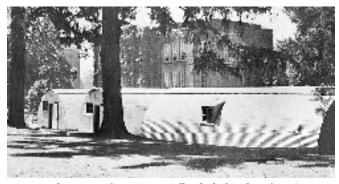
good rapport, developed a friendship, and stayed in touch until after his wife Ruth died.

His status as a teacher and scientist was admirably stated in the fall 1994 *Chemistry News*, after his death in 1993: "... [He] always ranked high among the department's teachers. He was often cited for his enthusiasm, his didactic ability, his interest in his students, and—as one student put it—his willingness to give

either a verbal pat on the back or kick in the pants when such was required." I received both his pats on the back and deserved kicks in the pants.

Don was inclined to give those of us who were pulling good grades tough "unknowns" for analysis. Upon hearing our groans, he assured us that he was being easy on us, that he was given an unknown in Karo syrup for analysis when he was in school.

Pierre Van Rysselberghe, Ph.D., Stanford (1929), taught upper-division and graduate courses in physical chemistry and thermodynamics. He is remembered not only for his hard exams, but for his tolerance of us organic majors who were more inclined to be intuitive and less quantitative in our thinking. One of my personal triumphs was getting an "A" in his physical chemistry course.



Recaptured memories from Marion Hill include this photo from Oregana 1947 revealing quonset huts University officials erected to accommodate the post war overflow of students.

### News From All Over

#### 1920s

Malcolm (Monty) Jacobs, undergraduate studies 1927– 29 at UO; received degree from University of Nebraska in 1931. Founder and owner of Beauty Products, Portland, Oregon, from 1933 to 1976, he retired and plays golf and travels throughout the world.

#### 1930s

J. Howard Johnson '31; M.D., UO Medical School '35. "Professor Stafford offered, and I almost accepted, a graduate teaching position, but I ended up in medical school. Now retired, I concentrate on golf."

#### 1940s

Marion E. Hill '48; M.A. '50 (awarded in absentia) postgraduate work with R. Taft, Pennsylvania State University. Consulting, international travel, volunteer with International Executive Service Corps, family history research (genealogy), and writing family histories.

Marthe Smith '48. Retired physician (pathology and nuclear medicine.)

#### 1950s

#### **Emil Antoniades**

(postdoctoral fellow, '57-'60) is retired from a career in the petroleum industry in California

Robert Diebel '50, M.S. '54, retired from Westinghouse Hanford in 1988 after working thirty-four years with radio and analytical chemistry. Now maintains some com-

mercial property and assists one son with an automobile repair and towing business.

**Anthony N. Federici** '58 is a member of the Oregon House of Representatives, District 1, State Capitol, Salem, Oregon.

Neil Fetter, Ph.D. '57 teaches chemistry and physics at a private high school in San Francisco.

Anthony J. Golden '59 works as a collection station attendant for Goodwill Industries.

Beng-Thong Ho, M.A. '59, and wife, Dah-Hsi, a former graduate student in biology at UO, conduct biochemical research in Houston, Texas. Beng received a Ph.D. in pharmaceutical chemistry from the University of Washington.

**Cyril K. Kim** '57 is a psychiatrist in private practice.

#### 1960s

**Friedhelm Baitis** '68 is a pilot for United Airlines after retiring from the U.S. Air Force.

Barbara Bellin '64 is a German-English translator specializing in physical sciences. Recovering successfully from cancer therapy.

**Tom Boring** '65 is president and chief executive officer of Dynametric Corporation.

Dennis Clark '66 is vice president and a partner in Analytical Solutions, Sunnyvale, California, a contract analytical laboratory for the pharmaceutical industry.

Tom Dooley, M.S. '64, Ph.D. from University of Rhode Island; has been teaching part time at Ramapo College in New Jersey and Yeshiva University in New York.

**Gary L. Hedden** '67 manages a process development pilot

plant for Syntex Pharmaceuticals in Palo Alto, California.

Wayne Johnson, Ph.D. '69, has been involved in various aspects of agricultural chemistry at Rohm and Haas Company in Philadelphia. He and his wife are frequent travellers for business and pleasure.

George C. Karaboyas, M.S. '62, Ph.D. from University of Pennsylvania, and his wife operated a clinical biochemistry laboratory in Miami, Florida, for many years. They are retired.

Richard A. Klemm (summers '67 and '68, NSF undergraduate research participant) B.S., Stanford University; Ph.D., Harvard University. Develops theory of high Tc superconductivity at Argonne National Labs, Argonne, Illinois. He was elected a fellow of the American Physical Society in 1994. He and his wife, a food scientist, have two sons.

#### Alexandre Kohlik

(postdoctoral fellow '59-'62). Twenty-nine years at CIBA Ltd. Basle Scientific as literature and search specialist. Began early retirement three years ago.

**Chup Yew Mok**, Ph.D. '68, is associate professor, Department of Chemistry, National University of Singapore.

Russell J. Molyneux (postdoctoral fellow '63-'65) works at Western Regional Research Center, 800 Buchanan St., Albany CA 94710.

Willem J. Muizebelt (postdoctoral fellow '67-'68) Akzo Nobel Central Research, Arnhem, Netherlands, is involved in developing environmentally friendly coatings that contain fewer volatiles.

**David D. Reed**, Ph.D. '61, is retired from Texaco Corp., where he served several years as vice president for Japanese

operations in Tokyo. He and his wife have returned to their native Idaho.

P. S. Santhanam (postdoctoral fellow '66-'67) is senior vice president, Technology Management Division, Ushta-te Biotech Industries, Ltd., Madras, India. The company manufactures starch derivatives and sweeteners using enzyme technology. His wife teaches high school history and their son recently married.

Maurice Schwarz '62, Ph.D. '65, received the 1993 Achievement Alumni Award. He works with a new start up pharmaceutical company, Cell Therapeutics Inc., 201 Elliott Avenue West, Suite 400, Seattle WA 98119. He is responsible for product development.

**Wayne C. Solomon**, Ph.D. '63, received a UO chemistry alumni award in April 1995.

**Ellen Wedum**, M.S. '69, graduated in 1994 with Ph.D. in chemistry from Purdue University.

#### 1970s

Will Bloch Ph.D. '70, with Sidney Bernhard, formerly a professor at Reed College, is now a research scientist with Applied Biosystems. He presented a seminar at the UO in November, 1995 entitled: "PCR Analysis of the Fragile X Syndrome: An Interface between Science and Technology." After his seminar, he made some informal comments and held a questionand-answer session on "Life as a Research Scientist in the Biotech Industry."

Scott Dahlberg '77, an electrical engineer for Aerospace Company, works with polymer coatings and composites for aircraft antennas.

Caroline A. Enns, Ph.D. '76, is an associate professor in cell biology and anatomy at Oregon Health Science University, Portland, Oregon.

Michael G. Hahn '74 is an associate professor in the Complex Carbohydrate Research Center and the Department of Botany at the University of Georgia (165 Sandstone Dr., Athens GA 30605).

Thomas Harris (postdoctoral fellow '75-'76) is a senior research scientist with the Imagine Agents Group of Dupont Merck Pharmaceutical in Billerica. Massachusetts.

Virgil C. Hebert '70 is a member of the technical staff of Hewlett Packard Company, 1000 NE Circle Blvd., Corvallis OR 97330. Virgil is working on the HP line of Deskjet Printers.

Arthur E. Johnson, Ph.D. '73, accepted the E. L. Wehner-Welch Foundation Chair in Chemistry in the College of Medicine at Texas A&M University (Wehner-Welch Professor, College of Medicine, Texas A&M University. Health Science Center., 116 Reynolds Medical Bldg., College Station TX 77843-1114).

Neil Johnson '70 has a research position with National Center of Scientific Research in Toulouse, France (Laboratoire de Pharmacologie et de Toxicologie Fondomentales, Centre National de la Recherche Scientifique, 205 Route de Narbonne 31077, Toulouse Cedex France). Neil frequently visits the UO, in particular the von Hippel group, and recently gave a seminar here.

Francis H. Lee '71 is vice president, Supergen (an Icl-Israel Chemicals Co.), since 1992. He was founding research and development director for Fujisawa Pharmaceutical Co. in 1988; head, clinical cancer research, Warner-Lambert/Parke-Davis in 1987; associate medical director, DuPont, in 1983; and assistant director, cancer research, Bristol-Myers in 1976.

John Lemmer '74, Keana laboratory. After graduation John attended medical school in Portland followed by residencies in general and cardiothoracic surgery at the University of Michigan. He was a member of the faculty of the Department of Surgery at the University of Iowa for four years. In 1991 he returned to Portland, where he practices cardiac surgery at Good Samaritan Hospital.

Ronald Merrill, Ph.D. '73, operates Green Chem Technologies, specializing in catalysis, chirality, and computation in Torrance, California. Recently he has had major consulting jobs in Switzerland.

Yoon Merrill, M.S. '73, conducts organic synthesis at Bachem Chemical Company. Ron and Yoon have two children.

**Joseph M. Owens**, Ph.D. '76, works for Rohm & Haass and lives in Pennsylvania.

John T. Roe '70 is an environmental health sanitarian trainee for Tillamook County Health Department.

Prapon Wilairat, Ph.D. '74, is an associate professor, Department of Biochemistry, Faculty of Science, Mahidol University, Rama 6 Road, Bangkok, 10400 Thailand, and was chair, 1988–92.

### 1980s

**P. Bradley Anderson** '82 is a physician in Chatanooga, Tennessee.

Gregory Arnold '84 received a Ph.D. in 1989 at University of Washington and is senior research scientist at DOE Pacific Northwest Labs.

**Isaac H. Babbs** '83 is regional manager, West Corporation.

Richard Brudzynski (postdoctoral fellow '86-'89) is with Maxtek, a company formed from a division of Tektronix that is involved in hybrid circuit fabrication. During winter term 1995 he taught a course, Fundamentals of Plasma Processing, for the Semiconductor Industry at Oregon Graduate Institute in Beaverton. He reports that teaching is a lot of work!

Richard Chadwick, Ph.D. '86, is a scientist in analytical chemistry development at Allergan Optical, the eye-care division of Allergan, Inc., Irvine, California.

**Francis Y. Chen** '82 is a medical doctor.

Youngshin Lee Choi, Ph.D. '90, is senior scientist at Hanhyo Institutes of Technology, South Korea.

Kori Clement '86 completed an M.S. in chemistry from the University of Michigan before studying law. She works as an attorney.

Yuri Clingerman (Hiraiwa)
'82 is working in research and development of Nature Made Vitamins in Los Angeles.

**Debra Duval** '85 is a chemist with Reynolds Metals Company.

Thomas Hallquist '89 is the department manager of chemistry at Braun Intertec N.W. (an independent testing laboratory). He is married with three boys (ages one, three, and seven).

**Pete Kelly** (postdoctoral fellow '83-'86) (kelly@nomad.rice.edu) re-

turned to the University of California, Davis, after a sabbatical year in Jim Kinsey's laboratory at Rice University.

Tim Laue '88 is city councillor in Eugene. Tim founded and sold two firms, one forestry and one general contracting company. Tim continues as a consultant to these and a third firm

Jennifer J. Lu, Ph.D. '86, and her engineer husband live in La Mirada, California, where she supervises various chemical testing and manufacturing projects at IMS Company. They have two children.

Rick Ludescher, Ph.D. '84, (RICK@al.caftlvax.rutgers.edu) has received tenure at Rutgers University.

Leland Mayne, Ph.D. '88, (leland@hxiris.med.upenn.edu) of the University of Pennsylvania Medical Čenter was pictured in the August 21, 1995, issue of the Scientist because his recent paper "The Barriers in Protein Folding," Nature Structural Biology 1, 149 (1994) with T. R. Sosnick, R. Hiller, and S. W. Englander, is one of the most widely cited papers in this field this year. His recent coauthored paper in Science 269, 192 (1995) "Protein Folding Intermediates: Native-State Hydrogen Exchange," is also a must read!

Sandra L. Moran '80 is a partner in Pathology Consultants, Inc., 722 E. 11th Ave., Eugene. Sandy should be a contender for "Best Educated Alumna." She received her first B.S. in 1972 in finance and business economics; a second B.S. in 1980 in general science; an M.D. in 1985 from Oregon Health Sciences University followed by a five-year residency in Medical College of Virginia, 1985–90; a one-year fellowship in dermathopathology (also at Medical College of Virginia), and is a practicing pathologist.

**Christian Nielsen** '85 is inorganic chemist for WFR Laboratories in Tigard.

Michael R. Paddy, Ph.D. '84, is an assistant professor, Department of Anatomy and Cell Biology, Box 100235 JHMHC, University of Florida, Gainesville FL 32610-0235

**Tom Patapoff**, Ph.D. '84, works busily at Genentech in the San Francisco Bay area.

**Sovitj Pou**, Ph.D. '87, is faculty member at the University of Maryland, Baltimore, Department of Pharmacology.

Michael Rhodes (summer '87-spring '88) is a research chemist at Molecular Probes in Eugene.

**Ronald L. Rich** (visiting faculty member '84) and is publishing in *J. Chem. Educ.*, two articles are in press.

Klaus Rudolp, Ph.D. '86, is research chemist with Thomae Pharmaceuticals in Bibesach, Germany (Thomae Chemisch-pharmazeutische-Fabrik, Postfach 1755, D-7950 Biberach an der Riss; Germany).

Michael W. Scherz, Ph.D. '89, thesis: "Synthesis and Structure-Activity Relationships of Compounds Useful in the Isolation and Pharmacological Characterization of the Haloperiodol-Sensitive Sigma Receptor and the Nmethyl-D-Aspartate/PCP Receptor Complex." He is a research scientist at Proctor & Gamble Pharmaceuticals, Miami Valley Laboratories, Cincinnati OH 45239-8707.

Roseanne Sension (post-doctoral fellow '86-'89) (rsension@umich.edu) is an assistant professor, Department of Chemistry, University of Michigan. Two of her federal grant applications have been funded. She recently

returned from Montpellier, France, where she attended the International Congress on Photosynthesis. Upon her return she taught freshman chemistry for the second time.

Vicky Shannon (postdoctoral fellow '85-'88) is a senior process support engineer with Novellus Systems and has applied for a NASA mission specialist position. Consult your newspaper about the latest astronaut!

M.S. Shashidhar (post-doctoral fellow '87-'90). Shashi is a scientist, Division of Organic Chemistry (Synthesis), National Chemical Laboratory, Pune 411 008, India.

Jun Wang '89 is a postdoctoral fellow at Harvard Medical School, Department of Biology, Chemistry and Molecular Pharmacology, 240 Longwood Ave., Boston MA 02155.

Ronald Wassom '86 (undergraduate minor; graduate studies '90; teaching assistant '85–'86) is a chemistry and calculus teacher at Burns High School and 21st-Century Site Council chair.

Scott Wong (B.S.), a graduate student in the Department of Pharmacology at the University of Washington, working with Professor Dan Storm, got married this August.

**Paul Yoger**, Ph.D. '85, was just promoted to full professor of chemistry at the University of Washington.

### 1990s

Mark Anderson '90 completed a Ph.D. in physical chemistry from Arizona State University and is employed in polymer chemistry by Neste in Springfield.

Julie Arras '93 received master's degree in forensic science from George Washington University.

**Bluegrass Biggs** '95 is in graduate school at University of California, Irvine.

**Pilar Bradshaw** (Benda) '91 received her M.D. degree from the Oregon Health Sciences University in June 1995.

**David Brinkley** '94 (honors) is a graduate student in surface science at the University of Washington.

Sui Xiong Cai, Ph.D. '90, thesis title: "Development of Novel Photolabeling and Crosslinking Reagents for Biological and Lithographic Applications," is group leader of research chemists at CoCensys/Acea, Irvine, California.

**Valerie De Lamer**, M.S. '92, is senior research chemist at Finorga, Lyon, France.

Christian M. Dinsmore (summer '92-spring '94, Oregon Heart Association Fellow, Keana laboratory) is accepted to medical school for fall 1996.

Anne Glenn (postdoctoral fellow '90-'92) is assistant professor of chemistry at Guilford College in Pennsylvania.

**Denis Glenn** (fall '90–spring '92, Keana laboratory) is in the M.D.-Ph.D. program at Oregon Health Sciences University.

John Grunkemeier '91 is working on a Ph.D. in bioengineering at the University of Washington.

John Hagadorn '93 is carrying out graduate work with John Arnold at University of California, Berkeley, Department of Chemistry.

**Laura Harper** '95 (honors) (laharper@students.wisc.edu)

is a graduate student in the Department of Chemistry at the University of Wisconsin, Madison.

Darren Holmes (fall '88-summer '90, Keana laboratory) (holmes@carbon.ps.uci.edu) obtained his Ph.D. at University of Nevada, Reno in 1994 and is completing a post-doctoral year at University of California, Irvine, with Professor James Novick.

Takaaki Horaguchi, professor of chemistry and chairman of the department, Niigata University, Japan, spent two months during summer 1994 conducting heterogeneous catalytic research in LeRoy Klemm's laboratory. He continues this research in Japan.

Yong Hyong, Ph.D. '95, holds a postdoctoral position at National Institutes of Health, Bethesda, Maryland.

**Tricia Igawa** '92 is working temporarily as a coordinator for international relations on the Japan Exchange and Teaching Program in Japan.

**Barry Johnson**, M.S. '93, is a research chemist at DuPont Merck.

Erin Johnston '91 is research scientist at Molecular Probes. Now works for Industrial Adhesives as an organic chemist.

Jerrick Juliette, Ph.D. '93, holds a postdoctoral position with John Gladysz at University of Utah, Department of Chemistry.

**Josh Kehoe** '95 entered medical school at Oregon Health Sciences University.

**Daniel Koos**, Ph.D. '91, is a member of technical staff, semiconductor products sector, Motorola, Mesa, Arizona.

Wai Leung Lau '95 entered the biophysics program at the University of Pennsylvania as a graduate student in fall 1995.

Alistair J. Leigh (postdoctoral fellow '91-'92) is a process chemist at Cell Therapeutics Inc., 201 Elliott Ave. West, Suite 400, Seattle WA 98119.

Eric Mah '95 (honors) is in Taiwan refining his Chinese ('The classes are easy'!, he reports) and enjoying the contrast between Taipai and Eugene.

**Jeff Manus** '95 works at Borden Chemical in Springfield

Laura Markham, Ph.D. '95, (markham@cemvax.cem.msu.edu) has finished her thesis and is now at the Department of Chemistry, Michigan State University. She recently submitted a paper to the *Journal of Physical Chemistry*.

Pamela Oldfield Mouser '92 (Oregon Heart Association Fellow) is in the M.D.-Ph.D. program at University of California, Los Angeles.

**James A. Navratil**, M.S. '95, rejoined Amgen as a research chemist.

**Jonathan D. Ngo** '91 is a graduate pharmacy student at University of the Pacific.

Sarah "Betty" Philip '94 entered the master of science program at Oregon Health Sciences University in fall '95.

**Thomas Rush III**, Ph.D. '95, holds a postdoctoral position in Spiro's laboratory at Princeton University.

Bryon Severns '90 completed an M.S. degree in chemistry at New Mexico State University and is synthesizing potential antiglaucoma agents at Alcon Labs, Fort Worth, Texas. He has three children.

**Tommy Thompson** '95 is the starting punter for the San Francisco 49ers!

Maureen Wang, M.S. '92, is chemist-computer specialist at Neste Resins Corp., Springfield.

Yong Wang, Ph.D. '90, active postdoctoral fellow at Massachusetts Institute of Technology in the chemistry and physics departments.

**Paul Wash** '91 is in the chemistry Ph.D. program at the University of Nevada, Reno.

Scott Wong (summer '88-spring '91, 1990 American Heart Association Fellow, Keana laboratory) (scotydog@u.washington.edu) is in the M.D.-Ph.D. program at the University of Washington.

Yexin Wu, Ph.D. '90, thesis title: "Synthesis and Modification of Electron Opaque Labels for High Resolution Electron Microscopy. New Reagents for Electron Spin Resonance, Spin Labeling and Spin Trapping Applications," is a research chemist at Molecular Probes, Inc. in Eugene.

Mingdi Yan, Ph.D. '94, thesis title: "Functionalized Perfluorophenyl Azides for Solid Surface Modification and Bioconjugation, and Functionalization of C60. Fabrication of Submicron-Size Gold and Biomolecular Patterns Using Electron Beam Lithography."

**Hua Zheng**, M.S. '95, is a research chemist at Eli Lilly in Indianapolis, Indiana.

#### IN MEMORIAM

Eric Todd Buechler, a graduate student who had just completed his first year with David Tyler's research group, died September 7, 1995, in an automobile accident. Todd was on his way to becoming an accomplished chemist,

and he is missed. Friends and colleagues organized a memorial in his honor. A Japanese flowering cherry tree was planted in the front lawn of Oregon Hall in November 1995. Accompanying the tree is an inscribed bronze plaque, "In Loving Memory of our Friend, Eric Todd Buechler, 1969–1995".

John M. Macauley '55 died on October 26, 1995. He wrote to the department from his home in Salem, Oregon, as recently as January 1995. In his letter John mentioned how much he'd enjoyed his chemistry courses over the years, from general chemistry through advanced analytical and theoretical chemistry. One of his professors was Adolph Heineman, a worldclass chemist knowledgeable in alcohol chemistry, who had served as a fuels expert with Werner Von Braun in Germany during World War II. After the Korean War. John returned to the UO and graduated in 1955.

Carolyn E. Ritter '51, M.Ed. '66, died in June 1991.

LeRoy E. Smith '33 died October 26, 1994, of Alzheimer's disease at age eighty-three. He received a degree in chemistry from the University of Oregon in 1933 and a master's degree in chemistry from Oregon State College in 1937. He was employed by Rayonier Inc. for sixteen years at Hoquiam, Washington, and by Weyerhaeuser Inc. for twenty-one years at Everett, Washington. At Weyerhaeuser he was responsible for environmental protection activities. He retired in 1974.

His wife, Pauline Smith, gave us a glimpse of the UO in the 1930s in her December 1994 letter. "I was attending Corvallis in 1932 when their School of Education was ex-

changed for Science. The next summer, therefore, I transferred to the U of O-met LeRoy swimming in the mill race and we were married two years later. He received a fellowship to O.S.C. in 1935. LeRoy was to receive a half fellowship for \$27 a month. However, he was given another section and then another plus some work in the stock room, making between \$75 and \$100 a month. We ended the two years with a baby (\$100) a car (\$100) and \$100. He worked as an assayer (his minor was metallurgy for both fire and chemical at Champion Mine out of Cottage Grove, and when the mine went down at the end of the summer we went job hunting and got on at Rayonier. Back to Oregon. . . . I took first year chemistry from Mr. Stafford. He had written his own text that consisted of two large mimeographed books. The University enrollment was about 3,000. The previous year I believe Dr. Roger Williams taught organic and Dr. Shinn taught physical chemistry. Mr. Kuntz and Mr. Strong worked in the department. Dr. Shinn helped my husband find the speed of a bullet in various aspects of its flight. I remember the large replica of a meteorite on the porch of the chemistry building. LeRoy tended two wood furnaces for two sororities and mowed their lawns. His R.O.T.C. stipend helped pay for tuition. He received a three stripe Oregon sweater for being on the rifle team and was a major in the final R.O.T.C. parade. We were married 59 years, 57 of them wonderful until Alzheimers. However, four years is shorter than many have to endure, and he died very quietly."

**John Zepp** '83 died of melanoma in 1993.

#### UNIVERSITY OF OREGON



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oregon.uoregon.edu/~chem/index.html. This page may be accessed from the University of Oregon Home Page by starting with http://www.uoregon.edu/ and choosing "Campus, Administrative, and Departmental Information" then "College of Arts and Sciences" and then "Chemistry Department". Our home page includes a complete list of our faculty and descriptions of their research and pictures. Undergraduates and graduate degree requirements are posted as well as hyperlinks to other interesting chemistry sites. We will update our home page regularly, so stop by and take a look.

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**12** P1295B1876