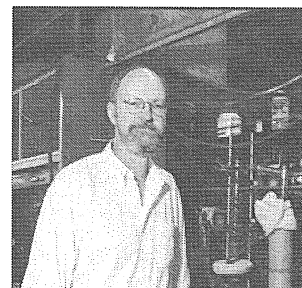


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Chemistry Newsletter

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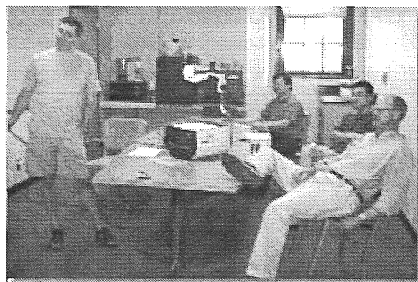
Robert Grubbs presents 2003 Pauling Lectures



This year's Pauling Lecturer, Robert Grubbs, is the Victor and Elizabeth Atkins Professor of Chemistry at California Institute of Technology. He is a pioneer in the field of olefin metathesis. During his visit in June, Grubbs presented three outstanding lectures on the subject of olefin metathesis: The Design and Synthesis of Catalysts for Olefin Metathesis, The Use of Olefin Metathesis Catalysts in Organic Synthesis, and Polymer Synthesis Using Olefin Metathesis. The seminars attracted people from academia and industry throughout Oregon. The weeklong visit allowed Grubbs to meet individually with faculty from the department and campus, and he was able to spend valuable time with chemistry graduate students who presented their current research for him.

Grubbs has won numerous awards for his work including the Sloan Fellow, Dreyfus Teacher-Scholar Award, Humboldt Fellowship, ACS National Award in Organometallic Chemistry, ACS Award in Polymer Chemistry, Nagoya Medal of Organic Chemistry, Fluka Reagent of the Year, Mack Memorial Award, Benjamin Franklin Medal in Chemistry, ACS Herman F. Mark Polymer Chemistry Award, ACS Herbert C. Brown Award for Creative Research in Synthetic Methods, ACS Arthur C. Cope Award, ACS Award for Creative Research in Homogeneous or Heterogeneous Catalysis, and the 2003 Pauling Award.

When asked about this year's lectures, Jim White responded, "Bob Grubbs' visit as this year's Linus Pauling Lecturer was the highlight of our seminar program. In three superb lectures, he took us through the early, stumbling efforts to find catalysts suitable for olefin metathesis to the latest



developments that enable synthetic organic chemistry to accomplish reactions undreamed of a few years ago. There is no doubt that olefin metathesis has become one of the most important reactions to be discovered in the past quarter century. As the leading exponent in this area, Bob Grubbs fully deserves the recognition he has already received. His modesty, his collegiality, and his serious interest in the activities of our students made the visit all the more enjoyable for everyone."





Message from the Chair

Greetings from Corvallis!

As you may know, OSU has a new president, Dr. Edward Ray, former provost and executive vice president of Ohio State University. Dr. Ray is passionate about education and research, and we look forward to his dynamic leadership and continuing support for the sciences at OSU.

While I have been chairman for only a few weeks, I already appreciate the tremendous support of a very capable and dedicated staff. The cooperation, occasional sympathy, and ever-present advice of my faculty colleagues are, of course, always appreciated. On behalf of the Department, alumni, and friends, I thank John Westall for his tireless efforts in promoting the activities of the Department during the past five years.

Two new faculty members joined the Department during the past year. Claudia Maier obtained her PhD at the University of Konstanz, Germany followed by a postdoctoral appointment at OSU and a position as Lecturer/Assistant Professor at Utrecht University, The Netherlands. Her research specialty covers the application of mass spectrometry to the analysis of proteins. Fred Stevens received his doctorate from the University of Groningen, The Netherlands, and he also had a postdoctoral appointment at OSU. His research specialty is bioorganic chemistry.

The Department has been hit by an avalanche of faculty retirements – Max Deinzer, Jim Ingle, Joe Nibler, Mike Schuyler, Dick Thies, and Jim White. As a group, they have contributed more than 188 years of service to OSU! Fortunately, all of them will continue to play vital roles in the teaching and research missions of the Department. Searches are already underway to fill the next 188 years.

I am pleased to let you know that Rick Nafshun was promoted to senior instructor for his outstanding teaching contributions in our general-chemistry sequences, for securing funds for technological enhancements to classrooms, and for devoting valuable time to outreach activities.

During the 226th National Meeting of the American Chemical Society in New York City, the OSU Foundation and Department sponsored a reception to recognize the presentation of the Arthur C. Cope Senior Scholar Award to Jim White. We were happy to see many alumni, friends, and colleagues in attendance to honor Jim's accomplishments.

As I write this letter, I have been informed that our newest equipment acquisition – an image-plate X-ray diffraction system – has just arrived at the University dock. We look forward to its installation and use by the organic and materials groups. Such acquisitions are critical to student education and conducting cutting-edge research. Our alumni and friends can play a major role in the acquisition and establishment of our instrumentation facilities by contributing to our **Chemistry Instrumentation and Facilities Fund**. Contributions to this fund provide the seed money for leveraging the large grants and contracts that are required to purchase equipment. In this way, we can significantly stretch your donations and provide an opportunity for very significantly affecting the success of the Department.

We always like to hear from our friends and former students, so please take a few minutes to tell us about your activities for inclusion in the Alumni News section. If your travels bring you to Corvallis, be certain to stop by the Department for a visit.

DOUGLAS A KESZLER

Faculty News

Jennifer Field's graduate student **Kim Hageman** completed her PhD in the spring and their paper, "Forced Mass Balance; Technique for Estimating *In Situ* Transformation Rates of Sorbing Solutes in Groundwater" was accepted for publication in *Environmental Science and Technology*. A data analysis technique for deriving *in situ* transformation rates of sorbing solutes from "push-pull" test data is presented and evaluated with numerical modeling.

During the past year, **Doug Keszler** gave invited presentations at the Hewlett-Packard Company and at the International Conference on Solid-State Crystals in Zakopane, Poland. He also spent ten days in Paris as part of an international exchange with Gerard Aka at the Ecole Nationale Supérieure de Chimie de Paris. Results from work on the study of inorganic phosphors and their deposition onto flexible organic substrates were presented at the 11th International Workshop on Inorganic and Organic Electroluminescence, Ghent, Belgium.

In January **Joe Nibler** chaired a session at the 50th Western Spectroscopy Association Meeting at Asilomar, CA. In February he lectured on Coherent Raman Spectroscopy at Willamette University. Earlier in 2002 he gave an invited talk at a Symposium on High Resolution Infrared Spectroscopy at the Pacific Northwest National Labs in Richland, WA, where he serves on their User Facility Advisory Board. During the year, Art Maki (retired, NIST) and KyungHee Lee (OSU PhD '90) from the Andong Institute of Information Technology in South Korea worked on collaborative research projects in the Nibler lab. Collaborator Alfons Weber from NSF and NIST will present some of the work done at OSU at the 18th Colloquium on High Resolution Molecular Spectroscopy in Dijon, France in September.

Christine Pastorek participated in a chemistry peer review panel for the NSF Course, Curriculum & Laboratory Improvement Program in Washington, DC in January. She also spearheaded a drive to replace more than 2000 mercury thermometers in the teaching labs with the non-Hg variety. Matching funds were acquired through a campus Environmental Health & Safety Smith Grant.

Highlights from **Vince Remcho's** group include invited presentations on microfluidics, nanoscale sensors and separations devices, and molecular recognition processes in Santiago, Chile; Milford, MA; Riva del Garda, Italy; Vancouver, BC; Bozeman and Missoula, MT.; Somerset, NJ; Rouses Point, NY and Mar del Plata, Argentina. Their work is being published in *Analytical Chemistry*, *Journal of Separation Science*, *Analytical & Bioanalytical Chemistry*, and *Electrophoresis*.

PhD candidates **Stacey Clark** and **Angela Doneanu** won scholarship support from the International Symposium on Capillary Chromatography and Electrophoresis to present their work at the ISCC conference in Italy. Graduate student **Carlos Gonzalez** won scholarship support through the Pipeline Fellowship Fund, and first-year students **Jack Rundel** (summer intern at Sandia Livermore Laboratory with VTR alum Dr. Gabriela Chirica) and **Laura Lessard** are off to a running start with their respective research projects.

David Horne's laboratory was successful in obtaining two patents for DBH and Topsentin marine natural products. These useful metabolites are currently being evaluated by Genzyme Corporation for the treatment of osteoarthritis and inflammation.

The following NSF Nugget was submitted by **Wei Kong**, 2003:

"How smart is nature in choosing the nucleic acid bases as carriers of our genetic code? Using gas phase spectroscopic techniques, Dr. Kong's group learned that as individual molecules, these bases are easily damaged by ultraviolet radiation. However, when surrounded by water molecules in a cluster, the absorbed photon energy is quickly dissipated into the solvent, thereby maintaining the integrity of the bases. Nature is therefore not simply smart in choosing these bases, rather, it is wise in providing an environment for the bases to preserve the fidelity of our genetic code."



New Faculty Members Arrive in December

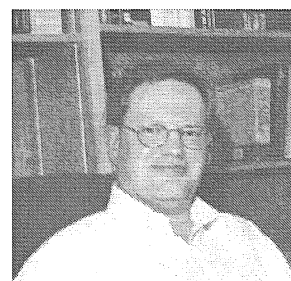
Last November the Department was extremely pleased to welcome two new assistant professors, **Claudia S. Maier** and **Jan Frederik Stevens**, as they arrived to set up their laboratories in the analytical and organic chemistry divisions respectively.



Maier earned her PhD at the University of Konstanz, Germany in 1994 and had a post-doctoral appointment in Max Deinzer's lab in 1998-99. In 1999, she accepted a position as Universitair docent in the Department of Biomolecular Mass Spectrometry at Utrecht University, The Netherlands. Maier's research and teaching will become key components of OSU's bioscience initiative and the departmental effort of bridging the gap between chemistry and biological sciences. The Maier laboratory emphasizes the analysis of proteins in relation to their function by using biomolecular mass spectrometry. Two interrelating research themes are followed. One research line focuses on the detailed investigation of an individual protein or protein system by protein-chemical approaches

in combination with mass spectrometry. Here, the emphasis is on the investigation of non-covalent interactions which are important in protein-ligand and protein-protein interactions as well as in protein-folding and formation of tertiary and quaternary structures. The second research line accentuates proteomics concepts, i.e. the systematic analysis of complex protein mixtures and the structural characterization of proteins and their post-translational modifications. There is an emphasis on developing and applying functional proteomics approaches for targeting specific groups of functionally related or post-translationally modified proteins. Her research has been published in the *Journal of Biological Chemistry*, *Biochemistry* and *Protein Science*. Claudia's laboratory is located in the ALS building where she shares mass spectrometry facility resources with Max Deinzer and Doug Barofsky.

Fred Stevens earned his doctorate in Pharmaceutical Chemistry at the University of Groningen, The Netherlands, in 1995 and held a post-doctoral position in Max Deinzer's laboratory in 1998-99. After returning to the Old World, he held research positions at the Free University of Amsterdam and at the Leibniz Institute for Plant Biochemistry in Halle, Germany. Stevens' laboratory space, located in Weniger Hall, has taken shape gradually after being painted and cleaned. Fred's research focuses on the elucidation of the effects of lipid peroxidation processes on the development and progression of age-related diseases, studying non-enzymatic conjugation reactions between oxidized lipids and biomacromolecules using chromatographic techniques, mass spectrometry, nuclear magnetic resonance, and chemical modification techniques.



When asked about returning to Corvallis, Claudia replied, "Fred and I met at OSU and had here in the Pacific Northwest simply a very good time. As the opportunity came up, we decided to take on the challenge of an intercontinental move and call Oregon our new home. We like the outdoors; the Cascades are breathtaking, Oregon's coast is incredibly beautiful and we felt deeply in love with Central and Eastern Oregon's scenery." Claudia and Fred's 'new' home has views of McDonald Forest. Their two cats, Amelia (born in the Netherlands) and Corvallis (a "native" Oregon stray who made the intercontinental trip twice!), have adjusted well to their new surroundings.

Doug Keszler Named Sigma Xi Scientist of the Year

Doug Keszler, Professor of Chemistry, was named the Sigma Xi Researcher of the year at the OSU Sigma Xi Annual Banquet on May 8, 2003. Keszler will present a public lecture about his research this fall. He is cited for pioneering work with nonlinear optical materials that are useful in lasers with diverse applications such as machining and surgery. His research group has also developed new phosphors with applications in flat panel displays. His work combines basic research funded by governmental agencies with applied research funded by industrial partners.

As one of his colleagues commented, "Keszler has discovered new materials in these areas that are dramatically superior to previously known materials,



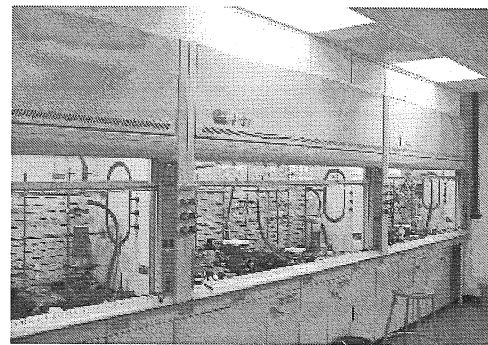
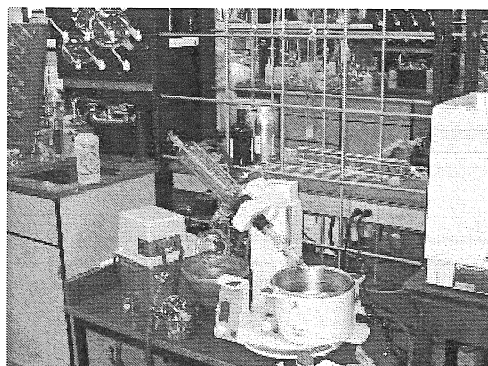
and his materials are finding commercial application. He has also been a leading contributor to the fundamental scientific understanding of both luminescent and nonlinear optical materials."

During his career at OSU Keszler has advised over 25 MS and PhD students. He received his BS from Southwestern Oklahoma University in 1979 and his PhD from Northwestern University in 1984. He joined the Chemistry Department in 1985 and was recently named department chair.

Sigma Xi is a national research and scientific honor society. Its purpose is the encouragement of original investigation in science, pure and applied.

Carter Lab Remodel Makes a World of Difference!

"Bright, airy, modern and spacious".....those words describe the new Carter lab. More than just a paint job, the state-of-the-art hoods, new desks and lights, false ceilings, and air conditioning vastly improve the research environment in Rich Carter's organic chemistry research labs. Carter is now upgrading the smaller labs



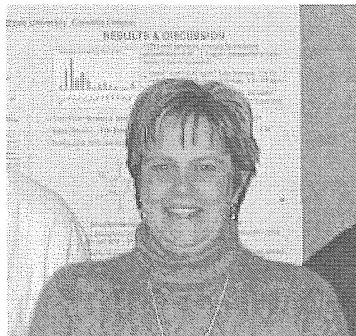
in his area so that he can accommodate more undergraduate and graduate students and postdoctoral fellows. The outdated labs were overdue for a facelift and required removal of asbestos throughout. The new surroundings will make a big difference in graduate recruitment and safety.



Simonich Lab Findings Gain Recognition Among Environmental Researchers

Staci Simonich has held a joint appointment in Environmental Toxicology and Chemistry at OSU for two years. During that time she has written grant proposals, attracted and mentored graduate students in both programs, set up a new laboratory with state-of-the-art equipment, and launched a series of sampling sites for environmental testing to support her research. She has been awarded the prestigious NSF CAREER 5-year grant to support her research from NSF's Atmospheric Sciences Division.

Since joining OSU, her mission has been to establish methods to track wind-borne organic contaminants from Asia and Europe. Many compounds which were banned long ago in the US are reaching North America. Her lab is finding pesticides, fire-retardant chemicals, PCBs, and other well-recognized toxins at sampling stations atop Cheeka Peak on the Olympic Peninsula in Washington, and at Mary's Peak west of Corvallis. Her research group is also studying the atmospheric deposition of these pollutants in seven national parks located in the western U.S.



In March, Dr. Simonich participated in the 2003 Georgia Basin/Puget Sound Research Conference in Vancouver, BC, where nearly 800 American and Canadian scientists, government officials, and environmentalists met to compare results and highlight trends in northwestern ecosystems. Simonich, one of the scientists who first alerted the world to the cross-continental transport of pollutants, expects to see increasing threats to these systems as developing countries unleash more pollution.

She was quoted in the April 1, 2003, Seattle Post-Intelligencer: "On a global basis, you end up with higher concentrations in the Arctic, and on a

regional basis you find higher concentrations at higher elevations. As we have global warming and glacier melt, you have the potential to release more of these stored pollutants into ecosystems." This poses a potentially long-term threat to relatively pristine high elevation ecosystems. Simonich's lab is searching for new analytical methods to track airborne contaminants.



K-12 Benefits from OSU Chemistry Outreach

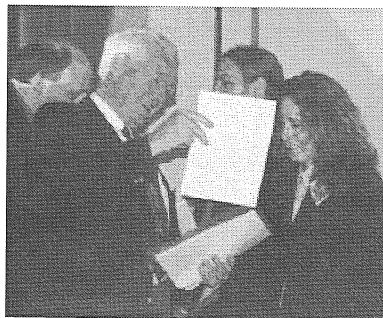
Chemistry department faculty, graduate and undergraduate students are often involved with outreach activities which promote science among school children and underrepresented groups in Oregon. This year Iota Sigma Pi members, led by Margie Haak and Chris Pastorek, hosted a 5th grade class from Newport and a high school class from Eugene for a day, designed and ran chemistry activities as a part of Family Science Night for Corvallis and Siletz public schools, ran a day of hands-on chemistry activities for middle school students from a Salem charter school, and worked with SMILE middle-schoolers during their Weekend Challenge programs. Pastorek and Haak provided programs throughout the academic year for Saturday Academy classes. Pastorek organized and provided daily activities in Gilbert Addition for the Summer Engineering & Science Camp while Haak did the same for the Adventures In Learning summer day camp at OSU. Many of us can point to an experience like this that led to a lifelong interest in chemistry.



OSU Researcher Wins Top Honors in Germany for Outstanding PhD Thesis

In March 2003 Sarah Trimpin, a post-doctoral research associate in Max Deinzer's laboratory, was awarded the prestigious **Wolfgang-Paul-Promotionsstudienpreis 2003** from Deutsche Gesellschaft für Massenspektrometrie (DGMS) for her outstanding PhD thesis in mass spectrometry. The prize, sponsored by Bruker-Franzen Saxonia, included a cash award of €5000. Trimpin gave an oral presentation and received her award at the DGMS conference at Westfälische Wilhelms-Universität in Münster.

Trimpin attended the University of New Brunswick and earned her Diplom in chemistry from the University of Konstanz in Germany in 1999 where she worked on a bioanalytical mass spectrometry approach to Alzheimer's disease in Michael Przybylski's group. As a result of this work, in 1999 she was awarded the **Wolfgang-Paul-Diplomstudienpreis** from the DGMS for her outstanding Diplom thesis.



She joined Klaus Müllen's research group at the Max-Planck-Institute for Polymer Research, Mainz, completing her research and defending her PhD thesis titled, *Methodische Entwicklung der MALDI-TOF Massenspektrometrie für Grenzbereiche der Makromolekülanalytik*, in June 2002. This research involved methodical development of matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF-MS) for the analysis of synthetic macromolecules. She developed a technique of solventless MALDI-TOF-MS so that today insoluble macromolecules can be unequivocally characterized.

Trimpin's current research is a mass spectrometric approach to neurotoxicants and their impact on biopolymers. She gave an invited talk in November at the Quantitative Synthetic Polymer Mass Spectrometry Workshop at the National Institute of Standards and Technology in Gaithersburg, MD and this led to a feature article in the February issue of *Analytical Chemistry*.

2002/03 An Active Year For SAACS

SAACS students poured lots of energy into their club activities this past year. Led by co-chairs Kathy VanWormer and Emily Simpson, the group explored the gamut of chemistry applications during their monthly meetings. In November Jennifer Travers lead undergraduate chemistry majors and Botany and Plant Pathology Undergraduate Club members on a beautiful mushroom hike on Mary's Peak. The winter term field trip was a tour of Gene Tools, a biotech company in Philomath. Activities during the meetings included growing crystals, making liquid nitrogen ice cream, doing root beer analysis, helping to plan and help with Saturday Academy activities for young people, and investigating the carbon dioxide content of Pop Rocks. The group website was maintained with lots of fun ideas and a list of clues to let "you know you have been thinking too much about chemistry when...." Check it out at www.chem.orst.edu/saacs



Alumni News

Phillip Leveque, BS '47, MS '51, is investigating the comparative efficacy of natural, semi-synthetic and synthetic *Cannabis* medications on medical conditions acceptable by the Oregon Health Division for *Cannabis* therapy. As of November 2002, there were 2,500 patients under study.

Roger Crawford, PhD '59, Ken Hedberg's first graduate student visited the Department this summer. He retired as Director of Research from PPG in 1993 in Akron, OH. He teaches an occasional chemistry class and is responsible for a major upgrade in undergraduate instruction at Ohio University.

Dr. Jürgen Seubert, Post-Doc (Marvel) '66 -'68, retired from a long career at Merck in Darmstadt, Germany.

Lane Goodell, MS '68 (Yoke), has retired and moved to Portland after 34 years with Rhone Poulenc, the last eleven years in Los Angeles.

Stephen Ely, PhD '75 (DeKock), has spent 26 years with Amoco, now British Petroleum, as Projects General Manager for Polyester Intermediates Americas in Illinois.

Turgay Seçkin, MS '87 (Thies), is a professor of chemistry at Inonu University in Malatya, Turkey, teaching physical chemistry.

John Salinas, MS '88 (Ingle), is in Grants Pass, OR, teaching chemistry at Rogue Community College. Summers find him working with federal agencies on lakes and streams in southern Oregon, compiling volumes of data for publication.

Ted Haigh, BS '89, completed an MS at PSU in 1992 and worked as an analytical chemist, analyzing polymers at a wood resin plant for 7 years. He is now an atmospheric chemist and air quality specialist for the Confederated Tribes of the Umatilla in the Environmental Sciences and Technology Program.

Debbie Hongxing Sun-Zou, PhD '89, Doug Keszler's first graduate student, visited the Department in the spring. After leaving OSU, she spent a year doing biomedical research at Harvard Medical School while waiting for her husband to complete his PhD at MIT. In 1990, they moved to Cleveland

where she was lab director at Alpha Omega Chemical Co. In 1993, she and her husband started a company, USA Instruments, Inc. (USAI), to design, manufacture, and market RF coils for



Magnetic Resonance Imaging (MRI) systems. After nine years of operation, USAI became a global leader in engineering, manufacturing, and distribution of MRI coil products, growing to 250 employees. USAI has received numerous awards from organizations such as INC 500, Weatherhead 100, Ernst & Young, and the Ohio Governor's office in recognition of their exceptional growth and successful entrepreneurship. The company was sold to General Electric Medical in December, 2002. Now Debbie is a consultant to GE Medical; she has remarried and currently enjoys traveling and her new-found free time.

Rainer Beck, PhD '90 (Nibler), gave a joint Physics/Chemistry Seminar at OSU in August. He is professor of chemistry and coordinator of student exchange programs at Ecole Polytechnique Fédérale de Lausanne, Switzerland. Rainer, his wife Susan, and their two children Julia and Oliver, spent two weeks on holiday in Oregon and Washington.

Nancy (Triggs) Breen, PhD '90, teaches at Roger Williams University in Rhode Island.

Scott E. Davis, BS '96, is now an attorney at Klarquist Sparkman, LLP, a firm that OSU commonly uses for patents in Portland.

BingBing Wang, PhD '98 (Somoza), works for Johnson & Johnson Pharmaceutical Co. in New Jersey in research and development of anti-cancer drugs.

Ki-Seog Chang, PhD '98 (Keszler), is a Lt. Colonel at the Korea Air Force Academy, and is Associate Professor of Chemistry. He spent a sabbatical year studying with Peter Dorhout at Colorado State University in 2001 working on the synthesis and characterization of the first perovskite nanotubes made by sol-gel template synthesis.

Alumni News

Anthony Ocana, BS '98, is Metals Supervisor for North Creek Analytical, Inc. in Bothell, WA.

Matthew Cresswell, BS '98, has completed an MS in oxygen-reducing electrode materials in the chemistry department at Portland State University.

Paul Forster, BS '98, presented his PhD research at a seminar in July in the Department. He will complete his degree at UC Santa Barbara in the fall. Paul did undergraduate research for Art Sleight.



Wenxin Ke MS '98, wife Nuria (1998 postdoc with S. Gould), and son Victor visited OSU in July. They now live in Thousand Oaks, CA.

Steve Mayer, PhD '98, and wife Shannon ('97 OSU PhD, Physics) have new positions in chemistry and physics, respectively, at the University of Portland. They have two daughters, Jordyn and Haley.

Ivana Radosavljevic, PhD '99 (Sleight), was awarded the Cambridge Crystallographic Data Center Young Scientist Prize for 2003. This is the highest honor for a young crystallography scientist in the UK. Ivana will give the prize lecture at the British Crystallographic Association meeting in York.

Dong Li, PhD '99 (Keszler), has a position in research at ASM in Phoenix, AZ.

Tim Balts, BS '99, passed the North Carolina Bar exam and the Patent Bar Exam and is now working

for Alston & Bird in Charlotte, NC. Tim writes that he enjoys patent work and has done some polyolefin products applications. He wrote a patent opinion in which he credits XRD experience gained at OSU.

Evan Rougeux, BS '00, was promoted to Process Improvement Chemist at the Dynea Plant in Springfield, OR.

Luke Lavis, BS '00, will attend graduate school this fall on a fellowship at the University of Wisconsin.

Rebecca Bliesner, PhD '01 (Sleight), moved with her husband and son to Olympia, WA to begin teaching at Evergreen State University.

Matt Cranswick, BS '01, attends graduate school in materials science at University of Arizona.

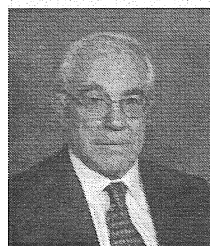
Jelena Dacres, PhD, '01 (Freeman), reports that she has a new post-doctoral position with Oak Ridge Institute for Science and Education. She is located in the Environmental Protection Agency in Cincinnati.

Derek Hamill, BS '02, works at Neilson Research Corporation, an analytical laboratory in Medford that tests water and soils, methamphetamines, paints, air, soils, food and other substances.

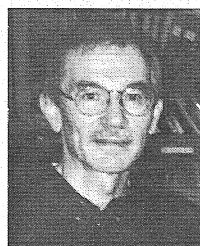
Sangmoon Park, PhD '02 (Keszler) began a postdoctoral position at Brookhaven National Labs in New York in December. Sangmoon's son Daniel was born soon after they arrived.

Stéphanie Melin, MS '02, returned for graduation ceremonies from The Netherlands where she is a technical advisor for Idexx Corp.

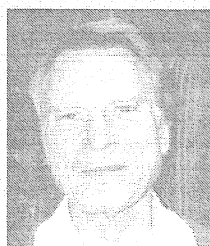
2003 OSU Chemistry Retirees



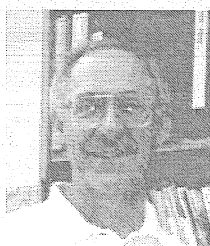
J.D. White
(32 1/2 years)



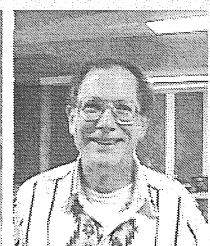
Jim Ingle, Jr.
(32 1/2 years)



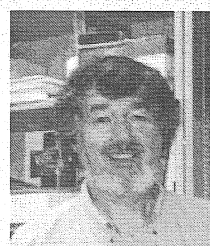
Max Deinzer
(29 3/4 years)



Joe Nibler
(35 3/4 years)



Mike Schuyler
(23 years)



Richard Thies
(35 years)



Contributions

We wish to thank the following donors whose generous contributions during the 2002/03 year funded the seminar series, the Pauling Lecture Series, graduate recruiting, and scholarships and fellowships for chemistry students. The department benefits in the best possible way from your donations. Thank you all for over \$120,00 in gifts to chemistry.

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Duane Starr

John & Charlene Stephenson

Melissa Strait

John Stoner

Harry & Carol Studer

Jeffrey Stults

Brian & Hope Suchsland

Grace Cheung & Albert Sun

Sun Microsystems Foundation

Edward & Joanne Suzuki

John & Lori Sytsma

Fred & Fella Maria Tanaka

Contributions

Tektronix Foundation
Milton & Joanne Thompson
Candace Tomlinson
Sheri Tonn
Richard Treinen
Junming Tu
Jerry & Diana Unruh
Debra Van Engelen
David & Catherine Vieira
Thomas R. Webb
Suzanne & Steven Weissman
Doreen & Dwight Weller
Robert & Patsy Woodley
Kenneth & Elena Wright
Crystal Lin & King-Wai Yau

George Buechi Lectureship
Firmenich SA

Carroll DeKock Scholarship
Christopher & Lisa Baumann
Carroll & Gerry DeKock
Shirley Gray
Lyle Smokey McAfee

Bruce Graham Memorial Scholarship
Olivia & William Allaway
Mindy Alter
Pieter Bax
Margaret & Peter Brooks
Ruth Candland
Ernest & Marilee Duce

Jayne Elkins
Gerda Ermler
Linda Fengler
Bruce Graham
Kim & Susan Graham
Hermine Graham
Kathleen Hoffacker
Suellen Hudson
Harriette & Robert Huff
Murray & Mary Kuperman
Elizabeth Lease
Ronald Levesque
Audrey & Stuart Marsee
Gene Mohan
Iris & Tom Moran
Carol & Harry Mosher
Carolyn & Theodore Myers
Alice & Tohru Ota
Nan Prince
John Quinn
Thomas Rogers
Eric & Marie Saur
Carl & Dorothy Schoder
Geoffrey & Linda Sharp
Mary & L.E. Spring, Jr.
Eugene & Marjorie Tower
June Turnquist

Arnold Johnson Jr. Fellowship
Sharon Ervin Johnson

James Krueger Fund
Christopher & Lisa Baumann

Cynthia Cozza
Janice Cammack
Max Deinzer
Carroll & Gerry DeKock
Peter & Judith Freeman
Scott Hein & Claudia Seyfert
Frederick & Clara Horne
Sara & James Ingle, Jr.
William A. Johnson
Richard & Yumiko Kiyokane
Michael Lerner
Joseph & Karen Nibler
Christopher Oriakhi
Dale & Toni Ritter
Oravan Sanguanruang
Lewis Hyde Schaad
Leonard & Louise Schussel
Michael & Brandy Schuyler
James & Meredith Shields
Clara B. Shoemaker
William Stanclift
Barry & Dianne Sudbury
Marta Cecilia Yappert
Yoke Family Trust

Pauling Chemistry Lectures
Andrew Butler
Ellen Crumb
Robert & Pamela Fisher
Gregg Gilles

Colleen Spurgeon Scholarship
Colleen Spurgeon

Bruce Graham Memorial Scholarship

A memorial scholarship recognizing the life and work of Bruce Graham (PhD 1945) was established by Hermine Graham with the OSU Foundation to recognize his years of meritorious achievement in academics and research. Dr. Graham graduated from Monmouth Teachers College and became principal of Knappa Grammar School at age 18. In 1941, he returned to school at Oregon State College where he earned a PhD, working with Bert Christensen. After working at Eastman Kodak as a research chemist and teaching at the University of Rochester, he moved with his wife and five children to the San Francisco Bay Area and Stanford Research Institute where he started the Life Sciences Division, directing its growth into a highly respected and successful part of the organization.

In 1965, he became the founding president of Gulf South Research Institute in Louisiana. In 1970, he moved to Washington, D.C. as a consultant in the contract research area until retiring to the family home in Los Altos in 1981. Dr. Graham was well known for his kind personality, sense of humor, good-natured battles with golf courses, and love of singing. Anyone may donate to this scholarship fund, which was endowed to commemorate the life of an outstanding individual and scientist.



Advanced Degrees 2002-2003



The Nibler crew kicks up its heels. L to R: Jeff Barber, Stephanie Melin, Arjan Stander (Mech. Eng.), Joe Nibler, Tony Masiello.

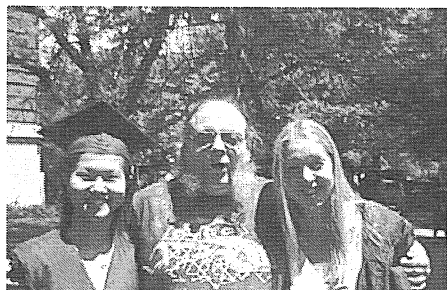
Master of Science

- Justin Staggs** Non-thesis (V. Remcho). Justin is a lab technician for Interfacial Dynamics in Tualatin, OR.
- April Mixon** *Mass Spectrometric Analysis of Bovine Neurofilament Proteins NF-L, NF-M, and NF-H: Peptide Mapping, Phosphorylation and Alkylation Site Identification* (M. Deinzer). April is teaching at Portland Community College, Sylvania campus.
- Jan Napack** Non-thesis (D. Keszler). Jan is a research associate for NCASI in Corvallis.
- Kristi Haataja** Non-thesis (D. Keszler). Kristi works at Synthetech in Albany.
- Kriangsak Khownium** (K. Gable) *Direct Atom Transfer Versus Ring Expansion in Reaction of Rhenium Oxo Complexes with Cyclooctene Epoxides and Episulfides*. Kriangsak will do PhD studies in medicinal chemistry at University of Kansas in Lawrence.

Doctor of Philosophy

- Eric Brown** *Rhenium-Catalyzed Oxygen-Atom Transfer Reactions: Mechanism and Applications*. (K. Gable) Eric has a post-doctoral position with William Tolman at the University of Minnesota.
- Joshua Hansen** *Total Synthesis of 7-Epicylindrospermopsin*. (J. White) Josh has a research position at Array Pharmaceuticals in Longmont, CO.
- Younggi Choi** *Total Synthesis of Indole Alkaloids*. (J. White) Younggi has a post-doctoral appointment at Scripps Institute in La Jolla, CA
- Kim Hageman** *In Situ Reductive Dechlorination Rates in a Trichloroethene-Contaminated Aquifer*. (J. Field) Kim has a post-doctoral position with Staci Simonich at OSU.
- Sanchai Prayoonpokorach** *Fluorometric Determination of Chloroform and TCE in Water with a Portable Fluorometer*. (J. Ingle) Sanchai teaches in the School of Chemistry at Suranaree University of Technology in Nakhon Ratchasima, Thailand.
- Anthony Masiello** *High Resolution Spectroscopy of Sulfur Trioxide and Carbon Suboxide*. (J. Nibler) Tony has a post-doctoral position at Pacific Northwest National Laboratories in Richland, WA.
- Jeffrey Barber** *High Resolution Spectroscopic Studies of $^{32}\text{S}^{16}\text{O}_3$ and $^{34}\text{S}^{16}\text{O}_3$* . (J. Nibler) Jeff has a National Security Post-Doctoral Fellowship at Los Alamos National Laboratories in New Mexico.

2002-03 Bachelor of Science



Veronica Chiu and Nicola Maynard receive a congratulatory hug from Emile Firpo after receiving their diplomas.

Jeff Bilyeu (BS, chemical education) begins the MST program in Math & Science Education at OSU.

Brian Blair (BS, pre-medicine) is a phlebotomist at Kaiser Permanente in Portland.

Sara Breitenbach (HBS, advanced biochemistry) works in D. Rockey's microbiology lab at OSU while she applies to graduate schools.

Veronica Man Ling Chiu (BS, advanced chemistry, advanced biochemistry) after an internship, took a full-time position in the QC Lab at AVI BioPharma, Inc in Corvallis.

Steven Cruickshank (BS, forensic science) has a position at CH2M Hill under the direction of Mark Bos.

Szabolcs Farkas (BS, materials science) has a laboratory position in Corvallis.

Jessie Hartford (BS, chemistry education, French major) plans to attend graduate school and teach high school.

Michinao Hashimoto (HBS, advanced chemistry, adv biochemistry) begins graduate studies in physics at Harvard in fall.

Adam Hendy (BS, pre-medicine) plans to return to school in chiropractic medicine after working for a year.

Cristian Ion (HBA, triple major) begins graduate school at Monterey Institute of International Studies in California.

Rebecca Locke (BS, business) will attend osteopathic medical school at Erie College in Pennsylvania.

Nicola Maynard (BS, pre-medicine) plans to attend graduate school in chemistry at Colorado School of Mines.

Melissa McEwan (BS, forensic science) attends Officer Candidate School.

Emily Simpson (HBS, advanced chemistry) will attend graduate school at University of British Columbia in Vancouver.

Denay Tubbs (BS, forensic science) moved to California

Anthony Atha (BA) after an internship, accepted a position with CH2M Hill.

Anthony Tavoloni (BS, biochemistry) will continue in the military.

Macchiventa Wisdom (BS, advanced chemistry) took a position with AVI Biopharma Inc. after an internship there.

Jason Schindler (HBS, advanced chemistry) took a position in the QC laboratory at AVI BioPharma, Inc. after an internship there.

Karmin Williams (BS, chemistry education) is in the MST program in Math & Science Education at OSU.

Undergraduate Research Experience:

Spencer Porter (Keszler)

Betsy Camp (Carter)

Kathy VanWormer (Loeser/Chen)

John Friehe (Intel)

Nik Lockard (PNNL, Richland, WA)

Sarah Robinson (SURF-UC Santa Cruz)

Mark Abel (Kansas State University)

John Yan - McNair Scholar (Gerwick lab, Pharmacy)

Josh Pan - McNair Scholar (Dolja lab, Botany & Plant Pathology)

Luke O'Rourke (Maier)

Tony Tong (Stevens)

Becky Parker (U of Utah, Poulter lab)

David Hartmann (AVI BioPharma, Inc.)

Spencer Huff (AVI BioPharma, Inc.)

Chris Holm (CH2M Hill & Oceanography)

Nanako Ogi (Food Science & Technology)



Honors and Awards

College of Science

Undergraduate Scholarships for 2003/04

Peter Culter Memorial Scholarship

Rebecca Parker

Carroll DeKock Scholarship

Abdul Hackim

Colleen Spurgeon Scholarship

Elizabeth Camp

Barry Goldwater Scholarship

Mark Abel

Milton Harris Scholarship

Kathy Van Wormer

Excellence in Science Scholarship

Nanako Ogi

Augustin & Rita Gombart Medical Scholarship

Nick Sabrowski

Amy Chadburn Premedical Scholarship

Luke O'Rourke

Chemistry Department Awards, June 2003

Ingram First Year Graduate Fellowship

Nick Kesinger

Benedict 2nd Year Graduate Fellowship

Cheol-Hee Park

Fall 2002 Laboratory TA Awards

Kristi Haataja

Mohammad Khasawneh

Vasanth Williams

Winter 2003 Laboratory TA Awards

Kaustubh Gawande

Tony Scott

Venu Cheedu

Spring Laboratory TA Awards

Jack Rundel

Michael Hruschka

Meg Bojan

Shirley Kuse Fellowship

Martha Degen Stapels

Stacey Clark

Melissa Schultz



David Shoemaker Fellowship

Guoqiang Wang

Jun Li

Angela Doneanu



N.L. Tartar Summer Research Fellowships

Carin Huset

Stacey Clark

Peter Ruiz-Haas

Sascha Usenko

Chris Lincoln

Eric Korf

Keith Schwartz

Nick Kesinger



Oregon Sports Lottery Fellowship 2003

Jack Rundel, Jr.

OSU Graduate Student Conference Awardees

Martha Stapels - 1st Place Oral Presentation

Yonggang He - 3rd Place Oral Presentation

CRC Press Freshman Chemistry Awards

Heather Bolstad

Eileen Stanton

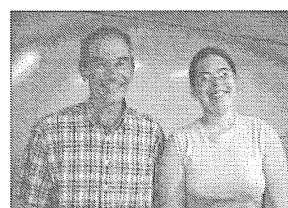
Phi Lambda Upsilon Outstanding Sophomore

Luke O'Rourke

Outstanding Analytical Chemistry Student

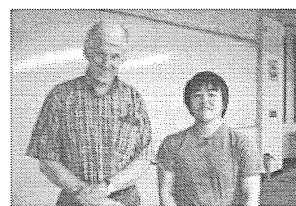
Nanako Ogi

American Institute of Chemists - Graduating Senior



Emily
Simpson
(shown with
J.Ingle)

Merck Index Award for Outstanding Senior



Michinao
Hashimoto
(shown with
G. Evans)

Senior chemistry major **Theresa Berger** won a scholarship to attend the 2003 Oregon Women in Higher Education (OWHE) conference in Portland January 31, 2003.

Milestones in service to OSU

Bob Boyer, Departmental
Computer Administrator
20 years

Joey Carson, Administra-
tive Assistant/Office
Manager
15 years

Glenn Evans, Professor
of Theoretical Physical
Chemistry
25 years

Walter Loveland, Profes-
sor of Nuclear Chemistry
35 years

OSU chemistry alumni are found on every continent these days. We would like to hear from you. Now you can log on to our alumni update site and tell us what you are doing. Go to www.chem.orst.edu. Pull down the menu under "Department" and click on 'Alumni Update'.

or.....

Send us a letter with your name, degree, year earned, and your major advisor, and tell us what is keeping you busy these days.



The Alpha Beta Chapter of the Honorary Chemical Society Phi Lambda Upsilon (PLU) received a national PLU activities grant that provided funds for refreshments at the three Pauling Lectures in June, for repairs to the PLU placard for the sophomore award, and for the spring departmental picnic. PLU President Tony Masiello and Secretary Melissa Schultz submitted the proposal for the grant. Graduate students Martha Staples, Tony Masiello, Melissa Schultz, Ben Figard, and Post-Doc Sarah Trimpin received \$250 each from the national PLU travel grant so that they could attend meetings where they were presenting their research. PLU initiated eight new members at a ceremony held at Woodstocks Pizza Parlor in May.





**OREGON STATE
UNIVERSITY**

Department of Chemistry
Oregon State University
153 Gilbert Hall
Corvallis, OR 97331-4003

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'The Atoms' made the playoffs for the first time ever! Chemistry women rock!



After a slow start, the 'Alchemists' recovered to win three games. All are looking forward to the return of power hitter Joe Nibler next season.