



Issue 3 Fall 2006

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Greetings from the Chair

The Chemistry Department has made important strides forward over the last year. These achievements help set the stage to realizing our full potential in the coming months and years.



The strength of our program is rooted in the members of our faculty who are recognized among the world's elite researchers and scholars. This fall, the Department added four new assistant professors, the greatest number of new faculty members in one-year since 1974. I hope you will join me in welcoming Lillian Chong, David Earl, Nat Rosi and Michael Traxselis to our community. The Department is thrilled that these four talented chemists have joined us, and is looking forward to reporting on their future successes. Please see pages 6 and 7 for details on the research interests of our new colleagues. As some of you may already be aware, Dr. John Yates has retired from the University of Pittsburgh and will take up residence in Virginia as a Shannon Fellow and Professor of Chemistry at the University of Virginia.

Our staff employees, through their loyalty and professionalism, enable the Department to grow and prosper. This year, two long standing staff members are retiring. Margie Augenstein, long-time assistant to John Yates, has decided to spend more time with her family. Also, Bob Greer will be retiring from his position as a scientific glassblower in January. It is with great pleasure that I wish to welcome Lori Neu to the Department as our new scientific glassblower. She began her work on September 1, 2006, so that she and Bob could provide a smooth transition. I am also happy to welcome Jeff Palmer who is the point person for taking care of facilities issues in the Department. These new staff members bring the same high level of skill and collegiality that is a trademark of our Department.

September was highlighted by two special events. On September 14, we celebrated Ted Cohen's 50 years of scientific research with the Chemistry Department. Ted provided us with a 1 hour lecture which sampled his scientific re-

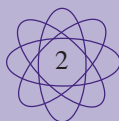
search at Pittsburgh, and we followed it by a reception at the William Pitt Union. On September 29, we celebrated the accomplishments of five of our former students, as the Department awarded the 2006 Distinguished Alumni Awards to Drs. Sharon D'Orsi, Michael Deeb, Joseph Gardella, Fred Humphries and Costas Karakatsanis. Please visit our web page at www.chem.pitt.edu to read about these recently honored alumni.

Our rich seminar tradition continued this year with over 80 seminars. This fall's Bayer Lecture Series, given by Nobel laureate Jean Marie Lehn, was an important highlight. At this event, Dean N. John Cooper announced that the Bayer Endowed Chair (currently occupied by Dennis Curran) was now fully funded. We are very grateful to our friends at Bayer for their ongoing support of our Department.

As is natural, students come and students go. This past year the Department's students were awarded 23 PhDs, 11 MS degrees and 53 BS degrees. In September, we welcomed forty-four new graduate students to the Department and we believe that these students will continue the tradition of excellence which has been created by our past students. Our undergraduate program continues to excel and receive external recognition. This year three of our undergraduate students were awarded national and international fellowships: a Rhodes Scholar, a Truman Scholar and a Churchill scholar. We are very proud of these successful students.

We are delighted to share some of the Department's accomplishments through this newsletter. If you find yourself in Pittsburgh, please feel free to stop and visit. We also welcome any questions and look forward to hearing your thoughts on the Department.

David H. Waldeck



Alumni Honored in 2006

The Department of Chemistry proudly honors these five leaders as 2006 Distinguished Alumni. We extend our congratulations and appreciation to each for the contributions they have made to our science, our communities, and the nation.

Sharon Marion D'Orsie (BS 1969)

Founder, Eagle Environmental Services, Houston. Pioneer business woman and a dedicated and valued educator who returned recently to her first love - teaching high school chemistry



Joseph A. Gardella, Jr. (PhD 1981)

Professor of Chemistry, SUNY-Buffalo. Community and campus leader, outstanding teacher, and innovative scientist. Active in public service through the ACS, community education, and local government



G. Michael Deeb, MD (BS 1971)

Herbert Sloan Collegiate Professor, University of Michigan. Thoracic surgeon, former Director of Cardiac Surgery, and present Co-Director, Heart Care Program at the University of Michigan Medical Center



Frederick S. Humphries (PhD 1964)

Regent Professor, Florida A&M University. Former president of Florida A&M, former president of Tennessee State, continued service as a national leader in education



Costas G. Karakatsanis (BS 1974, PhD 1978)

Former Director, Materials Characterization at Bayer Material Science. Important contributor to the research enterprise at Bayer and a valued partner in Pittsburgh regional university-industrial relations



left to right: D. Waldeck (Chair, Chemistry Department); J.A. Gardella, Jr.; S.M. D'Orsie; F.S. Humphries; C.G. Karakatsanis; N.J. Cooper (Dean, School of Arts and Sciences)

CALL FOR NOMINATIONS

The Department is soliciting nominations for *Chemistry Department Alumni Awards*. Nominees should have a bachelor's, master's or doctoral degree from the Department. The basis for the nomination can be excellence in research, teaching, management, or volunteer efforts. Nominations should include:

1. Your nominating letter
2. At least one but no more than three seconding letters
3. A CV for the nominee
4. Contact information for the nominee

Please see

<http://>

[www.chem.pitt.edu/
alumni/home.asp](http://www.chem.pitt.edu/alumni/home.asp)

for more information
Nominations should be

posted by

December 1, 2007

to:

Assistant Chair
Dept. of Chemistry
University of Pittsburgh
Pittsburgh PA 15260
valenta@pitt.edu



ACS-Student Affiliate Corner



2006 Undergraduate Senior Awards

The Merck Award

Christopher J. LaRocca
F. Ryan Santos

The Silverman Prize

Meredith R. McDermott

The American Institute of Chemists Award

Brendan D. Keeler

The SACP College Award

Sara L. Rhoades

The Mary Louise Theodore Prize

Joshua W. Elder
Elizabeth C. Fidler
Jennifer R. Kulzer
Lee E. Stunja
Laura E. Yokobosky

The Phillips Medal

Justin M. Chalker
Christopher J. LaRocca
F. Ryan Santos

The American Chemical Society-Student Affiliates group here at Pitt continues to thrive. This past year we again received national recognition. We were one of only thirty-two groups nationally to receive an outstanding award. We continue to put a lot of emphasis on the value of science outreach to the local community. In addition to our honors organic and Saturday Science Programs (which many of you have participated in over the past 20 years!) we added new programs aimed at the Homestead and Braddock communities. This year we plan to develop a project with Children's Hospital here in Pittsburgh.

We have established a formal tutoring program. Just about any day of the week you can find our members in the Fishbowl sharing their own love of science with each other and other students. Certainly the idea of "giving back" to the community is alive and well in our group and our department.

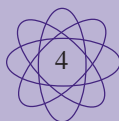
Even with all of these important educational efforts we still manage to find some time for fun. The annual Pumpkin Painting Extravaganza is still a great part of our Fall term. We display the results of our creativity in the Fishbowl lead-

ing up to Halloween. If any of you are in the area, stop by and see the artistic side of our science majors at the end of October! We also have our annual Holiday Party each January to celebrate the New Year as a group.

The photograph below is of our April 2006 graduating class. Our ACS is also largely responsible for planning this very special event where we thank all of our seniors for making the Department so very special. We look forward to working on the 2007 function as we again say thanks for a job well done!

Because of many of you in the past and the great group of current members, our ACS-SA continues to be a really important part of the educational and social experience of science majors on our campus.

To learn more about our organization and its outreach efforts, please visit our website at <http://www.chem.pitt.edu/acs-sa/>.



Phi Lambda Upsilon (PLU)

Phi Lambda Upsilon (PLU) is a National Honorary Chemistry Society founded with the purpose of promoting high scholarship and original investigation in all branches of pure and applied chemistry. The University of Pittsburgh represents the Xi chapter of PLU with its foundation in 1917. Our current roster consists of 73 graduate students and 18 faculty members, 7 of which were initiated in 2006.

In the 2005-2006 year, PLU organized a number of social and academic events for the Chemistry department including the annual new graduate student picnic in August, the annual Holiday party in December (which was finally catered!), and our initiation celebration for PLU held in June. Our most significant event of the 2005-2006 year, however, was the 51st Annual Francis Clifford Phillips Lecture held in May 2006, which is the longest running graduate chemistry lecture series organized by graduate students. Our invited speaker was Dr. Paul Wender from Stanford University, an organic chemist. Dr. Wender gave two intellectually stimulating lectures during his visit to the Department. Currently we are plan-

ning the 52nd Phillips Lecture, which will be held in October of 2007. Our lecturer will be Dr. Chad Mirkin of Northwestern University, an inorganic chemist and nanoscientist.

Keeping with the tradition of previous years, in the 2006-2007 year we are again planning academic and social events for the Chemistry Department. The organization has also established a partnership with the newly established Graduate Student Advisory Board (GSAB) in an effort to provide an official forum where students can discuss the concerns and affairs of the Department. We have also promised a collaboration with an educational outreach program headed up by Dr. Joe Grabowski where PLU volunteers will serve as technical experts for high school chemistry teachers.

Our elected officers for the 2006-2007 year are:

President – Amanda Garner (Fourth Year, Koide)
 Vice-President – Justin Baca (Fourth Year, Asher)
 Treasurer – Bhavya Sharma (Fourth Year, Asher)
 Secretary – Jessica Thomas (Third Year, Pratt)

2005-2006 Graduate Student Fellows

Lauren Ashe Fellows

David Arnold
 Kathryn Ewing
 Neil Donovan
 Glen Jenness
 Douglas Kauffman
 John Maciejewski
 Remond Moningka
 Keith Moquin
 Matthew Parker
 Jessica Sarver
 Chad Shade
 Julia Vargas
 Zhenyu Zhong

Hurd Safford Graduate Teaching Awards

Mark Ams
 Leonardo Alvarez
 Valarie McCarthy
 Keith Moquin
 Chad Shade
 Byong-Kyu Shin
 Ryan Stayshich
 Jessica Thomas

American Heart Association

Benjamin Stevens

Bayer Fellow

Sarah Russick

Frederick Kaufman Fellow

Zachary Brown

Foresight Institute Distinguished Student

Christopher Levins

Graduate Excellence Fellows

Brian Albert
 Adam Keller
 William Kowallis
 Hongjun Yue

Novartis

Amanda Garner

Provost's Award

David Arnold
 Zachary Brown

Sunoco Fellowship

Sandra Kim

2006-07 Mellon Fellowship Awardees



Hui Xiong



Hongjun Yue

2005-06 Warga Fellowship Awardees



Sarah Russick



Kathryn Ewing

New Faculty

Lillian Chong



Theoretical and Computational Chemistry, Molecular Dynamics Simulations, Protein Structure and Function

The central goal of the Chong lab is to use theory and simulation to understand how proteins fold, bind their partners, and catalyze reactions, with an emphasis on how malfunctions at the molecular level can be linked to clinical data for various diseases. To achieve this goal, we develop accurate approaches for simulation and subsequent analysis of protein structure and function.

Given the difficulty of using experiments to obtain structural details of the conformational changes of proteins upon folding or binding their partners, a natural alternative is to use atomistic molecular dynamics simulations, which provide the time resolution and detail necessary for monitoring the step-by-step progression of conformational changes. Due to the large computational cost required for simulating these conformational changes, we apply methods that take advantage of distributed computing by making effective use of a large ensemble of short, independent simulations.

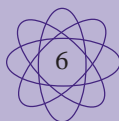
David Earl



Theoretical and Computational Chemistry, Statistical Mechanics, Biological Evolution, Immune System Modeling, Computational Material Design, Monte Carlo and Molecular Dynamics Simulations

Research in the Earl group uses the tools of computer simulation and statistical mechanics to study and explain a variety of processes and phenomena at the border between chemistry, physics, and biology. Topics currently of interest include the computer-aided design of nano- and micro-porous materials, the phase behavior of complex molecular species, immune system dynamics and vaccine design, and low Reynolds number swimmers.

David studied for his undergraduate and graduate degrees at the University of Durham in the UK and did postdoctoral work at Rice University and Oxford University. David is joined in Pittsburgh by his wife Katherine, a school-teacher.



Nathaniel Rosi

Design and Discovery of New Materials, Molecular Assemblies, Biomaterials, Organic/Inorganic Solid-State Chemistry, Porous Materials

We focus on developing strategies for the design and synthesis of new materials having broad potential applications in areas such as catalysis, sensing, and drug delivery. To accomplish our goals, we employ an approach that involves the rational assembly of chemical building blocks (e.g. small molecules, biomolecules, metal clusters, or nanostructures) into well-ordered hierarchical structures. Ultimately, we strive toward the conception and realization of unifying design principles that will facilitate the organization of such building blocks over multiple length scales. Given the multidisciplinary nature of our research, each project in lab may involve aspects and techniques derived from all branches of modern chemistry. We are particularly interested in developing methods for constructing materials (porous networks or nanostructures, for example) from biologically-derived building blocks such as peptides or nucleic acids. Such methods will lead to highly-programmable, environmentally-benign syntheses and biologically compatible materials.

Michael Trakselis

Biophysical, Protein Interactions, Enzymology, Kinetics, Molecular Biology, Genetics, Cell Biology, Polymer Chemistry

Projects in the Trakselis laboratory center on understanding the molecular mechanisms of DNA replication and exploiting this knowledge for cancer therapeutics, biotechnology, and nanoscale applications. We utilize a model archaeal DNA replication system which shares significant homology to that of higher eukaryotes but is amenable to *in vitro* biochemistry experiments. This allows us to draw parallels between different domains of life using simpler replication systems. For example, we are working on understanding mechanisms of helicase proteins capable of unwinding DNA and polymerases capable of replicating DNA. We are not only interested in how these proteins work individually but also within larger macromolecular protein complexes. This information will be used to probe and test the homologous protein counterparts in higher eukaryotes. In this aim, we utilize molecular biology, biochemistry, genetics, cell biology and biophysical methods to probe this area of research.

Faculty Highlights:

Kenneth Jordan, Professor of Chemistry

Director, Center for Molecular and Materials Simulations

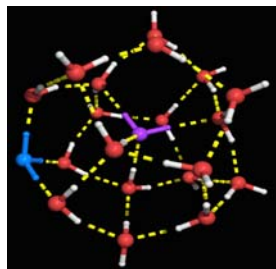


Computer modeling has evolved into a major tool for elucidating chemical reactivity and for aiding in the design of new molecules and materials. My group is actively involved both in developing new computational methods and in applying them to important chemical problems. Our research addresses fundamental problems such as the thermodynamic properties of small clusters and the nature of excess electrons and protons in water as well as more applied problems dealing with chemical reactions on semiconductor surfaces and the characterization of gas hydrates.



Much of our research is carried out in collaboration with experimental groups at Pitt, government laboratories, and other universities. The students and postdocs in the group frequently interact closely with members of the groups of our experimental collaborators.

We are collaborating with Mike Duncan's (Univ. of Georgia) and Mark Johnson's (Yale Univ.) groups in joint theoretical and experimental studies designed to elucidate the nature of protons in water. These studies are addressing fundamental questions, such as the preference of the excess proton for the surface vs. the interior of water clusters and whether the proton is localized in an Eigen (H_3O^+) or Zundel (H_5O_2^+) type entity.

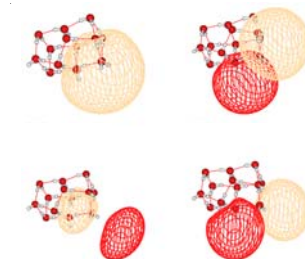


The inset depicts the most stable form of the $\text{H}^+(\text{H}_2\text{O})_{21}$ cluster identified in our studies. In this case, the excess proton is located on the surface of the cluster as an Eigen-type entity.

In a second project being carried out in collaboration with the Johnson group, we are en-

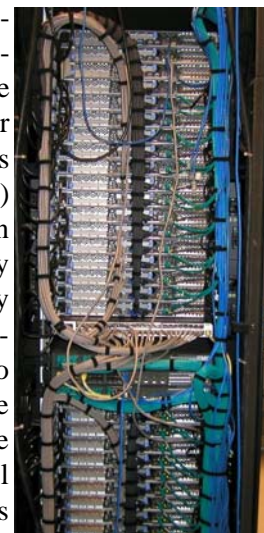
gaged in theoretical studies of excess electrons in water. These studies are aimed at developing a detailed understanding of how excess electrons are accommodated by hydrogen-bonding networks. The adjacent figure displays the orbitals associated with an excess electron bound to the

$(\text{H}_2\text{O})_{13}$ cluster. The excess electron occupies an s-like orbital in the ground state and p-like orbitals in the low-lying excited states, which is surprising since the neutral cluster is decidedly



non-spherical. These calculations were carried out using a theoretical approach developed in our group.

The students engaged in the projects underway in the group make extensive use of the computational facilities in the University's Center for Molecular and Materials Simulations (CMMS) which was established in 2001. This facility not only provides the necessary CPU cycles for demanding calculations but also provides our students the opportunity to become skilled at using parallel computing methodologies in solving complex problems in chemistry.



Graduates from the group have gone on to successful careers in industry, government laboratories and academia.



Faculty and Staff

Faculty Nuggets

Shigeru Amemiya was presented with an Eli Lilly Graduate Student Travel Award for one of his students.

Sanford Asher was promoted to Distinguished Professor. His research was featured in the Chronicle for Higher Education.

George Bandik was awarded the Chancellor's Distinguished Public Service Award for 2006.

Kay Brummond was named as the recipient of the 2006 Akron ACS Award. She was also appointed to the NIH Synthetic and Biological Chemistry Study Section A as a permanent member (2005-2010) and she is a guest editor of a Tetrahedron Symposium "Allenes in Organic Synthesis."

Toby Chapman was a recipient of a 2005 Innovator Award from the University of Pittsburgh.

Rob Coalson was awarded the Chancellor's Distinguished Research Award for 2006, and his ion channel work is featured on the cover of the Biophysical Journal.

Dennis Curran was a recipient of the Morley Medal from the Cleveland Section of the ACS as well as being named as the winner of the 2006 ACS Pittsburgh Award. He has been named the Blaise Pascal Chair from the Ile-de-France (Paris) Region of France, and he remains an ISI Highly Cited Researcher, among top 100 in chemistry (2000-present).

Bodie Douglas, Professor Emeritus, published his new book "The Structure and Chemistry of Crystalline Solids".

Ken Jordan has been named the David P. Craig Visiting Professor at the Australian National University. His research on proton water interactions was featured in Science and on the cover of C&E News. Ken and his group were fea-

ured in an article published by the Pittsburgh Supercomputing Center.

Kazunori Koide's recent J. Am. Chem. Soc. Paper is ranked the sixth most accessed between October and December.

Scott Nelson - A paper that was recently published by Dr. Scott Nelson and his group in the Journal of the American Chemical Society was highlighted in Chemical & Engineering News.

Megan Spence is the named recipient of the 2006 Eli Lilly Analytical Chemistry Grant.

David Pratt received the 2005 ACS Pittsburgh Award.

Chris Schafmeister won the Foresight Institute Feynman Prize for Experimental Nanotechnology. Chris was also featured in a Post-Gazette article featuring his work in nanotechnology.

Peter Siska's textbook "University Chemistry" was published.

Alex Star's work on carbon nanotubes and cancer research was reported in PNAS, and received considerable media attention, e.g. reported in the Pittsburgh Post Gazette.

Stephen Weber was appointed a permanent member, EBT Study Section (2005-2007).

Peter Wipf was awarded the Novartis Chemistry Lectureship Award, and he was appointed to the Wyeth Oncology Advisory Board (first chemist to be invited to serve).

John Yates and Tracy Thompson (a student in John's group) authored a feature article in the Journal of Physical Chemistry.

New Staff



Kris Takach
Computer Specialist



Jeff Palmer
Facilities Coordinator



Lori Neu
Glass Blower

In Memoriam: Raymond Craig

Raymond S. Craig, a chemistry professor at the University of Pittsburgh for 35 years and a classical music enthusiast, died at his Mt. Lebanon home June 30, 2006, of prostate cancer. He was 89.

A native of Deland, Fla., during the Depression Mr. Craig worked his way through Stetson University, earning a music scholarship for which he qualified by learning to play the violin and tuba.

In 1944, he earned a doctorate in physical chemistry from Pitt. During World War II, he developed rockets for the Army in Cumberland, Md. He returned to Pittsburgh to teach and met his wife of 55 years, Margaret Magee, who was studying at Pitt.

In conjunction with colleagues, his research involved the synthesis and characterization of new rare earth intermetallic compounds. This class of intermetallics made possible a new generation of electric motors that were twice as energy efficient and had a 10-fold increase in torque over that of conventional equipment of comparable size.

His enthusiasm for music was apparent on campus, including department parties where Mr. Craig performed. "I remember Ray as a musician", says Toby Chapman, associate professor of chemistry. "We had a group of people in the department who played chamber music together. I always envied that because I didn't play an instrument. Those folks just had a grand time. He was such a fine gentlemen."

After retiring from Pitt in 1983, Mr. Craig taught a course at Carnegie Mellon University. In addition to his wife, Mr. Craig is survived by a daughter, Carla Craig, of Brooklyn, N. Y.; a son, Thomas, of Minneapolis; a brother, Owen Craig, of Sebring, Fla., and three grandchildren.

Craig Johnson

Dr. Craig Robert Johnson, director of the chemistry program at Carlow University, died of a heart attack, July 5, 2006, at his Penn Hills home. He was 53.

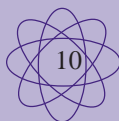
A graduate of Penn Hills High School, Dr. Johnson earned his bachelor's degree at Penn State University and his doctorate in organic chemistry from the University of Pittsburgh.

Dr. Johnson is remembered as a passionate chemistry educator. He joined Carlow as an instructor in 1990, rising to assistant professor that same year. He became director of the department of chemistry and physics in 1992, and associate professor of chemistry in 1996. He had also taught at the New Kensington and McKeesport campuses of Penn State.

In his more than 15 years at Carlow, Dr. Johnson helped nurture the chemistry department there. Carlow had stopped offering a chemistry major in the 1980's, but Dr. Johnson got the major reinstated in the 1990's, resulting in more students majoring in chemistry, more faculty, and more equipment for the department. Dr. Johnson is remembered for long hours of dedication in the department, and for always being available for his students.

Tricia Tobin, of North Versailles, a 2001 Carlow graduate in chemistry, remembered Dr. Johnson in the classroom. "You could definitely tell he loved what he was doing", she said. "He always tried to relate it to real life things so it wouldn't be as daunting." His brother, Doug, of Fox Point, Wis., said Dr. Johnson loved backyard gardening, and growing fruit and vegetables. He was building a greenhouse at the time of his death.

In addition to his brother, Dr. Johnson is survived by two other brothers, Lynn of Atlanta and Mark of Niantic, Conn.



Department Milestones:

Theodore Cohen



On September 14, the Chemistry Department celebrated the 50th Anniversary of Theodore Cohen's presence on the faculty. Ted gave a lecture summarizing the arc of his scientific work over that time from mechanistic organic chemistry to the development of important synthetic methodology, especially the use of

organosulfur reagents.

Ted is a native of Arlington, Massachusetts and did his undergraduate studies at Tufts. Although there was no undergraduate research program there at the time, he was inspired on to graduate studies at the University of Southern California where he was Professor Jerome Berson's 2nd graduate student. Ted's project was in the area of alkaloid synthesis and Berson, based on this experience, decided to do physical organic chemistry in his subsequent illustrious career. Ted then did postdoctoral studies with Derek Barton who was then at Glasgow. A side project on biosynthetic phenol oxidations led to a benchmark paper and opened whole new areas of mechanistic and synthetic chemistry. He was then hired, sight unseen, by Pitt.

Ted played a key role in the development of the organic division. He was instrumental in the hiring of Ned Arnett and the two of them convinced Sam Danishefsky to join the Department. The three of them provided the nexus that has become the outstanding organic division. Ted has been a leader in the teaching of organic chemistry, always stressing the importance of mechanism as a framework for the field.

Ted has had other roles. He has been a strong advocate and model for the importance of a healthy diet. He is the department photographer, always with a digital camera at hand; his serious photographs are the equal of any found in art magazines. Perhaps most important, he leads and mentors by demonstrating through his dedication to the Department and to his science.

Finally, his career has been inspired by the love and understanding by his family—his wife Pearl, children Rima and Brett, and most recently by his granddaughter Ava.

John T. Yates, Jr.



Professor John T. Yates, Jr. received his B.S. degree from Juniata College and his Ph.D. in physical chemistry from M.I.T. After three years as Assistant Professor at Antioch College, he joined the National Bureau of Standards. His research in the fields of surface chemistry and physics, including both the structure and spectroscopy of surface species, the dynamics of surface processes, and the development of new methods for research in surface chemistry, has put him at the forefront of an exciting rapidly growing field of science.

Professor Yates joined the University of Pittsburgh in 1982 as the first R.K. Mellon Professor of Chemistry and as the Director of the new University of Pittsburgh Surface Science Center. In 1994 he was jointly appointed to the Department of Physics. He serves on the editorial boards of six journals and two book series in surface science and catalysis. He was Associate Editor of the ACS journal, *Langmuir*. He served on the Advisory Board of *Chemical & Engineering News*, and he is on the International Advisory Board of *Chemistry World*. He has been active in AVS, APS and ACS affairs for the last 25 years, including being a past member of the AVS Boards of Directors and Trustees, past Chairman of the Surface Science Division of the AVS (for the second time), past chairman, APS Division of Chemical Physics, and the past chairman of the ACS Division of Colloid and Surface Chemistry. He has organized a number of symposia for ACS National Meetings, APS National Meetings, and has been Chairman of three Gordon Research Conferences. He is the coeditor of two books, "Vibrational Spectroscopy of Molecules on Surfaces," Plenum, 1987 and "Chemical Perspectives of Microelectronic Materials," Materials Research Society, 1989. He is the co-author of a book entitled "The Surface Scientists Guide to Organometallic Chemistry," ACS, 1987. A new book, "Experimental Innovations in Surface Science," was published by Springer-Verlag and The American Institute of Physics in 1998. A textbook "Molecular Physical Chemistry for Engineers," is in press. Currently, he is the author of 691 published and submitted papers

In October 2006, he plans to join the faculty of the Department of Chemistry at The University of Virginia as a Shannon Fellow. He will continue research in surface chemistry, photochemistry, and astrochemistry.



Bob Greer
Glassblower



Margie Augenstein
Assistant to
John T. Yates, Jr.



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University of Pittsburgh

Department of Chemistry

Thank you: Analytical Lab Update

During the Spring of 2006, Department Chair David Waldeck sent letters to our many friends and supporters to request their assistance in raising funds for our Undergraduate Analytical Laboratory. Many of our friends made generous donations that allowed us to purchase 3 new gas chromatographs and 6 new UV-Spectrophotometers for use by our undergraduate students. The newly acquired instrumentation not only replaced instruments that were near the end of useful life, but now provides our undergraduate students with the opportunity to work with state-of-the-art equipment which will benefit them when they move to a graduate program or industry. We are very grateful to those that assisted our efforts in this campaign.

www.chem.pitt.edu