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2012 Spring Semester

Faculty Recognized By UM System

A Chemistry faculty member from Missouri University of Science and Technology received a President's Award, the highest honor bestowed by the University of Missouri System, for excellence among the university's mission area of teaching.

"The faculty and students honored with a President's Award represent some of the finest, most dedicated educators and students we have on our four campuses," says University of Missouri Interim President Steve Owens. "Their passion and commitment to excellence have made a profound impact not only on our university but on all who have the pleasure of knowing and working with them." The awards were presented to winners in early March 2011. Recipients were honored at an awards dinner in June with the University of Missouri Board of Curators.

Dr. Klaus Woelk, associate professor and currently interim chair of chemistry, won the Innovative Teaching Award for redesigning introductory level chemistry courses to include discussion boards, student response devices, online testing and homework, and the ability to communicate with the instructor through text messaging during class. The Innovative Teaching Award recognizes an outstanding teacher who uses innovative teaching methods, including electronic resources, social media or experiential activities.



Dr. Klaus Woelk

Whitefield, Woelk appointed to interim positions

On Monday, Aug. 1, 2011, UM System interim President Stephen J. Owens announced the appointment of Provost Warren K. (Kent) Wray to serve as interim chancellor upon the retirement of Chancellor John F. Carney III. Carney retired on August 31st. The appointment of Wray as interim chancellor was effective Sept. 1, 2011.

With Wray's appointment as interim chancellor, three other university officials also were appointed to interim positions effective Sept. 1.

Dr. Robert W. Schwartz, vice provost for academic affairs since June 2007, became interim provost.

Dr. Philip D. Whitefield, chair of chemistry since 2005, became interim vice provost for academic affairs. He joined the chemistry faculty in 1990 and is also director of Missouri S&T's Center of Excellence for Aerospace Particulate Research.

During Whitefield's service as interim vice provost, Dr. Klaus Woelk became interim chair of chemistry; he previously served as an associate professor and assistant chair of chemistry.

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Welcome!

Dr. Amitava Choudhury

The Chemistry Department is pleased to welcome Dr. Amitava Choudhury as a new tenure-track faculty member in the Fall 2011 semester. Prior to joining as tenure-track assistant professor, Amitava has been serving the department from 2008 to 2011 as an assistant research professor when he ran the single-crystal X-ray diffraction facility. He received his PhD from Indian Institute of Science, Bangalore in 2003 and was a post-doctoral fellow at Colorado State University from 2004 to 2008. His research interests are in the area of inorganic solid-state and materials chemistry.

EmmaLou Satterfield

The Chemistry Department is pleased to welcome EmmaLou Satterfield as a new faculty member in the Fall 2011 semester. Emma received her M.S. from Missouri University of Science and Technology in 2011. Her research focuses on NMR pulse programming and educational technology. We are delighted to have Emma join our team.

Dr. Honglan Shi

The Chemistry Department is pleased to welcome Dr. Honglan Shi as a new faculty member in the Spring 2011 semester. Dr. Shi received her PhD from Missouri University of Science and Technology in 2010. She has expertise in environmental analysis and bio analytical chemistry. Dr. Shi's research focuses are drinking water emerging contaminants, soil contaminants, and biomedical techniques. We are excited to have Dr. Shi join our team.

GRADUATES!

May 2011

Benjamin Mahala, BS
Patrick Martin, BS
James Moore III, BS
Ryan Rader, BS
Andrew Wessel, BS
Naveen Chandrasekaran, PhD
Nanditha Govindan Nair, PhD
Rakesh Gudavarthy, PhD
Sasidhar Siddabattuni, PhD
Balaji Viswanathan, PhD
Chuan Wang, PhD



CONGRATULATIONS

July 2011

Adrienne Comage, BA
Jonathan Gaik, BS
Joshua Wilmes, BS
Ameya Natu, MS
Shelonda Finch, PhD
Anand Sadekar, PhD

December 2011

Brett Babcock, BS
Aline Collin, BS
Katherine Higgins, BA
Annalise Pfaff, BA
EmmaLou Satterfield, MS
Robert Schaub, PhD

3 astronaut-alumni discuss space exploration

Three NASA astronauts -- all graduates of Missouri University of Science and Technology and veterans of the space shuttle program -- discussed their careers and the future of space exploration during an event on the Missouri S&T campus. The event, titled "The Moon, Mars and Beyond: A Discussion With Three Astronauts," featured astronauts Col. Tom Akers, Dr. Janet Kavandi and Dr. Sandra Magnus.

Dr. Janet Kavandi earned a master's degree in chemistry from Missouri S&T in 1982. A native of Carthage, Mo., she also holds a bachelor's degree from Missouri Southern State University in Joplin. In 1990, Kavandi earned her Ph.D. in analytical chemistry from the University of Washington-Seattle. Selected as an astronaut candidate by NASA in December 1994, she has flown on three shuttle missions. Her first shuttle flight, in June 1998, was the final space shuttle docking mission with the Russian space station Mir. In February 2000, on her second mission, Kavandi served aboard the Shuttle Radar Topography Mission, which mapped more than 47 million miles of the Earth's land surface. She currently serves as director of flight crew operations for the Johnson Space Center in Houston.



Rolla students collect water samples

This fall, 63 students from Rolla High School collected local water samples from ponds, streams and faucets as part of a project to analyze water in conjunction with representatives from Missouri University of Science and Technology.

Yinfa Ma, Curators' Teaching Professor of chemistry at Missouri S&T, visited classrooms at the high school to present information about the analysis of water quality. The students then collected the various samples.

According to Ma, graduate students at S&T looked at caffeine levels in the samples. "Since so many things could exist in water samples, we start with caffeine to demonstrate the capabilities of our sensitive laboratory equipment to the high school students," Ma says. "We consume so many drinks that contain caffeine. It will find a way to get into water resources. We may analyze other compounds at a later time."

In October, the high school students took a "field trip" to Ma's lab at S&T to see how the samples were analyzed. Ma re-visited the school to present the data later that month.

This project is funded by the American Chemical Society's Division of Analytical Chemistry, which is providing grants during its "International Year of Chemistry Activities."

Chemistry pilots redesigned course

Missouri's S&T's chemistry department is piloting a redesigned course structure for Chemistry 1 for the spring 2012 semester. The pilot will include one section taught in the traditional lecture/recitation format, as well as a buffet of options, such as online modules, for the redesigned lecture/recitation sections.

A PDF flyer that explains the options can be found on the chemistry department's website. Students and advisors are encouraged to review this resource when registering for spring courses.

The redesign effort was established according to an initiative of the Missouri governor and the 13 Missouri public four-year, higher-education institutions, and in partnership with the National Center for Academic Transformation (NCAT).

MEMORIALS

Dr. Heping Wang passed away in Rolla, Missouri on April 16, 2011 at the age of 57. He earned his PhD at University of Missouri-Rolla in Chemistry in 1994. Upon graduation, Dr. Wang began working at Brewer Science, in Rolla, Mo where he remained until his passing. Dr. Wang was preceded in death by his mother Zirong Liu. He is survived by his wife, Le Wang, two sons Mingxun Wang of San Diego, CA and Mingway Wang of the home, his father Yixiang Wang of China, two brothers and one sister all of Chesterfield, Mo.

Phyllis Johnson passed away March 10, 2011 in Rolla, Missouri. Phyllis served as senior secretary in the Chemistry Department for 36 years at UMR, now Missouri S&T. Phyllis was preceded in death by her parents John and Elizabeth Holm, longtime companion, Dale Ousley, brother, John Holm, and infant children Billy Johnson and Mary Johnson. Phyllis is survived by her daughter, Annette Johnson of Rolla and two grandchildren Sean McKern of Paducah, KY and Shane McKern of Rolla, Mo.

CONGRATULATIONS

Jeffrey Winiarz and Paul Ki-Souk Nam, both promoted to associate professors of chemistry with tenure.

ALUMNI NEWS

Dr. Lynell Gilbert-Saunders (PhD '03) recently just had a beautiful baby girl, Claire Anne Saunders. Along with her husband Zane they spent lots of family time together this past summer.

Christina Taylor (BS '99) welcomed a daughter Sarah Elizabeth Taylor, who was born on December 23, 2010. Christy and her husband, James, have another daughter, Samantha, who turned 4 in July.

Jake Grubbs (BS '08) is currently employed by Bridgestone Retail Operations in Arlington VA. He married Rachel Newland in February 2011. Jake is studying for his MCAT; he is planning on becoming an orthopedic surgeon and completing a lifelong dream of practicing medicine.

Share your news with us Just fill out the form on the back of this newsletter and mail it in!

2012 CHEMISTRY PHONATHON

Last year's Chemistry Department phonathon was held in April and thanks to all the alumni it was a great success. The Missouri S&T Chemistry Department received pledges totaling \$9,965. Thank you to all those who made this possible, and thank you for supporting the students.

This year's phonathon will be held April 16, 17, 18, 19 and 22, 2012. With the economy as it is, please answer your phone and say "Yes," when asked to make a pledge. Taxpayer support accounts for 40% of the university's revenue, making your contribution a vital ingredient in the revenue pie. Any amount you give will be greatly appreciated.



Thank you!!!

Contributions

ALBERT C. BEAN SR. SCHOLARSHIP &
LOAN FDN.
ALLIANCE FOR ADVANCED COATINGS
RESEARCH
BASF CORPORATION
CENTRIFUGAL CASTING
TECHNOLOGY & MOLD
CHEVRON CORPORATION
CYBERPOINT MARKETING LLC
GENERAL PRINTING LLC
HALLMARK CORPORATE
LOCKHEED MARTIN CORPORATION
MERCK COMPANY FOUNDATION
MONSANTO FUND
NORTHERN COATINGS & CHEMICAL
CO.
OCCIDENTAL PETROLEUM
CHARITABLE FDN.
ORACLE CORPORATION
SHELL OIL COMPANY FOUNDATION
U.S. PAINT CORPORATION
UNION PACIFIC CORPORATION

Gifts

ADAMS, JOHN E
AKERS, DAVID ALLEN
AKERS, JAMES EDWARD
AKERS, JILL RENEE
ANDERSON, DENNIS R
ANDERSON, HOMER L
ANDERSON, MYRA S
ANDERSON, ROBERT K
AYKIN-BURNS NUKHET
BAER, TED A
BAI, DONGSHUN
BANKS, AMY KATHLEEN
BANKS, MATTHEW WILLIAM
BARTLETT, RUTH A
BAXTER, MICHAEL JOSEPH
BECKMANN, KAREN L
BECKMANN, MICHAEL ROY
BIERMAN, FREDERICK H
BOHANON, JOSEPH T
BRENT, BILL M
BRUNTON, GERRY R
BURCHFIELD, THOMAS E
BYRD, ALICIA KATHLEEN
BYRD, SAMUEL MARTIN
CAPE, CHRISTOPHER C
CARMAN, FREDERICK R
CEBALLOS, MIRANDA C
CHEN, JIE
CHEN, SZU-CHAIN F
CLAYTON, CARLA J
COVAULT, RICHARD A
CREWS, PAULA

CROWDER, CYRUS E
DAVIES, CAROL A
DOVER, GEORGE MARTIN
DUGAN, DANIEL C
DUONG, KHANG VAN-SI
ECKLER, PAUL E
EVERS, APRIL MARIE
EVERS, THOMAS MICHAEL
FARRAR, WAYNE A
FLAIM, TONY DAVID
FLORI, BEVERLY J
FLORI, RALPH E
FRANK, CATHERINE M
FRANK, RONALD L
GAO, STEPHEN SHANGXING
GRANNEMANN, HARRY NEAL
GRANNEMANN, LYNN
GRIFFIN, PAUL D
HARDER, D'ARCY HOLT
HARDER, HAROLD M
HARDIN, DAVID P
HAWKINS, RODNEY B
HIGGINS, ARTHUR J
HIGGINS, PATRICIA A
HOFFMAN, GLENN W
HOLDMAN, JON MARK
HYMAN, ROLANDA LEATRICE
JAMES, WILLIAM J
JONES, RANDALL W
KAPILA, SHUBHENDER
KNOX, JAMES R
KULVARANON, EMERENTIANA
KULVARANON, SUVIT
LAEGELER, ANDREW PARRY
LAEGELER, MOLLY T
LIN, WEISHENG
LIN, QIN
LISSANT, KEITH J
LITTLE, BILLY F
LITTLE, KATHRYN S
LIU, KELLY H
MAGRUDER, GARY C
MASON, NICOLE RENEE
MATHKAR, SHILPA SURESH
MAY, TRISHA
MUNSON, ELIZABETH A S
MUNSON, WILLIAM F
NICKOLS, SUSAN MARIE
NOLAND, PATRICK A
OOSTENDORP, DAVID J
OSBORNE, CAROL JEAN
OSBORNE, DAVID WADE
OTTEN, CAROLYN RACHEL
PATTERSON, BARBARA R
PATTERSON, GARY K
PLANJE, CURTIS E
PLUME, WALTER J

PRIVETT, MARK H
QIN, ANWEI
RATKEY, CRAIG M
RATKEY, CYNTHIA DIANNE
REDMAN, WILLIAM LYNN
REIMER, MICHAEL TODD
REISSEN, MARY B
RIDENOUR, KRISTIN RENEE
ROBERTSON, B KEN
SANDERS, AMELIA G
SANDERS, DARIN RAY
SAMARANAYAKE, V A
SCHROEDER, CHARLES E
SCHUCKER, GERALD D
SCHWALJE, KEVIN JAY
SCHUMAN, THOMAS
SHACKELFORD, MARSHALL B
SHERMER, WILLIAM D
SHAO, XIE
SHI, HONGLAN
SHIH, WU-SHENG
SILKWOOD, BLAKE E
SILKWOOD, LAURA ANNE
SMITH, PAUL J
SRIRANGAM, UMAMAHESWAR
STEVENS, ANTHONY A
STEVENS, LEISA C
STRAUB, JOHN CHRIS
STRITE, RUSSELL R
STRODER, MICHAEL DAVID
STUCKMEYER, STEVEN LOUIS
SWEENEY, EDWARD G
TAYLOR, CHRISTINA MARIE
THOMAS, CHRISTOPHER J
THOMPSON, LARRY F
THORNTON, KAY E
TREASURER, ROBERTA L
VINANSKY, GEORGE
VOGEL, MATTHEW F
WEBB, MRS. WILLIAM (RUBY)H
WEBB, WILLIAM
WEIR, GERALD T
WEN, XUERONG
WETHINGTON, ANN P
WIDEMAN, LAWSON G
WILSON, MELISSA R
WYZLIC, GERALD W
YANG, YUN
YEOMAN, SHERREE LEE
ZHENG, YAHONG ROSA
ZHU, ZHIMIN
ZIENTARA, GINA ANN
ZIMMERMAN, WILLIAM C
ZWEERINK, GERALD L

Your gift makes a difference.

GREETINGS FROM THE INTERIM CHAIR

The last year has brought many changes to the Missouri S&T Campus and its Chemistry Department. Several sections of this newsletter will explain in more detail the exciting achievements and challenging transformations we experienced in the academic landscape of Missouri S&T. In times of economic hardship but record-setting student enrollments, it is not easy to continue or even exceed the success we were able to sustain for so many years. Yet, I can proudly mention that the members of the department have been working hard securing funds to explore their research ideas, pursuing new ideas in teaching with technology, and participating in all levels of service to the campus and the University of Missouri system.

A great sign of respect for the chemistry department and its standing among the S&T departments was received when department chair Philip Whitefield was named Interim Vice Provost for Academic Affairs. His appointment to this critical position within S&T's administration was undoubtedly based on his leadership skills that served the department so well over the last 6 years. At the same time, the upper administration trusted the chemistry department to continue its path of success. This success can be measured in many ways.

We were able to hire two new faculty members. Assistant research professor Amitava Choudhury who previously provided X-ray crystallography services to many research groups transferred into a tenure-track assistant professor position. During Amitava's term as assistant research professor, utilization of the departmental X-ray instrumentation increased tremendously making it an integral service to the campus. EmmaLou Satterfield, an S&T chemistry alumna and graduate student, was hired as Assistant Teaching Professor to coordinate the large first-semester undergraduate teaching mission in General Chemistry (Chem 1). She currently teaches up to 700 major and non-major students annually and participates in the state-wide teaching redesign initiative to transform large-enrollment multi-section courses into a technology-supported active learning environment.

The ongoing renovation of the Materials Research Center building and the prospective restoration of the Bureau of Mines building led to a relocation of Jay Switzer's and Shubhender Kapila's groups and research equipment to Schrenk Hall. While most of Jay Switzer's group will eventually move back to the Materials Research Center building (now named Straumanis-James Hall in honor of our own chemistry professor emeritus Bill James), Shubhen Kapila is expected to keep his multi-million-dollar analytical equipment and his research group operating in Schrenk Hall. Space is currently very tight in Schrenk Hall but with a new building for the Chemical and Biological Engineering Department on the horizon, we expect to comfortably accommodate all chemistry research groups in Schrenk Hall.

On January 19, 2012, a new chancellor was announced for Missouri S&T. Dr. Cheryl Schrader, associate vice president for strategic research initiatives and former dean of engineering at Boise State University, will become Missouri S&T's first female chancellor. In her first address to the campus, she promised to build on S&T's existing strengths, promote and enhance diversity, and engage in innovative high-quality teaching and learning efforts.

In this time of transition, the chemistry department will continue to improve research and instruction in Schrenk Hall. We have already considerably remodeled our undergraduate teaching laboratories, increased the chemistry undergraduate enrollment to 100 students, and engaged in outreach activities such as funded projects with high-school chemistry students and workshops for 7th and 8th grade girls interested in science and engineering.

With your generous help we expect to continue this path of success providing students with high-quality science education and multiple career opportunities.

Dr. Klaus Woelk
Interim Chairman

Academic Scholars 2010-2011

This recognition is given to full-time students who earned a 3.2 or above GPA for that semester.

Fall 2010

Acar,Selin
Bass,Kelsey
Bird,Erin
Bowen,Weston
Burton,Casey
Choi, Jihee
Cox,Olivia
Curtin,Brice
Dachroeden,Karl
Edwards,Tiffany
Fouke,Micah
Hull,Caleb
Kurath,Dustin
Mahala,Benjamin
Martin,Patrick
Miller,Andrew
Mollhagen,Ariel
Patterson,Matthew
Pringle,Gavin
Rader,Ryan

Swyers,Angela
Waldrop,Jacy
Willmering,Matthew
Wilmes,Joshua
Wolfe,Rachel
Zimmerman,Casey

Grobe,Joshua
Hoskins,Johnathon
Hull,Caleb
Jentsch,Nicholas
Mahala,Benjamin
Manahan,Kevin
Mentis,Dava
Miller,Andrew
Mollhagen,Ariel
Nocito,Dominique
Pfaff,Annalise
Rader,Ryan
Schuller,Megan
Upschulte,Ashley
Vernon,Hamilton
Wessel,Andrew
Zimmerman,Casey

Spring 2011

Acar,Selin
Armstrong,John
Babcock,Brett
Bass,Kelsey
Bergthold,Marissa
Bowen,Weston
Choi, Jihee
Clark,Kevin
Collin,Aline
Curtin,Brice
Czeschin,Kathryn
Dachroeden,Karl
Edwards,Tiffany

2011-2012 Scholarship Recipients

Bean Scholar

Hart,Alison
Willmering,Matthew

Wouter Bosch Scholarship

Bowen,Weston
Burton,Casey
Edwards,Tiffany
Hull,Caleb
Marting,Caleb
Miller,Andrew
Williams,Abigail
Willmering,Matthew

Davies Scholarship

Upschulte,Ashley

Stoffer Scholarship

John Armstrong

William & Arlene James Scholarship

Bowen,Weston
Bird,Erin
Bradley,Alicia
Choi, Jihee
Cox,Olivia
Crossen,Kelsey
Curtin,Brice
Czeschin,Kathryn
Dachroeden,Karl
Flaherty,Mary
Goldfarb,Ethan
Hart,Alison
Kosbar,Autumn
Mann,Easton
Miller,Joshua
Nocito,Dominique
Puleo,Emily
Schuller,Megan
Stanley,Patrick
Walsh,Kelly
Zimmerman,Casey

Pietsch Scholarship

Donovan,Ariel
Frye,Hannah
Ingalls,Derek
Pereira,Drew
Vernon,Hamilton

William H. Webb Scholarship

Acar,Selin
Bass,Kelsey
Collin,Aline
Jentsch,Nicholas
Mentis,Dava
Mollhagen,Ariel
Walker,Jessica

**Missouri University of Science
and Technology
Chemistry Department
142 Schrenk Hall
400 W. 11th Street
Rolla, MO 65409-0010**

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Chemistry Department
Missouri University of Science and Technology
142 Schrenk Hall
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email to
chem@mst.edu

Name _____ Year attending UMR/Missouri S&T _____

Current activities/interests _____

Family _____

News/Plans _____
