

# CHEMISTRY

N E W S L E T T E R

Millersville University, Department of Chemistry ♦ [www.millersville.edu/~chem](http://www.millersville.edu/~chem) ♦ Fall 2009

## General Update

I hope the fall edition of the newsletter finds you and yours well. As it has for everybody else, the economy and its effects on day-to-day life has arrived on campus and we have been occupied with issues of budget and spending. While we are experiencing some effects, prudent spending on the part of the faculty is keeping us in decent shape for now. So far our programs have not been compromised. Independent research continues to thrive. Our faculty are engaged in writing research proposals, both internal and external, to support our research efforts and to supplement equipment acquisitions used both in the instructional and research labs. We are always open to ideas and would appreciate any help or contacts that you might be able to offer.

Mr. Stephen Peurifoy has joined the department as our new laboratory technician. His extensive background in electrical engineering and computer science has already made him indispensable to the department.

Mrs. Catherine Greco has announced her retirement for December 2009. She will be greatly missed. For almost 30 years she has served as an instructor for the department and she has been willing to accept any teaching assignment asked of her. She has also helped out in the general chemistry prep room.

With the generous support of the administration and funding from the Technology Fee, we were able to purchase a new Agilent HPLC in the spring of 2009.

Our enrollments remain healthy. This year our freshman class has 37 students. We have a total of 107 majors. Several of our majors are enrolled in the biochemistry option for the express purpose of preparing for pharmacology studies. There are 7 students enrolled in the pre-pharmacy associate degree program.

Dr. Maria Schiza offered a topics course last spring in Forensic Chemistry.

## Faculty

**Dr. Pat Hill** is back from a very successful sabbatical leave. She developed an advanced Chemistry in Art workshop, presented at Villanova Univ. in summer 2009 with 16 participants. She spent February and March at Arizona State Museum and the Univ. of Arizona learning of methods for lower-cost evaluation of artifacts to guide conservation. Many contacts were initiated and renewed. An MRI grant to obtain a hand-held XRF is planned. She received two NSF (CWCS) contracts for the Introductory and Advanced Chemistry & Art Workshops for a total of \$30,000.

**Dr. Steve Bonser** received a PASSHE, FPDC grant for this research on "The Synthesis and Chemistry of Diaziridines" for \$3,542.

**Dr. Steven Bonser** sponsored one of his undergraduate research students, Laura Ruiz, for the prestigious Merck Index Women in Chemistry Scholarship. Laura was selected as one of five winners nationally of the award. She attended the 238th ACS National Meeting and Exposition, August 16-20, in Washington DC, where she received her award and presented the research she carried out under the direction of Dr. Bonser.

**Dr. Jeremiah Mbindyo** received a Research Corporation grant for his research on "Self Assembly Routes to Multifunctional Biocompatible Nanoparticles" for \$52,212.

**Dr. Mbindyo** has published an article in the refereed *Journal of Chemical Education* with two MU undergraduate students as co-

authors: Jeremiah K.N. Mbindyo, Stephen A. Michaylira, and David M. DeMarco, "Stamping Lithography: An Undergraduate Experiment in Nanotechnology." *Chem. Educ.*, 13, **2008** 236-239.

**Dr. Mbindyo** has also published an article in the *Journal of Chemical Education* with two MU undergraduate student co-authors: Civia A. Katz, Zachary J. Calzola and Jeremiah K.N. Mbindyo, "Structure and Solvent Properties of Microemulsions" *J. Chem. Ed.*, 85, **2008** 263-265. Ms. Katz is a chemistry alumnus currently pursuing Ph.D. studies at the University of Maryland Baltimore County (UMBC). Mr. Calzola is a chemistry major in the environmental chemistry option here at Millersville.

## How YOU Can Help

Like what you read about chemistry alumni, faculty, students and programs? Please keep our programs strong and support chemistry students. Give on-line @ [www.millersville.edu](http://www.millersville.edu). Click on the "Giving" tab OR send your gift to Millersville University, Development Office, PO Box 1002, Millersville, PA 17551-0302. Gifts can be restricted or unrestricted.

### HOMECOMING WEEKEND ACTIVITIES

**Saturday, October 24**

**Science and Mathematics Alumni Gathering, 12:30 p.m. – 2:00 p.m.** (Caputo Hall, Steinman Courtyard)

Science and Mathematics alumni are invited for dessert and beverages. Free. Reservations are requested by registering online at [www.villealumni.com](http://www.villealumni.com) or call the Alumni Office at 717-872-3352 or 800-681-1855.

**Science and Mathematics Student Research Poster Display, 8:00 a.m. – 4:30 p.m.** (Caputo Hall Lobby)

Current undergraduate and graduate research poster papers will be displayed.

# H i g h l i g h t s

# CHEMISTRY

## Student Activities

We are extremely proud of the Chemistry Class of Spring 2009. Their names and affiliations follow:

### BS Graduates

**Mark McNulty** was accepted at the University of Delaware and Syracuse University; he will attend Syracuse University.

**Rachel Dao** was accepted at UCLA, Ohio State University, University of Wisconsin, and University of Michigan; she is attending the University of Wisconsin.

**Laura Ruiz** was accepted at University of Wisconsin and Ohio State University; she is attending the University of Wisconsin.

**Benjamin Gambler** was accepted and is attending Penn State University.

**M. Joe Tomlinson** is enrolled in the graduate program in biochemistry at the University of Virginia.

### Student Internships and REUs

**Matt Smith:** Penn State NMT Capstone Semester, State College, PA; Summer 2008

**Josh Yablonski:** NC State REU; Summer 2009

**Randy Petersheim:** NSF REU in Spain; Summer 2009

This year we had 24 undergraduate students engaged in research supervised by 9 faculty in the department. Of this group of students 5 presented posters at the National ACS meeting in April.

Our ACS Student Affiliate Chapter was awarded a "Commendable" citation for their work during the past year.

### Spring 2009 Graduates



*Back [Left to Right]:*

★ James McCaw ★ Zachary Calzola ★ Hudson Van Ormer ★  
★ Joseph Tomlinson ★ Kyle Angjelo ★ Laura Ruiz ★  
★ Benjamin Gambler ★

*Front [Left to Right]:*

★ Charles Fernald ★ Alexis Nawotka ★ Sebastian Villamil ★  
★ Rachel Dao ★ Raghda Alhussaini ★ Erin Hyde ★

*Graduates not available for photo:*  
Boon Lor

## Alumni Updates

Just a few alumni updates (others can be found on the chemistry web site):

**Tamra Shelly** ('08 – BS BIOCHEM) is a chemistry Ph.D. candidate at the University of Maine.

**Kristen Kahler** ('07 – BS CHEM) MS, Bucknell University-2009; is an Associate Scientist at GlaxoSmithKline in Research Triangle Park, NC.

**Anthony Pagan** ('07 – BS CHEM) is currently working as a laboratory technician for Cargill Cocoa and Chocolate, Columbia, PA.

**Amber Brown-Schultz** ('07 – BS CHEM) is working in Quality Control for Nutraceutical Life Sciences.

**Jennie Rohrbaugh** ('07 BSE) is a High School Chemistry teacher at Susquehannock High School.

**Erin E. (Kirpatrick) Eichfeld** ('06 – BS BIOCHEM) is enrolled in the Nuclear Medicine Program at Lancaster General College of Nursing and Health Sciences and is performing her clinical internship at the Good Samaritan Hospital in Lebanon, PA.

**Jason P. Waldo** ('06 – BS POLY) is a Chemist at Polymeric Systems Inc. in Pheonixville, PA.

**David S. Weinberger** ('06 – BS CHEM) MS in Chemistry, Villanova University; is a Teaching Assistant at Villanova University.

We are publishing our newsletter electronically due to budget restrictions. Please spread the word to our alums to check it out on the web site. If you would like us to update your activities, send us the information by email or directly through our "Alumni News" link of the site.

## Fall 2009 Seminar Speakers

**Dr. Matthew W. Stoltzfus** (MU '02) Ohio State University, OH, "*The REEL Program: Preparing undergraduate freshman for today's research based society by investigating the color of charge transfer salts*", September 14

**Dr. Elisa M. Woolridge** (MU '85) Marist College, NY, "*Opportunities for Green Paper Production using Biobleaching Enzymes*", September 21

**Mr. Michael Morris** (MU '04) GlaxoSmithKline "*Reductive Biotransformation of an Anticancer Agent by Rat Gastrointestinal Microflora: An Assessment of Gut Metabolism*", November 2

**Ms. Marcie A. Natale** (MU '97) Eastman Chemical, PA, "*Practical Industry Application of Enzymatic Biocatalysis*", November 30

**Mr. Edward L. D'Antonio** (MU '04) North Carolina State University, NC, "*Mutagenic Engineering of Peroxidase Function into the Hemoglobin Dehaloperoxidase from *Amphitrite ornata**", December 7

## Alumni News

## Alums! We LOVE to hear from you!

Update your contact information online at: <http://www.millersville.edu/~chem/>

Click on "Alumni" on the left side of the page.

Then click on "Update Now" on the right side of the page to update your information for us.