

THE SCHLIEREN

(A CHEMCLUB PUBLICATION)

FALL 2011

A Big Chemistry Welcome!



Dr. Schmitthener



Mr. Smith



Dr. Zacharakis

Dr. Hans Schmitthener (Lecturer)

Hans earned his BS in chemistry from MIT and went on to earn his Ph.D. from Penn State University. He did a post-doc at the University of Rochester and was an assistant professor at Saint John Fisher College. Hans then went into industry and has held positions at both Astra Zeneca, Eastman Kodak, and Carestream Health. Hans' research interests lie in both organic synthesis and analytical chemistry.

Mr. Darren Smith (Lecturer)

Darren earned both his BS and MS in chemistry from RIT. While at RIT, he worked under the mentorship of Dr. Tom Smith. Upon graduation, Darren worked in industry as a chemist at Xerox and then as a quality assurance officer at TES Environmental. Darren's research interests lie in organic synthesis and polymer synthesis.

Dr. Andronique Zacharakis (Lecturer)

Nicki earned her B.S. in physics and MS in solid state physics from Concordia University in Montreal. She then

continued on page 2

In Memoriam

Dr. M Lee Illingsworth (1950-2011)



Dr. Illingsworth earned his Doctorate degree in 1980 in Chemistry from the University of Massachusetts and in 1986 he joined the RIT Chemistry faculty. He is remembered for his passion for his field and his dedication to the many students he mentored. Dr. Illingsworth gave tirelessly to his students and truly enjoyed talking chemistry with them.

Dr. Illingsworth was an outstanding research mentor. He maintained an active research group at RIT focused on the synthesis of various pendent polyimides specifically solution-imidized, UV-Curable NLO-pendent model compounds. He has mentored many graduate and undergraduate students. In addition to his many publications, Dr. Illingsworth was awarded an Excellence in Research Award from NASA as well as a NASA Augmentation Grant, and a NASA JOVE Grant.

Dr. Andy Langner (1961-2011)



Dr. Langner earned his Doctorate degree in 1988 in Chemical Engineering from the State University of New York at Buffalo and in 1989 he joined the RIT Chemistry faculty. He has been recognized for his many accomplishments but especially for his dedication to

continued on page 3

INSIDE THIS ISSUE

- 1 A Big Chemistry Welcome
- 1 In Memoriam:
Dr. Andy Langner and Dr. Marvin Illingsworth
- 2 Where are they now?
- 2 Chemistry News and Events
- 3 Chemistry Humor
- 4 Student in the Hood: Chris Grieco

earned her Ph.D. in Energy (Materials Science Focus) at the University of Quebec.

Nicki has previously held positions as the director of photoreceptor design at Xerox and most recently as a research scientist in the RIT Nano-power Research Labs. Her research interests lie in nano-materials for polymer photovoltaics.

Where are they now?

Sarah Frisco '12 reports, "I have taken the fall quarter off before I spend the winter semester studying abroad, and I am spending it traveling in Europe. Right now, I am in Germany, taking part in an exchange program and working on an alpaca farm. It's a wonderfully unique experience for me, and it's given me a chance to get some perspective on my decision to go to graduate school. Also, this part of Germany is quite beautiful, sort of like I always imagined Tuscany with rolling vineyard covered hills everywhere".



Brett Granger '08 is currently pursuing his PhD at the University of Texas, Austin. He writes, "It took a while, but it seems graduate school is finally starting to get exciting. I've been through the candidacy exams and gave my 3rd year seminar in front of the entire chem + biochem department., I was really nervous, but it went ok. I just recently had my first paper accepted for publication in Organic Letters, so I'm pretty excited about that. It's titled "Multicomponent Assembly Strategies for the Synthesis of Diverse Tetrahydroisoquinoline Scaffolds." Basically I've developed some pretty cool reactions to access some heterocyclic ring systems that are prevalent in natural products and/or pharmaceuticals. We were also invited to write an article for a special edition of Heterocycles in honor of Albert Padwa, so we have sent that in as well, and should hear back soon."

Kevin Belfield '82 is currently a faculty member and chair of the chemistry department at UCF. He was recently awarded a Pegasus Professor Award during the annual Founders' Day ceremony at UCF. The award recognizes extraordinary contributions to the UCF community through teaching, research, and service. Congratulations Kevin!

Jessica Smith '08 is currently pursuing her PhD at the University of Rochester under the mentorship of Dr. Rudi Fasan. She reports that's she finally seeing the light at the end of the grad school tunnel and that she just published her first paper (Angewandte Chemie International Edition 2011, 5075–5080) entitled "Modular Assembly of Macrocyclic Organo–Peptide Hybrids Using Synthetic and Genetically Encoded Precursors".

Liz Ransey is currently pursuing a PhD in chemistry at Carnegie-Mellon. Liz was recently awarded an NSF Fellowship. She reports, "I was actually the only person in my department and the only first-year in quite a to receive an NSF Fellowship here and I know so much of it is a direct result of Dr. Rosenberg and his support letters - not just with the NSF but with every summer internship, conference application, grad school application and internal RIT scholarship that have made my scientific career thus far. Thank you so much!" A big congrats on the fellowship Liz!

CHEMISTRY NEWS AND EVENTS

Rochester ACS Presentations: Our students did a fantastic job representing our RIT Chemistry Department at the 2011 Rochester ACS Undergraduate Research Symposium at the University of Rochester. Congratulations to all the students and advisors who participated in this event.

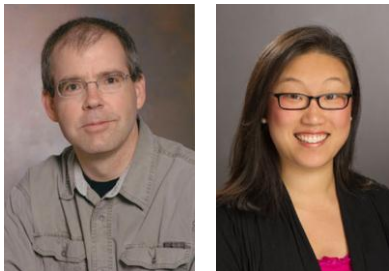


Writing Award: Congratulations to Sebastian Ramirez who was awarded a Henry and Mary Kearse Award. The RIT College of Liberal Arts hosted its annual student award ceremony last April to highlight winners of this award for excellence in writing in the first year.

NEWS AND EVENTS CONT...

Outstanding Faculty:

Dr. Scott Williams was honored with a Raymond Bowman award given by the Society for Imaging Science and Technology. The award is recognizing Dr. Williams' "dedication to a teaching philosophy which inspires students to become critical thinkers and effective communicators." Additionally, Dr. Williams was invited to participate on the editorial board of the "Journal of Print and Media Technology Research" which is an internationally recognized journal in the graphic arts field and is printed out of Europe.



Dr. Lea Michel was selected to be part of the National Institutes of Health Early Career Reviewer Program run by the Center for Scientific Review.

Research Award: Joy Snyder '12 received an award from the ASBMB UAN (American Society for Biochemistry and Molecular Biology Undergraduate Affiliate Network) which helped fund her summer research in Dr. Lea Michel's Lab. She formally received the award during the ASBMB 2011 meeting in San Diego where she also presented her work. Her photo and research summary will be in November's UAN publication *Enzymatic*. Congrats Joy!

Imagine RIT 2011:

Chemistry and Biochemistry majors put in a full day volunteering making liquid nitrogen ice-cream for the visitors to the campus last spring.



In Memoriam

continued from page 1

teaching. He enjoyed teaching and had a sincere desire to help his students learn from his wisdom. Dr. Langner had received every type of award that RIT has to offer to its outstanding teachers. In 1991, he was the recipient of the prestigious Sears-Roebuck Foundation Teaching Excellence & Campus Leadership Award. In 2004 he received the Eisernhart Outstanding Teaching Award, and in 2009, he was the recipient of The Norman A. Miles Award that acknowledges excellence in academic study and teaching and the role a faculty member plays in that success.

In addition to his teaching, Dr. Langner maintained an active research group at RIT focused on computational and experimental investigations of structural transitions in soft materials and complex fluids. He mentored many graduate and undergraduate students. Most recently, he served as the Associate Head of the Chemistry Department and he was the leader for the development of the strategic plan for our college. A Memorial ceremony was held at RIT last spring to remember our dear friend and colleague.

Dr. Illingsworth's and Dr. Langner's passing is a huge loss not only to our department and RIT but to the educational community. We will miss them both dearly.

News and Events cont...

Outstanding Scholars 2011: Melody Frink '11 and Sebastian Ramirez '11 were both recipients of the 2011 RIT Outstanding Undergraduate Scholarship awards. This award goes to students who maintain a grade point average of 3.85, and participate in community service and/or independent research. Only about one percent of RIT students are selected each year to receive the award. Congrats to you both!

Chemistry Humor

Johnny, finding life a bore,
Drank some H_2SO_4 .
Johnny's father, an MD,
Gave him $CaCO_3$.
Now he's neutralized, it's true,
But he's full of CO_2

A photon walked into a hotel. When asked if he needed help with his bags, he said, "no thanks, i'm traveling light!"

-author: from the chem lounge white-board.

Student in the Hood:

CHRIS GRIECO '12

Interview by Vic Murcia '14

Major: Chemistry
Mentor: Dr. Chris Collison

Vic: What aspect of Chemistry made you decide to major in it?

Chris: For me, deciding to major in Chemistry wasn't well thought out. I slipped into Chemistry since it was more mathematical than Biotechnology, my previous major, and I just love math.

Vic: Why did you choose Dr. Chris Collison as your research mentor?

Chris: Fall quarter of my third year, I had just quit biomedical research and was ready to move on to chemistry research. That quarter, I began taking Chemical Thermodynamics and was taking a liking to the physical side of Chemistry. One of my electrical engineering friends, who took College Chemistry years ago, recommended Dr. Collison. After a quarter of discussing with Dr. Collison and personal reflection on whether physical chemistry research was right for me, I decided to take the opportunity.

Vic: What is your favorite area of chemistry (organic, inorganic, physical, other) and why?

Chris: I love physical chemistry (the heart of chemistry), perhaps because it is highly mathematical. I love being able to describe the molecular level using mathematical theory. The quantum side has also appealed to me very much.

Vic: Funniest Chemistry joke you know?

Chris: I can't think of one off-hand. I do enjoy telling people that I get excited when I use the spectrofluorometer though.

Vic: What are you planning to do after you graduate?

Chris: I am hoping to be admitted to grad school. It would be awesome to earn a PhD in Chemistry and I think it's worth a shot.

Vic: What do you like to do in your spare time?

Chris: I enjoy playing heavy metal on electric guitar.

Vic: Most memorable experience in a lab or lecture?

Chris: This past summer when I cheered on my excitation spectrum as it was being plotted in real time as if I was watching the World Series. I solved my month-long problem.

Vic: For how long have you had your present calculator?

Chris: I've had my TI-83plus since I was a freshman in High School.

Vic: Most memorable experience in a lab or lecture?

Chris: This past summer when I cheered on my excitation spectrum as it was being plotted in real time as if I was watching the World Series. I solved my month-long problem.

Vic: For how long have you had your present calculator?

Chris: I've had my TI-83plus since I was a freshman in High School.

Vic: best non-chemistry use of a periodic table ever seen?

Chris: The periodic table of [heavy] metal that Victor Murcia found the other day.

Fall Photo



ASBMB members celebrate Halloween with a chemistry-themed pumpkin carving! That's Ken, Tessa, Austin, Mike, Kelsey, and Christine from left to right with their pumpkins: a periodic table from Ken, gold (Au for Austin), sulfur hydroxide, potassium (K for kelsey), the ASBMB logo (from Mike), various faces (from tessa, austin, and christine) including a cat (from christine who had never carved a pumpkin before!), and a puzzle piece from Kelsey.

CHEMCLUB

WWW.RIT.EDU/COS/CHEMCLUB

E-Board 2010

DR. TINA COLLISON (ADVISOR)
JACOB FREYN '14
SARAH FEIGER '14
SOFIYA HLYNCHUK '14
MICHAEL MADAIO '13
VICTOR MURCIO '14
KATHERINE VALENTINE '14