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ChemistryTimes

In This Issue

PhD student Megan Fegley inserts a sample into the new 600-MHz NMR, installed in fall 2011 with the support of a National Science Foundation grant spearheaded by Associate Professor Eriks Rozners.

BINGHAMTON UNIVERSITY
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Letter from the Chair

Wayne E. Jones Jr.

"We are continuing to move forward with plans to grow the biological chemistry track of our program."

As the fall 2011 semester came to a close, the Chemistry Department looked back on another successful year. This newsletter gives you a few snapshots of our successes, including updates on students, faculty and current activities in the department.

In October, we hosted our second annual distinguished alumni lecture with John Bisognano, MA '84, PhD '87, who joined us from Rochester. Following his lecture, Dr. Bisognano enjoyed a pizza reception with undergraduate students from the Chemistry Club, Pre-health Organization and Biochemistry Club. It was a great opportunity for students to learn firsthand the role that chemistry can play in a career in healthcare. In addition, the new 600-MHz NMR installation and renovation of the teaching labs continued this fall. We are planning an official opening of the NMR at the start of the spring 2012 semester, and work will continue on the teaching labs.

This academic year, Distinguished Professor John Eisch will officially retire. We celebrated his 40-plus-year career in chemistry with a special two-day symposium on the Binghamton campus, inviting two Nobel Laureates and several distinguished alumni from the Eisch lab to speak. With a generous initial gift from John and Joan Eisch and several alumni, the John Eisch Lectureship in Organic Synthesis was established. This lecture will enable the department to bring internationally renowned lecturers in organic and organometallic chemistry to campus each fall. Additional donations to recognize Professor Eisch and support this fund can be made through **www.giving.binghamton.edu.**

While we are very happy about our successes in 2011, and our record number of graduating students (54 chemistry bachelor's degrees), we are continuing to move forward with plans to grow the biological chemistry track of our program. This year, Ming An joined the faculty as an assistant professor after completing his post-doctoral work at Yale University. As I write this newsletter, we have made an offer to another biochemist to join our ranks.

As always, we would be delighted to hear from you. Please drop me an e-mail at **wjones@binghamton.edu** to let us know what you are doing. If you are going to be in the Binghamton area, we would love to have you come to the department for a visit.

I wish you a happy, successful and prosperous 2012.

Wayne E. Jones Jr.
Professor and Chair
Department of Chemistry

ChemistryTimes

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Alumni return to honor retiring mentor

Some of the nation's leading chemists discussed their research at the John Eisch Organometallic Symposium, held on campus Oct. 28-29. For the alumni who attended the event, it was more than an opportunity to learn what their industry colleagues were working on. It also was a once-in-a-lifetime opportunity to honor their retiring mentor.

John Gitua, PhD '05, said he didn't have to think twice about accepting the invitation to speak at the symposium. He made the trip from Des Moines, Iowa, where he's an associate professor of chemistry at Drake University.

Over the years, Gitua has kept in touch with Eisch and they have collaborated on a number of projects. "As the saying goes, 'once a teacher, always a teacher,'" Gitua says. "I would always look to him for advice."

Three of the presenters earned their doctoral degrees from Binghamton, and two are Nobel Laureates: Ei-ichi Negishi of Purdue University and Roald Hoffmann of Cornell University.

"I really learned a lot from Eisch," says Xian Shi, PhD '96, a pharmaceutical scientist, who presented some of his work on carbon bonds. "He's very patient, easy to talk to. He really prepared me to work in the pharmaceutical industry. I owe him a lot of my success."

"To see everyone else, it feels like I've come back home," says Renuka Manchanayakage, PhD '07, assistant professor of chemistry at Susquehanna University in Selinsgrove, Pa., who discussed her work on electrons. "I live a few hours away, and unless there's some type of big occasion like this, I don't get to come back. [Eisch] influenced me to be a professor. I didn't know what I wanted to be."

While Eisch's former students say he taught them a great deal about organometallic chemistry, they easily recall life lessons he taught as well.

From left: John Eisch, Nobel Laureate Ei-ichi Negishi of Purdue University and Joan Eisch

"He would always say, 'virtue is its own reward,'" says George Damasevitz, MA '76, MAT '04, science teacher for Broome-Tioga BOCES. "Don't look for payment today or tomorrow."

In closing remarks titled "Retrospect, Prospect and Gratitude," Eisch expressed his appreciation for the collaboration of his talented and diligent coworkers and the support of his department and University.

"I'm basically an organic chemist and believe that even the pre-biotic chemicals essential to life evolved from a pool of simply inorganic chemicals that then united to set the stage for the emergence of life," he says. "I'm interested in the processes that would lead to that. That's the kind of research that makes the rest of us appreciate how improbable it must have been for the emergence of life. But without a lab or talented collaborators, I will have to work that out in my mind. The origin of life is a problem no one will ever really solve completely and it's best to attack it in retirement. So, that's the kind of chemistry I will do in the years ahead — thought chemistry."

Eisch Symposium

Donations may be directed to the John Eisch Lectureship in Organic Synthesis at Binghamton University. Please make checks payable to "BU Foundation Account #11007" and mail to: Binghamton University Foundation, PO Box 6005, Binghamton, NY 13902-6005. Please be sure to indicate "Eisch Lectureship" in the memo section of your check. Secure, online credit card gifts may be made at www.giving.binghamton.edu. Select "Other, please specify" from the account drop-down menu, and then type "Eisch Lectureship, Acct #11007" in the space provided.

Transfer student finds niche in materials chemistry

"The research has helped me apply the principles I learn in my classes, especially thermodynamics and inorganic chemistry."

Gene Nolis, a senior transfer student from Ithaca College, has found his niche in the Binghamton University Chemistry Department. A member of Professor M. Stanley Whittingham's research group for more than two years, Nolis already has four publications — an accomplishment any first-year graduate student would envy. "I have actually been mistaken as a graduate student before," Nolis says. "It is certainly flattering."

Gene Nolis

Nolis' research focuses on understanding the structural stability of metal phosphates at high temperatures, an increasingly popular choice for lithium-ion battery technologies. Reflecting on his experiences in the lab, Nolis says, "The research has helped me apply the principles I learn in my classes, especially thermodynamics and inorganic chemistry." Lately, however, he is shifting his focus toward theoretical chemistry. "I have enjoyed my time in the lab, but now I want to try something a bit different," he says.

In addition to research and school, Nolis commits himself to other activities. He has been an undergraduate teaching assistant for general chemistry and he is the treasurer of the Undergraduate Chemical Society at Binghamton University. He also presented at the 2011 Fall Materials Research Society Meeting.

At the end of the semester, Nolis had an additional burden on his shoulders: choosing a graduate school. His interests are not restricted to the United States, although Nolis plans to apply to the University of Texas at Austin and the University of California's Berkeley and Santa Barbara campuses. A graduate program in Europe has also attracted his attention. The "Materials for Energy Storage and Conversion" program allows students to travel in Europe while taking materials chemistry courses.

When asked if the transfer to Binghamton University has been worth it, Nolis responded with a fervent, "definitely."

2011 Distinguished Alumni Lecture

John Bisognano, MD delivered the 2011 Chemistry Department Distinguished Alumni Lecture on Oct. 7. Professor of medicine in the Division of Cardiology at the University of Rochester and director of Cardiology Outpatient Services there, he earned his master's degree in 1984 and his PhD in 1987 from Binghamton University after completing his bachelor's degree at the Massachusetts Institute of Technology. He attended medical school at the State University of New York Health Science Center in Syracuse.

Bisognano's lecture, titled "Chemistry, Hypertension, and Stories from the Everyday Teacher," was well attended by undergraduate and graduate students alike. He shared with them his experiences at Binghamton, including his training as a teaching assistant under the guidance of Richard Quest and his career in medicine after graduation. He also participated in an open forum with students in pre-health and in the undergraduate Chemistry Club and the Biochemistry Club, who were interested in learning more about careers in healthcare and life after Binghamton.

In welcoming Bisognano back to campus and introducing his lecture, Harpur College Dean Donald Nieman thanked him as well as Joe '88 and Terri '85, MS '88 Natishan for their leadership in helping to initiate the Distinguished Alumni Lecture. The dean also acknowledged the important role that alumni can play in helping today's students make the transition to successful careers.

Anyone interested in participating in future alumni lectures can contact the department office at 607-777-2517 or wjones@binghamton.edu.

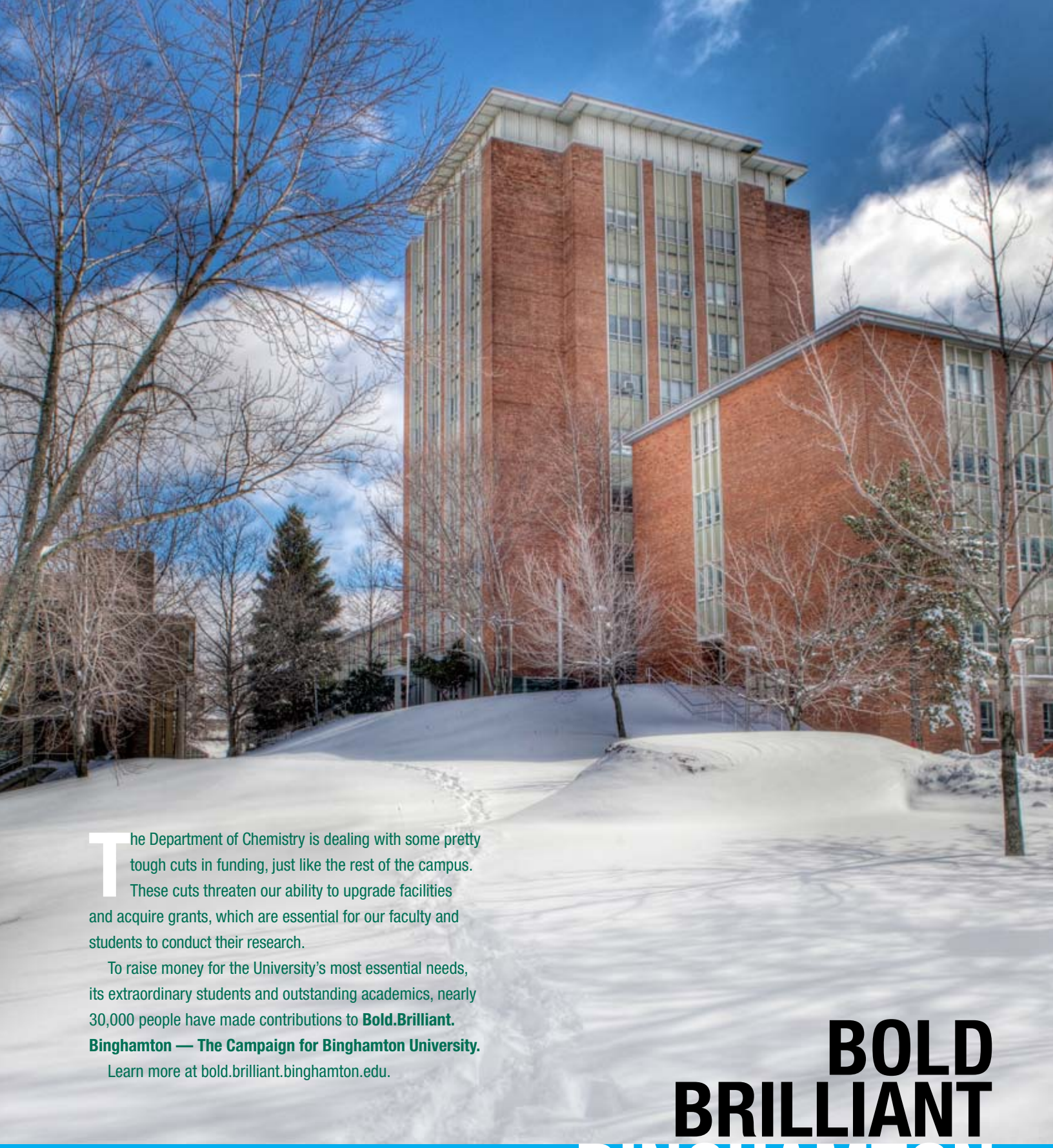
John Bisognano, MA '84, PhD '87

Bisognano's lecture, titled "Chemistry, Hypertension, and Stories from the Everyday Teacher," was well attended by undergraduate and graduate students alike.

Faculty News

In the fall semester, we welcomed **Ming An** as assistant professor of organic chemistry. An received his undergraduate degree in chemistry and molecular biology from the University of Michigan and his PhD in organic chemistry from the University of California at Berkeley. Prior to joining the Binghamton faculty, he served as a post-doctoral fellow at Yale University. His research interests at Binghamton are in the area of membrane protein-lipid interactions, membrane active peptides for drug delivery, and inhibitor design and synthesis.

Ming An



The Department of Chemistry is dealing with some pretty tough cuts in funding, just like the rest of the campus. These cuts threaten our ability to upgrade facilities and acquire grants, which are essential for our faculty and students to conduct their research.

To raise money for the University's most essential needs, its extraordinary students and outstanding academics, nearly 30,000 people have made contributions to **Bold.Brilliant. Binghamton — The Campaign for Binghamton University.**

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