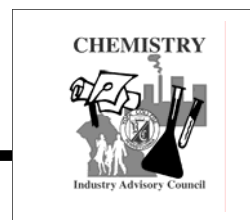


CHEMISTRY INDUSTRY ADVISORY COUNCIL NEWSLETTER



Steering Committee:

Dr. John H. Lind—Adhesives Research

William Goodfellow—EA Engineering, Science and Technology

Dr. Jeffrey Ross—Armstrong World Industries

Kenneth Peterson—Dentsply

Dr. David Kaplan—York College

Dr. Gregory Foy—York College

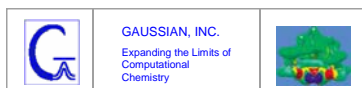
Bill Glenwright—York College

Chad Linder—York College

Member Companies:



UTZ Quality Foods



WELCOME

Greg Foy

Welcome to the latest installment of the York College of Pennsylvania Chemistry Industry Advisory Council Newsletter. Over the past year, CIAC members have been working hard to enhance the benefits for both students and industry members. You will see below in the committee reports, program report and internship profiles that we have been quite busy that our efforts are paying off and we look forward to more growth and expansion of opportunities. We encourage all of you to get involved and remain involved in the CIAC. We also welcome any suggestions that you may have for improvement. Please visit the Chemistry Program and CIAC web sites to find the latest news about Chemistry at York College of Pennsylvania!

IN THE NEWS

[York College, firms bond](#)
Chemistry council shares talents with local industry

CHARLIE YOUNG *The York Dispatch*
Thursday, October 21, 2004 -
The York College Chemistry Industry Advisory Council is hoping a little bit of fun will be a catalyst for lasting relationships between students and local companies in need of their talents.

The council tries to pair York College chemistry students with local employers to create semester-long internship projects.

Continued on Page 4

CHEMISTRY PROGRAM NEWS

Greg Foy

The Chemistry program continues on our managed growth pattern with the introduction of a new major in Forensic Chemistry. The draw of the Forensic Chem major puts our incoming freshman class at 25 freshman Chemistry and Forensic Chemistry majors. Mrs. Sherry Brown will fill the role of Forensic Chemistry Coordinator.

We welcome three new members to the Chemistry Program. Dr. William Steel is a new Assistant Professor of Chemistry and will be reviewing our general chemistry program and taking the lead in updating the curriculum to serve our diverse general chemistry population. Dr. David Horn joins us as a Visiting Professor of Organic Chemistry and will lead the Organic Program as our search for a full time tenure-track Organic Chemist continues. Mrs. Barbara Mowery is the new General Chemistry Laboratory Coordinator and will be taking the lead in purchasing, inventory, and instrument maintenance.



Continued on Page 4

Upcoming Events:

Please join us Thursday, **February 17th** for the Annual Winter CIAC Dinner. This will be held at the Country Club of York with drinks at 5:00 PM. The meeting and dinner will begin at 6:00 PM. We look forward to seeing you there!

For a complete list of events please visit <http://www.ycp.edu/physci/2554.htm>

MEETINGS

The Fall Tent Event:

Who Wants to be a Milli-Millionaire?

The fall CIAC Meeting held October 21, 2004 featured student teams interviewing Industry representatives in an effort to win cash prizes.

Our goal for the fall event was to encourage social interaction among students, industry reps, faculty, and administrators. To that end we can count this meeting as a tremendous success. Fifty Chemistry students, fifteen Industry Representatives, ten Chemistry faculty members, four York College administrators, several alumni, a photographer, and a local reporter gathered for the formal meeting that began in DeMeester Theater in the Appell Life Sciences Building.

After learning of the progress that the CIAC has made over the last several months, the group moved to the tent for the game and dinner. The game was designed to encourage interaction among students and Industry



Representatives. Student groups (4-6 students) went to each industry table (8 tables) with an industry question that they had been given during the meeting. Each Industry representative had submitted a question before the meeting that focused on some aspect of their business. The students job was to engage each Representative and try to

formulate an answer to the question. The groups were graded on the accuracy of their answer and their poise during the question and answer period. The groups were given a total of four minutes at each table. All eight groups did an outstanding job, and all eight Industry Representatives were exceptional teachers.



While everyone enjoyed a delicious dinner, the score sheets were tallied and winners were announced. First, second, and third place winners were given a generous cash prize.

First Place: Jeremy Beck, Justin Kaplan, Sarah Haight, Ann Hill, and Mindy Kenworthy.

Second Place: Michelle Ludlow, Jessica Stingle, Ronald Strine, Natalia Mikanowicz, and Beth Royel

Third Place: Heather Brosius, Daniel Dewey, Brandon Hall, Timothy Pellenberg, Jana



James, and Rachel Shapiro

INTERNSHIP NEWS

Bill Glenwright

Since our last Newsletter several noteworthy CIAC events have taken place.

We had our annual Winter Meeting at the Country Club of York. Several Chemistry and Physical Science majors presented posters depicting their research interests. The affair was well attended by CIAC members, guests and YCP students and faculty. Two seminar series were presented and during the week of April 26th we held Student Scholars week with participation by all interns.

This Summer nine interns were placed at seven of our member companies. Heather Brosius and Michelle Ludlow had internships at Adhesives Research, Erin Slosser had a position with Advancis Pharmaceuticals, Jon Leake interned at Bimax Corporation, Lisa Simmonds worked with E.A. Engineering, Dan Dewey assisted in the Chemistry labs at YCP organizing chemicals, supplies, and assisting with summer labs. Jeremy Beck and Rachel Fogle performed tasks for Gaussian Inc. at YCP under the direction of Dr. James Foreman

A spirited CIAC Internship Picnic was held at William H. Kain Park, in Jacobus. E. A. Engineering hosted our Steering Committee meeting at their Sparks, MD facility. Adhesives Research hosted a Networking meeting between Adhesive Research, Armstrong World Industries and Bimax.

Focus

CIAC Liaison Report—Bill Glenwright

The CIAC Internship Liaison has visited ten member companies since May, 2004.

Adhesives Research (two interns, 2004)
 Armstrong World Industries
 Advanced Laboratory Services Inc.
 Gaussian Inc. (two interns, 2004)
 Bimax Inc. (one intern, 2004)
 Glatfelter Paper Co.
 UTZ Foods
 Harley-Davidson (one intern, 2004)
 Dentsply International
 E.A. Engineering, Inc. (one intern, 2004)

The purpose of the visits was to foster the YCP/CIAC internship and independent study program and to try to project the availability of internships and independent study projects at each of the member companies for 2005 and beyond. The reception was favorable at each meeting. Several of the

member companies have provided assurance that internships will be included in their 2005 budgets. Attendance by all member companies is anticipated for our Fall, 2004 CIAC Dinner Meeting.

Gaussian Inc. Internship Report

Jeremy Beck and Rachel Fogle

This summer we had the opportunity to work as interns for Gaussian. We had several projects to work on, but two of those projects have been released for the public to see. The first of these projects was the creation of several student exercises meant to appear in a workbook for Fujitsu's program, CACHE. The objective of these exercises was to show the benefit of utilizing CACHE's interface with Gaussian. The second project included the update of Visualization tutorials on the Gaussian website. These tutorials are directed at those who have completed Gaussian calculations and wish to view the results in a separate program. These tutorials are also available to view on the Gaussian webpage. Another project involved updating the Gaussian theories and basis sets and related information for the first several chapters for Dr. Foresman's book Exploring Chemistry, 3rd edition.



Harley – Davidson Inc. Internship Report

Jennifer Brown

My name is Jen Brown. I am a senior Chemistry major, graduating in December. I had the opportunity of interning at Harley Davidson. I worked as a chemist in the nickel-chrome plating area. I checked the concentrations of about ten tanks using titrations daily. I performed a distillation on the rack stripper tank weekly. I ran a TOC



to find total organic carbon levels in the two nickel tanks. I was involved in an SPC program to track the concentrations and pH's of the tanks, as well as additional testing for other components of the tanks. Using this information, we were able to adjust and

tighten the specification ranges for many of the tanks. This led to a more consistent process, cost reductions in chemicals, and a decrease in rejects. I also updated the operating procedures, work instructions, and check sheets, as well as writing technical procedures for the area.

BiMax Inc. Internship Report

Jonathan Leake

Through networking opportunities with the CIAC I had the opportunity to be an intern at Bimax Inc. this sum-

RELATED WEB LINKS

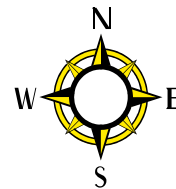
IMPORTANT LINKS:

York College Chemistry Web Site:

<http://www.ycp.edu/chemistry>

Chemistry Industry Advisory Council

<http://www.ycp.edu/physci/2565.htm>



mer. Bimax is a small company that makes specialty monomers. Bimax has a lab in Cockeysville, Maryland as well as a production facility in Glen Rock, PA. I worked at the lab in Maryland setting up and running many different reactions.



The chemistry involved in these reactions was mostly direct or transesterifications. By running these reactions I was able to learn many new techniques and learn some interesting chemistry. The lab has analytical facilities that provide quality control for the manufacturing done at the plant. I got the chance to help with a few of the analytical tests including testing for color, acidity, and density. Although I had many successful experiments I also learned that chemistry does not always work, especially when faced with a flask full of sticky polymer. Overall, I gained some valuable experience and learned a lot about working at a small company

Chemistry Program News Continued

The newest instrument in the department, a Varian MPX Inductively Coupled Plasma/Atomic Emission Spectrophotometer, should be up and running shortly and will be used extensively in Independent Research Projects this fall.



We have also added a Dual Beam UV/VIS Spectrophotometer necessary for Bill Steel's research. Our next planned purchase is a Scanning Probe Microscope with AFM and STM capability. We will also be assessing our instrument needs for the Forensic Chemistry Major.

We are looking forward to an exciting and productive semester!

York Dispatch Article Continued

The projects provide beneficial work experience for the students and talented employees for local industry.

The council also provides member companies access to specialized equipment at York College, and in turn the members fund acquisition of new instruments. The council also hosts industry seminars and fosters collaboration between its members.

The council was formed in the summer of 2001 with four local industries: Adhesives Research, Armstrong World Industries, Dentsply International and Glatfelter. Other members now include BiMax Corp., EA Engineering, Science & Technology Inc., Harley-Davidson Inc., Gaussian Corp., North Industrial Chemical and Utz Quality Foods.

"Our hope is that we would benefit the chemical industry by producing knowledgeable, competent graduates to work in the area, and that the industry would help us with financing new instrumentation and provide expertise in our courses," said Gregory Foy, the chemistry program coordinator.

In the past, the council relied on York College professors to pair students with the employers' projects. Beginning about two years ago, it tried something new: romance instead of arranged marriages.

By putting the students and industry folks into social situations, the council members are hoping the individuals involved will naturally find the best fit for themselves, said David Kaplan, chairman of the physical sciences department.

Who wants to play a game? The students, employers and faculty will meet this afternoon for presentations of eight current internship projects, followed by a networking game similar to television's "Who Wants to be a Millionaire?" and dinner.

"We let them find more about each other in a fun environment, so they can make more intelligent choices," Kaplan said.

Over time, intelligent collaboration between the school and industry players is the smartest choice, said John Lind, vice president of research and design at Glen Rock-based Adhesives Research.

"In the long term, I would love to see this program grow," Lind said. When the council was founded, there were only one or two chemistry graduates each year; now there are four to five, Lind said. He would like to see 20 to 30 annual graduates and eventually a graduate degree program.

"For a company like ours, we have enjoyed significant growth over 10 years," Lind said. "To continue, we need access to good talent and continuing education in specific areas."

-- Reach Charlie Young at 324-0315 or [cy-
young@yorkdispatch.com](mailto:cyoung@yorkdispatch.com).

Thank you to the York Dispatch for permission to reprint this article.

CIAC INTERNSHIP SUMMER PICNIC

A spirited CIAC Internship Picnic was held at William H. Kain Park this past summer. In addition to twelve York College student interns, there were several CIAC industry representatives, York College staff and faculty, York College Alumni and even a representative from a local high school and a Millersville College student. The weather cooperated 100 percent

as everyone enjoyed a fine cuisine of hamburgers and hot-dogs prepared by Chad Linder. There were no formal reports of illness after the event.



In addition to hours of comradeship, several competitive games of volleyball were played. Unfortunately the last game had to be called after it was determined that the students were intentionally targeting Dr. Foy on their serves. That would be the students on Dr. Foy's team.



All in all, a wonderful time was had by everyone. We hope this becomes an annual event and look forward to seeing you there.