

Council on Undergraduate Research Chemistry Division Newsletter

March 2013

Welcome to the first issue of the CUR Chemistry Division newsletter! We are proud to be the founding division of the Council on Undergraduate Research, and we are committed to help faculty establish and sustain vigorous programs of research where undergraduate students play important and meaningful roles. Our organization has changed greatly since its beginning in 1978. For example, CUR now has divisions representing the natural sciences, mathematics, the social sciences and arts and humanities and welcomes members from all types of higher education institutions. Our councilors are working across disciplines to promote:

- Integration of undergraduate research into the curriculum;
- Assessment of the impact of undergraduate research;
- Broadening participation in undergraduate research, and;
- Innovation, commercialization, and internationalization.

While all these new activities foster a wealth of programs and initiatives and engage a large number of councilors and members with diverse backgrounds, it is our responsibility as a division to maintain the focus on the needs of our disciplinary members. During the 2012 CUR Business Meeting held at the College of New Jersey, the Chemistry Division designed a plan of action to better connect with our Chemistry members. This newsletter is one of the activities that we are launching in 2013. Soon we hope to populate our website with materials that are relevant to teacher/scholar chemists, such as examples of successful research programs, conference announcements and funding opportunities. We are also developing a member database to promote networking.

We hope to be an essential resource for you moving forward!

--Silvia Ronco, CUR Chemistry Division Chair

Chemistry Division Outreach

The Chemistry Division often engages in outreach activities. For example, in 2012 our councilors participated in CUR-sponsored workshops at national meetings of disciplinary societies, such as Pittcon, the American Chemical Society, the American Society for Biochemistry and Molecular Biology, the Biophysical Society and the American Crystallographic Association. Chemistry councilors also made presentations at the 2012 CUR National Meeting and CUR Dialogues. Similar activities will take place again in 2013. Examples of workshop topics are how to choose research projects, mentor undergraduates, and write competitive proposals. Please help us spread our voice and encourage your young colleagues to take advantage of these opportunities.

Recently, at the 2013 Pittcon Conference, Chemistry councilors Michelle Bushey (Trinity University) and Kim Frederick (Skidmore College) presided a workshop entitled "Bringing research into the analytical teaching lab: A win-win for all involved." Presentations highlighted different ways that research activities can be incorporated into the instruction lab experiences. This approach has the advantage of allowing

the instructor to collect research data with an “army” of students and allows the students to participate in authentic research.

Workshop speakers included:

- **Michelle Bushey**, Trinity University -- “From the teaching lab to research lab and back again: Linking non-science students with analytical chemistry students through research.”
- **Justin Shearer**, Rose-Hulman Institute of Technology -- “Experimental extraction material in a teaching laboratory context,”
- **Lisa Holland**, West Virginia University -- “Microfluidics for the masses: Classical research laboratories and shared experience through classroom visualization.”
- **Kim Frederick**, Skidmore College -- “Using FTIR and chemometrics to study mural paintings: Incorporating research into the instrumental analysis lab.”
- **Joseph Grabowski**, NSF, Division of Undergraduate Education – “NSF’s interest in bridging between research and teaching labs.”

Travel Awards

In 2013, for the first time, the CUR Chemistry Division gave travel awards to three young faculty to attend CUR Dialogues. Invitations were sent to faculty who had attended either the CUR “Beginning a Research Program in the Natural Sciences” institute or the “Proposal Writing” institute, and priority was given to young faculty with no external funding. We hope to continue offering these opportunities next year. We feel that our funds are well-spent if we are able to leverage the impact of these institutes and we help young faculty to become more competitive when seeking external funding.

Mentor Program

The Mentor Network in the Chemistry Division of CUR matches individuals seeking information about starting, sustaining or re-initiating undergraduate research programs to faculty who have proven records of successful scholarship. The contact person for this program is Chemistry Councilor Kim Frederick at Skidmore College (kfreder1@skidmore.edu). For more information about the Mentor Network, go to: http://www.cur.org/projects_and_services/mentor_network_chemistry/.

Upcoming Events 2013

- **245th National American Chemical Society Meeting & Exposition**, April 7-11, New Orleans

- **National Conference on Undergraduate Research**, April 11-13, University of Wisconsin, La Crosse
- **Undergraduate Research Week**, April 15-19
- **CUR Annual Business Meeting**, June 20-22, Chapman University

CUR-Sponsored Workshop at the Spring 2013 ACS National Meeting

Once again, the CUR Chemistry Division and the ACS Young Chemists Committee joined forces to offer a workshop aimed at helping young faculty, “Starting a Research Program at a Predominantly Undergraduate Institution.” This workshop will take place on April 7 during the Spring ACS National Meeting in New Orleans, 1:00-4:40 pm, Hilton Garden Inn New Orleans, Convention Center, Camelia Room. This workshop was organized by councilors Mel Druelinger and Silvia Ronco. Attendees will receive a wealth of information on how to establish a vigorous research program at a predominantly undergraduate institution.

Speakers include:

- Tom Wenzel, Bates College -- “What is undergraduate research and why do research at a PUI?”
- Kerry Karukstis, Harvey Mudd College -- “Collaborative research with undergraduates: Research project and research group design”
- Bridget Gourley, DePauw University -- “Balancing teaching, research, service and life in the context of PUIs”
- Mel Druelinger, Colorado State University, Pueblo -- “Art and necessity of gaining internal support from institutional administrators”
- Silvia Ronco, Research Corporation for Science Advancement – “Funding opportunities at RCSA”
- Askar Fahr, Petroleum Research Fund – “Undergraduate New Investigator grants at the ACS/PRF”
- Joe Grabowski, National Science Foundation – “Funding opportunities at NSF that support research at PUIs”
- Tom Wenzel, Bates College – “Writing more competitive proposals”

A Call to Chemistry members

The CUR Chemistry Division would like to use the newsletter to help disseminate opportunities and highlight accomplishments relevant to the field. Please help us identify and recognize this news by

sending items for the Chemistry Newsletter to Jani Ingram, Jani C Ingram, Jani.Ingram@nau.edu, or Silvia Ronco, sronco@rescorp.org. Deadline for the Summer 2013 issue is June 30, 2013.

Current CUR Chemistry Councilors

Peter Alaimo, Seattle University
Robert Bachman, University of the South
Aileen Beard, The College of Saint Scholastica
Nicole Bennett, Appalachian State University
Michelle Bushey, Trinity University
Michael Castellani, Marshall University
Catherine Chan, University of Wisconsin-Whitewater
Julio De Paula, Lewis and Clark College
Melvin Druelinger, Colorado State University – Pueblo
Scott Feller, Wabash College
Kim Frederick, Skidmore College
Bridget Gourley, DePauw University
Tom Higgins, Harold Washington College
Jani Ingram, Northern Arizona University
Tom Mitzel, St. Edward's University
Alex Norquist, Haverford College
Kathleen Parson, Macalester College
James Phillips, University of Wisconsin- Eau Claire
Joseph Provost, Minnesota State University, Moorhead
Silvia Ronco, Research Corporation for Science Advancement
Roger Rowlett, Colgate University
Stephanie Sen, College of New Jersey
George Shields, Bucknell University
Kraig Wheeler, Eastern Illinois University

###