

Background

An important component of all CHEMRAWN conferences is the educational aspect. While in previous CHEMRAWN conferences this has taken many different forms, CHEMRAWN XIV: Toward Environmentally Benign Products and Processes is taking a rather ambitious approach to its educational mission. Immediately prior to the beginning of the formal CHEMRAWN conference, there will be a three day session devoted to the training of students from a wide range of nations. This training will be designed not just to expose the students to the concepts, principles and methodologies of Green Chemistry but also to empower them to bring this new knowledge back to their home nation or region. The structure of the training will be designed to provide them with the knowledge and basic tools they need to begin planting the seeds of Green Chemistry within their own educational structure.

IUPAC CHEMRAWN XIV PRE-CONFERENCE WORKSHOP

To apply, please send a letter of interest addressing the relevant criteria and a completed application form to:

John C. Warner
Educational Chair, CHEMRAWN XIV
Professor of Chemistry
Director of Biochemistry
University of Massachusetts Boston
100 Morrissey Blvd.
Boston, MA 02125-3393
Phone: 617-287-6165
FAX: 617-287-6127
John.warner@umb.edu
<http://green.chem.umb.edu>

Applications must be received by February 15, 2001.

Application forms are available online at:
http://cires.colorado.edu/env_prog/chemrawn
or
<http://green.chem.umb.edu>

The instruction will be in English. Students are expected to have strong English language skills.



IUPAC



IUPAC CHEMRAWN XIV PRE-CONFERENCE WORKSHOP

GREEN CHEMISTRY

June 6-9, 2001

IUPAC CHEMRAWN XIV CONFERENCE
**Toward Environmentally Benign
Processes and Products**

June 9-13, 2001
University of Colorado Campus
Boulder, Colorado

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Workshop participants will arrive on the evening of Wednesday June 6, 2001. The workshop will run June 7, 8 and 9. Participants are invited to attend the conference which begins on the afternoon of June 9 and ends around noon on June 13.

It is hoped and expected that the Future Actions Committee of the CHEMRAWN XIV Conference will identify on-going educational support as an important area. If so, the students trained in June, 2001 may have a support network to assist in their efforts to build indigenous capacity for Green Chemistry within their home nations.

Expenses for the educational session, including room and board, will be covered for all students accepted to the program. In addition, travel support is available for international students (up to \$2,000 international, \$1,000 domestic). The instruction will be in English. Students are expected to have strong English language skills.

Criteria

An important part of the success of this CHEMRAWN educational initiative is the wise and strategic selection of the individuals to participate in the sessions. The term "student" is used not in the classical sense of where a person is in their studies, but rather to each of the participants regardless of age or professional status. The criteria for selecting students will include the following:

- Higher priority will be given to students from developing nations than from industrialized nations. Currently, there are relatively more formal and informal support networks for those interested in green chemistry in industrialized nations than in developing nations. In order to begin to address this need, it is important to focus on developing nations where feasible.
- Higher priority will be given to students with a background in molecular sciences than those who do not. While foreseeable exceptions can be made, the majority of students will be expected to possess a working knowledge of one of the molecular sciences in order to maximize the impact of the experience for them.
- Multiple students (2 or 3) from the same country or region, will be considered beneficial since it enhances the support network in the home country as opposed to one individual needed to bear the entire burden. This consideration will need to be balanced with budgetary constraints and the desire to allow participation from various regions and countries.
- Students with formal connection to an educational institution will be given higher priority than those without. Established infrastructure enhances the chances of successfully building a Green Chemistry educational program in the home nation and is considered valuable.
- A recommendation or letter of support from a person in an industrialized nation that is actively involved in Green Chemistry will be considered in the selection decision. Once again, having established connections and a support network for on-going information exchange and other support activities, increases the overall potential for long term impact and success.

Session Content

The students will be engaged through a series of lectures, discussions and activities from world leaders in the area of Green Chemistry. The sessions will be aimed at providing the necessary foundation for establishing an on-going initiative in Green Chemistry into their home region/country's educational system. The content will include:

- Context of current environmental and human health issues that pose a challenge for sustainability
- Historical background on world approaches to dealing with the threats to the environment, ecosystems and biosphere
- The definition and twelve principles of Green Chemistry
- Overview of the various areas of the science and technology of Green Chemistry
- Case studies/ real world examples of Green Chemistry in practice in industry
- Review of frontier science in the field of Green Chemistry
- Identification of educational approaches, materials and information sources necessary for building a Green Chemistry program. This extensive area will focus on:
 - a presentation of successful approaches to Green Chemistry education
 - the design of basic demonstrations or laboratory experiments for Green Chemistry
 - workbooks/problem sets for students of Green Chemistry
 - non-traditional training opportunities for students in Green Chemistry

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