



Committee on Professional Training

American Chemical Society | 1155 Sixteenth Street, N.W. | Washington, D.C.

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Attend the following events during the upcoming 2008 ACS national meetings:

- **YCC/CUR Symposium: Starting a Successful Research Program at a Predominantly Undergraduate Institution**
- **Academic Employment Initiative AEI Poster Session**

See page 3 for details.

Implementation Plan for the New ACS Guidelines

The American Chemical Society (ACS) Guidelines for approval of bachelor's degree programs in chemistry are being revised to stay current with changes occurring in chemistry and in education.

Timeline. In 2005, the ACS Committee on Professional Training (CPT) sought broad input from the chemistry community concerning the current Guidelines and possible directions for revision. In 2006, proposed revisions to the Guidelines were widely circulated among the community, and many useful comments were returned to CPT. In the spring of 2007, draft guidelines were developed and distributed, and feedback was again sought and received from the community. After considering all the comments and feedback it has received, CPT intends to release the new ACS Guidelines in the spring of 2008.

Areas of Change. The infrastructure and faculty requirements specified in the new guidelines will be similar to those in the current guidelines. However, changes are being made to the curriculum requirements in order to promote innovation and improvements in the student learning experience. Under the new guidelines, the curriculum of an approved program must offer appropriate foundation course work, in-depth course work, and laboratory experiences. Beyond a traditional chemistry course of study, chemistry programs are encouraged to define and develop additional degree tracks, such as organic synthesis, biochemistry, polymer chemistry, or green chemistry, which would allow students to focus on a particular aspect of chemistry or a chemistry-based interdisciplinary area. The draft guidelines are available on the CPT website (www.acs.org/cpt) and should be consulted for details.

Chemistry programs should develop student skills that will enable their success as professionals upon graduation. Chemistry programs should also have a mechanism for regular self-evaluation to ensure that their defined goals are being met. The Committee is currently developing supplements to the new guidelines that will provide suggested curriculum content and student experiences related to the various elements of the guidelines. These documents will be posted on the CPT website as they are completed.

- **Option degrees no longer evaluated by ACS**
- **Annual reports still required each August 15**
- **Five-year reports deferred until June 2009**

Degree Tracks Replace Options. An important change in the new guidelines is that option degrees will no longer be defined and evaluated by ACS. *ACS-approved degree options* are being replaced by *department-defined degree tracks* that meet the foundation, in-depth, and laboratory requirements specified in the guidelines. By allowing chemistry programs to define these courses of study, departments can develop degree tracks that target innovative developments in chemistry, utilize expertise within the department, and meet the department mission and student interests.

Procedure Changes. Beyond changes to the guidelines themselves, there will also be changes to the procedures for initial approval of a chemistry program and for periodic review of approved programs (which typically occurs every five years). New applications will begin with a Web-based pre-application, followed by a self-study and submission of a complete application package. The periodic review procedure will concentrate on compliance with requirements in the new guidelines. The goals of these changes are to provide faster turnaround time for program evaluation and more focused Committee comments to programs.

Five-Year Reports Deferred. CPT recognizes that it will take time for chemistry departments to interpret the new guidelines and make appropriate changes to their curricula and activities. Furthermore, the Committee requires time to develop new supplements and reporting forms, and ACS staff require time to implement these changes.

To facilitate changes by chemistry programs and ACS, the Committee voted at its last meeting to defer the collection of the five-year reports submitted by chemistry departments. Together with this change, the due date for these reports will be moved from December to June, so that reports may be evaluated by the Committee more closely to the time period for which the data apply. Consequently, no requests for five-year reports will

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be sent out in 2007. Instead, programs will receive notification in December 2008 that their 2009 report will be due in June 2009. All subsequent periodic reviews will be deferred correspondingly.

Annual Reports Continue. Annual reporting of chemistry graduate and curriculum information will proceed as usual, with information due each August 15. This will permit CPT to tabulate and publish annual graduation rates in *C&E News* and on the ACS website.

Certification of Majors. During the deferral period and until chemistry programs are evaluated under the new guidelines, departments that are currently ACS-approved remain approved and can continue certifying chemistry graduates who meet the ACS requirements. The department chairs of ACS-approved programs may certify students under the previous or new guidelines during this interim period. After programs are reviewed by CPT under the new guidelines, graduating students must meet the new requirements in order to be certified.

The new guidelines will provide departments with opportunities to modernize their curricula, focus on student learning of both chemistry content and professional skills, and build infrastructure that supports excellence. By communicating the plans for guidelines revision, the Committee encourages chemistry departments to take advantage of the opportunities within the new ACS guidelines to reach new levels of excellence. ■

New ACS Directory of Graduate Research Has Been Published!

The ACS *Directory of Graduate Research (DGR)*, published in odd-numbered years, is now available in a new 2007 edition, including an online searchable version, DGRweb! The size of the DGR has grown dramatically over its lifetime—from approximately 2,000 faculty members at 150 chemistry and chemical engineering programs in the early editions to 10,118 faculty members from 668 degree programs in chemistry, chemical engineering, biochemistry, and five other related areas in the 2007 edition. It took more than a year and “a village” to produce this most comprehensive information about graduate research and researchers in the United States and Canada. The ACS Office of Professional Training (OPT) worked diligently with the administrative staff and faculty of 668 academic departments and the DGR contractor, ATLAS Systems, through two rounds of data collection using Web-based forms.

As in the previous DGR editions, in Phase I, the department chairs provided the names of the faculty members, which, in turn, were used to retrieve their research publications from *Chemical Abstracts*. In Phase II of DGR production, the chairs were asked to update and verify the department and faculty information, including statistical data, individual faculty member information, research publi-

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cations, and master's and doctoral theses. Again, in order to gather the most complete and accurate information, in addition to formal correspondence, multiple e-mail reminders were sent to chairs, faculty members, and administrative staff to alert them that the production of DGR was in progress. Before wrapping up production, OPT staff made numerous phone calls in an effort to reach department chairs who had not updated their listings. Despite this intensive follow-up effort, some faculty information has not been confirmed, and these listings have been marked with the following sentence: “Publication list has not been verified by the department.”

For the 2007 edition of DGR, ACS Committee on Professional Training (CPT) experimented with a new procedure for publication retrieval. Publication citations were retrieved only when an author's name was an exact match for the faculty member names that were provided in Phase I of data collection. In the past, various combinations of the first, last, and middle names were used, which frequently resulted in an inaccurate publication list, if the information was not reviewed carefully by the department. Some faculty and departments reported that this new procedure did not retrieve many of their publications. Before production of the 2009 edition begins next year, CPT members will evaluate whether this experimental editorial policy achieved the goal of improved accuracy of the DGR listings and will decide whether to adopt the procedure for further editions.

Both CPT and OPT staff members hope that the 2007 edition of the DGR and DGRweb will continue to be an accurate and indispensable source of information for facilitating research collaboration in the chemical sciences, enabling networking across chemical disciplines, and assisting students with selecting a graduate program. We appreciate your efforts in contributing to this most complete compilation of graduate research in chemistry and the chemical sciences. Until the next 2009 edition! ■

NOW AVAILABLE ONLINE AND IN HARDCOVER!

ACS Directory of Graduate Research 2007 and Searchable Online Version: DGRweb 2007

Go to www.acs.org/dgrweb to conduct free online searches or get your print copy of DGR 2007 today! Item 39757, U.S. \$95 each (additional shipping and tax charges may apply).

- **By phone:** Use a credit card (MasterCard, Visa, or American Express), call **1-800-227-5558 or 1-202-872-4600**,
- **Online at www.acs.org/dgrweb**, then use a sidebar link to purchase a print copy
- **By fax:** Send your order to **1-202-872-6067** (please include credit card account number, expiration date, name on the card, and authorizing signature)



CPT Surveys of Ph.D. Programs

As part of its charge to collect and report information on trends and developments in graduate education in chemistry, the ACS Committee on Professional Training (CPT) periodically queries master's and doctoral programs in the chemical sciences. In the fall of 2006, questionnaires were sent to all 195 Ph.D. programs in chemistry in the United States. Questions were asked about faculty and departmental structure, graduate student statistics and requirements, and graduate student progression toward degrees. By the spring of 2007, usable questionnaires had been received from 139 Ph.D. programs.

A full report on the Ph.D. program survey will be published in the spring 2008 CPT Newsletter, to be followed by a report on master's programs at a later date. The Ph.D. program report will highlight important trends observed in the past 10 years (based on the last graduate program survey, fielded in 1996) and notable comparisons of Ph.D. programs at small, medium, and large chemistry departments.

Preparing for Life After Graduate School (PfLAGS)

How can chemistry graduate students and postdocs prepare for entering the workforce?

PfLAGS is a two-day workshop designed to inform chemistry graduate students and postdocs about their career options after graduate school and how to prepare for them. About two-thirds of the PfLAGS workshop is directed toward nonacademic careers in business and industry. This complements other ACS programs targeted to graduate students and postdocs seeking academic careers. Broadly defined, the workshop covers three topics: defining careers for chemists; some nontechnical skills and knowledge needed for career success (with an emphasis on industry); and finding employment opportunities (including a postdoc).

A third optional day includes mock interviews and resume reviews.

In the past two years, the PfLAGS workshop has been presented at the University of Wisconsin–Madison, Princeton, Purdue, Texas A&M, Connecticut, SUNY-Buffalo, North Carolina, and at the ACS Central Regional Meeting in Cincinnati. These workshops have received outstanding evaluations from the graduate student participants and more workshops are planned for 2008, including one at Maryland and a repeat at Wisconsin.

The PfLAGS workshop is available to chemistry departments at Ph.D.-granting universities through the ACS Office of Graduate Education and the Department of Career Management and Development. If you would like more information or your department is interested in finding out more about hosting a session of PfLAGS, please contact the ACS Office of Graduate Education: GradEd@acs.org; 202-872-4588.



SYMPOSIUM: Starting a Successful Research Program at a Predominantly Undergraduate Institution

Organizer: Merle Schuh

Many new faculty members at predominantly undergraduate institutions (PUIs) do not have a good understanding of the unique challenges associated with establishing an active research program involving undergraduates. A half-day symposium will be held on Tuesday afternoon, April 8, at the upcoming ACS National Meeting in New Orleans during which the topic of undergraduate research will be addressed by representatives from the Research Corporation and the Petroleum Research Fund as well as by faculty members from PUIs with successful undergraduate research programs. The setting for the symposium will be relatively informal to give members of the audience ample opportunity to ask questions and interact with the panel of facilitators. The symposium is being co-sponsored by the Council on Undergraduate Research and the Younger Chemists Committee (YCC) and is being scheduled within the YCC program. Address any questions to meschuh@davison.edu.

CONGRATULATIONS!

The ACS Committee on Professional Training (CPT) congratulates **Bethel University** on their newly ACS-approved bachelor's degree program in chemistry.

The current number of ACS-approved chemistry programs is 643.

AEI Poster Session ACS National Meeting Philadelphia, PA Abstract Deadline April 14, 2008

Will your department be hiring new faculty in the coming year?

Does your department have graduate students or postdocs who will be seeking academic positions?

If so, encourage the students and postdocs to present a poster for the Academic Employment Initiative (AEI) Sci-Mix Poster Session at the ACS National Meeting, Monday evening, August 18, from 8–10 p.m., and plan to attend the AEI Poster Session yourself to meet with potential new faculty candidates.

At the Fall 2007 ACS National Meeting in Philadelphia, candidates seeking faculty positions will use the AEI Sci-Mix Poster Session to present posters about their current research and expand on their research interests, teaching philosophies, and experience. Abstracts for AEI posters must be submitted through OASYS, the ACS abstract submission system, by April 14, 2008.

Faculty recruiters are invited to take advantage of this opportunity to meet as many candidates as possible. Brief biographical sketches of each of the candidates—with links to their abstracts—will be available at the beginning of July 2008 at chemistry.org/aei.html. Further information can be found at that website or by writing to GradEd@acs.org.



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