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Cathy A. Nelson, *Secretary* (202) 872-4589

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Dear Colleague:

The Committee on Professional Training completed a three-year process by recently approving a revised set of Guidelines for undergraduate programs. We expect to publish the 2015 Guidelines by the spring ACS meeting. The 2015 Guidelines do create some new requirements for programs.

The Committee had lengthy discussions about the possibility of instituting a polymer requirement. Inclusion of a polymer requirement was under consideration because of the recognition that the properties of large molecules and aggregated systems are different from those of small molecules. We received considerable constructive feedback about this topic in our recent call for input from the community. Many of these comments recommended that we broaden the focus beyond polymers to include other larger-scale systems. Based on the feedback, the Committee decided that the principles that govern macromolecular, supramolecular, mesoscale, and nanoscale systems must now be part of the curriculum for certified graduates. Furthermore, instruction must cover the preparation, characterization, and physical properties of at least two of the following: synthetic polymers, biological macromolecules, supramolecular aggregates, meso- and/or nanoscale materials. We expect that most departments will meet this requirement through coverage distributed across multiple courses required for the certified degree. In that case, the coverage should constitute the equivalent of approximately one-fourth of a standard semester course. An alternative option is to offer a stand-alone course that is required for the certified degree.

We realize that this new requirement may take some time for programs to satisfy or that programs may have some difficulty determining whether they are meeting this requirement. While we want programs to meet this new requirement as soon as feasible, they will not need to do so immediately. Conformance with this requirement will be assessed at the time of a program's next periodic report. If it is not met, the program will need to address this situation by the time of their ensuing periodic report.

We also received considerable feedback on a proposal to require that departments have a safety committee. Recognizing that this could be challenging for smaller departments, the 2015 Guidelines mandate that programs promote a safety culture and identify other aspects of safety education and practice that programs must fulfill. Departments will not be required to have their own safety committee, although a department or institutional safety committee that collaborates with an institutional chemical hygiene officer is highly recommended as a vehicle to promote a safety culture.

Departments will be required to have an NMR spectrometer, and equipment from four of five different categories must be used by undergraduates: optical molecular spectroscopy, optical atomic spectroscopy, mass spectrometry (including GC-MS and LC-MS), chromatography and separations, and electrochemistry.

Contact hour requirements and the ability of programs to use averaging to meet maximum contact hours have been adjusted slightly in the 2015 Guidelines. Those teaching in the classroom and laboratory must not exceed 15 contact hours per week. Two individuals in this category can meet this requirement by averaging over semesters or quarters, provided only one term is over the 15-hour maximum and is not more than 18 hours. Those teaching only in the laboratory must not exceed 16 total contact hours per week. Two individuals in this category can meet the 16 hours by averaging, provided only one term is over the 16-hour maximum and is not more than 18 hours.

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Chemistry programs will now be required to have at least five full-time, permanent faculty members wholly committed to the chemistry program. Currently approved programs with fewer than five permanent faculty members will have until 2025 to meet this requirement.

Finally, and not surprisingly, we heard no objection to our plan to lengthen the time between periodic reports from five to six years.

We appreciate the many comments we received from the community over the past three years. They were vital in informing our thinking and helping us to craft the final version of the 2015 Guidelines. We look forward to working with the community in the implementation of the 2015 Guidelines.

Sincerely,



Thomas J. Wenzel
Chair
Committee on Professional Training



Clark R. Landis
Vice Chair
Committee on Professional Training