

ACADEMIC PROFESSIONAL GUIDELINES

Introduction

The American Chemical Society (ACS), the world's largest association of professional scientists, has the opportunity to lead in articulating standards for scientists. We believe the Academic Professional Guidelines represent a fair and just balance among the legitimate interests of all facets of the higher education community and recommend that these guidelines be accepted and implemented.

These guidelines apply to those members of the academic community whose job function impacts directly or indirectly on scientists practicing the profession of chemistry. For brevity, the term "chemical scientist" is used broadly in these guidelines to refer to undergraduate and graduate students, post-doctoral and research associates, technicians, staff members, and all part-time and full-time faculty members involved in chemical sciences and engineering.

The Academic Professional Guidelines complement the broader ACS Professional Employment Guidelines to provide assistance on special issues of concern to chemical scientists in the academic environment. The ACS Professional Employment Guidelines are to be consulted for those issues dealing strictly with workplace issues.

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General Guidelines

Chemical scientists in an academic community have the right to equal treatment regardless of sex, race, age, ethnicity, disability, national origin, political philosophy or affiliation, religious belief, sexual orientation, or marital status. This includes a workplace free of intimidation, coercion, exploitation, discrimination, and harassment, sexual or otherwise.

A safe laboratory working environment must always be maintained. This includes providing facilities, equipment, and formal instruction adequate for the anticipated operations within the laboratory as well as compliance with federal, state, and local regulations. Attention should be focused on commonly accepted laboratory practices as well as the personal responsibility of the individual laboratory worker.

Compensation and benefits should be commensurate with the position in the professional community.

Professional development for all chemical scientists should be supported. Working in academe implies a life-long commitment to learning.

Chemical scientists have a professional responsibility to serve the public interest and welfare and to further public understanding of science. Chemical scientists should take personal responsibility to:

- Maintain high standards of honesty, integrity, and diligence in the conduct of education, research, and all other professional duties.
- Be concerned with the health and safety of co-workers, consumers, and the community. The expertise of a chemical scientist is required in matters of public health and safety.
- Provide considered comment to the public at large on matters involving chemistry. Chemical scientists are in the best position to decipher complex matters of chemistry for the general public.
- Honor commitments made in the context of fulfilling professional duties, whether to students, colleagues or employer.
- Establish and maintain lines of communication throughout the academic and professional communities.
- Generate opportunities for appropriate educational and research collaborations.

The Student and Postdoctoral Associate

Although the following section focuses on graduate students and postdoctoral associates, these guidelines also apply to undergraduate students where appropriate, especially those engaged in undergraduate research.

Responsibilities to the Faculty and the Institution

The student should demonstrate honesty, integrity, and diligence in the conduct of research, teaching, and in the completion of academic courses. The graduate student should diligently pursue coursework and, as appropriate, teaching and thesis research. Included in this obligation is the timely completion of manuscripts, publications, and a dissertation.

Students should be fully aware of the ethical, legal, health, and safety implications of their education, research, and teaching.

Students and postdoctoral associates should take personal responsibility for understanding, practicing, and promoting appropriate safety procedures .

Students have the responsibility to vigorously pursue educational opportunities directed toward becoming professionals.

Students should broaden their educational and professional development through experiences such as industrial internships, coursework in other disciplines, and other experiential programs.

It is the responsibility of the student to monitor progress in coursework, consult with appropriate individuals when difficulty arises, and cooperate in efforts to resolve these difficulties. The student should seek further guidance from an appropriate higher academic or administrative level if a problem cannot be resolved with the faculty member.

The research student or postdoctoral associate should consult the supervising faculty advisor/mentor at appropriate intervals regarding progress and should openly discuss relevant technical and administrative problems. If a problem cannot be resolved with the faculty advisor/mentor, the graduate student or postdoctoral associate should seek further guidance from an appropriate higher academic or administrative level.

The student should honor commitments relating to teaching and research. The student should recognize that the faculty member devotes significant time and effort to classroom teaching, supervision of research, and other professional activities. The commitment by the faculty member should be matched by the student.

Students should maintain open lines of communication with other students and with faculty members.

Students should clearly understand their rights and obligations related to intellectual property and authorship, keep accurate and complete laboratory notebooks and records to document their work and ideas, and communicate their results as appropriate.

Mentoring opportunities should be actively sought. More experienced students should serve as mentors and educators for others. Prospective mentors should seek professional development opportunities to increase their mentoring skills.

Postdoctoral associates should recognize their dual role as both employees and scientific peers of their research mentor. Postdoctoral appointments should be considered a short-term transitional period between graduate school and an independent professional position.

Postdoctoral appointments should broaden the base of the associate's knowledge and be of mutual benefit to the associate and host laboratory.

The Faculty Member

Responsibilities to Students and Colleagues

The faculty member should exhibit honesty, integrity, and diligence in the conduct of research, teaching, mentoring, and all other professional responsibilities.

The faculty member must take responsibility for establishing a laboratory environment consistent with the current best practices in chemical safety, including the workplace right-to-know law governing employees and students. Faculty members should use their expertise to assist university safety personnel in those situations involving chemical hazards or spills.

The faculty member should contribute to building a collegial environment among all full- and part-time faculty members, students, postdoctoral associates, and staff.

The faculty member should be a model for the professional development of students, colleagues, and staff by continuing professional development and scholarship. Broader self-education within the discipline of chemistry and chemical education as well as outside of chemistry is appropriate.

Full attention should be directed to student learning, recognizing that the acquisition, interpretation, and dissemination of knowledge are the principal functions of an academic institution. In this role as a teacher, the faculty member should stimulate the students' interest, broaden their outlook, and encourage a sense of inquiry.

The faculty member should willingly serve as a mentor to students, postdoctoral associates, and other faculty members. Mentoring should include assistance in developing a successful career and should encourage the development of a sense of inquiry, a habit of broad-based learning, and professional communication skills. The special obligation to provide sound guidance to undergraduate students should be recognized. Prospective mentors should seek professional development opportunities to increase their mentoring skills.

The faculty member should encourage and provide opportunities for students to develop writing, speaking, listening, or other communication skills necessary to achieve success in their careers.

The faculty member should encourage the development of initiative and independent thinking by students and postdoctoral associates.

The faculty member should maintain an environment in the research laboratory that fosters productivity, collaboration, and respect among co-workers.

The faculty member should recognize the research contributions of students, postdoctoral associates, or staff by co-authorship or appropriate acknowledgment in publications.

Regular and periodic evaluation should be provided to students and postdoctoral associates. This communication should concern the progress of the research and provide feedback regarding the status relevant to the project, as well as constructive suggestions toward resolution of any research difficulties encountered. A functioning advisory committee should be formed for each graduate student as soon as the research is initiated. The committee should meet periodically with the student and faculty member to evaluate progress and to provide further guidance to the student.

The faculty member should guide the student so the degree requirements, including coursework and research, can be satisfactorily completed in a reasonable amount of time. If satisfactory progress is not being made, the faculty member should inform the student that a problem exists and offer the student opportunities to correct the situation. Options may include changing research projects or faculty advisors. This discussion should occur as soon as a problem is noticed.

The faculty member should be aware of the institution's policy toward intellectual property, such as authorship, patents, and copyrights, and inform students and postdoctoral associates of that policy.

The faculty member should inform each postdoctoral associate in writing of the financial support and benefits to be provided. Fair and consistent practices in hiring postdoctoral associates should be observed.

The Administration

The administration has the responsibility to support chemical scientists in working toward the mutual goal of providing the highest quality instruction, research, and public service in chemistry at the institution.

General Responsibilities to Chemical Scientists

The hiring of full- and part-time faculty members, research associates, staff and post-doctoral associates and the admission of graduate students should be done with integrity using fair and ethical standards. Each institution should establish clear, written guidelines for compensation, benefits, and duration of appointments to safeguard against the abuse of chemical scientists in part-time and postdoctoral appointments.

The institution should provide:

- Teaching and research facilities commensurate with expectations for academic professionals.
- Adequate library facilities and information technologies.
- Information about copyright and patent laws, technology transfer, and intellectual property rights.
- A safe working environment and promotion of a health- and safety-conscious atmosphere. Formal instruction on safe practices must be provided.
- Contemporary educational technologies and modern laboratory instrumentation.
- Opportunities that encourage professional development.

Responsibilities to Graduate Students and Postdoctoral Associates

Upon admission to the graduate program or acceptance of a postdoctoral position, each student or postdoctoral associate should be informed in writing of the financial support and benefits that normally may be expected during the appointment period as well as the terms and conditions of the appointment.

The institution or department should provide formally established procedures to resolve disputes equitably. Graduate students and postdoctoral associates should be informed in writing of these procedures, which should be structured to provide prompt due process.

Postdoctoral associates should receive fringe benefits comparable to permanent employees.

Full-time graduate students should have access to institutional health benefit plans commensurate with full-time university staff.

Career and placement services should be provided for graduate students and postdoctoral associates.

Responsibilities to the Faculty Member

The AAUP “Statement of Principles on Academic Freedom and Tenure” (1940), “Statement on Procedural Standards in Faculty Dismissal Proceedings” (1958), “Statement on Procedural Standards in the Renewal or Nonrenewal of Faculty Appointments” (1971), and “Statement on Professional Ethics” (1987) provide a framework for the institution in its relationship with faculty members.

A broad definition of scholarly work should be used by administrators to recognize and reward faculty members. Chemical education research and/or innovations should be part of such a definition.

The administration should provide regular teaching and learning workshops for full- and part-time faculty members and teaching assistants in order to ensure high quality instruction.

The administration should provide both full- and part-time faculty members with fair compensation and fringe benefits, teaching responsibilities consistent with professional expectations and the mission of the school, and a governance framework providing for input and participation of the faculty.

Adequate financial support for scholarship should be made available to incoming faculty members so that they can begin to establish careers as productive teacher-scholars.

The administration should foster a climate of faculty mentoring throughout their careers. Each institution has a unique “culture”, the understanding of which is very important early in a career.

The administration should encourage and support collaborative scholarship and interdisciplinary programs so that the important role of chemistry in many other disciplines can be effectively exploited.

The administration should recognize that the evaluation of a faculty member's performance is best done by invoking a variety of techniques and approaches. In the case of collaborative work, the administration should develop means to assess and reward individual contributions appropriately.

Institutions, recognizing the value and role of full-time faculty members, should avoid excessive reliance on part-time teaching faculty members. Moreover, consistent with good pedagogy, all teaching assignments, including those for temporary and part-time

faculty, should be consistent with sound educational standards as established by the ACS Committee on Professional Training.

Institutions should ensure that part-time faculty members have adequate access to facilities, resources, and office space as well as professional development opportunities.

Departments should provide part-time faculty members with opportunities to be engaged with educational issues and to provide input into curricular matters.

The institution should establish and make known to candidates in writing the criteria and process for reappointment, promotion, and tenure. An expeditious grievance procedure should be in place which, if invoked, will guarantee due process and be completed before any final action concerning the faculty member is taken.