

## APPENDIX A

### Departmental Criteria for Tenure and Promotion

Department of Chemistry  
University of Colorado at Denver

Adopted November 1999, amended May 2010

#### I. General Considerations

Tenure and promotion decisions are among the most important ways that a faculty identifies, encourages and sustains excellence in its members. Excellence is demonstrated by meeting standards based on identified and measurable criteria that are relevant, equitable and consistent with the goals of the academy and with academic freedom, and must be achieved in accordance with the highest ethical and professional standards.

The criteria of excellence for promotion and tenure are listed below according to the traditional categories of teaching, scholarship and leadership/service. These follow the categories and criteria that are used for Annual Faculty Merit Evaluation, but, as discussed previously, superior Faculty Merit Reviews do not necessarily lead to positive recommendations for tenure and/or promotion. Faculty Merit Evaluation and Promotion and/or Tenure are decoupled processes, differentiated by several factors. During Promotion and/or Tenure review, external reviewers are consulted in the evaluation of a candidate's record. This does not occur during Faculty Merit Evaluation. During Promotion and/or Tenure review, extensive evaluation of a candidate's record occurs at levels beyond the department. This includes the Dean's Advisory Committee, the Dean, the Vice Chancellor for Academic Affairs' Advisory Committee, the Vice Chancellor for Academic Affairs (Provost), and the Chancellor. This does not occur during Faculty Merit Evaluation. Thus, because its purpose and consequences are quite different, Promotion and/or Tenure review is a more complicated process than Faculty Merit Evaluation, not to mention a more important one for the University. A candidate's overall record must also demonstrate accountability, responsibility and continuing commitment consistent with an ability to maintain the quality of that record.

A departmental review committee whose voting members will consist of all resident tenured faculty at or above the rank to which the candidate aspires shall evaluate the faculty member's record of achievement by applying the standards required for tenure and /or promotion. In cases where it is deemed important, equally qualified members of other departments within the university may be invited to serve as voting members of the review committee. Reviews will be conducted with the aid of external as well as internal expert referees, based on the dossier of achievements assembled by the candidate. All tenure-track members of the department's faculty will be invited to participate in the fact finding and deliberative portions of the review in accordance with the policies of the Regents given in the University of Colorado Faculty Handbook laws, policies, and administrative policy statement of the Regents.

## II. Areas of Evaluation

The parameters used to evaluate candidates for tenure/promotion have a parallel in the annual faculty merit evaluation process, but are gauged differently as alluded to earlier. The tenure/promotion evaluation aims not to quantify a candidate's performance, but to evaluate its quality, thus determining the impact of the candidate on students, the department, the external world, where the candidate practices, and the university. The evaluation asks what impact the candidate is making in these areas and whether that impact, assuming it is positive, will be sustained.

The impact/responsibility of outstanding, documented evaluation of candidate's record falls on the department particularly in the absence of any numerical rating system. In every area of evaluation, the carefully crafted letters of support must document the quality of the efforts each candidate has presented. What is the quality of the journals where articles are published? What is their acceptance rate? Questions like this in all areas of evaluation need to be addressed, some with the input of the candidate.

### A. *Teaching*

The evaluation of teaching requires that multiple measures be used and considered. The complexity of the teaching enterprise basically demands such an evaluative approach. Teaching is comprised of many activities that involve faculty interacting with students or working on behalf of their students' education. For example, in addition to traditional classroom instruction, chemistry faculty participate in teaching by (1) supervising organized laboratory classes, (2) pursuing research projects with individual students or groups of students, (3) holding on-line tutorials or answering student email, (4) holding regular office hours or help sessions, (5) assisting students to prepare seminars and presentations for various activities and audiences, and (6) participating in formal and informal academic and career advising. Beyond these, faculty are deeply involved in teaching when they develop curricular or novel teaching materials, assess student performances for the purpose of class improvements, interact with other faculty in discussing and developing improved teaching practice, critique their peers classroom practices, and communicate their findings to scholarly teaching journals or at national meetings. Activities corresponding to this latter set are often referred to as the "scholarship of teaching" and are required for those aspiring to excellence in teaching. All of these, with the exception of publishing and reporting on the theoretical aspects of teaching, which more appropriately qualify as research scholarship, will be considered in evaluating teaching.

Teachers demonstrate excellence by participating widely in both types of teaching identified above. They also display a superior command of their subject, teach the most important, up-to-date and accurate information available, and promote a high level of understanding in their students.

A wide variety of indicators must be employed in the evaluation of teaching. Student course questionnaires and faculty classroom observations are only a part of the process. Analysis of course materials, syllabi and examinations, evidence of classroom innovations, letters from former students or faculty with whom they have co-taught courses, performances of research students, evidence of effective advising and publications or presentations on teaching, for example, are all components of the total picture. An overriding consideration in evaluating each criterion is evidence of a high level of quality.

### *B. Research and Scholarship*

Every member of the tenure-track faculty is expected to be engaged in a continuing, productive research program. Research not only enhances a faculty member's understanding of his or her discipline, it also contributes to the knowledge each of us is expected to impart, and provides opportunities for directly teaching both about the discovery and applications of that knowledge. It is thus an essential part of a university professor's professional duties. A high quality research program must show significant intellectual contributions by the faculty member as well as clear evidence of direction, continuity and sustainability.

Excellence in research is judged according to the many ways in which high quality research contributes to our mission. Among the indicators of quality research are:

- publications in refereed scholarly journals (including science education journals), books, research reviews, chapters or book editorships;
- presentations, especially invited or refereed presentations, at local, national or international meetings;
- activities as a conference organizer or journal editor;
- invitations to participate on public or government expert panels;
- research funding arising from peer-reviewed proposals.

Productivity, as measured by numbers of papers, magnitude of external funding, numbers of students graduated, etc. is also an important aspect of a vigorous research program. In evaluating all such activities the department recognizes that the standards for productivity and the measures of originality and quality vary across the various sub-disciplines of chemistry. There is, therefore, no specific standard of sufficient productivity, such as a required number of publications or grants. In evaluating faculty scholarship the department will use external referees who are experts in the relevant field and will rely heavily upon them for judgments both of quality and of productivity. The effect of potential differences in overall workload on productivity will also be taken into account. The candidate's record must be judged in terms of the total picture.

Ultimately, it is the quality of a faculty member's research that is its most important hallmark. Productivity must be appropriate, but quantity can never be a substitute for quality.

### *C. Leadership/Service*

Faculty members support the institution through their participation in university governance. Each member of the faculty must contribute to those structures and activities that support the essential functions of the university, and without which teaching and research would be impossible. Leadership/service contributions can occur at many levels, department, college, university, profession and community. Each faculty member seeking promotion or tenure must demonstrate a record of vigorous engagement in support of the institution and the community that underlies it.

## **III. Standards for Successful Reviews**

### *A. Reappointment Following a Comprehensive Review*

The purpose of the comprehensive review is to assess whether a faculty member is on track for eventual promotion and tenure and to develop and provide specific feedback that can help to the candidate reach the required levels of performance (for which, see below). To be recommended for reappointment a candidate must present sufficient evidence of progress towards meritorious performance in both teaching and research. Furthermore, the candidate must present promise of reaching the standard of excellence in either teaching or research by the time of the tenure review. There must also be a record of active participation in leadership/service that supports the goals of the department, college and/or university. The department will carefully evaluate expert external evaluations in determining the sufficiency of the presented record. Recognize again that there are higher levels of review that will consider the record after the department makes its recommendation.

### *B. Tenure and Promotion to Associate Professor*

Tenure and promotion to associate professor is awarded only to faculty members who have demonstrated (1) meritorious performance in teaching, research and leadership/service, and (2) excellence in either teaching or research. Research achievements will be reviewed by internal and external experts as described in the section on research. The quality, productivity and sustainability of the research program must not only be fully evident, but carefully documented.

Candidates for excellence in teaching will be reviewed by internal and external referees who possess expertise both in teaching and in the candidate's sub-discipline (where possible internally). The indicators of teaching excellence are described in the section on teaching.

Meritorious leadership/service is demonstrated by a strong record of involvement in significant activities that support the institution's academic goals. Leadership/service on key academic and administrative committees at more than one level within the University and contributions to departmental programmatic activities will be given

the greatest weight in such decisions. Leadership/service in the community or the profession will also be considered provided they support institutional and academic goals.

*C. Promotion to Full Professor*

Promotion to the rank of full professor requires a demonstrated record of overall excellence as a faculty member, and is judged on the body of work since promotion to associate professor. Workloads of senior faculty members are more varied than for pre-tenure faculty, therefore the decision on promotion will be based more on the candidate's record as a whole, than on specified levels of achievement in particular categories. Nevertheless, promotion to full professor depends upon demonstrated significant achievements in all three areas, teaching, scholarship and leadership/service, that go beyond the levels achieved at the time of promotion to associate professor. Outstanding performance in teaching, scholarship, or leadership/service, may be given additional weight in determining whether the candidate has achieved a record of excellence, taken as a whole.

## APPENDIX C

### Departmental Criteria and Procedural Details for Post Tenure Review

Department of Chemistry  
University of Colorado at Denver

April 2010

#### I. General Considerations

Tenure is granted with the expectation of continued professional growth and ongoing productivity in teaching, research/scholarship, and leadership/service. Thus, every tenured faculty member has a duty to maintain professional competence; and, to insure this, faculty in the department of chemistry will undergo an evaluation of their professional activities every 5-years following the year the faculty member is awarded tenure by the University. The purposes of Post-Tenure Review (PTR) are:

- (1) to facilitate continued faculty development, consistent with the academic needs and goals of the University, and the most effective use of institutional resources; and
- (2) to ensure the professional accountability of each faculty member.

Post-tenure Review (PTR) is a regular, comprehensive evaluation of every tenured faculty member's professional performance, and is undertaken every five years following promotion with tenure. This regular review is undertaken by the department and it determines whether the faculty member is maintaining the standards expected of a tenured member of the chemistry department faculty, as outlined in the following policy on professional standards.

Evaluation of a faculty member's achievement during the preceding 5-year period shall be made by the departmental Personnel Committee whose membership is elected from the tenured faculty. In cases where it is deemed necessary, equally qualified members of other departments within the university may be invited to serve as voting members of the post-tenure review committee.

#### II. Areas of Evaluation

##### *A. Teaching*

Teaching is comprised of a large number of activities that involve faculty interacting with students or working on behalf of their students' education. For example, in addition to traditional classroom instruction, chemistry faculty teach (1) in supervising organized laboratory classes, (2) through pursuing research projects with individual students or groups of students, (3) when they hold on-line tutorials or answer student email, (4) during office hours or help sessions, (5)

in assisting students to prepare seminars and presentations for broader audiences, and (6) by participating in formal and informal academic and career advising.

Beyond these, faculty are also involved in teaching when they develop curricular or novel teaching materials, assess student performances for the purpose of class improvements, interact with other faculty in discussing and developing improved teaching practice, critique their peers classroom practices, and communicate their findings to scholarly teaching journals or at national meetings. Activities corresponding to this latter set are often referred to as the "scholarship of teaching". All of these, with the exception of publishing and reporting on the theoretical aspects of teaching, which more appropriately qualify as research scholarship, will be considered in evaluating teaching.

Teachers demonstrate excellence by participating widely in the various types of teaching identified above. They also display a superior command of their subject, teach the most important, up-to-date and accurate knowledge available, and promote a high level of understanding in their students.

A wide variety of indicators must be employed in the evaluation of teaching. Student course questionnaires and faculty classroom observations are only a part of the process. Analysis of course materials, syllabi and examinations, evidence of classroom innovations, letters from former students or faculty with whom they have co-taught courses, performances of research students, evidence of effective advising and publications or presentations on teaching, for example, are all components of the total picture. An overriding consideration in evaluating each criterion is evidence of a high level of quality.

### *B. Research and Scholarship*

Every member of the tenure-track faculty is expected to engage in a continuing, productive research program. Research not only enhances a faculty member's understanding of his or her discipline, it also contributes to the knowledge each of us is expected to impart, and provides opportunities for directly teaching both about the discovery and applications of that knowledge. It is thus an essential part of a university professor's professional duties. A high quality research program will show indications of significant intellectual contributions by the faculty member as well as clear evidence of direction, continuity and sustainability.

Excellence in research is judged according to the many ways in which high quality research contributes to our mission. Among the indicators of quality research are:

- publications in refereed scholarly journals (including science education journals), books, research reviews, chapters or book editorships;
- presentations, especially invited or refereed presentations, at local, national or international meetings;
- activities as a conference organizer or journal editor;

- invitations to participate on public or government expert panels;
- research funding arising from peer-reviewed proposals.

Productivity, as measured by numbers of papers, magnitude of external funding, numbers of students graduated, etc. is also an important aspect of a vigorous research program. In evaluating all such activities the department recognizes that the standards for productivity and the measures of originality and quality vary across the various sub-disciplines of chemistry. There is, therefore, no specific standard of sufficient productivity, such as a required number of publications or grants. The effect of potential differences in overall workload on productivity will also be taken into account. The candidate's record must be judged in terms of the total picture.

Ultimately, it is the quality of a faculty member's research that is its most important hallmark. Productivity must be appropriate, but quantity can never be a substitute for quality.

### *C. Leadership/Service*

Faculty members support the institution through their participation in university governance. Each member of the faculty must contribute to those structures and activities that support the essential functions of the university, and without which teaching and research would be impossible. Participation can occur at many levels, department, college, university, profession and community. Preferably, it occurs at all levels. Each faculty member must demonstrate a record of vigorous engagement in support of the institution and the community that underlies it.

## **III. Standards for Successful Reviews**

### *A. Teaching Expected Standards:*

1. An annual merit evaluation score of 2.3 or higher in the teaching component of the evaluation.
2. Participation in all areas of the department's teaching mission. Evidence in the form of student evaluations, peer evaluations, student research reports, course curriculum proposals, etc. should be included with the dossier.
3. Evidence of teaching effectiveness. This should come in multiple forms including student course questionnaires; faculty classroom observations; analysis of course materials (e.g. syllabi, examinations, and assignments); examples of classroom innovations; letters from former students or faculty with whom they have co-taught courses; performance of research students.
4. Evidence of student research involvement. This may include student generated reports, and /or published manuscript or abstracts with student coauthors.



*B. Research Scholarship Expected Standards:*

1. An average annual merit evaluation score of 2.3 or higher in the research/scholarship component of the evaluation.
2. A record of consistent and continuous scholarly productivity. This can be demonstrated in a number of ways, including:
  - a. Publication in peer reviewed journals
  - b. Publication of books, monographs, or reviews
  - c. Participation in professional meetings
  - d. Grant activities
3. During a 5-year period, a faculty member must have some professional publications, published meeting abstracts, and/or evidence of grant activity to receive a rating of “meeting expectations”

*C. Leadership/Service Expected Standards:*

1. An average annual merit evaluation score of 2.3 or higher in the leadership/service component of the evaluation
2. Membership on committees in the department, college, or University.
3. Involvement in the community of professional peers as evidenced by:
  - a. Refereeing activities
  - b. Participation as organizer, session chair, etc.in professional meeting

**IV. Post-tenure Review Procedures**

*A. Regular Five-Year Review*

1. The Chemistry department will constitute a Post-tenure Review committee by faculty election from the tenured faculty, as described in the department by-laws section on the Personnel Committee.
2. Faculty who have achieved summary evaluations of "meeting expectations" or better since the last PTR (or since receiving tenure if this is their first PTR) will undergo Regular Review at five year intervals. When one or more years of "below expectation" in a single area is obtained in the annual merit evaluation, the faculty member is urged to participate in a coaching program with the Department Chair and/or the departmental Personnel Committee. As part of this coaching session a differentiated workload might be considered. *Receiving a rating of “below expectations” in a single area does not initiate a triggered post-tenure review.*
3. In a Regular Five-Year Review, the faculty member prepares a post-tenure review dossier that includes:
  - a. The 5 previous year’s performance evaluations,
  - b. A personal statement,
  - c. A current curriculum vita, and

- d. Documentation of the teaching, research/scholarship and leadership/service activities for the preceding 5 years.
4. As part of the dossier, the faculty member prepares a personal statement that serves as a self-evaluation of their contributions in teaching, research/scholarship, and leadership/service. In addition, the faculty member will provide the PTR committee with an updated Professional Plan for the next five years.
  5. The Post-Tenure Review committee examines the dossier and the faculty member's Professional Plan(s) from that PTR cycle. (See the administrative policy statement on "The Professional Plan for Faculty.")
  6. The PTR committee will write a brief report stating whether the candidate is meeting expectations or not. The report will summarize the department's findings regarding the faculty member's adherence to the previous Professional Plan(s) (taking into account the differentiated workload, where present), meeting the Chemistry department's standards, and conclusions about his/her productivity and contributions to the University in teaching, research/creative work, and leadership/service. A copy of this report will be given to the faculty member. The report is an opportunity to evaluate the faculty member's contributions over the past 5 years to the unit, the university, the community (where relevant) and the profession. The reports will be forwarded to the dean, who will provide a summary report and copies of the individual reports to the academic vice chancellor on the results of all the post-tenure reviews in the college/school. A copy of the PTR report will be placed in the faculty member's personnel file. In the case that the PTR committee determines that the faculty member is not "meeting expectations," the faculty member must undertake a Performance Improvement Agreement. (See Section C.)

***B. Triggered Review***

Faculty who receive a summary evaluation of "below expectations" at any time during the five year PTR cycle are required to meet with the Department Chair to identify the causes of the unsatisfactory evaluation and to plan and implement a written Performance Improvement Agreement (PIA) to remedy their problems. (See Section X Appendix D, below)