

ACADEMIC PROGRAM REVIEW
DEPARTMENT OF CHEMISTRY
ISSUES LIST
MAY 2000

- I. The Department's programs are organized into the traditional areas of organic chemistry, inorganic chemistry, physical chemistry, and analytical chemistry. Should a revision of the structure be considered? Should areas like materials chemistry and structural biology be given more visibility? Given recent hiring successes and the retirements of prominent faculty, what is the Department's hiring plan for the next 6 years?
- II. The Department has had, and is likely to continue to have, serious faculty retention problems. What is the plan for retention/equity salary adjustments over the next few years?
- III. There has been some decline in the overall volume of external research dollars. What are the projections for the future?
- IV. The Department of Chemistry is very interested in the rebuilding of the Library collection. What is the Department's view of the manner in which the collection should be developed?
- V. The number of B.S. graduates is relatively low. The retention rate appears to be low. Are students leaving the major for appropriate reasons?
- VI. Students and faculty in other departments often complain about the quality of instruction in chemistry courses. At least some of this criticism can be discounted because chemistry is a formidable intellectual challenge for some of the students who are required to take it. Also, there are chemistry faculty members who are praised for the quality of their teaching. Given that chemistry, particularly organic chemistry, is a major gate-keeper for many majors, are there steps the Department could take to insure student friendly, high quality instruction in the gate-keeper courses? Would the addition of recitations be helpful?
- VII. The data indicate that chemistry faculty teach a large number of student credit hours per faculty member and a relatively low number of Type A credit hours. What are the national norms in the discipline? What teaching loads must be offered to new hires to remain competitive? What are typical teaching loads at peer institutions for faculty members who maintain successful laboratories which support the research of other scientists and students? Are faculty members with smaller research programs given increased teaching loads.
- VIII. Research experiences for undergraduate students clearly distinguish the comprehensive research university experience from study at other kinds of institutions. Such experiences also prepare students for employment and for graduate school. What percentage of

chemistry majors have an undergraduate research experience? Could undergraduate research experiences be repackaged in such a way as to make them a more visible part of faculty teaching loads?

IX. What are the Department's projected space needs?