EXECUTIVE SUMMARY - ACADEMIC PROGRAM REVIEW, Department of Chemistry, University of Victoria

Date of scheduled review: January 23–24, 2020

Reviewers:

- Professor Deborah Begoray, Department of Curriculum and Instruction, University of Victoria
- Professor Jeffrey Keillor, Department of Chemistry, University of Ottawa
- Professor Rik Tykwinski, Department of Chemistry, University of Alberta

Review Process

The review panel was provided with extensive, useful resources in advance of the on-site visit to the Department on January 23 and 24. The initial meeting with the Associate Vice-President – Academic Planning was helpful in setting the stage for the review within the context of the University of Victoria Academic Program Review. The two days of meetings were well organized, and we felt that it provided a good opportunity to evaluate the personnel, overall goals, operation, and quality of the Department. The Department was very engaged in the review process, and our meetings and the reading material provided gave us a very positive impression of the Department.

Overall Assessment

There is little question that the Chemistry Department is respected at all levels within the University. Meetings with administrative representatives of the University and Faculty of Science highlight that Chemistry's research record is one of the best at UVic, and the Department is respected for its innovation and strong leadership: "One of the jewels" was one comment. Chemistry Faculty are known to "step up" when asked, and the Department has a reputation of boldness: they are always eager to try new things.

The review panel unanimously agree that the Chemistry Department has a strong upward trajectory with respect to research and reputation within Canada. While it is difficult to evaluate international standing, there are clearly research programs within the Department that are recognized and respected internationally. The success of the Chemistry Department is a consequence of the dedication of the Department's students, faculty, and staff, complemented by leadership from the Faculty and the Department. The most obvious characteristic noted in nearly all the meetings was a pleasant, collegial, and respectful rapport amongst all Department members. Finally, the Department has recently (ca. three years) invested strongly in new faculty, and the vast majority (three) have been hired at the junior level. The new junior faculty hires are balanced against two recent, high profile senior hires. As discussed later in this report, however, additional resources are necessary for the Department to maintain this positive trajectory.

The on-site review covered the graduate and undergraduate academic programs, as well as the associated academic unit (the Department). While the committee makes a number of specific recommendations, the review identified very few serious issues attributable to the Department itself. We do note, however, that the support the Department receives from the Faculty, University administration, and provincial government is inadequate to maintain the upward trajectory that has been established over the past several years; continued performance and improvement in quality will require additional resources.

The committee views the Department's educational programs to be in good shape. The Department leadership is exceedingly strong, and morale at all levels is amazing; the positive rapport amongst

faculty, staff, and students is probably our most striking observation during the onsite visit. Relationships between the Department and the rest of the University are also healthy and strong. The main items of concern, which are discussed in more detail later in the report, are listed below.

Space. There have been admirable recent efforts to renovate chemistry space for research and teaching, but the Department has little or no additional research and office space available for expansion as new research groups grow and additional, planned, hires' work comes to fruition.

Infrastructure. There is an immediate need of several pieces of instrumentation, in particular NMR spectrometers. There is also an urgent need for upgrades to the mass spectrometry facility in both terms of space and climate control, to house and protect the significant investments that have been made in instrumentation. Finally, we were surprised that there was not a departmental X-ray diffractometer, as most chemistry departments of even medium size feature such instruments.

Support staff. There are several "hot spots" where mediation and optimization of personnel resources is required to support current and future research faculty and their efforts. These are further discussed below.

Support of junior faculty. In view of the large number of current and planned new hires, a structured Departmental mentoring policy would be useful for junior faculty.