UNIVERSITY OF ABERDEEN
SCHOOL OF NATURAL AND COMPUTING SCIENCES:
DEPARTMENT OF CHEMISTRY

INTERNAL TEACHING REVIEW
SUMMARY REPORT

Panel Visit: Tuesday 17 and Wednesday 18 November 2015

Overall Impressions

The department of Chemistry is one of four departments which comprise the School of Natural and Computing Sciences, based within the College of Physical Sciences (CoPS) and located within the Meston Building, King's College.

The Panel wished to thank all members of staff within the department for the work that had gone into producing the Internal Teaching Review documentation, and for their commitment to the review process. The Panel also wished to thank all students and staff who participated in the visit, providing open, honest and helpful feedback.

Overall, the Panel **commended** the quality of teaching and learning in the department. The Panel was heartened by the positive response from students toward the department and **commended** the existence of a keen sense of collegiality and a common goal amongst all staff in respect of the pursuit of a high standard of student experience.

The Panel **commended** the willingness and commitment of staff and were encouraged to note this commitment recognised by the undergraduate, postgraduate taught and postgraduate research students interviewed. The Panel noted a number of instances of good practice, recognition of which is implicit below.

The Panel did note a degree of isolation within the department from both the School of Natural and Computing Sciences, of which they are a part, and the University as a whole. The Panel **recommended** that work to improve these relationships be undertaken.

Notes: The numbering of sections below reflects the numbering of the self-evaluation document (SED). Some sections of the SED attracted no commendations or recommendations.

COMMENDATIONS

Section 3: Staffing

3.2   The Panel noted the relatively small (and research led) department and **commended** the commitment of the academic staff within it in supporting teaching and research. The Panel **commended** the approach of staff to teaching, acknowledging teaching responsibilities to be widely shared amongst all staff.

3.4   The Panel **commended** the department workload allocation model and the balance of the three principal responsibilities of teaching, administration and research.

3.5   The Panel **commended** the use of Postgraduate students in demonstrating in labs for Undergraduate students.

3.6   The Panel **commended** the efficiency and dedication of the department (and wider School of Natural and Computing Sciences) administrative staff. Specifically, the Panel **commended** the large role administrative staff play given they are a small team.

3.7   The Panel **commended** the exceptional work undertaken by the department Technicians, who can often be conflicted by roles across the School of Natural and Computing Sciences as a whole. The Panel **commended** the commitment of the Technicians to their roles but noted concern over the lack of backup for these roles.

Section 4: School Organisation

4.1   The Panel **commended** the organisational structure of the department, however, noted that the department operates almost entirely independently from the School as whole.

4.2   The Panel **commended** the strong sense of cohesion and community across the department.

Section 5: Course and Programme Design, Accessibility and Approval

5.1   The Panel **commended** the breadth of teaching methods and flexible approach to learning evident within the department. The Panel specifically **commended** the introduction of two level 1 courses, *CM1022* and *CM1522*: *Elements of Chemistry 1 and Elements of Chemistry 2* respectively.

5.2   The Panel **commended** the work of the department in supporting students undertaking programmes outwith Chemistry.

5.3   The Panel **commended** the department for this course of action, taken as a direct result of External Examiner feedback.

5.4   The Panel **commended** the School for its approach to the introduction and development of its Postgraduate Taught programmes, specifically noting the work of the Programme Advisory Board (PAB) through which the Panel observed the close engagement with Industry.

5.6   The Panel **commended** the measures and philosophy the school has in place to fulfil the requirements of the Equality Act (2010). The Panel **commended** the work done by the School in supporting students with disabilities.

Section 6: Teaching, Learning and Assessment

6.1   The Panel **commended** the quality of teaching and learning in the department.

6.2   As is noted throughout this report, the Panel **commended** the 'feeling of belonging' evident amongst staff and students within the department as contributing to the teaching and learning environment within the department.

6.3   The Panel **commended** the department's use of small group tutorials at level 1, however, noted that the small group environment may not be being used to its full potential. The Panel further noted other variable means of assessment and specifically **commended** the integration of a student research project as part of *CM4036: MChem Group Practical.*

6.4   The Panel **commended** the School's use of the University's Virtual Learning Environment, MyAberdeen, which all the courses use to support teaching, although to varying degrees.

Section 7: Course and Programme Monitoring and Review

7.1   The Panel **commended** the School on the positive comments and endorsements from External Examiners for all taught programmes offered.

7.3   The Panel **commended** the department for their "open door" policy as a means of continuous feedback between students and staff.

Section 9: Training and Supervision of Research Students

9.1   The Panel **commended** the School for the general satisfaction with supervision as expressed by the PhD student representatives.

Section 10: Personal Development and Employability

10.2   The Panel **commended** the department for its approach to employability and the strong links forged with employers by way of the Professional Advisory Board (PAB).

Section 11: Professional Units/Bodies

11.1   The Panel **commended** the School on its involvement with the Centre for Academic Development (CAD) and was pleased to note the existence of drop-in sessions for level 1 Chemistry students who need support with calculations/applied mathematics.

Section 12: Staff Training and Educational Development

12.1   The Panel **commended** the School's supportive approach to the induction of new staff, as evidenced by team-teaching with more experienced staff as well as in the collegial and supportive atmosphere in general.

Section 13: Student Involvement in Quality Processes

13.1   The Panel **commended** the department for student feedback that suggested their feedback was always welcomed and not limited to SSLC Committee meetings or other feedback mechanisms.

Section 15a: Student Support, Retention and Progression (part 1)

15.1   The Panel **commended** the department's overall commitment to student support, as demonstrated by the "open door" policy exercised by all staff.

Section 15b: Student Support, Retention and Progression (part 2)

15.3   The Panel noted the design of courses such as CM3032: General Chemistry to develop the skills of students in approaching General Papers. The Panel **commended** the existence of positive relationships between the department and central bodies including the Careers Service, Library, IT Services, Registry and Student Recruitment and Admissions.

Section 16: Recruitment, Access and Widening Participation

16.2   The Panel **commended** the School's involvement in the RSC sponsored 'Spectroscopy in a Suitcase' outreach programme, which allows the department to visit schools in the North of Scotland to raise awareness about this specific aspect of Chemistry.

Section 17: QAA Quality Enhancement Engagements

17.2   The Panel **commended** the proactive nature of the department in course development to include significant elements of skills and team building.

Section 18: Recent Developments

18.1   The Panel **commended** the department on the steps they had taken to act upon the majority of points raised by the previous Panel.

Section 23: Production and Approval of Self-Evaluation Document

23.1   The Panel thanked the School for well-presented documentation prepared for the ITR which provided the Panel with a clear perspective of the school's strategy and vision.

RECOMMENDATIONS

Section 3: Staffing

3.3   The Panel noted the recent introduction of the Master of Science in Oil and Gas Chemistry programme, coordinated by a non-permanent Teaching Fellow. The Panel echoed the concerns of the department that this member of staff is not permanent and **recommended** that this position and its permanent/non-permanent status be considered at School level.

3.5   The Panel **recommended** that this be investigated further at School and Institutional level for the benefit of all parties.

3.7   The Panel **recommended** that thought be given to the consequences of the absence of any one Technician and recommended that provisions be put in place to address this issue, particularly in recognition of the fact that Technicians within the small team are approaching retirement.

Section 4: School Organisation

4.1   The Panel **recommended** that the department and School both give consideration to more cooperative working practice and better integration of and alignment of Chemistry administration practices with those of the School, for the benefit of department, School and student population.

4.3   The Panel noted the absence of student representation on the majority of the department Committees (the department Safety Committee is noted as an exception to this). The Panel **recommended** that this be reviewed. The Panel **recommended** that the department make available a permanent position for student representation on all appropriate committees.

Section 5: Course and Programme Design, Accessibility and Approval

5.4   The Panel commended the School for its approach to the introduction and development of its Postgraduate Taught programmes, specifically noting the work of the Programme Advisory Board (PAB) through which the Panel observed the close engagement with Industry. The Panel **recommended** the extension of this interaction with the PAB for Undergraduate programmes.

5.5   The Panel **recommended** that, as students can and do take both, the content of these programmes should be reviewed for consistency.

Section 6: Teaching, Learning and Assessment

6.3   The Panel **recommended** that the department consider these tutorials as an opportunity for communication and feedback to students.

6.4   The Panel commended the School's use of the University's Virtual Learning Environment, MyAberdeen, which all the courses use to support teaching, although to varying degrees. The Panel **recommended** that all course coordinators are encouraged to use the system to its full potential.

6.5   The Panel noted the department's sporadic use of software for the recording of lectures. The Panel **recommended** that this software be utilised, particularly at levels 1 and 2 where the numbers of students attending lectures are so high.

6.6   The Panel sympathised with the department that proposals for a new science building had been placed on hold meantime and **recommended** that the possibility of improvements at this time be discussed at School level.

Section 7: Course and Programme Monitoring and Review

7.1   The Panel commended the School on the positive comments and endorsements from External Examiners for all taught programmes offered. The Panel noted the reflective approach of the department to this issue and **recommended** that where issues continue, or arise in the future, they should work closely with the appropriate External Examiner(s) to ensure they are resolved.

7.3   The Panel **recommended** that the department give consideration to other anonymous methods by which feedback may be gathered.

Section 8: Academic Standards and the Academic Infrastructure

8.2   The Panel **recommended** that steps be to taken to ensure the department is working closely with both School and central policies.

Section 9: Training and Supervision of Research Students

9.1   The Panel commended the School for the general satisfaction with supervision as expressed by the PhD student representatives. The Panel did, however, note one clear instance of this not being the case and **recommended** that this particular issue (known to the department) be resolved as soon as possible.

Section 10: Personal Development and Employability

10.1   While it was clear to the Panel that the AGAs were embedded in the curriculum, the Panel **recommended** that the department highlight AGAs to students.

10.2   The Panel commended the department for its approach to employability and the strong links forged with employers by way of the Professional Advisory Board (PAB). The Panel acknowledged this interaction as being largely at Postgraduate level and **recommended** that the PAB consider Undergraduate provision and potential prospects too.

Section 12: Staff Training and Educational Development

12.2   The Panel **recommended** that attendance on internal training courses be encouraged and that the department communicate with the Centre for Academic Development (CAD) regarding the type of courses that would be beneficial.

Section 13: Student Involvement in Quality Processes

13.2   The Panel **recommended** that students be incorporated into the department Committee structure, to further enhance Student involvement in Quality Processes, as referred to in section 4.3 above.

Section 15a: Student Support, Retention and Progression (part 1)

15.2   The Panel noted concerns regarding student attendance at Personal Tutor meetings. The Panel recognised this as being an institutional-wide issue currently but **recommended** that the department look into the extent of the problem to try and address it as necessary.

Section 17: QAA Quality Enhancement Engagements

17.3   The Panel noted the commitment demonstrated by several members of the department to the Enhancement Themes and **recommended** that the School suggest to staff that it may be useful for them to attend the Quality Enhancement Themes Annual Conference as it may prove valuable.

Section 18: Recent Developments

18.1   The Panel commended the department on the steps they had taken to act upon the majority of points raised by the previous Panel. The Panel appreciated the explanations provided for points which had not yet been addressed, however, as is noted above, there was concern that the department had not yet permitted the inclusion of representatives of the student body on their teaching committees. The Panel **recommended** that this issue be revisited.

Section 20: Impediments to Quality Enhancement

20.1   The Panel specifically noted in particular the problems relating to teaching facilities and provision, and **recommended** that these be discussed with the Head of the School of Natural and Computing Sciences.

Conclusions

The Panel **recommended** unconditional revalidation of all Undergraduate and Postgraduate programmes delivered.

The Panel wished to thank all members of staff within the department for the work that had gone into producing the ITR documentation and for their commitment to the review process. The Panel also wished to thank all students and staff who participated in the visit; the visit itself went very smoothly and the Panel was made to feel very welcome.