# Athena SWAN Silver Department award renewal application


**Name of institution:** Queen's University Belfast (QUB)
**Date of application:** Nov 2013

**Department:** School of Chemistry and Chemical Engineering

**Contact for application:** Dr C. Lagunas / Prof. Hardacre

**Email:** c.lagunas@qub.ac.uk **Telephone:** 02890974436
c.hardacre@qub.ac.uk **Telephone:** 02890974592

**Departmental website address:** http://www.ch.qub.ac.uk/

**Date of previous award:** May 2010 (Silver)

**Date of university Bronze and/or Silver SWAN award:** April 2012 (Silver)

**Level of award applied for:** Silver Renewal

Athena SWAN **Silver Department** award renewals recognise that in addition to university-wide policies the department has made progress in promoting gender equality and addressing challenges particular to the discipline. It is expected that after three years Athena SWAN Bronze Department award holders should be at the stage to make a new application for a Silver Department award. However, in exceptional circumstances a Bronze Department renewal award submission can be made.

Not all institutions use the term 'department' and there are many equivalent academic groupings with different names, sizes and compositions. The definition of a 'department' for SWAN purposes can be found on the Athena SWAN website. Where the department unit that made the original application has changed, it is up to the new unit for submission to decide whether a renewal application is appropriate or whether a new award application should be made. If in doubt, contact the Athena SWAN Charter Coordinator well in advance to check eligibility.

It is essential that the contact person for the application is based in the department.

**At the end of each section state the number of words used.**

Click here for additional guidance on completing this template.

**Abbreviations**: AoS = Advisor of Studies
CL = Cristina Lagunas
EOU = Equal Opportunities Unit
HoS = Head of School
JT = Jillian Thompson
PDRA = Postdoctoral Research Assistant
PG = Postgraduate
RSC = Royal Society of Chemistry
SAT = Self-Assessment Team (SWAN)
SMB = Senior Management Board
SSCC = Staff-Student Consultative Committee
UG = Undergraduate

## 1. Letter of endorsement from the Head of Department – maximum 500 words

An accompanying letter of endorsement from the Head of Department should explain how the SWAN action plan and activities in the department have and will in future contribute to the overall department strategy and academic mission.

The letter is an opportunity for the Head of Department to confirm their support for the renewal application and to endorse and commend any women and SET activities that have made a significant contribution to the achievement of the departmental mission.

[Letter attached]

## 2. The self-assessment process – maximum 1000 words

Describe the Self-Assessment Process. This should include:

a) A description of the self assessment team: members' roles (both within the department and as part of the team) and their experiences of work-life balance, parental leave, flexible working etc;

The self-assessment team (SAT, 70% female) includes seven academics at various levels of seniority, and PG/PDRA/clerical staff representatives. The School has two SWAN Champions since 2011 (CL and JT) to ensure continuity in SWAN activities (e.g., when CL has been on leave), as well as following University recommendations.

**Prof. Chris Hardacre:** Head of School (HoS). Chair of Physical Chemistry, first appointed in 1995. He has chaired the SAT since 2009. His wife works part-time and is currently undertaking a part-time degree. He has two children.

**Dr Cristina Lagunas**: Lecturer; SWAN Champion. [redacted]

[redacted] Cristina has greatly benefited from QUB flexible working policies and, in particular, the School's returner's policy which enabled her to concentrate on research after returning from leave.

**Dr Jillian Thompson**: SWAN Champion. She obtained her first Degree and PhD at QUB. She was awarded a RCUK Fellowship prior to her appointment as a Lecturer in 2007. She has two children and has been working part-time since 2007, following her return after her first maternity leave. This has enabled her to care for her young family whilst furthering her career.

**Prof. A.P. de Silva:** Chair of Organic Chemistry; first appointed in 1986. He has been the School's mentor since 2009. He has 6 years of experience in being a principal carer for older relatives while working in academia.

**Mrs. Angela Doherty:** School Manager. Supports SWAN activities and undertakes administrative duties related to the programme. She has more than 15 years' experience of academic and student support.

**Ms. Karen Moore**: School secretary**.** Member of the SAT since 2012 where she acts as clerical staff representative and provides secretarial and administrative support.

**Prof. David Rooney.** First appointed in 1999, currently Director of Research and Professor in Chemical Engineering. His wife is a lecturer in the School. They have two young children.

**Dr Pamela Walsh:** Lecturer in Chemical Engineering since 2012. Organiser of the PostDoc Forum. She was awarded a Marie Curie International Outgoing Fellowship to conduct research in USA in 2012 and won the June Wilson Memorial Award from the London Materials Society for excellence in her research in 2011, based on work she undertook as a PhD and a PDRA in QUB.

**Dr Helen Daly:** Research Fellow since 2006. She took extended maternity leave following the birth of her son in 2012. On return, she initially worked flexibly before returning full-time. She will take maternity leave again in 2014, and has been granted part-time working on return, which she plans to increase gradually to full-time working.

**Ms. Kimberlee Willis:** Third-year PhD student. As president of the students' Chemical Society in 2010, she initiated various annual School social events that continue to date. She has helped to promote the visibility of women in the School ever since (e.g., organising Career Events, mentoring younger PhD students, departmental guide to potential UG students, Green Impact team leader).

b) an account of the self assessment process, with reference to year-on-year activities since the original Department award application, details of the self assessment team meetings, including any consultation with staff

or individuals inside or outside of the university, and how these have fed into the submission;

SWAN is discussed regularly at Senior Management Board (SMB) meetings, scheduled every 3 weeks, and in which SWAN is a standing item. Three SAT members (CH,AD,DR) also belong to the SMB, and the SWAN Champions are invited when additional SWAN-related input is required. For example, Dr Lagunas has attended three SMB meetings in 2013 to discuss new initiatives and give updates on the renewal application. Formal meetings of the SAT take place up to 3 times a year, with smaller working groups involving the HoS, the SWAN Champions and other interested parties meeting more often (3-4 times a year), e.g., to sketch out the details of events, suggest names for visiting lecturers, or provide a response when requested for institutional SWAN information. The implementation of the Action Plan is monitored at SAT and SMB meetings. As a result of these discussions, some activities have been modified (e.g., the launch of a PostDoc forum instead of a PhD forum). Minutes are uploaded in the School SharePoint which can be accessed by all members of staff.

A discussion group is held every year between the HoS and all female academics, where various issues are discussed in an open manner, including, for example, flexible working, representation on decision making bodies, communication within the School, social activities, and timings of meetings. Since 2012, these meetings have also included PDRA, PG, and support staff representatives. The group provides an additional forum for discussion of gender issues and SWAN activities across the School which is very much valued by the female staff.

CL and JT report to the University SWAN-Champions Working Group every two months. These meetings ensure that there is consistency and dissemination of good practice across the University. The SWAN Champions and HoS report progress on the Action Plan to the University SWAN-Steering Group (once a year). The HoS discusses SWAN activities with the Faculty Dean during appraisals (twice a year) and at 'Dean and Heads of School's' meetings.

A gender-equality survey was circulated among staff and PhDs in 2013. The results instigated a range of SWAN initiatives, and have informed our Action Plan (see Section 8).

c) Plans for the future of the self assessment team, such as how often the team will continue to meet, any reporting mechanisms and in particular how the self assessment team intends to monitor implementation of the action plan.

To enable a closer monitoring of the Action Plan, as well as faster responses to any issues affecting the School's gender balance, the number of SAT and working group meetings will increase [Action 1.1], and there will be annual written reports submitted to the SMB for discussion [Action 1.2]. We will expand the SAT to include technical staff and UG representation [Action 1.3].

A gender-equality survey will be circulated again in 2015. PDRAs and PhDs will be specifically consulted (*e.g.*, *via* online surveys, or the PostDoc Forum) in order to address issues that affect them (e.g., transition to an academic career, in particular for women) [Action 1.4].

*[987 words]*

## 3. A picture of the department – maximum 2000 words

a) Provide a pen-picture of the department to set the context for the application, outlining in particular any significant changes since the original award.

The School of Chemistry and Chemical Engineering is the only combined school in the UK, and has a dynamic balance between scientists and engineers. We currently have 42 academics, including 8 women (compared with 4 women out of 35 academics in 2010).

Importantly, we have appointed three female Lecturers and one female Teaching Fellow (subsequently upgraded to Lecturer (Education)) in the area of Chemical Engineering, where there were no females in 2010. Another female Teaching Fellow (part-time) has also recently been upgraded to Lecturer (Education). A female Reader (Dr Migaud) moved to the School of Pharmacy to a named Readership which provides strong links with the pharmaceutical industry. Strong collaborations still exist between Dr Migaud and our School, including joint PhD students, grants, publications. Therefore, as a role model for students and PDRAs in the School, Dr Migaud still provides a very positive image and is well known within the School.

Our UG cohort (currently 423 students) has more than doubled since 2010 (200 students), particularly in Chemical Engineering. Importantly, there has still been an increase in the proportion of female UGs (from 42% to 44%). This is partly the result of our extensive recruitment programme, which has been further strengthened through the appointment in 2012 of Dr Angela McKeown as RSC Regional Coordinator. This post is funded by the RSC to promote education activities across Ireland, as well as to undertake outreach/recruitment activities on behalf of the School. In addition, the entry requirements for all our Degree courses have been raised twice since 2010, thus increasing significantly the quality of our intake (Table 1).

**Table 1**. Changes in entry requirements in the last 3 years

| | **BSci / BEng**[(a)] | **MSci / MEng**[(a)] |
|---|---|---|
| **2010/11** | BCC | ABB |
| **2011/12** | BBC | ABB |
| **2012/13** | BBB | AAB |

[(a)] Entry requirements for Chemical Engineering Degree courses include A-Level Mathematics.

The proportion of women among our research staff is ca. 44%. Importantly this is the same as our PhD %female population, indicating that we are closing the gap in one of the key transition stages at which women often leave science. One of our female PDRAs, Dr Srinivasan, won one of only four prestigious 2012 L'Oréal-UNESCO fellowships for Women in Science.

A high proportion of the School's staff (*i.e*, 41% of academics and 45% of PDRAs) is international, creating a culturally diverse School community. We also have exchange programmes with China, Malaysia and Brazil and receive *ca*. 30-40 international UGs every year (approximately 10% of the UG cohort, of which *ca*. 50-60% are female). It is interesting to note that two female Chinese students last year were impressed to see so many female PhDs in our labs: 'Studying at Belfast gave us a completely different view. Unlike China, in Belfast female students can study PhD, get married and have a family and it is normal'.

The links between Chemistry and Chemical Engineering within the School were already strong, but have been strengthened even further in the past three years. Through strategic investment, six new academics have been appointed since 2010 (including 3 female Chemical Engineers), and there have been a significant number of joint grants and publications. As a result, much of the research in the School is interdisciplinary, and PG students in these projects can choose whether to graduate with a PhD in Chemistry or Chemical Engineering (independently of their UG background). In addition, approximately one third of the academics in the School teach in both pathways. It is therefore difficult, and somewhat artificial, to divide PhDs and staff between Chemistry and Chemical Engineering. For this reason, the statistics for UG students below are presented separately, but the rest are combined. Specific issues affecting only one of the subjects are discussed as appropriate.

b) Provide data and a short analysis for at least the last five years (where possible with clearly labelled graphical illustrations) on the following, commenting on changes and progress made against the original action plan and application, and initiatives intended for the action plan going forward.

**Student data**

(i) **Access and foundation male and female numbers** – full and part time.

Since 2007/08 the University does not run access courses. We have worked closely with FE colleges to adapt their access courses to the level required for the current Level 1 entry, including the addition of more core material, resulting in courses from two local colleges being re-accredited in 2011. Due to these adjustments, the number of students entering through these routes in the reviewed period is very small (11 students, 45% female, Table 2). This compares with 38 students entering in 2004-2008 (68% female). We will maintain our engagement with FE colleges through our Access Coordinator (Dr. Muldoon), who also acts as University's Access Coordinator. He is fully aware of

the need to attract more women students and regularly liaises with female colleagues, e.g., to interview potential students in recruitment events.

**Table 2**. Access and foundation students (all full time)

| CHEM. | Female / Male | Total | %Female |
|---|---|---|---|
| 2011/12 | 2 / 1 | 3 | 67% |
| 2012/13 | 3 / 4 | 7 | 43% |
| **CHEM.ENG.** | **Female / Male** | **Total** | **%Female** |
| 2011/12 | 0 / 0 | 0 | 0% |
| 2012/13 | 0 / 1 | 1 | 0% |

(ii) **Undergraduate male and female numbers** – full and part-time.

*Full-time student population:*

There has been a steady increase of female UG students in Chemistry from 2008/2009 (Fig. 1). The %female has remained in a narrow range, 49-53%, which is consistently above the UK average (42%-43%), Importantly, this is an improvement compared with our last SWAN application (average %female for 2005-2008: 46%).

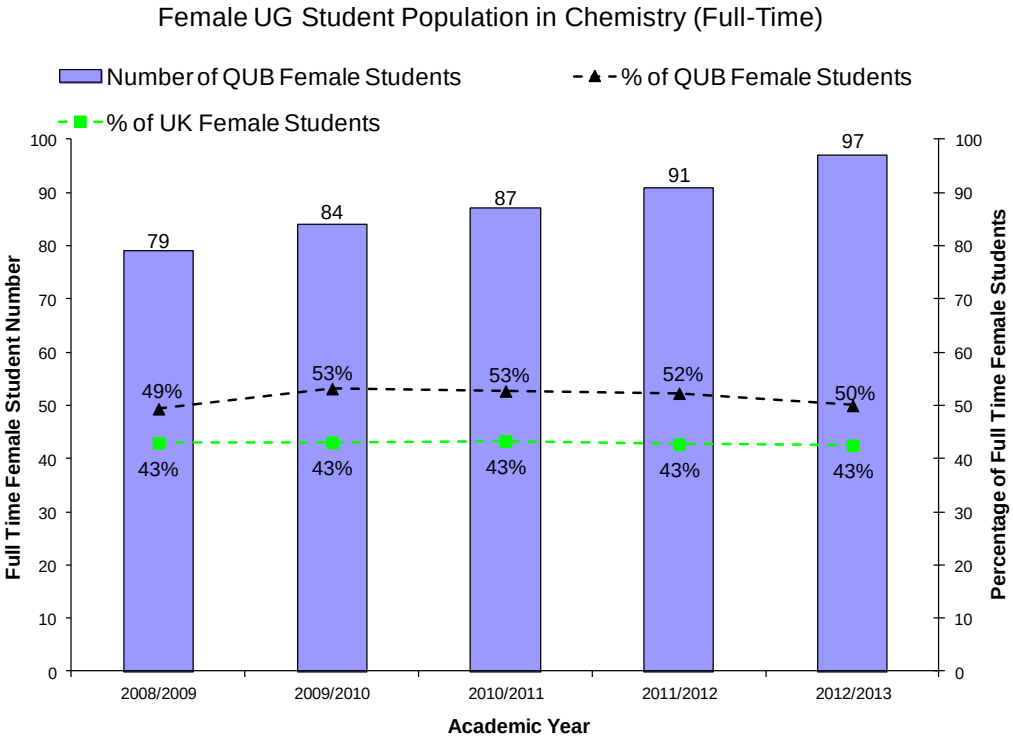



**Fig. 1**: Female UG Student Population in Chemistry (Full Time). UK comparison data obtained from HESA (subject group F1: Chemistry).

The number of female students in Chemical Engineering has increased more dramatically, in particular from 2011, and has doubled since 2008/2009 (Fig. 2). The %female (33%-41%) has remained well above the UK average (25%-26%), and is similar to that in the 2005-2008 period (38% on average). There are variations in %female across the period but these are small; especially considering the large increase on the overall number of UG students and the fact that entry requirements were raised twice (Table 1, above).

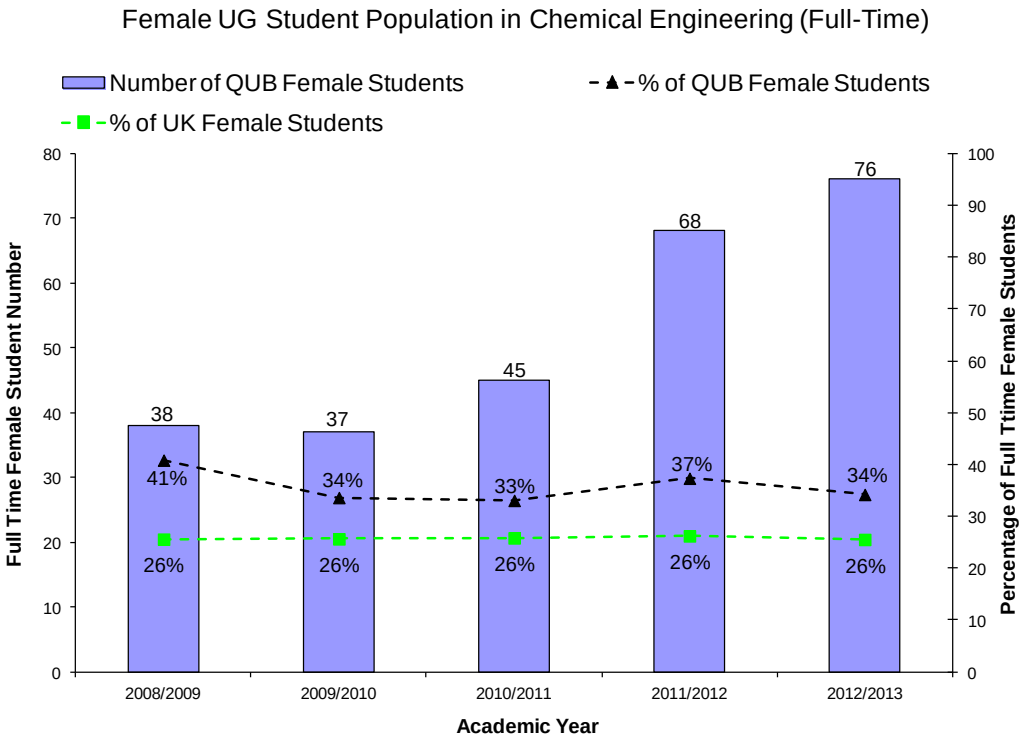



**Fig. 2**: Female UG Student Population in Chemical Engineering (Full Time). UK comparison data obtained from HESA (subject group H8: Chemical, process and energy Engineering).

*Part-time student population:*

The majority of our UGs are full-time, with only 1-6% of students being part-time in any given academic year. Since 2008, there have been 11 part-time students in Chemical Engineering (all male) and 28 in Chemistry (15 female, Fig. 3). There are large variations in %female every year, but student numbers are too small to draw meaningful conclusions. Data on part-time students was not included in our previous SWAN application.

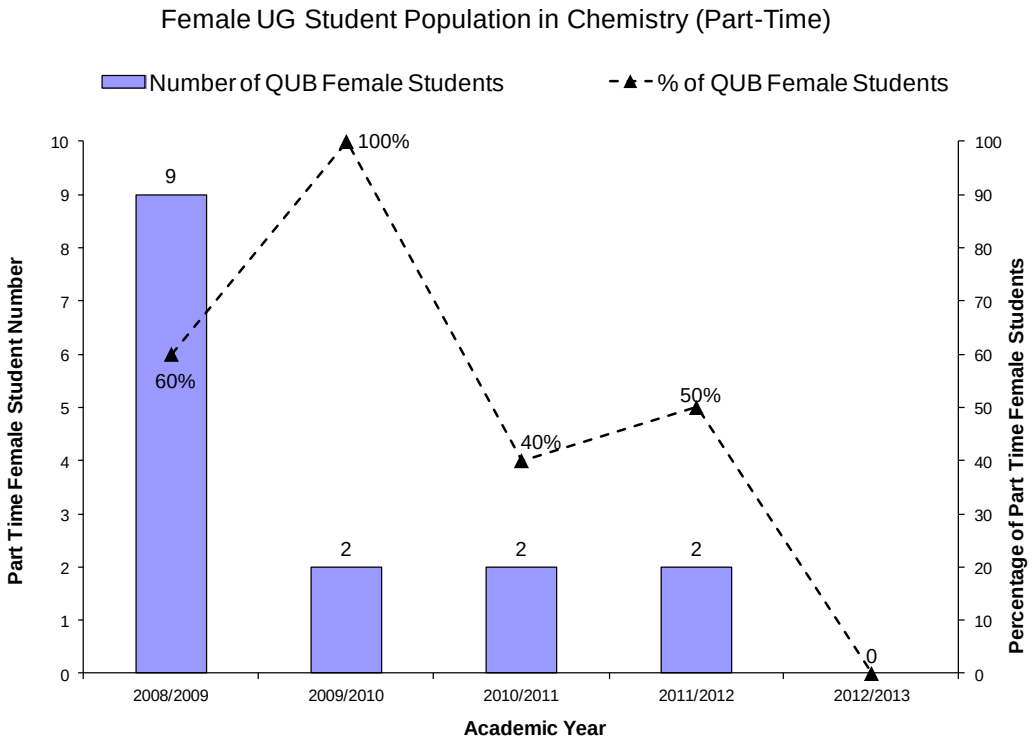



**Fig. 3**: Female UG Student Population in Chemistry (Part Time)

(iii) **Postgraduate male and female numbers on and completing taught courses** – full and part-time.

The number of students taking postgraduate taught (PGT) courses is very small and almost all are from overseas. Most of our own undergraduates staying in education choose to do a PhD. The %female in Chemistry (Fig. 4) has increased from 27% to 50%, whereas in Chemical Engineering (Fig. 5) has varied between 20% and 33%. At the time of our previous SWAN application, we offered only one PGT course in Chemical Engineering (%female on average: 36%). Given the small numbers of students, no meaningful conclusions can be made from these figures.

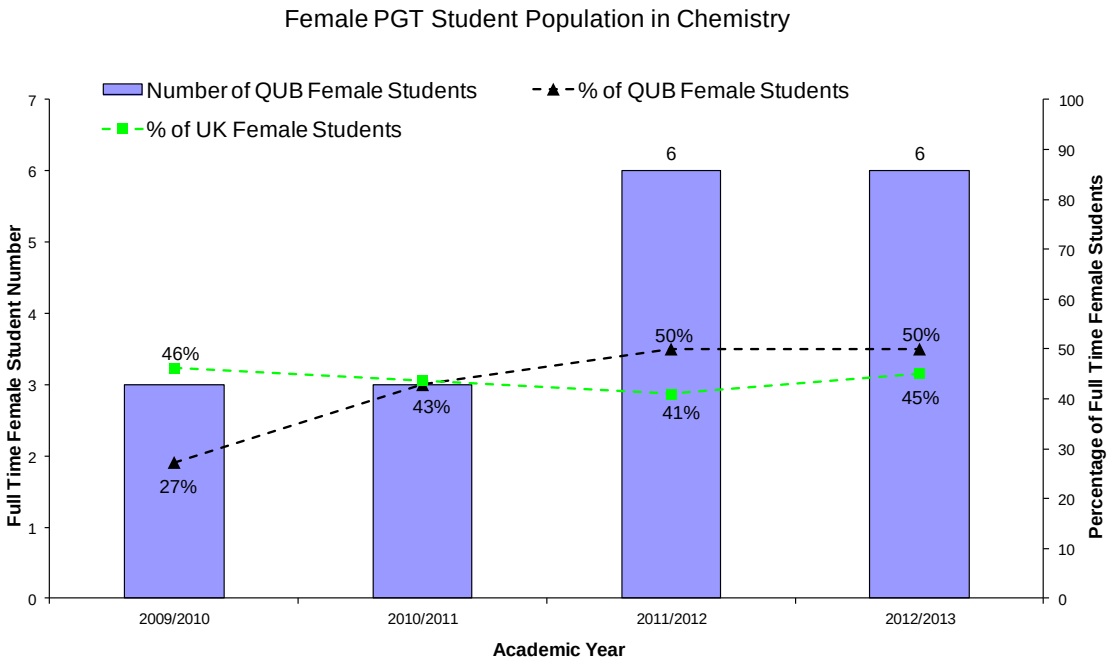



**Fig. 4:** Female student population in PGT courses in Chemistry (no courses were offered in 2008/2009). UK comparison data obtained from HESA (subject group F1: Chemistry).

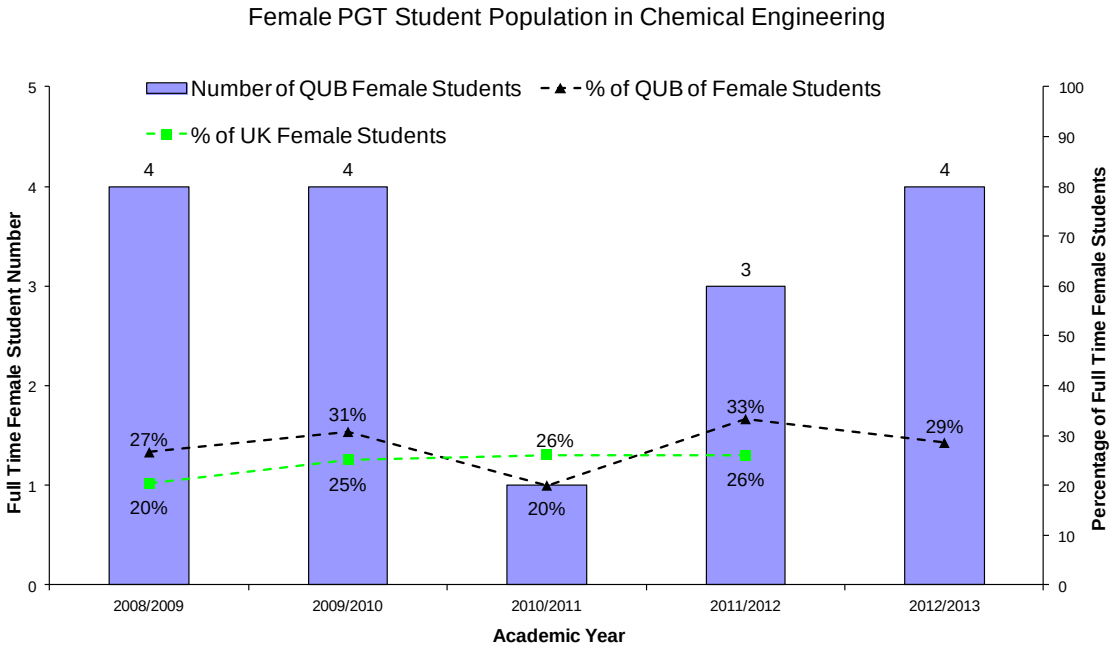



**Fig. 5:** Female student population in PGT courses in Chemical Engineering. UK comparison data obtained from HESA (subject group H8: Chemical, process and energy Engineering).

(iv) **Postgraduate male and female numbers on research degrees and completion times** – full and part-time.

In the first two years of the review period, the number and %female of postgraduate research (PGR) students in the School decreased from 54% to 44%, but there has been a steady increase since 2010, reaching 47% in 2012/13 (Fig. 6). These are all well above the UK average of 35%-37%. Almost all our PGR students are full-time (see Table 3 for part-time PGR data).

In the 2007-2010 period, the average %female was 59% in Chemistry and 29% in Chemical Engineering (44% overall). As mentioned above, a significant number of our current PG students are assigned to interdisciplinary projects, but to aid the analysis, the percentage of women 'mainly' in Chemistry projects or 'mainly' in Chemical Engineering projects has been calculated, resulting in 46% (Chemistry) and 40% (Chem.Eng). Therefore, although the overall proportion of female research students in the School has not changed significantly since our last Award and remains close to 44%, there is now a more even distribution between Chemistry and Chemical Engineering.

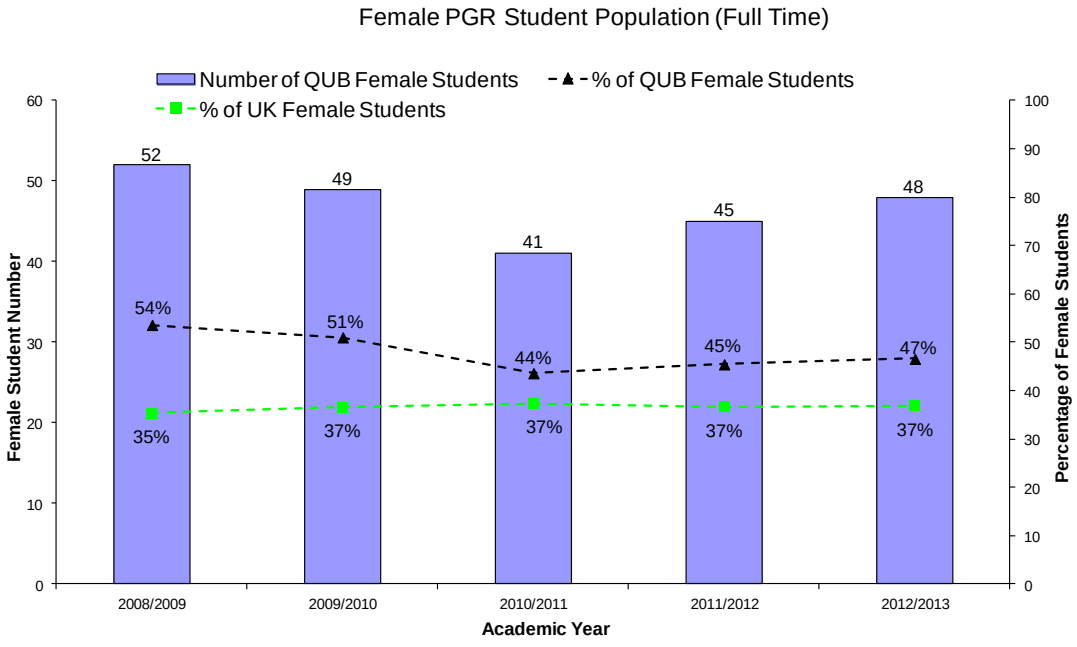



**Fig. 6** Female postgraduate research (PGR) student population in Chemistry and Chemical Engineering (full-time). UK comparison data obtained from HESA (average for subject groups F1 and H8).

**Table 3**. Part-time PG Research students.

| | Female / Male | Total | %Female |
|---|---|---|---|
| 2008/09 | 0 / 6 | 6 | 0% |
| 2009/10 | 3 / 3 | 6 | 50% |
| 2010/11 | 3 / 7 | 10 | 30% |
| 2011/12 | 2 / 2 | 4 | 50% |
| 2012/13 | 1 / 5 | 6 | 17% |

In general, completion times for women are slightly shorter than for men (Fig. 7). This is similar to that noted in our last application, showing that there is no gender bias in this respect.

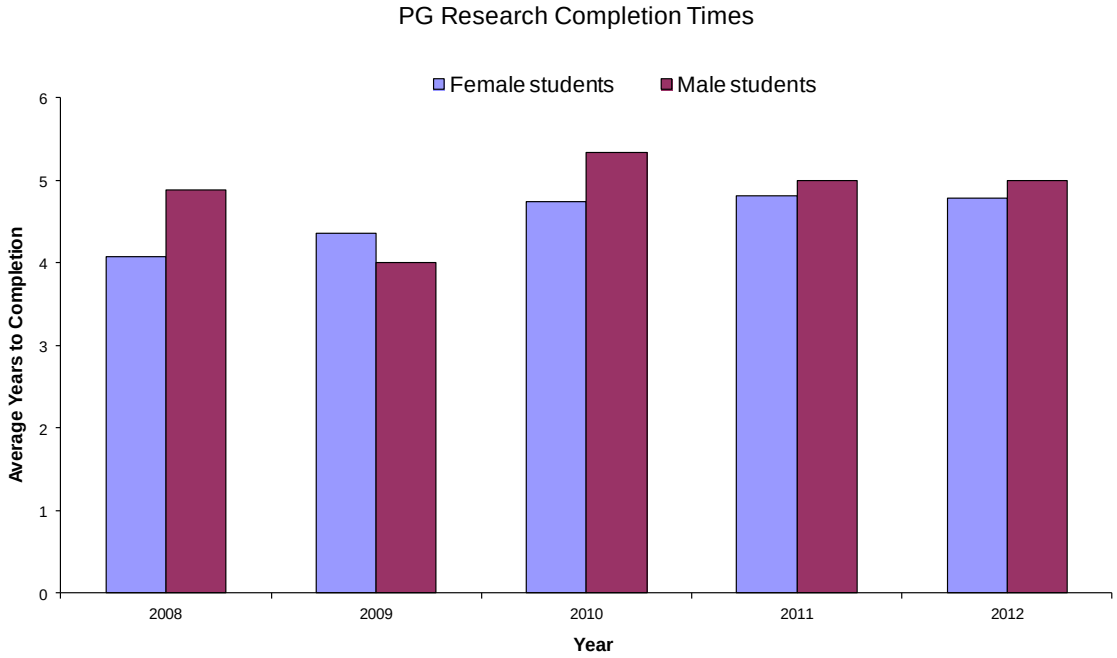



**Fig. 7:** Completion times of female and male postgraduate research (PGR) students in Chemistry and Chemical Engineering.

## (v) Ratio of course applications to offers and acceptances by gender for undergraduate, postgraduate taught and postgraduate research degrees

In our previous application, figures were only available for UG and PGT courses from 2008/09, and there was no data on PGR students. This was identified as lacking and full records have been kept centrally since 2011.

There has been an increase in the number of UG female applicants year on year (Figs. 8 and 9). The percentage of female applicants that receive offers is similar as or higher than the proportion of male applicants receiving offers (*ca*. 90% in all cases). This shows that there is no gender bias in the selection process, as also noted in our previous SWAN application.

The percentage of students that, having received offers, subsequently accept, is slightly higher for women than men in most cases (Figs. 8 and 9), although there are variations year on year for Chemical Engineering (Fig. 9). It is interesting to note that there was an unusually large percentage of female students accepting Chemical Engineering offers in 2011 (43%). The reasons for this are unclear.

For PG taught and research programmes (Tables 4-5), the data indicate similar trends as for UG students. This, however, should be taken with caution since data is only available for two years. The relatively low %acceptances for PGT courses (Table 5) is likely to be due to the fact that a large number of the

students are from overseas and do not have their own funding [see section 3b(iii)]. In addition, students from articulation agreements with other universities have tended to undertake PGR rather PGT study since 2010.

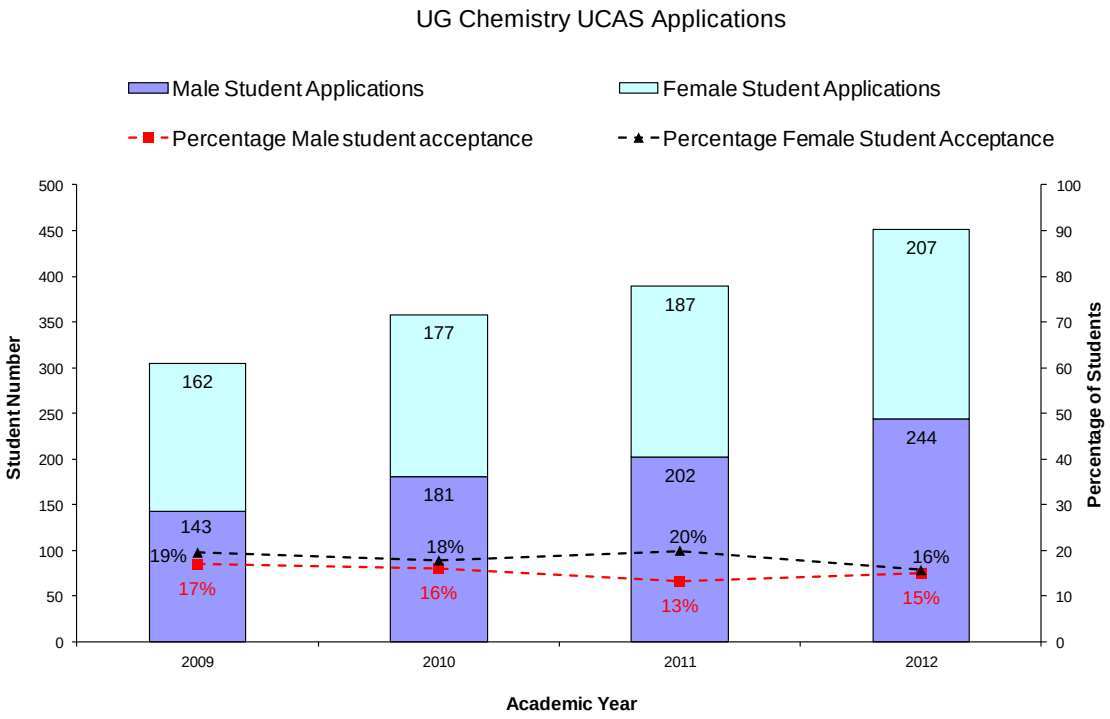



**Fig. 8**: Ratio of course applications to offers and acceptances for UG Chemistry students [complete data for 2008 is not available]

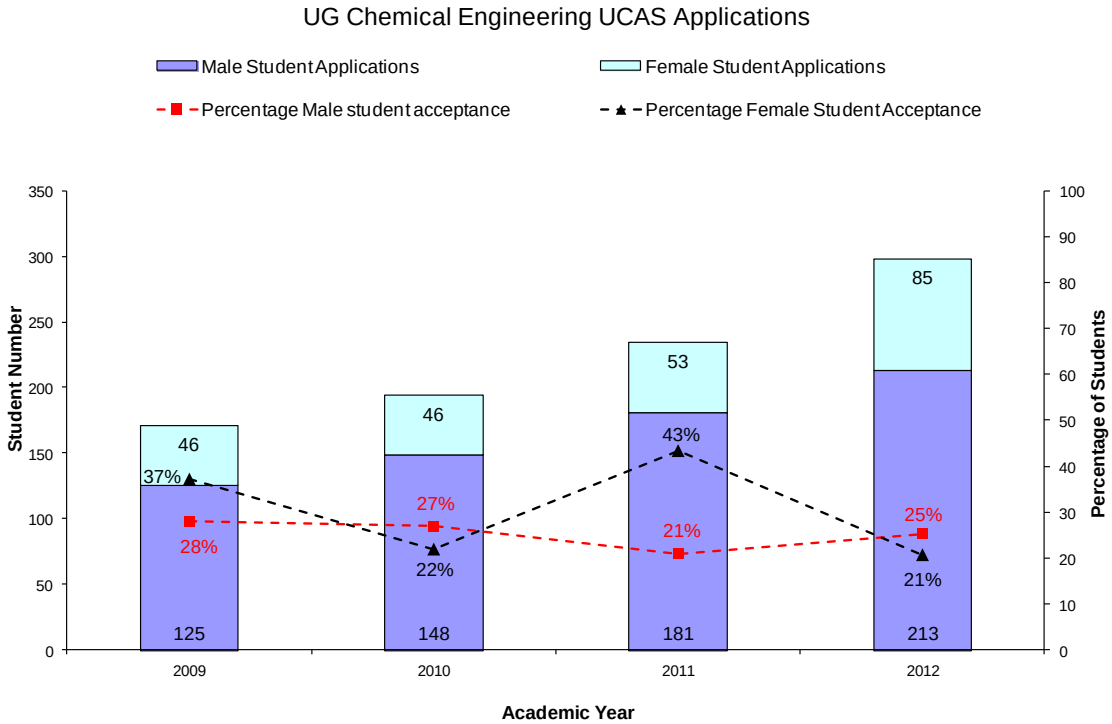



**Fig. 9**: Ratio of course applications to offers and acceptances for UG Chemical Engineering students [complete data for 2008 is not available].

**Table 4** Ratio of course applications to offers and acceptances for PG Research students.

| | Number of applications | | | Percentage of student offers | | Percentage of students acceptances (in relation to offers) | |
|---|---|---|---|---|---|---|---|
| | *female* | *male* | *%female* | *female* | *male* | *female* | *male* |
| **2011** | 36 | 56 | 39% | 67% | 44% | 92% | 84% |
| **2012** | 50 | 62 | 45% | 54% | 37% | 74% | 83% |

**Table 5**: Ratio of course applications to offers and acceptances for PG Taught students.

| | Number of applications | | | Percentage of student offers | | Percentage of students acceptances (in relation to offers) | |
|---|---|---|---|---|---|---|---|
| | *female* | *male* | *%female* | *female* | *male* | *female* | *male* |
| **2011** | 38 | 59 | 39% | 76% | 71% | 34% | 28% |
| **2012** | 38 | 68 | 36% | 92% | 79% | 17% | 33% |

*Actions on UG and PG recruitment:*

We will keep monitoring our UG/PG intakes and will work towards keeping the current upwards trends in %female. In order to increase the % of women in all our courses, we will increase their visibility, e.g., reinforcing women's profiles on the School webpage and promotional materials, more female invited speakers/external examiners, more female staff and PhDs actively participating in recruiting activities, more outreach activities specifically directed to girls (e.g., 'Fantastic Female' events, see section 6.(vii)) [Action 2.1]. We also plan to survey our female UG and PG students on why they decided to apply and subsequently enrol in their courses. Their feedback will inform future recruitment activities. We will focus on our current UG cohort in Chemical Engineering (year 3) in order to identify the reasons for the larger intake in 2011 [Action 2.2]. We will target and support not only Chemistry teachers (already done) but also Maths school teachers in order to encourage more girls into Chemical Engineering [Action 2.3].

## Staff data

(vi) **Female:male ratio of academic staff and research staff** – researcher, lecturer, senior lecturer, reader, professor (or equivalent).

*Research staff*:

There has been a gradual decrease in the number of research staff in the School (both male and female) from 49 in 2008/09 to 39 in 2012/13. The percentage of women, however, has been maintained at 40-50%, with a slight increase particularly in the last year (Fig. 10). This is slightly higher than that reported in our previous application (average for 2006-2009: ca. 40%), as is well above the UK average of ca. 28%.

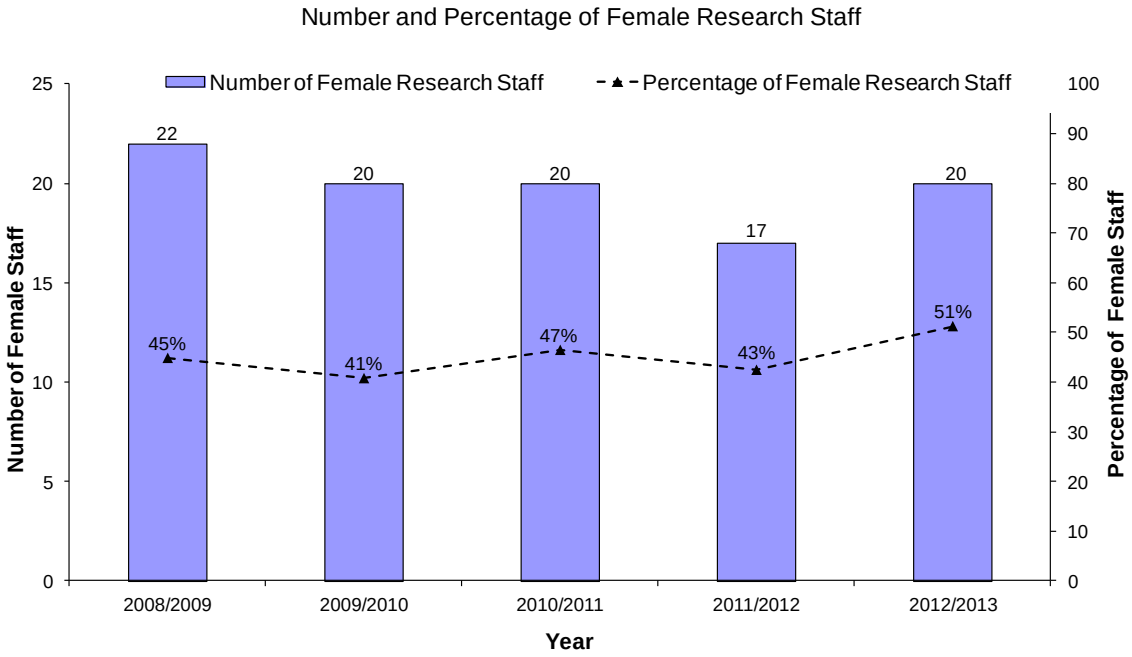



**Fig. 10**: Research academic staff in the School of Chemistry and Chemical Engineering. Data for 2012/13 as at Feb. 2013. UK average for Chemistry and Chemical Engineering: 28%

The percentage of female research staff at each grade is shown in Fig. 11. Note that numbers of staff at AC1/AC3/AC4 levels are small and large changes in percentages should be taken with caution. For example, the decrease at AC4 level in the last year reflects going from one researcher (female) to two (one male+one female). Between 77%-80% of PDRAs are AC2 grade, where %female is 40%-55%.

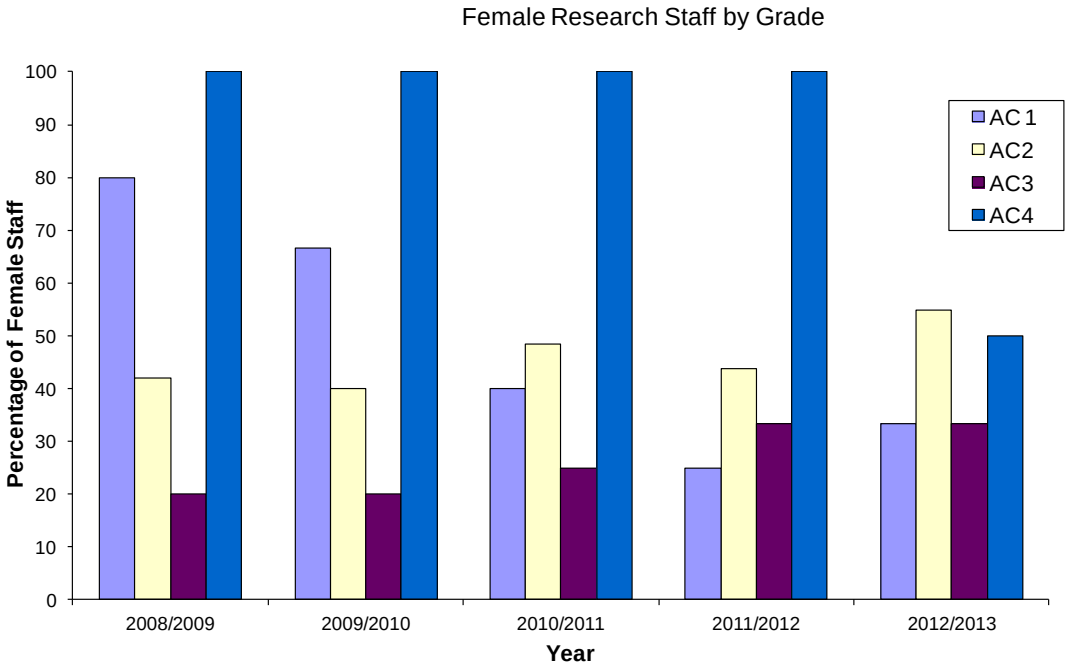



**Fig. 11**: Percentage of female research staff at each grade (Data for 2012/13 as at Feb. 2013)

*Academic staff:*

The number and percentage of female academic staff has increased from 3 (9%) in 2008/2009 to 7 (17%) in 2012/2013 (Fig. 12). One more female lecturer started in Sept. 2013 (not included in the data for the reviewed period); bringing the percentage of female academics in the School close to the UK average for Chemistry and Chemical Engineering of ca. 19%.

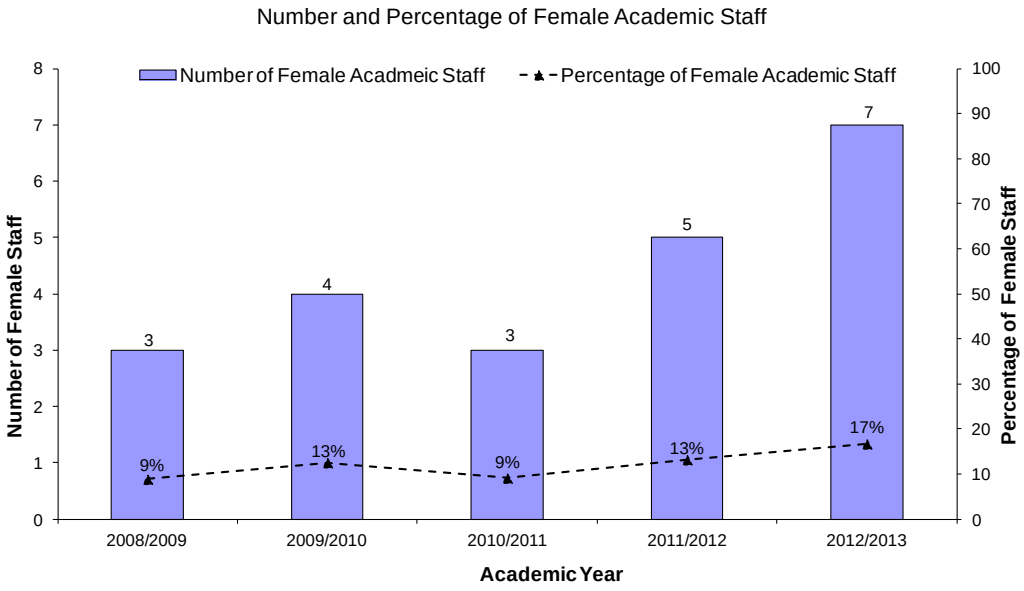



**Fig. 12**: Female academic staff in the School of Chemistry and Chemical Engineering. Data for 2012/13 as at Feb. 2013. UK average for Chemistry and Chemical Engineering: 19%.

Currently, all our female academics are at Lecturer A/B level (Fig. 13). The increase in %female at AC4 level (Reader) from 2008/2009 to 2009/2010 is due to changes in the overall number of academics, but corresponds to only one person in both years, Dr Migaud, who subsequently moved to Pharmacy (see above).

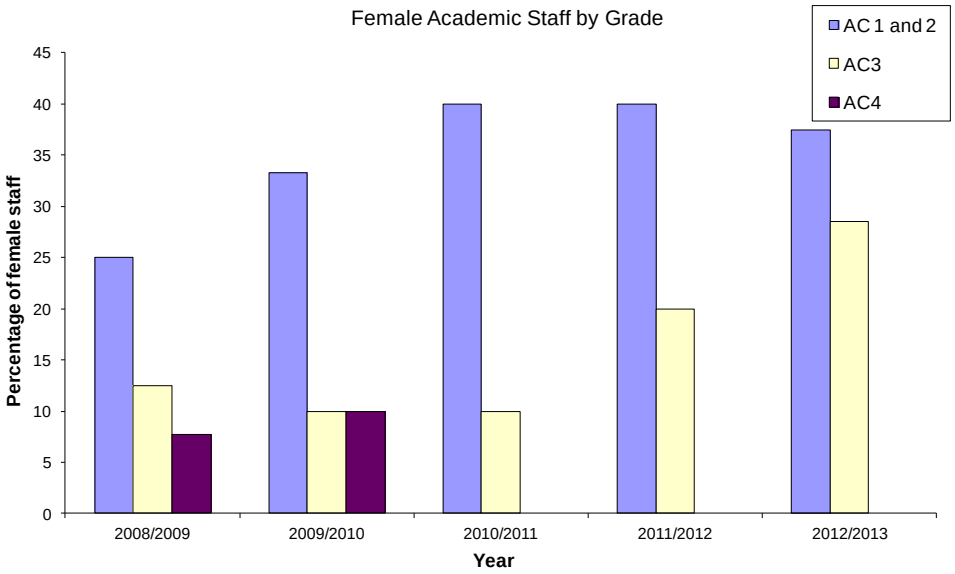



**Fig. 13**: Percentage of female academic staff at each grade (AC1/2: Lecturer A; AC3: Lecturer B; AC4: Reader). Data for 2012/13 as at Feb. 2013.

(vii) **Turnover by grade and gender** – where numbers are small, comment why individuals left

*Research staff*

Most of the research staff contracts are fixed-term and therefore a relatively large turnover is expected (Fig. 14). The %turnover at AC2 level is generally lower for women. As mentioned above, the number of staff at other grades is small and large turnover percentages should be taken with caution.

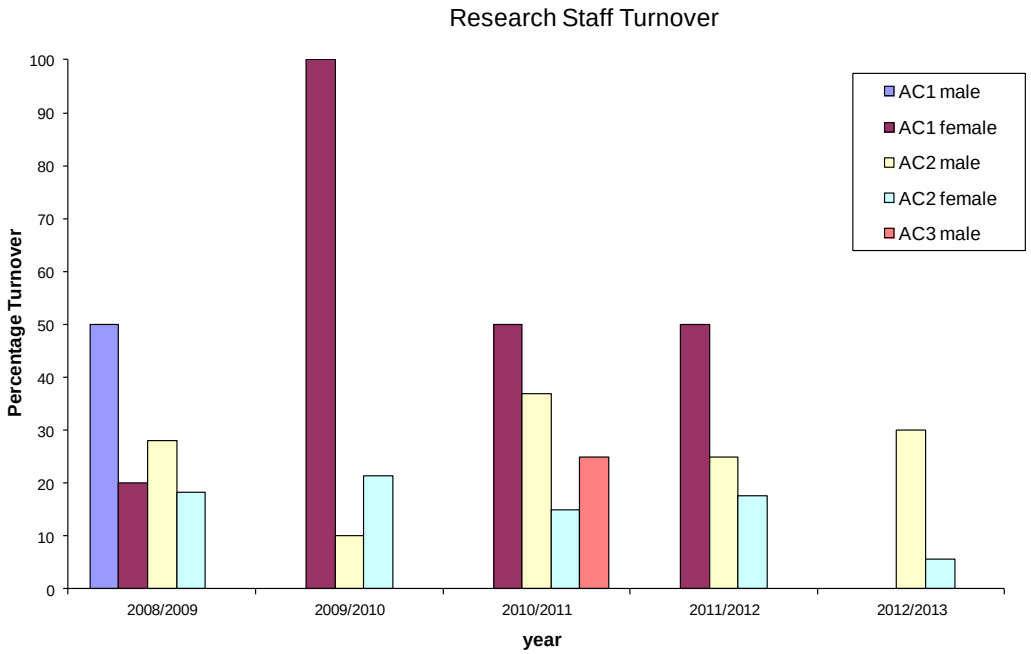



**Fig. 14**: Percentage turnover of research staff by grade and gender

*Academic staff:*

[redacted]

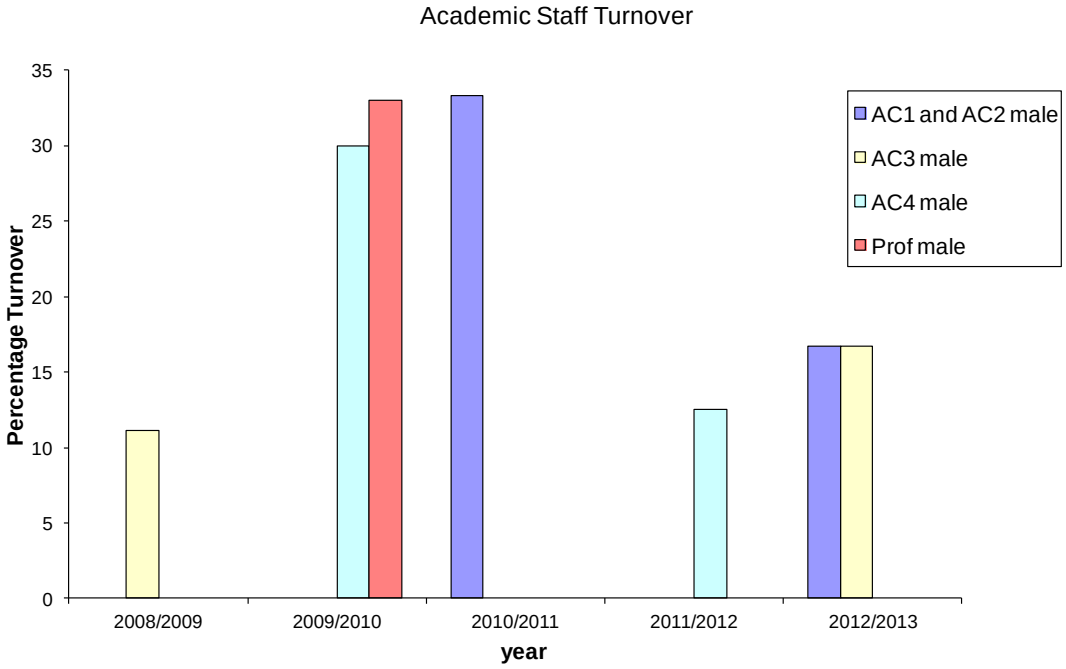



**Fig. 15**: Percentage turnover of academic staff by grade and gender (AC1/2: Lecturer A; AC3: Lecturer B; AC4: Reader). All leavers are male.

*[1995 words]*

## Supporting and advancing women's careers – maximum 5000 words

Please provide a report covering the following sections 4 – 7. Within each section provide data and a short analysis for at least the last three years (including clearly labelled graphical illustrations where possible) on the data sets listed, commenting on changes and progress made since the original application, and including details of successes and where actions have not worked and planned initiatives going forward.

Please also attach the action plan from your last application with an additional column indicating the level of progress achieved (e.g. zero, limited, excellent, completed).

> [The Action Plan (2010) from our last application, including level of progress, is attached]

## 4. Key career transition points

### (i) Job application and success rates by gender and grade

*Research positions*

The percentage of female applicants over the three year period (2010-2013) has remained approximately constant at 26-29%. This is similar to that noted in our original SWAN application (29% average for 2006-2009). Importantly, and as also noted in our previous application, the success rate for women is generally higher than for men (Fig. 16).

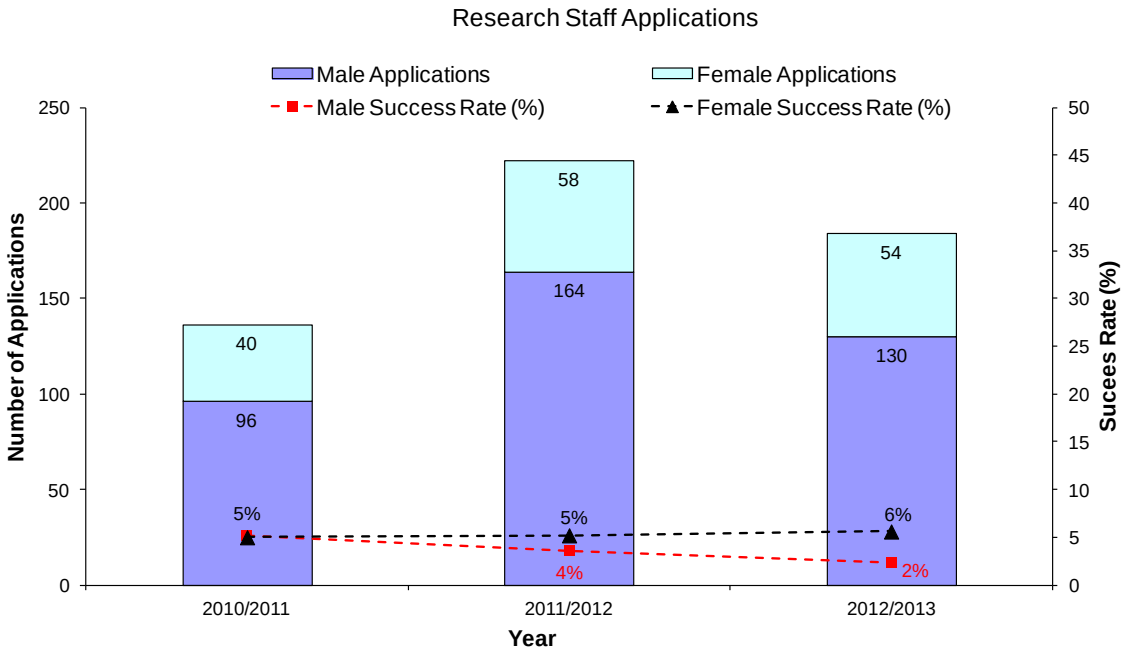



**Fig. 16**: Number of male and female applications for all research positions and success rates.

*Academic positions*

There has been a slight increase in the percentage of female applicants for academic positions in 2010-2013 (21%) compared with the previous three years (17%). Importantly, there has also been an increase on the female success rate, which, in the last two years, has been higher for women than for men (Fig. 17). The average success rate in 2006-2009 was 3% for women and 4.9% for men. The percentage of applications and success rates at higher grades, however, is still lower for women (Table 6). A senior lecturership was offered to a woman in 2012 but she took a position in her home country, close to her extended family, instead.

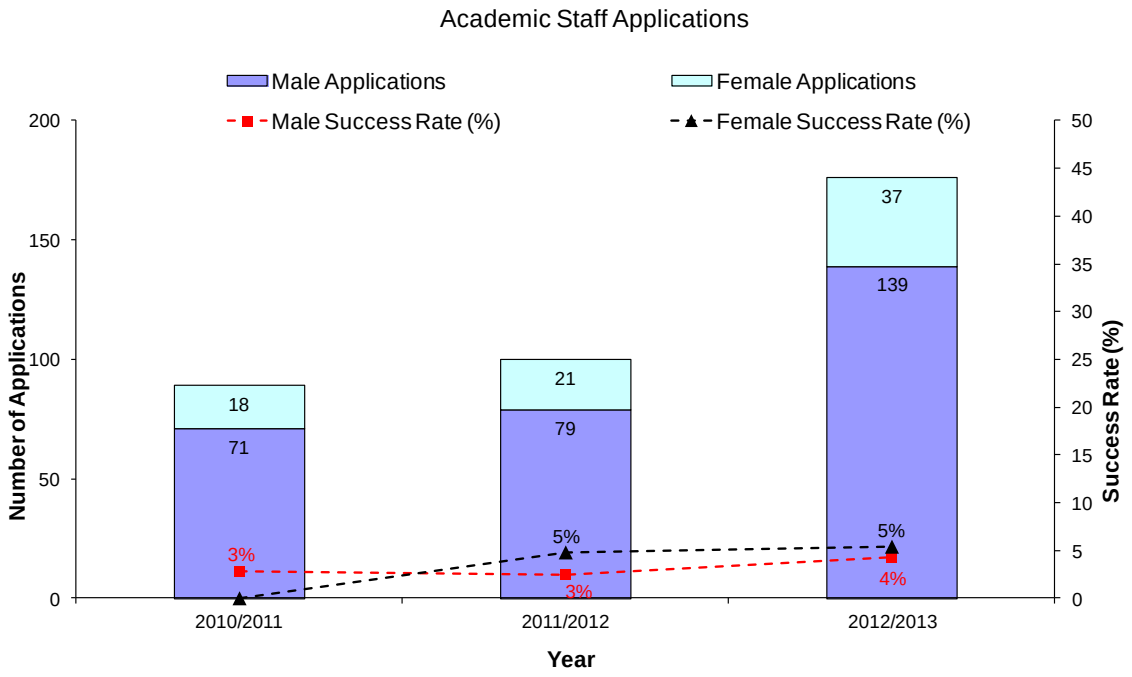



**Fig. 17**: Number of male and female applications for all academic positions and success rates.

**Table 6:** Job applications and success rates for all academic positions in the 2010-2013 period.

| LECTURER / SENIOR LECTURER | Applications Received | | Appointees | | Success Rate | |
|---|---|---|---|---|---|---|
| | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** |
| **2010-2011** | 11 (22%) | 39 (78%) | 0 | 0 | 0% | 0% |
| **2011-2012** | 21 (23%) | 72 (77%) | 1 | 2 | 4.8% | 2.5% |
| **2012-2013** | 33 (20%) | 130 (80%) | 1 | 6 | 3.0% | 4.6% |
| **PROFESSOR** | **Applications Received** | | **Appointees** | | **Success Rate** | |
| | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** |
| **2010-2011** | 7 (18%) | 32 (82%) | 0 | 2 | 0% | 6.2% |
| **2011-2012** | 0 (0%) | 7 (100%) | 0 | 0 | 0% | 0% |
| **TEACHING FELLOW** | **Applications Received** | | **Appointees** | | **Success Rate** | |
| | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** |
| **2012-2013** | 4 (31%) | 9 (69%) | 1 | 0 | 25% | 0% |

In order to better understand the gender balance at each stage of the selection process, the percentage of women shortlisted for each position will be monitored [Action 3.1]. In addition, we will reinforce our efforts to increase the quantity and quality of female applicants [see below: Section 4(iii) and related Action 3.2].

(ii) **Applications for promotion and success rates by gender and grade**

[redacted]

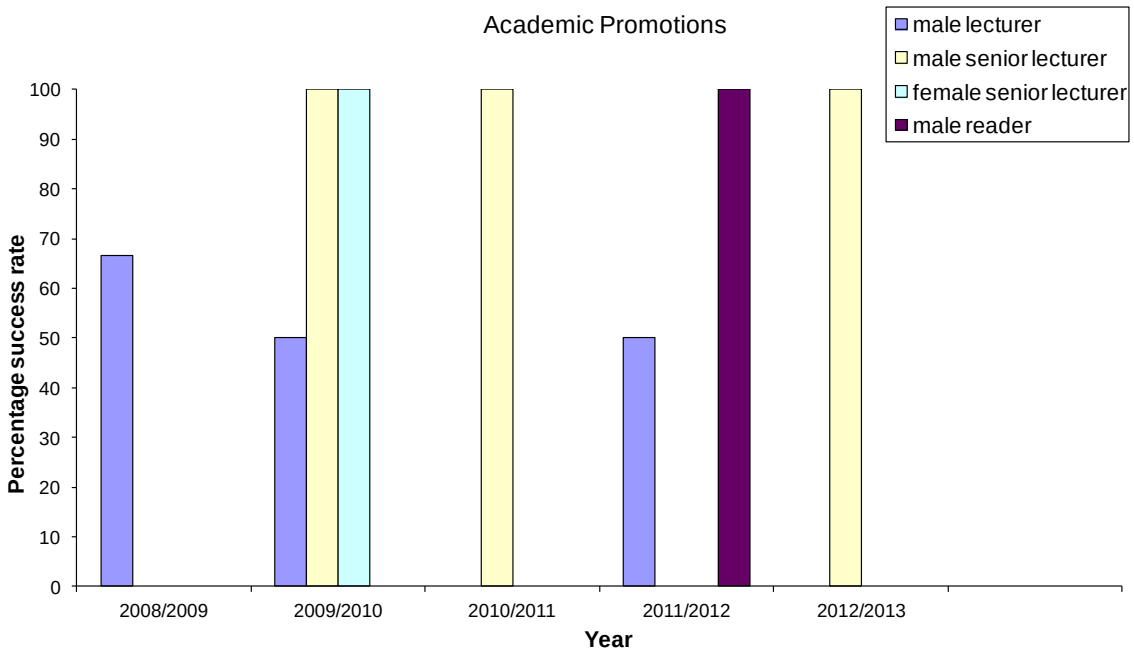



**Fig. 18**: Success rate of academic promotions by grade and gender

There has been some progress compared with our original SWAN application, [redacted]. However, there is still a significant gender disparity despite the School's efforts to address this issue. Further actions are planned [see below: Section 4(iv) and related Action 3.4].

(iii) Impact of activities to support the **recruitment of staff** – how the department's recruitment processes ensure that female candidates are attracted to apply, and how the department ensures its short listing, selection processes and criteria comply with the university's equal opportunities policies

We are pleased to have been able to attract more female academics, in particular in Chemical Engineering which was particularly low in our original submission. This is partly the result of our actions to raise the profile of women within the School. For example, we have improved the visibility of women on our webpage and have made SWAN prominent on the title page. The SWAN

webpage has been expanded to ensure that all applicants know the School's commitment to gender equality showing, for example, links to the Queen's Gender Initiative, information on mentoring schemes, and life-work balance issues. We will keep increasing the visibility of women on our webpage and promotional material [Action 3.2(a)]. In addition, we will have a woman as point of contact for all academic positions [Action 3.2(b)], and we will be pro-active in seeking suitable female candidates, especially for Reader/Professor positions (*e.g.*, through personal contacts of the HoS, Directors of Research, etc.) [Action 3.2(c)]. Job adverts for academic positions already include a positive statement welcoming female applicants. We plan to reinforce this statement for all job adverts, e.g., by including information on family friendly policies and the SWAN logo [Action 3.2(d)]. As part of the training on unconscious bias planned within the School [see Section 5(ii) below, and related Action 4.2(a)], we will examine the wording in job adverts to ensure that they do not influence the perception of potential candidates (*i.e.*, jobs are not perceived as 'men jobs') [Action 3.2(e)].

The composition of the interviewing panels follows University equal opportunities policies. Training is compulsory for all interviewers, and this is provided by the University. At all interviews there is at least one woman on the panel, and post-interview tours are offered to women candidates by female academics to allow discussion, if desired, on gender issues. We will continue to use these procedures.

(iv) Impact of activities to **support staff at key career transition points** – interventions, programmes and activities that support women at the crucial stages, such as personal development training, opportunities for networking, mentoring programmes and leadership training.

*PDRA-academic transition point:*

As noted in section 3(vi), a significant loss of women occurs at this key career transition point. Actions were taken to address this and will continue, *i.e.*:

- We proactively encourage PDRAs, and in particular women, to apply for grants/fellowships to help establish independent research careers (e.g., Dorothy Hodgkin and L'Oréal-UNESCO Fellowships). For this, we circulate relevant information by email to all PDRAs. The SWAN Champions and/or HoS identify potential female candidates who are then encouraged to apply. We provide mentoring for these applications including mock interviews. Dr Geetha Srinivasan benefited from these when she applied for a L'Oréal-UNESCO fellowship, which she subsequently won. This received significant media attention and VC acknowledgement, and has been prominent on the School webpage. We will continue our efforts in this area [Action 3.3(a)].

- In 2103, the School offered three travel bursaries to attend the Irène Joliot-Curie Conference in London. This event was aimed at female PDRAs who are considering an independent career in academic chemistry. The School received only one application from a female postdoc, which was granted. We have also recently offered bursaries to attend the 'Symposium on the role of women in chemistry' (Nov.2013, Trinity College Dublin). We will continue offering financial help to attend relevant events and we will encourage more

women researchers to take these opportunities (*e.g.*, by increasing female engagement through the PostDoc Forum, where previous recipients of the bursaries can share their experience) [Action 3.3(b)].

- We provide post-interview feedback to PDRAs who have been shortlisted for academic positions in the School. One of our female postdocs commented that she found this particularly useful and helped her to focus on what she needed to do in order to get an academic position. We will extend this to offer mock interviews and mentoring to PDRAs applying for academic jobs, prior to the shortlisting stage [Action 3.3(c)]. We will ensure female engagement in these activities through female SAT members involved in the PostDoc Forum (see below, Action 3.3(e)).

- PDRAs have been offered teaching experience to increase their employability as academics, following feedback from members of interviewing panels within the School who noted that PDRA applicants (male and female) often have excellent research records but almost no teaching experience. In 2012/13, two female and two male researchers in the School took this opportunity to increase their teaching experience. The School now plans to formalise this through a scheme of 'teaching fellowships' [Action 3.3(d)]. For this, we will invite applications from PDRAs which will involve the extension of their contracts by 1 month, in agreement with their funding body, in order to allow them to acquire teaching experience (up to 50 contact hours) without this having a negative impact in their research. The School has allocated £10,000 per year to fund three of these fellowships each year. The first round of applications will open in Dec. 2013 (*i.e.*, for teaching in the second semester of the current academic year). The scheme will be open to all PDRAs, but women researchers with the appropriate profile will be identified (through appraisers, supervisors and/or the PostDoc Forum), and proactively encouraged to apply. The scheme will be reviewed in a yearly basis by the SAT and the SMB, and will be closely monitored to ensure that there is adequate gender balance.

- A PostDoc Forum was initiated in the School by Dr Pamela Walsh to provide PDRAs with networking opportunities and a space where to promote career and professional development, and share information (e.g., fellowships opportunities, support for applications, etc.). The School will allocate £1000 per year to fund the activities of the Forum (networking/career events; invite speakers, etc.) [Action 3.3(e)]. The recipients of the 'teaching fellowships' will be asked to drive the Forum's activities and manage the annual budget, which will give them additional valuable experience for their future careers. The female PDRA representative in the SAT and Dr Walsh will work closely with the Forum's organisers in order to ensure that women researchers fully engage with its activities.

*Early-career academic-Senior academic transition point:*

As discussed in Section 4(ii), currently, all female academics are at lecturer level. We expect that, as our recently appointed members of staff progress in their careers, this will change.

Promotion continues to be discussed as part of the appraisal exercise (see next section) and part-time/flexible working is taking into account when considering promotion. Our recent survey within the School (see Section 8) highlighted that

most staff across the School felt that they did not understand sufficiently the promotion process. In response to this, a SWAN seminar was organised in Sep. 2013, where our HoS gave an overview of the process, followed by a questions and answers session. The seminar was well attended and feedback was positive. Information on promotions will be included on the School webpage [Action 3.4(a)] and further seminars will be scheduled in the coming years [Action 3.4(b)]. In addition, new members of staff will be encouraged to attend seminars by the Queen's Gender Initiative [Action 3.4(c)]. All members of staff are actively encouraged to discuss promotion regularly with their appraisers and/or the HoS, and this will continue. The HoS will liaise with the appraisers of women academics to ensure that promotion is actually discussed and needs for career development properly identified [Action 3.4(d)]. As mentioned in section 2b, meetings between the HoS and female staff take place at least once a year. In these, a range of issues are discussed including career development needs and promotion. These meetings will continue to address these issues in order to identify further actions that may help to increase the number of female applications for promotion [Action 3.4(e)].

The results of the survey (Section 8) also showed that female academics felt that there were not enough career development and networking opportunities. To address this, the School will organise annual events in collaboration with the RSC Women Members Network (incl. invited speakers and social events) [Action 4.1].

## 5. Career development

(i) Impact of activities to support **promotion and career development** – appraisal, career development process, promotion criteria.

The School continues to operate the standard University probation and appraisal procedures, which includes biannual appraisal meetings for all academic and research staff. All appraisers are trained, and this training includes gender awareness. Discussions on long-term career goals, staff development, how to pass probation and how to prepare for promotion are an essential part of the appraisal meetings. The appraisal procedure includes specific guidance on dealing with staff going on/returning from extended leave, such as maternity leave, as well as flexible working arrangements. In addition to this, a formal 'returners' policy and interview by the HoS has been implemented (see Section 7(v)).

Probation is normally six months for PDRAs, and three years for academic staff. The School offers mentoring and support to all probationers and will continue to do so. [redacted].

The promotions process continues to be transparent, and takes into account factors such as maternity leave or part-time working. A School panel considers applications against the criteria. This panel includes an external female academic, the School Manager (also a female) and a representative from the University Equal Opportunities Unit (EOU). The panel then provides a recommendation via the Head of School's report to University's Promotions

Committee. This committee provides a report to the Central Promotions Committee for the final decision. At the end of the process, if the application is unsuccessful, constructive feedback is provided by the HoS and the candidate has the opportunity to appeal the decision. All candidates are encouraged to speak to their line manager and/or the HoS to provide feedback prior to submission of the initial promotion documentation.

(ii) Impact of activities to support **induction and training** – support provided to new staff at all levels, and any gender equality training.

New staff are required to attend University induction activities (online induction is also available) and training courses, such as the Postgraduate Certificate in Higher Education Teaching. There is a wide range of courses available through the Staff Training and Development Unit (STDU) which PDRAs and new staff are encouraged to attend (e.g., supervising of students, writing grant applications, teaching large classes, use of online teaching tools, etc.).

Female mentoring is available through the Queen's Gender Initiative (QGI), and also internally (less formal) within the School (Prof. AP de Silva). In addition, all new members of staff in the School are assigned a mentor they can approach in an informal way for any day-to-day issues they may have.

The University's Equal Opportunities Unit (EOU) runs an e-learning course on Equality and Diversity (DiversityNow), which is mandatory for all members of staff and includes gender issues. Our recent survey (Section 8), however, highlighted the lack of specific training in unconscious bias. A seminar will be organised in partnership with the EOU to address this [Action 4.2(a)].

(iii) Impact of activities that **support female students** – support (formal and informal) provided for female students to enable them to make the transition to a sustainable academic career, particularly from postgraduate to researcher, such as mentoring, seminars and pastoral support and the right to request a female personal tutor.

As mentioned above, our activities have had a positive impact in the transition from PhD to PDRA, as the percentage of women is similar at both levels. There is also no significant drop from UG to PG. This is partly a result of the actions taken since our original SWAN application, for example, actions to raise the profile of women in the School, as well as to promote flexible working and life-work balance policies. Currently, two out of five external examiners are female (this compares with no women as external examiners at the time of our previous SWAN application). Information on SWAN and gender issues is provided at induction, and included in the UG-, PG- and staff-handbooks. Two academics (one male and one female) act as mentors to discuss gender and equality issues in a confidential, informal manner. We will continue reinforcing these actions [Action 4.3; see also Action 2.1].

The School regularly organises activities to encourage academic careers among our PhDs/PDRAs which include female speakers. For example, a Careers Event

organised by two female PG students in 2012 included a presentation from Prof. Elizabeth Tanner (Univ. Glasgow) on her experience as an academic, as well as from three female industrial representatives. Academic careers were also promoted within the School at a ChemNet event, where one of our female postdocs delivered a talk entitled '*My career in Chemistry*', as well as at a SWAN mini-symposium in 2010, with presentations from Dr J. Thomson (SWAN Champion; '*Staying in academia*'), and Dr Sean McWhinnie (Oxford Research and Policy). Further events will be organised in the coming years [Action 4.4].

There are three (two male and one female) UG Advisors of Studies, and one (male) PG Advisor. All UGs have a personal tutor and we have in place peer mentoring schemes for both UG and PG students. The School offers to provide a female Advisor/tutor when requested, but to date, no students have made such request. We plan to remind students of this at induction each year, and include the information in the students' handbook [Action 4.5]. Staff-Student Consultative Committees for UGs meet at least twice a year.

Students are represented on several School committees (see section 6(i) below), including the SWAN SAT (one female PG representative, we will expand to also include one UG [Action 1.2]), the School Board (2 UG representatives), and the Education Committee (2 UG representatives).

Mentoring for PhD students is done informally by research supervisors, but students also meet regularly with their second supervisors (at least 3 times per year) and one independent member of staff. In these meetings the student has the opportunity to discuss issues in the absence of the main supervisor. All PhDs are invited to attend a Staff-Student Consultative Committee (SSCC) meeting once a year. A PhD forum was proposed in our original SWAN submission, but this was changed to a PostDoc forum as the transition from PhD to PDRA was identified as less of a problem (*i.e.*, the %female is similar at both levels) than that from PDRA to academic.

The gender equality survey highlighted the lack of formal training on gender issues for PhD students. This will be made compulsory from 2014 [Action 4.2(b)].

## 6. Organisation and culture

### (i) **Male and female representation on committees** – provide a breakdown by committee.

We have female representation in all School Committees (Table 7). In order to avoid overloading women academics with administrative duties, female contribution to some of the committees is achieved through the School Manager (Ms Angela Doherty, also a member of the SAT) or through male members of the SAT, e.g., Prof. Hardacre (HoS) and Prof. Rooney at the SMB. Since 2012, the School Board is open to all members of staff (incl. PDRAs, technical and clerical staff, see section 6(iii) below), and currently also includes two UG representatives. The UG students in the Education Committee also act as representatives in the School Board and the gender balance changes year on year; for example, there were 1 male and 1 female UG students in 2010/11and

2012/13, and 2 female UGs in 2011/12 and 2013/14. These students are the Chem. Society and Chem. Eng. Society Presidents and are elected by the UG body within the School. The change in the male:female ratio of the SAT, compared with 2010, is partly due to an increase in its membership from 8 (4 female) to 10 (7 female). Since 2010, one male academic member of the SAT left QUB and was replaced by a young, enthusiastic, female lecturer (Dr Walsh), Ms Moore joined as representative of the clerical staff, and two SWAN Champions (CL and JT, both part-time) replaced our former Champion (Dr Migaud).

**Table 7**: Current female representation on committees in the School of Chemistry and Chemical Engineering. The percentage female at the date of our previous SWAN application is included for comparison.

| Name of committee | Female | Male | Total | % Female (% female in 2010) |
|---|---|---|---|---|
| Senior Management Board | 3 | 9 | 12 | 25% (17%) |
| Education Committee | 4 | 16 | 20 (incl. 2 female UG reps.) | 20% (11%) |
| Research Committee | 1 | 5 | 6 | 17% (17%) |
| Special Circumstances Committee (formerly Student Progress Committee) | 1 | 5 | 6 | 17% (17%) |
| Safety Committee | 6 | 6 | 12 (incl. 2 male and 1 female PG reps.) | 50% (36%) |
| SWAN Committee | 7 | 3 | 10 (incl. 1 female PG rep.) | 70% (50%) |
| Social Committee | 3 | 2 | 5 | 60% (established in 2011) |

Two female academics currently represent the School on three central University committees: the Postgraduate Advisory Board, the University Health & Safety Committee and the SWAN Champion Working Group. In addition, the School Manager and one female member of the technical staff represent the School on the Disability Forum and the Health & Safety Consultative Committee (Table 8).

**Table 8**: School representatives on University Committees (academic representatives, unless otherwise indicated)

| Name of committee | Female | Male |
|---|---|---|
| Academic Council | 0 | 2 |
| Postgraduate Advisory Board | 1 | 0 |
| University Health & Safety Committee | 1 | 0 |
| Academic Offences Committee | 0 | 1 |
| Central Student Appeals Committee | 0 | 1 |
| Disability Forum | 1 (School Manager) | 0 |
| Health & Safety Consultative Committee | 2 (School Manager + Technical staff) | 0 |
| SWAN Champion Working Group | 2 | 0 |

## (ii) Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts

Fixed-term contract for academics are not common practice in the School. Currently, all academics are employed on permanent contracts.

Fixed-term contracts are however the norm for research staff, as they are contracted for the duration of specific projects. [redacted]

## (iii) **Representation on decision-making committees** –evidence of gender equality in the mechanism for selecting representatives.

The Senior Management Board (SMB), the main decision-making committee in the School, includes two non-professorial members, allocated on a voluntary basis with ballot selection from across the School if more than two people come forward. At present, these are two recently appointed lecturers (one male and one female). In addition, two other female members of staff are on the SMB: the School Manager and the CEO from QUILL (Queen's University Ionic Liquids Laboratories). The makeup of the SMB is discussed annually and revised where appropriate.

As mentioned above, the composition of the School Board was expanded in 2012 to include all members of staff, as well as UG representatives. We plan to also include PG representation (including the female PG member of the SAT) [Action 5.1]. The School Board meets three times a year and the meetings are themed (e.g., improving the student experience, enhancing communication, increasing conversion of UCAS applicants, the role of the School in the University's academic plan). During these, the board is split in small working groups where open discussion takes place. This provides an effective discussion forum across all groups that generate ideas for the direction of the School.

The other main committees which provide advice to the SMB, i.e. the Education and Research committees, involve members of the SAT and at least one female member of staff.

We will continue our efforts to ensure that female members of staff have a voice on decision-making committees within the School; and new female academics will be gradually involved in appropriate administrative and committee work, mentored by more senior academics [Actions 5.2(a)-(c)].

(iv) **Workload model** – describe the systems in place to ensure that workload allocations, including pastoral and administrative responsibilities (including the responsibility for work on women and science) are transparent, fairly applied and are taken into account at appraisal and in promotion criteria.

The School has been using a workload allocation model since 2007 to ensure that teaching and administrative duties are distributed fairly amongst staff. Each activity (e.g. module co-ordination, Adviser of Studies, laboratory demonstrating, SWAN Champions) is allocated 'credit' - an annual number of hours to represent the expected workload. The Director of Education and the Head of School review the model each year to ensure that no one is over- or under-loaded. In addition, the allocation of time for each task is discussed each year at a School Board meeting and revisions made to the workings of it, for example, in 2012 the time allocated to university committee membership was also included. The workload model is uploaded at the School SharePoint where it can be accessed by all members of staff.

Efforts are made and will continue to avoid over-loading female academics with administrative and pastoral duties (e.g., the School currently has 3 male and 1 female Advisor of Studies). Flexible working is taken into account in workload allocations; with efforts made across the School to allocate appropriate teaching loads to female academics working part-time (i.e., in terms of quantity and scheduling) [Action 5.2(d)-(e)]. Flexible working is taking into account at appraisal and in promotion criteria.

Both male and female members of staff participate in outreach activities, but the School recognises the importance of providing female role models in some of the events organised [e.g., 'Fantastic Females' event; career events aimed for women].

(v) **Timing of departmental meetings and social gatherings** – evidence of consideration for those with family responsibilities, for example what the department considers to be core hours and whether there is a more flexible system in place.

Departmental meetings take place within 9.30 am and 4 pm, and whenever possible on Monday-Wednesday (9.30-1pm) to accommodate academics working part-time. When the latter is not possible, views are sought prior to meetings where relevant. Social gatherings are inclusive and many are family-

friendly (for example, children are welcome to our Summer BBQ (normally on a Friday afternoon), and the School celebrates a Christmas lunch, rather than a dinner, to facilitate attendance of those with family responsibilities.

(vi) **Culture** –demonstrate how the department is female-friendly and inclusive and ensures visibility of women, for example external speakers. 'Culture' refers to the language, behaviours and other informal interactions that characterise the atmosphere of the department, and includes all staff (academic, technical and support) and students.

The School is committed to maintaining an inclusive and welcoming working environment and to improve the work-life-balance of both men and women. Our efforts were reflected in the results of the survey, where areas related to the departmental culture scored the highest in all groups (academic, research, technical and clerical staff, as well as PhD students; see Section 8: 'areas of good practice'). For example, over 80% of respondents thought that 'the School is a great place to work for women and men', and 100% of female academics agreed that 'social activities are welcoming to both women and men', and that 'line managers are supportive of requests for flexible working and would deal effectively with any complaints about harassment, bullying or offensive behaviour'.

The National Student Survey (NSS) results show that our undergraduate students enjoy their time with us and value the quality of our teaching. For example, overall satisfaction for our courses in 2012 was at 96% for Chemical Engineering, and 100% of Chemistry students.

As mentioned above, we have significantly increased the visibility of women in our webpage, in particular in the 'News' and the 'SWAN' sections. For example, the 2012 L'Oréal-UNESCO UK Fellowship awarded to Dr Geetha Srinivasan and the Marie Curie International Outgoing Fellowship awarded to Dr Pamela Walsh were prominent. We recently marked 'Ada Lovelace' day displaying posters in the School which highlighted the achievements of inspirational women in science, and invited all staff and PG students to a coffee morning. The School celebrates with social gatherings the achievements of male and female members of staff. We will continue celebrating the achievements of our female staff, as well as of women scientists in general (e.g., the celebration of 'Ada Lovelace' Day will be made an annual event in the School's calendar) [Action 5.3].

New social space has been arranged for students at the School Foyer, which has been very popular. We plan to increase the number of social gatherings in order to facilitate communication and networking within the School, for example, coffee mornings will be organised for all staff once a week [Action 5.4(a)]. Family-friendly social events will be organised by the social committee [Action 5.4(b)].

Following discussions with female academics, the SAT decided that although efforts were needed to increase the number of female speakers, a formal quota should not be established. It was generally felt that the interest of the research should be the main criteria to invite speakers, rather than gender. However, an effort has been made and will continue to make sure that an increasing number

of women speakers are invited [Action 5.5(a)]. For example, the percentage of female speakers in our seminar programme increased from ca. 4% (1 woman) in 2011/12 to 10% (4 women) in 2012/13. Importantly, in Nov. 2011, the School 'Thomas Andrews Annual Lecture' was given by Prof. Lesley Yellowlees (University of Edinburgh; first ever female president of the RSC). In addition, staff will be reminded to consider women as external examiners for PGR examinations as appropriate for the thesis [Action 5.5(b)].

(vii) **Outreach activities** – level of participation by female and male staff in outreach activities with schools and colleges and other centres, and how the department ensures that this is recognised and rewarded (e.g. in appraisal and promotion).

Outreach activities are central to the School and all members of staff participate. These activities are recognised as part of the individuals' administrative duties and are taken into account at appraisal and promotion. PG students and PDRAs (male and female) also regularly participate in these activities (e.g., guiding departmental tours during open days, career events, school visits). There is a balance of male and female speakers in most events, and female role models are highlighted in the presentations. We encourage female members of staff, as well as PGs/PDRAs, to join some of the Ambassador schemes (ChemNet, STEM and Sentinus Ambassadors) aimed to promote chemical sciences to school pupils and the general public. We will continue these efforts [see Actions 2.1(c)-(e)].

In 2012, Dr Angela McKeown, former UG and PG student of our School, was appointed RSC Regional Coordinator (incl. Northern Ireland and the Republic of Ireland). Having this RSC post embedded within the School has given further strength to our recruitment and outreach programmes. In addition, Dr McKeown devotes 20% of her time to School's activities and has worked in partnership with us to organise a wide range of annual events for both chemistry teachers and pupils. These include, for example, career events, school visits, University Taster' days, and 'Chemistry at Work' events. Of particular interest was the 'Fantastic Females' event (attended by ca. 200 16-18 year old girls in 2012) which depicted career presentations from 8 female speakers, including 2 academics, and received very positive feedback. For example, the following is an extract of a report posted on the website of one of the schools that attended the event:

> *'As we listened to each of the women talk about their accomplishments and life stories, we were truly inspired! The women came from many different backgrounds and each spoke passionately about their chosen career. The occupations which they spoke about included chemistry lecturers, chemical engineers, pharmaceutical engineers and company directors. They described their typical day, qualifications needed to enter the profession, salary, promotion opportunities and conditions of the job. Most importantly they discussed how they had managed to juggle looking after their children (and husbands!) with the progression of their careers. They sent a positive message out to the girls listening that women didn't have to sacrifice their careers in order to raise a family. In fact, they talked about different schemes and options which are available to women working in the industry who wish to raise a*

*family. The whole experience persuaded a few of us to really consider taking Chemistry to the next level after our A-levels as it really does open a lot of doors!'*

We will continue with our diverse and extensive outreach programme. Given its success, we plan to run a 'Fantastic Females' event every year [Action 2.1(e)].

## 7. Flexibility and managing career breaks

### (i) Maternity return rate

In the 2000-2013 period, 2 academics and 5 researchers took maternity leave. As in our original application, the School has 100% return rate from maternity leave (Table 9).

**Table 9**: Maternity return rate for academic and research staff.

| | **Number of staff on Maternity Leave** | | **Number of staff who returned** | | **Return Rate %** | |
|---|---|---|---|---|---|---|
| | *Acad.* | *Res.* | *Acad.* | *Res.* | *Acad.* | *Res.* |
| **2010/2011** | - | 1 | - | 1 | - | 100 |
| **2011/2012** | 2 | - | 2 | - | 100 | 100 |
| **2012/2013** | - | 3 | - | 3 | - | 100 |

### (ii) Paternity, adoption and parental leave uptake

In the 2009-2012 period one female academic took adoptive leave, and 2 academics and 1 research staff took paternity leave (Table 10). This contrasts with data included in our previous application where no paternity leave had been formally taken by men (although informal arrangements had been made in some cases). Although the School continues to allow flexibility and informal arrangements, the higher uptake on paternity leave shows success on promoting family-friendly policies. It should be noted that QUB provides 3 weeks paternity leave at full pay (*i.e.*, significantly more generous that the current statutory entitlement of two weeks at Statutory Paternity Pay only).

**Table 10**: Paternity, adoption and parental leave uptake, and numbers of staff working flexibly (academic and research).

| | **Flexible working** | | **Paternity Leave** | | **Parental Leave** | | **Adoptive Leave** | |
|---|---|---|---|---|---|---|---|---|
| | *Acad.* | *Res.* | *Acad.* | *Res.* | *Acad.* | *Res.* | *Acad.* | *Res.* |
| **2009/2010** | - | - | 1 | 1 | - | - | - | - |
| **2010/2011** | - | - | 1 | - | - | - | 1 | - |
| **2011/2012** | 1 (f) | 1 (f) | - | - | - | - | - | - |

(iii) **Numbers of applications and success rates for flexible working by gender and grade**

Academic and research staff within the School are able to work flexibly in an *ad hoc* manner without having to make a formal application (e.g., working from home when the need arises, to care for sick children, etc.). When flexible working arrangements are needed on a more continuous basis, formal applications are encouraged and supported. In 2011/12, there were two formal applications for flexible working: one academic and one researcher, both female (Table 10). They were both granted.

(iv) **Flexible working** –numbers of staff working flexibly and their grades and gender, whether there is a formal or informal system, the support and training provided for managers in promoting and managing flexible working arrangements, and how the department raises awareness of the options available.

Currently 3 female lecturers are working part-time. The University has a formal flexible working scheme and this is implemented by the School. Applications are discussed with the HoS and arrangements revised as required. Flexible working policies are fully supported and actively promoted by the School; e.g., information is included in the webpage, and provided at induction. Information about family friendly policies, including flexible working, was also discussed at a recent School SWAN seminar, as this was identified as an area needing action at the Gender Equality Survey (see Section 8) [Action 5.6]. Flexible working is also specifically discussed at the 'returners interview' with the HoS (see next section).

(v) **Cover for maternity and adoption leave and support on return** – what the department does, beyond the university maternity policy package, to support female staff before they go on maternity leave, arrangements for covering work during absence, and to help them achieve a suitable work-life balance on their return.

The University has a central fund that provides maternity leave cover during the 18 weeks of full pay leave. Since 2010, the School has had 5 applications to the Maternity Fund approved.

In addition, the School introduced the following 'returners' policy' in 2010:

- Academics returning from maternity leave are relieved of teaching and administrative duties for 6 months following the return.

- All returning staff will have a 'back to work interview' with the HoS (or project manager/supervisor) where flexible working will be discussed.

The policy had been successfully implemented and has proved extremely valuable for a number of members of staff. We plan to further expand the policy

to include members of staff undertaking extended paternity leave (where their partners return to work) [Action 5.7]. As noted above, we have 100% return from maternity/adoption leave, and part-time working has been taken by 33% of returners.

*[4991 words]*

## 8. Any other comments – maximum 500 words

Please comment here on any other elements which are relevant to the application, e.g. other SET-specific initiatives of special interest implemented since the original application that have not been covered in the previous sections.

The HE STEM Gender Equality Culture Survey (UKRC) was circulated online among all staff and PhD students in July 2013. The results are summarised below. The percentage levels of 'agreement' for each statement in the survey were calculated and split by gender and group (academics, PhDs, clerical staff, etc.) in order to identify 'areas of good practice' and 'areas needing action'. In general, there were no significant differences in the feedback from men and women. The results of the Survey were circulated within the School by email.

| | **Participation by grade** |
|---|---|
| Academic | 80% |
| Clerical | 75% |
| Technical | 59% |
| Postdoc | 37.5% |
| PG students | 17% |
| ***Total*** | ***42%*** |

| | **Participation by gender:** |
|---|---|
| Male | 46.1% |
| Female | 42.9% |
| Prefer not to say | 11.0% |

- <u>Areas of good practice</u>

  - Staff are treated on their merits and work is allocated on a clear and fair basis, irrespective of gender.
  - The School has a workplace culture that is welcoming to all.
  - There is leadership and management commitment to delivering positive and sustainable changes in gender equality culture and practice.
  - The School is a great place to work for both women and men.

- <u>Areas needing action</u>

  - Training in understanding unconscious bias needed. Lack of formal gender equality training for PG students.
  - More information on the promotion process and criteria, particularly among women, was welcome.
  - More career development, and networking/representation opportunities are welcome, particularly among female academics, part-time staff, and support staff.

- More information about gender equality matters also welcome, in particular for non-academics.

Following feedback from the survey, the SAT agreed on the following Actions:

- Introduce training in gender issues for PhD students, as well as training in unconscious bias (staff and PG students) [Action 4.2].
- Give a seminar on promotion ahead of the next call for applications [provided by the HoS in Sept. 2013 and included in our webpage; see also Action 3.4(b)].
- Increase networking opportunities for female academics (e.g., through the RSC Women Member's Network) [Action 4.1].
- Provide more information on family-friendly policies, gender issues, and School policies [specific information has now been included in the UG-, PG- and Staff-handbooks, including the names to two academics (one male and one female) who can be contacted to discuss gender and equality issues; an information SWAN sheet was also circulated by email to all staff and a seminar of University and School work-life balance policies was given to all staff by Dr Lagunas in Sept. 2013, following the promotions seminar given by the HoS] [Action 5.6].
- Circulate in the future surveys specifically addressed to PDRAs and PhD students and to encourage their participation [Action 1.3].

*[425 words]*

## 9. Action plan

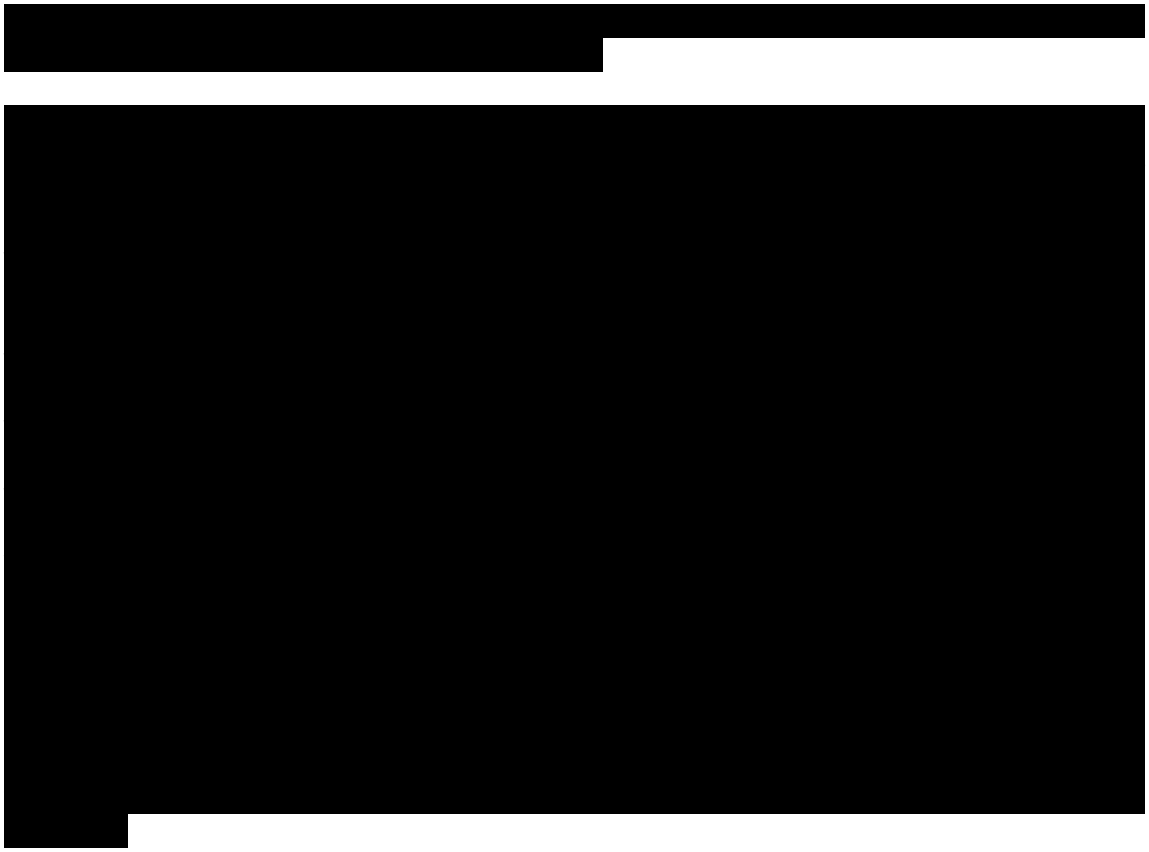
Provide a new action plan as an appendix. An action plan template is available on the Athena SWAN website.

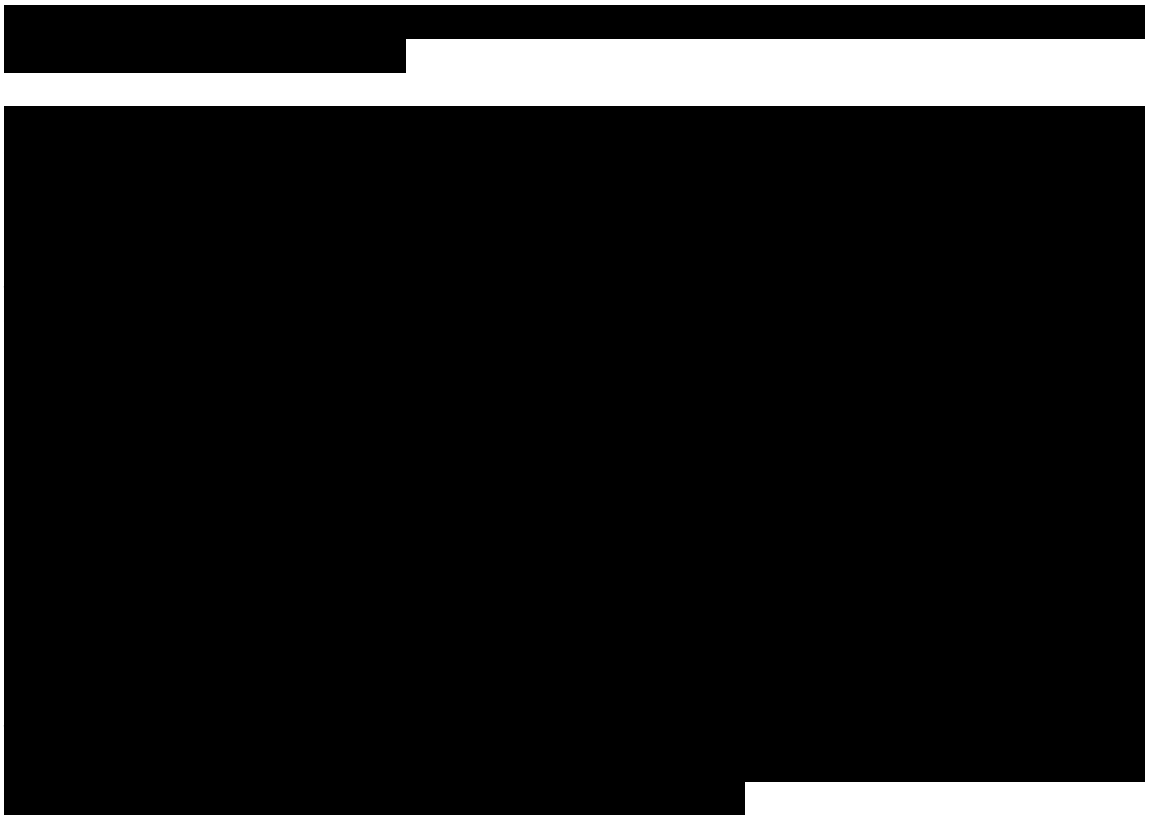
The Action Plan should be a table or a spreadsheet comprising actions to address the priorities identified by the analysis of relevant data presented in this application, success/outcome measures, the post holder responsible for each action and a timeline for completion. The Plan should cover current initiatives and your aspirations for the next three years.

[Action Plan (2013) attached]

## 10. Case study: impacting on individuals – maximum 1000 words

Describe how the department's SWAN activities have benefitted two individuals working in the department. One of these case studies should be a member of the self assessment team, the other someone else in the department. More information on case studies is available in the guidance.





*[653 words]*

## ACTION PLAN 2010 (including progress)

| Key assessment area | Action | Evidence | Plan | Expected Impact | By | Timeline | **Progress** |
|---|---|---|---|---|---|---|---|
| 1. SET baseline and academic profile | 1. To increase the percentage of female UG students entering CCE | | 1. Engagement of girls at secondary level specifically by using female role models. These role models will be female academics, PDRAs and/or PhD students. [**Completed and ongoing**: a number of events are organised every year in partnership with our female RSC Regional Coordinator, e.g., 'Fantastic Female' event; STEM Ambassadors events, etc.]<br>2. Formalisation of an outreach program for our current UG female students to return to their secondary school and talk about their experience in CCE [**Revised and ongoing**: Staff and PG students currently doing this, rather than UGs]<br>3. Targeting and supporting female chemistry school teachers in promoting chemistry amongst their own female student cohort. [**Completed and ongoing**: annual events organised in partnership with our RSC Regional Coordinator]<br>4. Annual training session for staff involved in outreach activities to make them aware of the need to target female pupils and explicitly inform the visited schools about the high levels of female undergraduates doing chemistry and chemical engineering degrees [**Staff informed regularly**; updated student female figures and female role models included in presentations]. | ▪ More informed female students about prospects and increased numbers<br>▪ Increased number of pupils keeping Maths and Chemistry at A-levels<br>▪ Increased number of high quality students entering CCE degrees | CCE SWAN committee and CCE staff | 2-3 years | **Action 1.1- Achieved:** Overall, the % of female UG students in the School has increased slightly from 42% (avg. for 2005-2008) to 44% (avg. for 2008-2013), with the actual number of female students more than doubling in the last five years. The quality of the students has also increased (*via* raising entry requirements) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2. To increase the percentage of female research staff and graduate students in CCE | | 1. Introduction of mentoring scheme for female researchers in the school to encourage the transition [**Scheme introduced**: Prof. AP de Silva runs a mentoring scheme since 2009]<br>2. Use of female academics and visitors to provide information and role models for potential PGs and PDRAs . [**Done on a regular basis**: a number of research and careers seminars with female speakers (industry and academia) are scheduled each year, including for example, the School 'Thomas Andrews Annual Lecture' delivered by Prof. Lesley Yellowlees in 2011. Two out of five external examiners are female]<br>3. Formalisation of a forum for female PhD students to talk about their experience in research to female undergraduate students [**Revised and ongoing**: A PostDoc forum was proposed instead as the transition from PhD to PDRA was identified as less of a problem than that from PDRA to academic. An initial meeting of the Forum has taken place and the School has allocated an annual budget of £1000 to the Forum from next year]. | ▪ Increased quality of candidates applying.<br>▪ Increased diversity of experience and attitudes in the school. | CCE SWAN committee<br><br>Mentoring: AP de Silva Support Staff: F. Lauder<br><br>PhD forum: H.Abraham and School Chem. Soc. | 2-3 years | **Action 1.2- Partly achieved.** The % of female graduate students overall (ca. 44%) has not changed significantly since our last application but the proportion of females in Chem. Eng. projects (as the main subject) has significantly increased and there is now a more even distribution between Chemistry and Chem. Eng.<br><br>The % of female research staff (ca. 44%) is higher than that reported in our previous application (average for 2006-2009: ca. 40%). |
| | 3. To increase the percentage of female applicants for research PDRA posts and academic positions in C and, specifically in CE | | 1. Increased targeting of potential female applicants. Increased profile of women on the website. SWAN webpage. [**Completed and ongoing**: We have improved the visibility of women on the School website and expanded the SWAN webpages which show, for example, links to the Queen's Gender Initiative, information on mentoring schemes, and life-work balance issues. The achievements of | . Raising the profile of women in the school. . . . Making it better known that CCE offers an atmosphere where women are recognised as equals. | HoS and SMB | 1-2 years | **Action 1.3- Partly achieved**: The % of female applicants for research PDRA posts over the last three years (2010-2013) has remained approximately constant at 26-29%, which is similar to that noted in our original SWAN application (29% average for 2006-2009). |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | our female members of staff and students are prominent in the 'news' section and this is updated regularly]<br>2. Promoting QGI activities within the school through school SWAN website. [**Completed and ongoing:** see above]<br>3. Promoting "buddy"/mentoring system for female PhD students with female PDRAs. [**Abandoned:** Our data show that there is not significant loss of women at the PhD-PDRA transition within the School. Therefore, and given that we have other mentoring schemes in place (*i.e.*, PhD peer mentoring, mentoring for female researchers), this new scheme was not considered necessary]. | | | | There has been an increase in the percentage of female applicants for academic positions in 2010-2013 (21%) compared to the previous three years (17%).<br><br>Importantly, the success rate is in general higher for women than men. |
| | 4. To increase the percentage of female applications for internal promotion | All eligible female academics have applied for promotion in the last two years. Mentoring of the staff has been effective in encouraging applications and helping to draft applications. | | | HoS and SMB | Ongoing | **Action 1.4 – Improvement shown**: One female applicant successfully promoted to Reader, compared to also one female applicant (unsuccessful) in our original SWAN application. |
| | 5. To increase the visibility of women in CCE in the population at large. | | School webpage showcasing interviews and female profiles of UG, PhD, PDRA and academic women in CCE at QUB: "One day in the life of chemists and chemical engineers at QUB". [**Revised and ongoing**: instead of 'one day in the life...', 'profiles of women in the School have been included] | Raising the profile of women in Science and Engineering in NI | CCE School Staff<br>CCE SWAN committee<br>HoS | 2-3 years | **Action 1.5- Achieved** The visibility of women has been increased in our webpage (see above, Action 1.3), in School seminars and events (e.g., celebration of 'Ada Lovelace day'), and in outreach activities (e.g., 'Fantastic Females' event). |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2. Key career transition points | 1. To monitor PhD completion rate | | Keep record of completion;<br>- identify possible gender bias<br>- identify possible supervisory issues | ▪ Improved PhD overall experience.<br>▪ Improved PhD supervisory culture | Mrs. A. Doherty<br>CCE SWAN committee<br>Reporting to SMB | 1-2 years | **Action 2.1- Completed and ongoing:** Data shows no gender bias. No issues identified. |
| | 2. To monitor progression from PhD to PDRA | | 1. Production of an information package to be made available online to PhD students providing guidelines on career progression in academia, how to secure PDRA positions and apply for funding fellowships in particular via UKRC [**Completed and updated on a regular basis:** relevant information has been included in the School SWAN webpages]<br>2. Keep record of progression via school yearly surveys to monitor "intention" vs "outcomes".<br>[**Abandoned:** following long discussions this was abandoned as it was impractical and there were issues related to Data Protection] | Increased confidence amongst female PhD students about the prospect that academic careers can offer. | CCE SWAN committee<br>SWAN Champion | 1-2 years | **Action 2.2- Completed and ongoing:** Data shows no significant loss of women at the PhD-PDRA key transition point. |
| | 3. To monitor destination statistics for graduates and PDRAs and introduce a formal leaving interview for PDRAs | | 1. Keep record of PhD students destination upon completion.<br>[**Completed and ongoing**: The University uses the DLHE (Destinations of Leavers from Higher Education) survey and records are passed on to the Schools. However, the number of respondents is often too low to withdraw meaningful conclusions]<br><br>2. Introduction of a formal interview recorded for leaving PDRAs.<br>[**Revised:** Done informally by supervisors. Given that career plans are discussed at regular appraisal and probation meetings, one more | Informed decision making about why students and PDRAs make their choices and how to change attitudes towards progression through to academia. | Mrs. A. Doherty<br>CCE SWAN committee | 1-2 years | **Action 2.2- Completed and revised on a regular basis:** - Monitoring will continue but it has proved difficult to get significant numbers of responses. For ex., there were only 18 responses from PhD students graduating in the period 2007-2010 (17 were in PG or graduate employment, 1 unemployed). |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | formal interview was considered unnecessary] | | | | |
| | 4. To analyse part-time working statistics and communicate part time working opportunities widely | All female academics have undertaken some part time working/career breaks in the school. All PDRAs who have had a baby have taken maternity leave. A large proportion of male academics have taken paternity leave. | 1. Advertise widely opportunities for part time working including info, guidelines and contact details on departmental webpage. [**Completed and updated on a regular basis:** information included in the School SWAN webpages]<br>2. Active engagement of staff considering this avenue at appraisal and mentoring sessions. [**Done on a regular basis:** flexible/part-time working is discussed at appraisal meetings with staff going on/returning from extended leave, such as maternity leave] | Increased productivity and morale of the department. | HoS and SMB<br>Mrs Doherty<br>AP deSilva | Ongoing | **Action 2.4- Completed and ongoing:** Statistics are analysed regularly. Information of family-friendly policies (inc. Part-time working) has been included in the UG-, PG- and Staff-handbooks, and a seminar was given to all staff by the SWAN Champion. |
| | 5. To analyse the impact of career breaks at all levels and introduce a returners policy | An informal arrangement has been introduced which is being formalised which has led to the returning academic to be relieved of teaching and admin duties for 6 months. | Introduction of a formal returners policy and interview. [**Policy introduced:** interviews are held by the HoS or relevant line managers. The scheme will be extended from next year to include staff taking extended paternity leave] | ▪ Increased research productivity for returning member of staff and quicker reintegration into the school.<br>▪ Increased morale and reduction of the impact of a career break. | HoS and SMB | Ongoing | **Action 2.5- Completed and ongoing:** 100% return from maternity/adoption leave. Positive feedback received from staff returning from maternity/adoption leave. |
| | 6. To monitor promotion statistics in the School and to understand and act on any anomalies | Ongoing monitoring undertaken and encouragement of eligible members of staff to undertake promotion applications (see 1.4) | | ▪ Increased morale and career development of staff. | HoS and SMB<br>Mrs Doherty | Ongoing | **Action 2.5- Completed and ongoing:** [see Action 1.4] Statistics are analysed regularly. The HoS gave a seminar on promotion to all staff. Promotion is discussed at appraisal meetings |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | twice a year. |
| | 7. To analyse the statistics at key transition points and to focus efforts on those stages where change is needed | | Analysis of the statistics by SWAN team. Report and action plan proposed.<br>Actions to be taken where needed. | ▪ Evidence based decision making on action plans. | CCE SWAN committee<br>Mrs Doherty<br>HoS and SMB | 1-2 years | **Action 2.6- Completed and ongoing**. Statistics are analysed by the SWAN team at least once a year. As a result, some actions have been revised (see above) or new actions introduced (for example, actions addressing issues identified at the School survey) |
| 3. Culture Change | 1. To establish a committee to examine equality issues | Committee formalised and meets regularly. SWAN is placed on the agenda of all senior management board (SMB) meetings. | 1. Actions proposed by SWAN SAT reviewed at SMB and ratified to become school actions.[**Done on a regular basis:** SWAN is a standing item in the agenda of the SMB. Three SAT members also belong to the SMB and the SWAN Champion is invited when appropriate]<br>2. Regular publication of SWAN SAT report on school webpage, including statistics and action plans<br>[**Done on a regular basis**: The SWAN Action plan is on the School website; statistics and meeting reports are circulated by email to SAT members; minutes of the SAT meetings are also uploaded on the School SharePoint] | ▪ Acceptance that equality issues are important.<br>▪ Demonstration that equality helps all in the school. | CCE SWAN committee<br>HoS and SMB | Ongoing | **Action 3.1- Completed**: In addition to the SWAN SAT and SMB meetings, a discussion group between the HoS and all female academics is held at least once a year. |
| | 2. To increase gender awareness at all stages of training from undergraduate levels to academic staff | | 1. SWAN related items addressed at induction by staff [**Introduced and will continue**]<br>2. Guidelines in the UG and PG handbooks to include info on gender specific issues. [**Introduced and updated on a regular basis**] | ▪ Acceptance that equality issues are important.<br>▪ Demonstration that the school takes equality issues seriously at all levels | CCE SWAN committee<br>HoS and SMB<br>CCE Staff | 1 year | **Action 3.2- Completed and revised on a regular basis**: Information is given at UG and PG induction and is included in the UG-, PG- and staff-handbooks. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2. To increase the numbers of female visiting professors, examiners, sabbatical visitors and external speakers | | 1. To set a quota of female speakers/visitors in the academic year. [**Abandoned** upon consultation with female members of staff]<br>2. Increase the number of female external examiners 1out of 5. [**Exceeded:** Two out of five external examiners are female] | ▪ Increased profile and role models of female academics to UG, PG, PDRA and academic members of staff.<br>▪ Increased numbers making the transition between levels. | HoS and SMB<br>CCE Staff | 1-2 years | The number of female speakers at seminars, etc. has been generally increased, but a fixed quota was considered unnecessary. Female academics felt that speakers should be chosen primarily by the interest of their research, independently of gender. |
| | 3. To encourage open departmental consultation and to improve internal and external communications at all levels in the school. | More regular school board meetings. Sharepoint site activated. School newsletter starting up. Social space incorporated in the school. [**Revised**: A SharePoint site was activated and is regularly used. Instead of a 'newsletter', it was considered more practical to keep a good 'news' section in the School webpage that is regularly updated. This has proved popular] | | ▪ Decrease in miscommunication.<br>▪ Increased acceptance of decisions.<br>▪ Better decision making undertaken.<br>▪ Increased morale of the school. | HoS and SMB<br>CCE Staff | Ongoing | **Action 3.3-Completed**: Communications within the School has been improved through more open consultations (e.g., at revised School Board Meetings, via School survey, HoS-staff group discussions) and new social space. |
| | 4. To address the percentage of female staff on key committees and in key jobs and linking this to workload allocation. | Monitoring of workloads and committee membership undertaken regularly. Eligible female academics already on a number of key school and university bodies when possible. | | ▪ Maintenance of balance of the workloads of academics in the school.<br>▪Increased school representation on university committees. | CCE SWAN committee<br>HoS and SMB<br>CCE Staff | Ongoing | **Action 3.4-Completed and revised on a regular basis**: The School has a workload allocation which is reviewed each year by the SMB, and uploaded on the School SharePoint. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 5. To accept non-standard academic career pathways as a route to employment/promotion | More "gender-balanced" qualifying criteria of selection in the appointment review process, such a multi-disciplinarity and extensive collaboration. | 1. To remind staff to examine the profile, including career breaks etc, when making judgements of the merits of applicants and promotion candidates.<br>2. To ensure school committees take this into consideration (particularly the internal promotion and probation panels) | ▪ Better quality candidates. Increased morale of school.<br>▪ Larger takeup of part-time working (see 2.2 and 2.3) | HoS and SMB | 1-2 years | **Action 3.5- Done on a regular basis:** Staff in interviewing /promotion panels, and appraisers are regularly reminded of these issues, and receive appropriate training from the University. |
| 4. Work life balance | 1. To increase the opportunity for networking activities | Increased number of visiting academics.<br>Encouragement of staff and PDRAs to apply for travel grants within QUB and externally.<br>Increased number of conferences organised by QUB staff.<br>Promotion of the ATHENA program and UKRC activities amongst female staff and students.<br>Promoting EU-gender led activities in QUB such as "Yellow Window" workshop. | | ▪ Increased awareness of research worldwide.<br>▪ Increased prospect of promotion.<br>▪ Increased profile of QUB academics from CCE. | CCE SWAN committee<br>SWAN Champion<br>HoS and SMB<br>CCE Staff | Ongoing | **Action 4.1- Events regularly organised and promoted within the School**. Travel grants are offered by the School to attend some of these events (e.g., Irène Joliot-Curie Conference-London, Symposium on the role of women in chemistry-Dublin) |
| | 2. To increase number and variety of school based social activities including timing and family friendly policies | Social events are increasing and families are welcomed at the events. | More consultation about timings and types of events is required. Need for the events to be coordinated. | ▪ Better integration of the school.<br>▪ Increased collegiality.<br>▪ Increased productivity. | CCE SWAN committee<br>HoS and SMB<br>CCE Staff | 1-2 years | **Action 4.2-: Social committee established**, driven by staff, to coordinate the events. Several family-friendly social events are organised throughout the year. Children often attend. |
| | 3. To monitor percentage of people practicing flexible working and communicate | See 2.2/2.3 | | | Mrs A. Doherty and CCE SWAN committee | 1-2 years | **Action 4.3- Completed and updated in a regular basis:** Two applications for |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | opportunities in the school more widely. | | | | | | flexible working were made in the reviewed period (both granted). A seminar of University and School work-life balance policies was given to all staff by the SWAN Champion. |
| | 4. To schedule departmental, research and appraisal meeting at appropriate times. | | Wide consultation of people to meet to ensure groups are not excluded. Consultation of those who cannot be accommodated before the meeting. [**Done on a regular basis,** see below and also Action 3.3] | ▪ Decrease in miscommunication .<br>▪ Increased acceptance of decisions.<br>▪ Better decision making undertaken.<br>▪ Increased morale of the school. | HoS and SMB | 1 year | **Action 4.4- Done on a regular basis:** Departmental meetings take place within 9.30 am and 4 pm and when possible on Mon-Wed (am) to accommodate part-time female academics. |
| 5. Champion and responsibilities | 1. Performance review | | 1. Seek feedback from staff on the school, HoS performance and response to expectation. Consultation at PDRA level through survey and mentoring.<br>2. Yearly survey and suggestion box on SWAN web page.<br>[**Revised**: A suggestion box was placed on the School SWAN webpage but there has been no significant uptake. A physical suggestion box will be placed in the School Office in the future. A gender survey was circulated among all staff (inc. PDRAs) and PhDs in 2013, but yearly surveys have not been done as impractical. Instead, there are regular meetings between the HoS | ▪ Increased efficacy and focus of action plans<br>▪ Increased transparency of decision making | Champion and Mrs A. Doherty; CCE SWAN committee | 1-2 years | **Action 5.1- Completed** Suggestions from staff (at discussion groups with the HoS; School Board, etc.) and feedback from the gender survey have informed our future Action Plan and used to revise some of initially proposed Actions in the current Plan. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | and SWAN SAT with PDRA reps., a PostDoc Forum has been initiated and mentoring schemes are in place. The HoS has done Focus groups with all support staff in 2012 and meets once a year with female academics] | | | | |
| | 2. To introduce and monitor a mentoring scheme for academics and PDRAs outside the appraisal system with the school | Mentoring scheme has been introduced as well as the formal appraisal scheme for all female PDRA and academics. | | Increased career focus and planning for the future. Higher attainment and ambition of those mentored. | HoS, AP de Silva | Ongoing | **Action 5.2- Scheme introduced** (see Action 1.2(1)) |
| | 3. To monitor regularly female staff activities in research, admin and teaching and act on anomalies. In particular, to monitor female input into decision making processes. | See 3.4 | | | Mrs Doherty and SWAN Champion reporting to HoS and CCE SWAN committee | Ongoing | **Action 5.3- Completed and ongoing:** See Action 3.4 above. |
| | 4. To increase the involvement of HoS and the senior management team in SWAN activities | HoS has become chair of the SWAN SAT committee and consults regularly on equality issues throughout the school.<br>SWAN discussed at all management and school board meetings.<br>A Director of Research and senior Professor is on the SWAN SAT | Increased consultation with small groups of PDRAs, academics and PGs on equality, communication and transparency. [**Done on a regular basis:** e.g., the SWAN SAT has one PDRA and one PhD representative; there are regular discussion groups between the HoS and all female academics as well as with support staff] | ▪ Increased morale of school.<br>▪ Clear decision making processes.<br>▪ Increased acceptance of decisions. | HoS | 1-2 years | **Action 5.4- Completed and ongoing:** See 3.1(1) above |

## ACTION PLAN 2013

**Abbreviations**: HoS = Head of School; SMB = Senior Management Board; AoS = Advisor of Studies; SAT = Self-Assessment Team (SWAN); UG = Undergraduate; PG = Postgraduate; RSC = Royal Society of Chemistry; PDRA = Postdoctoral Research Assistant

| Action | Description of action | Plan | Responsibility | Timescale | Success Measure |
|---|---|---|---|---|---|
| **1. Key area to be addressed:** *Self-assessment and implementation of the Action Plan* | | | | | |
| **1.1** | Increase the number of SAT and working groups meetings. | a) The SAT will meet at least 3 times a year, with smaller informal working groups meeting 4-6 times a year.<br>b) The discussion group between the HoS and female staff will continue to meet at least once a year.<br>c) The SWAN Champions/HoS will continue to report to the University SWAN-Champions Working Group and the SWAN Steering Group. | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) | From Jan. 2014 onwards | Meetings take place as planned. The Action Plan is more closely monitored and implemented more efficiently. |
| **1.2** | Closely monitor the implementation of the Action Plan. | The SWAN Champions will attend the SMB at least once a year. Annual reports will be prepared for discussion at these meetings, on the following:<br>- UG and PG student populations.<br>- Research and academic staff recruitment.<br>- Academic promotion.<br>See also Action 1.1 | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) | From Jan. 2014 onwards | Fast responses to issues affecting the gender balance of our student and staff populations. Closer monitoring of the Action Plan. |
| **1.3** | Expand the SAT membership. | The SAT will include one representative from the technical staff and at least one UG student. | Dr Lagunas (SWAN Champion) | From Jan. 2014 onwards | More participation of support staff and UG students in SWAN initiatives. Expanded SAT addresses issues relevant to these groups. |

| | | | | | |
|---|---|---|---|---|---|
| **1.4** | Carry on consultations with all staff and PhD students on gender issues to assess progress since the survey consultation carried out in 2013. | A survey will be circulated again among staff in two years time to monitor progress and identify any new issues. Surveys specific for PDRAs and PG students will be formulated. Their participation will be encouraged, for example, by offering a prize draw. Consultations with PDRAs will also take place via the PostDoc Forum. | Dr Lagunas (SWAN Champion) / Dr Walsh (PostDoc Forum) / Prof. James (PG AoS) | Surveys circulated in July-August 2015 | Surveys to be circulated, results analysed and compared with those of the previous survey. Increased participation of PDRAs and PhDs. Actions taken as appropriate. |
| **2. Key area to be addressed:** *Recruitment of female UG and PG students* | | | | | |
| **2.1** | Increase the visibility of women within the School in order to encourage more women into our UG and PG courses. | a) Keep reinforcing women's profiles on the School webpage (e.g., by posting timely updates on the achievements of our female members of staff and students), and in the School's promotional material (e.g., increase the use of female images).<br>b) Keep increasing the number of female invited speakers/external examiners [see also Action 5.5].<br>c) The three new female members of staff will actively participate in outreach and recruiting activities (e.g. interviewing female students during UCAS days).<br>d) Actively encourage more female members of staff and PhDs to take part on STEM / ChemNet Ambassadors Programmes to promote chemistry and chemical engineering in local schools.<br>e) Increase the number of outreach activities specifically directed to girls (e.g., 'Fantastic Females' events) | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) / Dr Muldoon (School Seminar Programme) / Dr Manesiotis (webpage) / Dr McKeown (RSC Regional Coordinator) | From Jan. 2014 onwards | Increased numbers of female students entering our UG and PG Programmes.<br><br>Percentages of female students kept above national averages. |
| **2.2** | Survey female UG/PG students on why they chose to apply and subsequently enrol in their courses. | Focus groups will be scheduled with UG and PG students, and in particular, with Chemical Engineering female UGs currently in year 3, in order to identify the reasons for the larger UG intake in 2011. | Dr Lagunas, Dr Thompson (SWAN Champions) | Consultations in March-April 2014 | The reasons for female students to enrol in UG and PG courses are better understood, and further actions are put in place if appropriate. |

| | | | | | |
|---|---|---|---|---|---|
| **2.3** | Support school Maths teachers in promoting Chemical Engineering amongst their female students. | Send information packs to Maths teachers in local schools<br>Invite Maths teachers to seminar/tour of the Department | Dr Lagunas, Dr Thompson (SWAN Champions) | Packs to be sent in Sept. 2014 | More girls take A-level Maths. Increased number and % of women entering Chemical Engineering. |
| **3. Key areas to be addressed:** *Recruitment of female staff and promotion* | | | | | |
| **3.1** | Monitor the percentage of women shortlisted for academic and research positions. | Keep records within the School and analyse the data regularly. | Ms Doherty (School Manager) / Dr Lagunas, Dr Thompson (SWAN Champions) | From Jan. 2014 onwards | Increased understanding of the gender balance at the various stages of the selection process. Actions put in place if required. |
| **3.2** | Increase the quantity and quality of applicants to research and academic positions. | a) Increase the visibility of women within the School (see Action 2.1), and increase efforts to promote family-friendly policies and mentoring schemes through School seminars, as well as in the webpage and in promotional materials.<br>b) Nominate one female academic as point of contact for all academic positions.<br>c) Pro-actively seek suitable female candidates for academic positions, especially for Reader/Professor posts (*e.g.*, through personal contacts of the HoS, Directors of Research, etc.)<br>d) Reinforce the positive statements in all job adverts welcoming applications from women, making reference to family friendly policies and including the SWAN logo.<br>e) Revise the wording in job adverts to ensure that they are not unconsciously biased towards men. [see Action 4.2(a)] | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) / Dr Manesiotis (webpage) | From Jan. 2014 onwards | Increased percentage of female applicants to both research and academic positions.<br><br>Increased number of women appointed. |

| | | | | | |
|---|---|---|---|---|---|
| **3.3** | Actively support female PDRAs into their transition to an academic career. | a) Identify potential candidates and proactively encourage applications from female PDRAs to grants/fellowships to help establish independent research careers (e.g., Dorothy Hodgkin and L'Oréal-UNESCO Fellowships). Provide mentoring for these applications including mock interviews and presentations.<br>b) Continue to offer travel bursaries to PDRAs (and PhDs, where appropriate) to attend relevant Conferences (e.g., the Irène Joliot-Curie Conference). Encourage more female postdocs to take these opportunities (*e.g.*, increased female engagement through the PostDoc Forum, where previous recipients of the bursaries can share their experience).<br>c) Provide mock interviews and mentoring to PDRAs applying for academic jobs, as well as detailed post-interview feedback to those shortlisted for academic positions in the School. Ensure female engagement in these activities through the PostDoc Forum (see 3.3(e)).<br>d) Introduce a scheme of 'teaching fellowships' which will involve the extension of PDRA contracts by 1 month to allow PDRAs to acquire teaching experience without this having a negative impact in their research. Monitor the scheme to ensure that there is adequate gender balance.<br>e) Actively support the PostDoc Forum in their efforts to promote career and professional development, including the allocation of annual budget of £1000 (eg. to organise career seminars, invite speakers). The female PDRA representative in the SAT and Dr Walsh will work closely with the Forum's organisers to ensure that women researchers fully engage with the Forum's activities and to liaise with the SAT. | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) / PDRA representative of the SAT (currently Dr Helen Daly) / Dr Walsh | From Jan. 2014 onwards | Increased number of female PDRAs within the School getting academic positions.<br><br>Increased engagement of women researchers in School's activities.<br><br>Increased confidence amongst female PDRAs about the prospects that an academic career can offer. |

| | | | | | |
|---|---|---|---|---|---|
| **3.4** | Increase the percentage of female applicants for internal promotion. | a) Include up-to-date information on promotions on the School webpage.<br>b) Schedule regular promotion Q and A sessions/seminars within the School.<br>c) Encourage new female members of staff to attend University Promotions Seminars organised by the Queen's Gender Initiative.<br>d) The HoS to liaise with the appraisers of women academics to ensure that promotion is discussed and career development needs identified.<br>e) Regularly discuss career development needs and promotion at the meetings between the HoS and female academics (see Action 1.1(b)) | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) | From Jan. 2014 onwards | Increased number of women academics applying for promotion.<br><br>Further actions to increase the number of female applications for promotion are identified and put in place. |
| **4 Key areas to be addressed:** *Career development and support for female staff and students* | | | | | |
| **4.1** | Increase career development and networking opportunities for female PDRAs and academics. | Organise annual events in collaboration with the RSC Women Members Network (e.g., invited speakers, social events).<br>(see also Action 3.3(b)) | Dr Lagunas, Dr Thompson (SWAN Champions) / Dr McKeown (RSC Regional Coordinator) | Annual events in Sept. 2014-2016 | Increased confidence amongst female staff. |
| **4.2** | Increase training on gender equality issues (in partnership with the University Equal Opportunities Unit) | a) Organise staff seminar on unconscious bias.<br>b) Introduce compulsory training on gender-equality issues as part of the PG induction programme. | Dr Lagunas, Dr Thompson (SWAN Champions) / Prof. James (PG AoS) / Ms Doherty (School Manager) | a) Seminar to be scheduled between Sept-Dec. 2014<br>b) In Sept.-Oct each year, starting in 2014 | Increased awareness of gender equality among staff and PG students.<br>Measures to avoid unconscious bias incorporated on day-to-day activities in the School. |
| **4.3** | Promote the School's SWAN principles among staff and students. | Regularly update the information on SWAN and gender issues included in the webpage, as well as in the UG-, PG- and staff-handbooks, including the names of the School mentors (Dr Lagunas and Prof. AP de Silva). | Dr Lagunas, Dr Thompson (SWAN Champions) | Ongoing | Increased awareness of the School's commitment to the SWAN agenda across all groups. |

| | | | | | |
|---|---|---|---|---|---|
| **4.4** | Promote academic careers among female PhD students | Organise career events and SWAN seminars where female PDRAs and academics talk about their experience. | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) | At least once a year (2014-2016) | Increased confidence amongst female PhD students about the prospect that academic careers can offer |
| **4.5** | Remind students that a female Advisor/tutor is provided when requested. | Remind students at induction each year, and include relevant information in the UG-/PG-handbooks. | Ms Doherty (School Manager) / Dr Sheldrake (Director of Education) | From the start of the 2014/15 academic year | Increased awareness among female students on the possibility of requesting a female Advisor/tutor. |
| **5 Key areas to be addressed:** *Culture change and flexible working.* | | | | | |
| **5.1** | Include PG representation (male and female) in the School Board. | PG representatives will be asked to participate in School Board meetings, including the female PG member of the SAT. | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) | From Dec. 2013 onwards | Issues affecting PG students are brought to the attention of the School Board and discussed. |
| **5.2** | Ensure that female academics have a voice in key committees, avoiding over-loading. | a) Regularly review the percentage of female staff on key committees.<br>b) Gradually involve new female members of staff in committee work, as appropriate, mentored by more senior academics.<br>c) Keep ensuring that there is female contribution in some committees *via* the School Manager (Ms. Angela Doherty) or male members of the SAT (e.g., Prof. Hardacre, Prof. Rooney)<br>d) Link committee work with the School workload allocation model, taking into account part-time working.<br>e) Keep up-to-date versions of the workload model visible to all staff through the School SharePoint. | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) / Ms A. Doherty (School Manager) | Ongoing | A good workload balance is maintained across the School.<br><br>Increased morale of staff.<br><br>New members of staff gain valuable experience in key jobs. |

| | | | | | |
|---|---|---|---|---|---|
| **5.3** | Increase efforts to celebrate the achievements of our female staff, as well as of women scientists in general. | a) Celebrate with social gatherings the achievements of male and female members of staff (ongoing). [see also Action 2.1]<br>b) Make the celebration of 'Ada Lovelace' Day an annual event in the School's calendar. | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) | From 2014 onwards | Increased awareness of the achievements of female scientists, and increased profile of women as role models for all staff and students in the School. |
| **5.4** | Increase the number of social gatherings and encourage participation from all staff. | a) Coffee mornings will be organised for all staff once a week.<br>b) Family-friendly social events will be organised by the social committee. | Prof. Hardacre (HoS) / Ms A. Doherty (School Manager) / Social Committee | From Nov. 2013 onwards | Increased communication and networking within the School; increased morale. |
| **5.5** | Keep increasing the number of female visiting academics (speakers, external examiners, etc.). | a) Ensure that suggestions for female speakers are sent in a timely fashion to the School Seminar Programme Coordinator (Dr Muldoon).<br>b) Remind all staff to consider women as external examiners for PGR examinations as appropriate for the thesis. | Prof. Hardacre (HoS) / Dr Lagunas, Dr Thompson (SWAN Champions) / Dr Muldoon (seminar programme) | Ongoing | Increased profile and role models for all staff and students in the School. |
| **5.6** | Promote and advertise more widely University flexible working policies, including the School's returners' policy and interview (see below). | a) Regularly update information on webpage as well as in the UG-, PG- and Staff-handbooks. [see also Action 4.3]<br>b) Schedule another SWAN seminar on work-life balance in 2015. | Dr Lagunas, Dr Thompson (SWAN Champions) | Update of information ongoing – Seminar in June 2015 | More members of staff consider taking up flexible working. Better work-life balance for all staff across the School. |
| **5.7** | Extend the current School's returner's policy to include male academics taking extended paternity leave (where their partners return to work). | Academics returning from extended paternity leave will also be relieved of teaching and administrative duties, and will have a 'back to work interview' with the HoS (or project manager/supervisor) where flexible working will be discussed. | Prof. Hardacre (HoS) / Ms A. Doherty (School Manager) | Implemented and ongoing. | Better work-life balance for all staff across the School. Increased research productivity for returning members of staff (both male and female), and quicker reintegration into the school. |