Athena SWAN Bronze department award application

Name of university: University of Birmingham (UoB)

Department: School of Chemistry

Date of application: April 30, 2013

Date of university Bronze and/or Silver SWAN award: November 2011, Bronze

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Section 1 - Letter of endorsement from the head of department

I have been involved in the Athena SWAN Self-Assessment Team since hearing about the values after the University was awarded the Bronze award in March 2012. I see the Athena SWAN agenda as being key in continuing to shape the School's drive towards equality, transparency and fairness for all.

I became Head of School in April 2011, just as the University Staff Questionnaire results were published for each School. The results for Chemistry suggested that staff wanted more direct involvement in issues and greater communication within the School. Thus, my headship has taken this on board, and directed efforts to deliver greater involvement of staff in, and greater transparency around, decision-making, thus the School now has:

1. a transparent bottom-up derived work allocation model, which endeavours to take account of all aspects of academic life,
2. twice-weekly coffee mornings for staff and PG and UG committee members, to engender a more cohesive working environment across the School,
3. six-monthly meetings of Postdoctoral fellows and PhD students with myself to receive and provide direct feedback on issues,
4. a policy on core working hours for School Committee Meetings/Seminars to allow those with caring responsibilities to work flexibly,
5. targeted sabbaticals for staff who have had large admin/teaching loads and/or who need support in creating additional research capacity, and

6. an active agenda in supporting academic mothers returning to work after maternity leave, as illustrated by Dr Pikramenou who works flexibly since the birth of her third child, as well as being appointed to a Research Unit leader role.

Furthermore, over the last 12 months the University of Birmingham has:

1. brought in annual Performance and Development Review, in order to facilitate regular dialogue between Heads of School and their staff, in order how to maximise both their career aspirations and productivity, and

2. created a new Teaching-Focussed academic position, and one of the first to take this position up was Dr Natalie Rowley, who over several years has contributed hugely to the STEMM agenda, and has been promoted to Senior Lecturer this year.

Although the School has made progress with a transparency and equality agenda, it has become apparent through the detailed work of the School's Athena SWAN committee there are some aspects which we are still lacking. For example,

1. we need to monitor applications, shortlisting and appointments across all activities in the School, from undergraduates applications through to academic staff appointments,
2. we need to ensure that there is gender balance on committees/working groups that make key decisions, and
3. we need to develop a return to work policy after maternity leave.

In conclusion, over the next few years we will endeavour to build the Athena SWAN principles into the psychological fabric of the School of Chemistry, as we strive toward the Silver and Gold awards, in order to enhance the environment in which we work, to ensure equality is at the centre of everything that we do, whether that be age, gender, ethnicity, creed or health.

(Section 1 Word Count: 500)

Section 2 - The self-assessment process

2a THE SELF- ASSESSMENT TEAM (SAT)

Zoe Pikramenou (Chair) is a *Reader in Supramolecular Photochemistry* and member of the School Research Committee (RC) in her role leading a Research Unit in Chemistry. Zoe is also Academic Lead of the College of Engineering and Physical Sciences (**EPS**) Women Network and member of the University Athena SWAN Committee. She had three maternity leaves since her lectureship appointment at UoB (2000) and brings her expertise of balancing the demands of a young family with a full-time post and an active research group.

Jon Preece, *Professor of Nanoscale Chemistry* and *Head of School* (2011). His previous roles as School Director of Research, Director of Year 1 and scientific leader of large EU grants bring experience of different areas of the School operation, but his most challenging job to date is fatherhood, which started in January 2013!

Anna Peacock is a *University Lecturer* (since 2009), member of the University Athena SWAN Committee and since her appointment she is actively involved in the Admissions Team. She also brings the views and experiences of an early career member of staff. She is married, and for sometime had to sustain a long-distance relationship.

Richard Grainger, *a Senior Lecturer in Organic Chemistry*, moved to the University of Birmingham in 2005. He is currently undergraduate director of Year 2 studies and a member of the Education Committee. His wife works full time and he has to share collecting his two children from school. He is very aware of the demands of job-hunting with a young family in tow, following the closure of the chemistry department at King's College London where he started his independent academic career.

Susan Squire is the *University's staff Diversity Adviser* and works full-time in the HR department. She is providing advice and guidance to Schools participating in Athena SWAN and has supported the production of data and examples of best practice for this submission.

Sam Adams is a *Year 2 Doctoral Researcher in Chemistry*, studying towards his PhD following an MSci degree at UoB. He brings his experiences of both undergraduate and postgraduate environments. He has a one -year old son.

Alison Bannister is an *HR Adviser at UoB* since 2011. She worked in the College of Social Sciences and is now in the College of Engineering and Physical Sciences. She has knowledge of employment law and its implications in the workplace and of the HR policies and procedures at the University.

Louise Male is the *X-ray Diffraction Facility Officer in Chemistry*. Her role involves mostly supporting research and some undergraduate teaching. She worked full time until her son was born, and returned from maternity leave to a part-time position when her son was seven months old. She has a part time arrangement with the flexibility of one day working from home.

2b THE SELF ASSESSMENT PROCESS

The process was initiated in the summer of 2012 by the Head of School, who appointed Zoe Pikramenou (ZP) to chair the SAT. Following discussions with School colleagues, the SAT was constituted and an *Athena SWAN Chemistry Awareness launch event* took place in September 2012 for all staff with introductions from ZP, the University's Staff Diversity Adviser Susan Squire, and Dr. Una Martin (Medical School) who provided us with insights on good practice from her experience as a Lead of the UoB *Women in Academic Medicine Network*. The SAT met monthly from November 2012 onwards, discussed the data (most data was available at the outset), current practices and procedures in the School and formulated the detailed action plan.

Concurrently, the College of Engineering and Physical Sciences (**EPS**) Academic Network for Women was launched and ZP organised a visit from Prof. R. Perutz who gave a presentation (November 2012) to the EPS College staff, about the ethos and efforts in York Chemistry towards the Athena SWAN Gold Award. These sessions were important for consultation and were supported with further discussions of UK departmental good practices and career support at the Irene Joliot conference at Warwick in October 2012 *('Establishing an Independent Career in Chemistry*'; ZP and three Chemistry researchers attended) and the RSC Athena SWAN information event (ZP attended, February 2013). Chemistry postgraduate students were also involved in organising a *Women in Science Network Evening* at UoB, under the RSC West Midlands Section Umbrella, which complemented the events in UoB Chemistry.

During this time, an open presentation and discussion session for female academic staff doctoral and postdoctoral researchers (chaired by ZP and AP) in Chemistry took place as a form of information dissemination and as a forum to provide information on activities to be planned.

College-wide focus groups for female academic staff and separately for postdoctoral researchers were organised (November 2012 and February 2013) as well as for Chemistry postgraduate students (February 2013) with discussions led by an external consultant, expert in people

development. The purpose of the focus groups was to identify barriers to female career development and progression and what specific development activities and support female staff and students could benefit from. Female staff from Chemistry attended the College-wide sessions and the Chemistry postgraduate student groups were also well received. Final reports were prepared by the consultant (Appendix) and the suggested recommendations have informed this application with some actions already initiated *via* HR in the College.

2c. PLANS FOR THE FUTURE

The SAT will now continue as the Athena@Chem group, expanded with participation from some additional academic staff, support staff, undergraduates, postdoctoral researchers and postgraduates and with the continued participation of the Head of School. Two undergraduates and two postgraduates have already been in contact with the Chair of the SAT providing informal feedback as representatives of their years in various School Committees. The group will meet on a termly basis.

The Athena@Chem group will be responsible for monitoring the implantation of the Bronze action plan and will compile an annual report on progress against the action plan, including key student and staff data. The group will report to the School's Executive Management Group (EMG). The group will also organise Athena SWAN activities in the School in response to student and researchers feedback.

(Section 2 Word Count: 999)

Section 3 - A picture of the department

a) The School of Chemistry is part of the EPS College together with eight other schools. The Chemistry student population includes around 370 undergraduates, 140 doctoral researchers, with 50 of these as part of an interdisciplinary doctoral training centre in the Physical Sciences of Imaging in Biomedical Sciences **(PSIBS)** based in and led by Chemistry. There are 19 staff that support teaching, research and administration. The School has undergone major and transformational changes in staffing since the millennium; more than half of its 32 academic staff have been appointed since 2005, including 5 Birmingham Research Fellow appointments in the last 14 months. The School has a relatively young age profile (all but four staff under 50 years old), 15 postdoctoral researchers and a dramatically enhanced number of female staff (3 in 2004; 9 in 2013). The School is organised in Teaching Forums (Inorganic, Organic and Physical Chemistry) and four Research Units (Biomolecular&Supramolecular; Molecular Synthesis&Catalysis; Solid State; Physical&Theoretical). There are outreaching themes in Imaging Chemistry, Chemical Biology and Materials Chemistry that facilitate collaborations with other Schools and strategic developments, such as the introduction of new postgraduate taught courses and centres for doctoral training as well as leading cross-disciplinary initiatives. Undergraduate students participate in the School and Education Committees while postgraduate and postdoctoral participation is established in School and Research Committees. Five experienced teaching-focused members of staff undertake major roles in administration, as directors of: innovation in teaching, laboratories, education, postgraduate matters, undergraduate admissions.

The School offers BSc and MSci degree programmes in Chemistry, Chemistry with Industrial Experience, Chemistry with Study Abroad, Chemistry with Analytical Science, Chemistry with Bioorganic Chemistry and Chemistry with a Modern Language. Two major/minor programmes on Chemistry with Pharmacology and Chemistry with Business Studies are offered jointly with Medical and Business Schools, respectively.

The School has a friendly, open approach as highlighted in the feedback from our undergraduates and the visitors in the open days. A central survey in 2011, run by the University for Chemistry

academic and support staff, brought some issues to light, which the Head of School (appointed 2011) has being working towards resolving. The Athena SWAN values have been embraced quickly by the School, who recognise that there are key issues, not been addressed or previously discussed.

We have adopted the philosophy that good policies, communication lines, and consideration of others are beneficial to all, and that we wish both to contribute towards increasing numbers of women in academic career paths and to facilitate the challenges in balancing career and family life faced by all of our staff regardless of sex (most important given our youthful profile).

b)

Student data

i) Access and Foundation Courses

UoB was one of the first universities to set up a fair access scheme (A2B) for local students. The scheme is designed to assist students in the West Midlands from families with little or no experience of Higher Education to study at the university. In Chemistry, the analysis of the student data shows an increasing number of entrants in the scheme over the last two years:

2010: 4 entrants, 2 male, 2 female
2011: 13 entrants, 8 male, 5 female
2012: 11 entrants, 8 male, 3 female

While this scheme is widely advertised by UoB and in Chemistry documentation and is relatively well taken up in Chemistry, the number of females is lower than the male entrants.

- We will monitor entrants to the Access scheme for gender balance and we will include its promotion during our outreach efforts for female students (action A1).

There is no bespoke Chemistry Foundation course; Chemistry rather contributes to a UoB Foundation Year.

ii) Undergraduate (UG) male and female numbers, offers and acceptances by gender

Our overall female undergraduate numbers ranged from 117 to 147 students *p.a* in the last three years, leading to percentages of 42 and 46 % of our total undergraduate population, lower than the national average of 48-49 % for the sector (Figure 1 and Table 1) in contrast with our postgraduate female numbers that are above the national average. The Year 1 data showed an increase by 5 % in the female population of the latest cohort admitted and enrolled in 11/12 (Table 2).

Figure 1. UoB Chemistry and sector female UG populations (%)

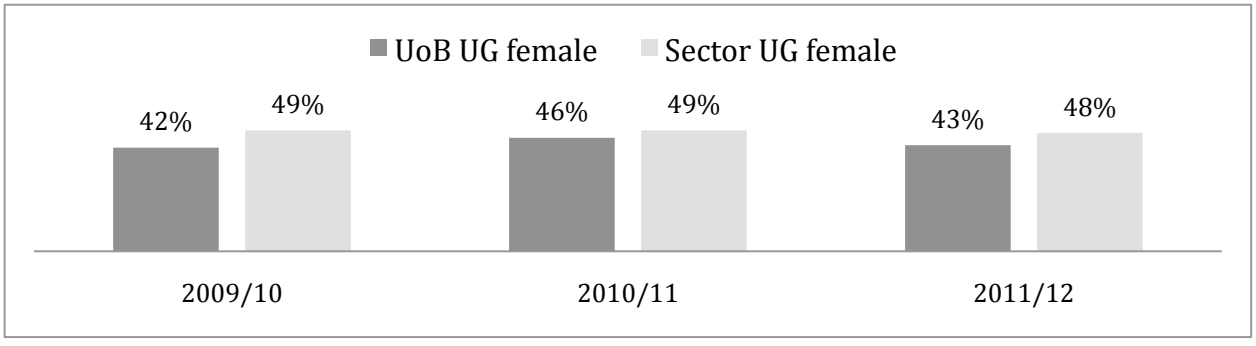


Table 1. UoB Chemistry UG data, (%) and sector female UG populations (%)

	UoB Chemistry					National average (HESA)	
Year	**Female**		**Male**		**Total**	**Female**	**Male**
2009/10	117	**42%**	162	58%	279	**49%**	51%
2010/11	142	**46%**	167	54%	309	**49%**	51%
2011/12	147	**43%**	192	57%	339	**48%**	52%

Table 2. Date of Undergraduate enrolment (year 1 only)

UoB Chemistry					
Year	**Female**		**Male**		**Total**
2009/10	45	**40%**	67	**60%**	112
2010/11	50	**39%**	77	**61%**	127
2011/12	52	**44%**	67	**56%**	119

We were able to access and compare the application data for offers *vs* acceptances from 2011 onwards. The data show that only 40 % of the applications received are female (Figure 3).

From analysis of the data of the admissions offers and acceptances (Figure 3 and Table 3), no gender variation in the offers is observed; we will continue to monitor the offers and acceptances for gender balance.

A further analysis of 2013 applications showed a preference of female applications for *Chemistry with Pharmacology* and *Chemistry with Analytical Science* rather than the single honours Chemistry degrees.

During admissions days all academic staff take part in the interviewing process of prospective applicants and the member of staff is selected based on the best match with the applicant's interests indicated in the UCAS personal statement. We have also examined our records of "outreach" School visits and we found that 9 out of the 52 schools were girls-only, with the rest being mixed gender.

Figure 2. Undergraduate applications by gender and year of entry (%)

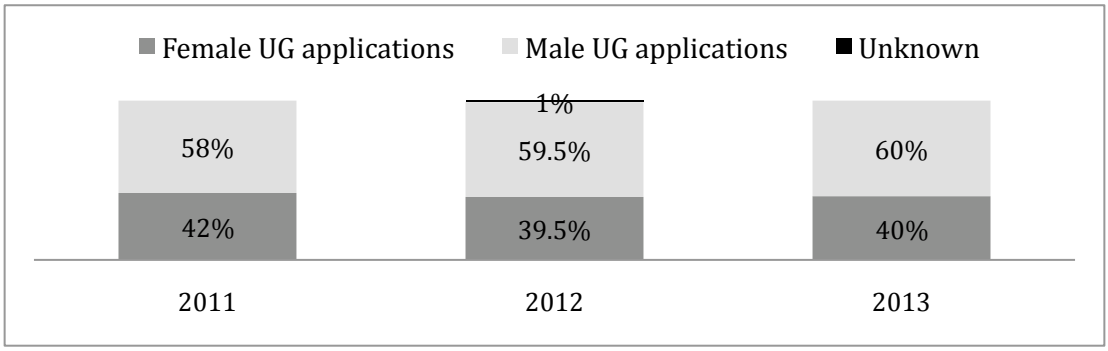


Figure 3. Undergraduate offer and acceptance rates by gender and year of entry (%)

Note The 'offers made' and 'offers accepted' rates are both presented as a % of applications received, i.e. in Figure 3, 83% of all female applicants received offers and 43% of all female applicants accepted those offers. Please also note that 2013 data covers only applications up to March 2013.

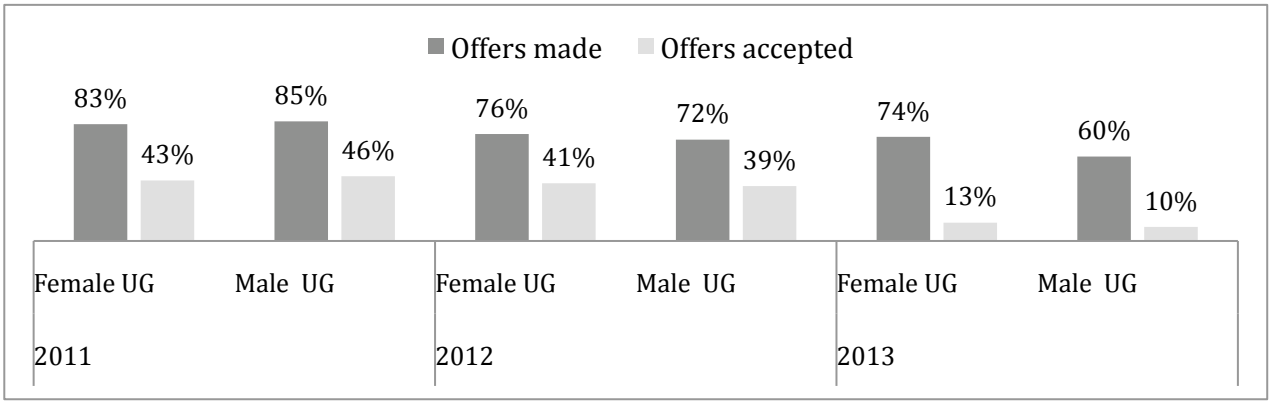


Table 3. Data of UG Applications, offers and acceptances (no.)									
	Applications			**Offers Made**			**Offers accepted**		
	2011	**2012**	**2013**	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**
Female	449	434	327	371	331	243	193	180	41
Male	620	652	490	526	467	292	285	255	51
Unknown	2	9	2	0	1	0	0	0	0
Total	**1071**	**1095**	**819**	**897**	**799**	**535**	**478**	**435**	**92**

We plan to undertake the following actions to address the gender imbalance in applications:

- Monitor the UG data by gender ratio annually (action A.2).
- We will monitor the applications data including offers and acceptances for gender balance and degree preference and identify issues to address in advertising (*i.e* possible career paths, role models) (action A.3)
- Target more visits to girls-only schools and ensure that visits to mixed-sex schools are gender balanced in terms of the UoB staff/students participating (action B.1).
- Review our arrangements for pre-application open days to ensure that female staff and current students are fully represented. Identify inspirational female academics to be involved in outreach activities (action B.2).
- Review our UG recruitment materials and our website to include more information and examples of female careers in chemistry and promote female success stories/role models (action B.3).

(iii) Postgraduate male and female numbers completing taught courses and applications received

The largest body of postgraduate taught students (PGT) (>50% in 2009/10 and >70% in 10/11 and 11/12) are PhD students registered in the first year of the 4-year PSIBS Integrated PhD programme (MSc + PhD). The School also contributes to other taught programmes across campus. Our PGT data for the last 3 years shows that an increasing number of PGT students are female and they consistently form over half of our PGT population and with percentages (67 %) that are significantly above the sector average (55 %) in 2011/12 (Figure 4, Table 4). This is very positive, particularly when contrasted with our female UG population, which is below the sector average. The PSIBS programme (directed from Chemistry) keeps note of female:male application and success rates in line with its EPSRC reporting requirements.

Figure 4. UoB Chemistry and sector female taught postgraduate populations (%)

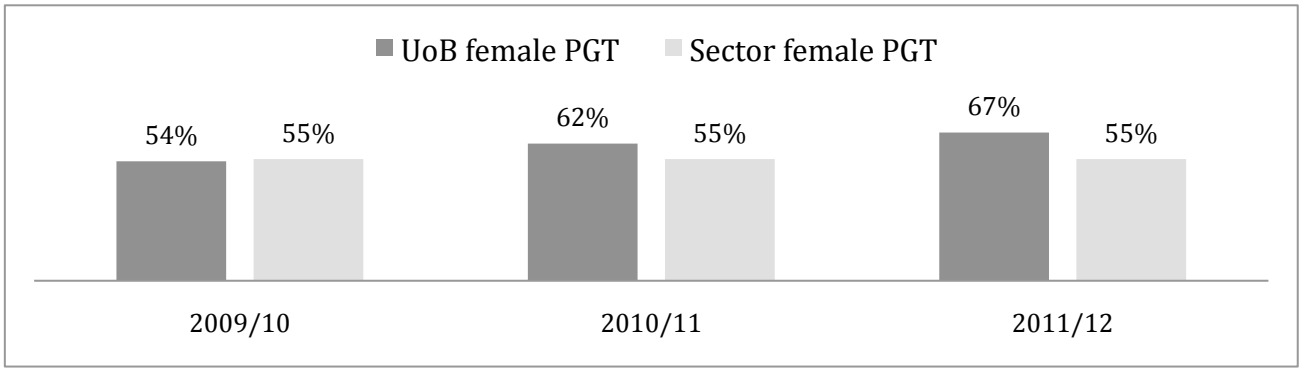


Table 4. UoB Chemistry data, % and sector female taught postgraduate populations (%)

	UoB Chemistry					**National average (HESA)**	
Year	**Female**		**Male**		**Total**	**Female**	**Male**
2009/10	13	**54%**	11	46%	24	**55%**	45%
2010/11	10	**62%**	6	38%	16	**55%**	46%
2011/12	12	**67%**	6	33%	18	**55%**	46%

The School has launched two new MSc programmes in 2013*: Chemical Biology & Biomedical Imaging*, and *Drug Discovery & Medicinal Chemistry*. A new MRes course in *Chemistry for Biomedical Imaging* is also launched in 2013. The March 2013 application data shows 12 of the 15 applications are from females.

- We will continue to monitor the gender balance of PGT students and applications of the newly introduced programmes (action A.4).

(iv) Postgraduate male and female numbers on research degrees and applications received

Analysis of the postgraduate research student (PGR) data (Figure 5, Table 5) shows that that the percentage of our female population is in line with the national female average. We will continue to monitor the gender balance of PGR students as part of our action plan activities. At the time of writing, we have held a series of focus groups with female post-graduate researchers to examine their experiences in the School, and we will introduce further actions to address the issues coming from the report (Sections 4 and 5).

Figure 5. UoB Chemistry and sector female research postgraduate populations (%)

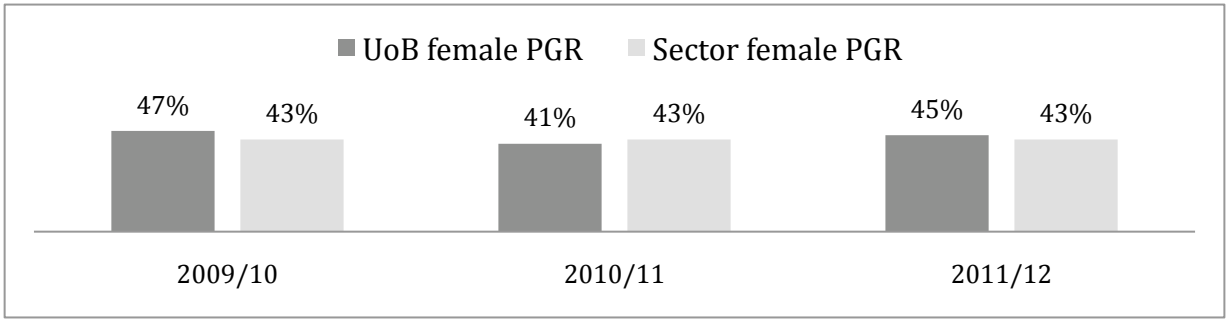


Table 5. UoB Chemistry data, % and sector female research postgraduate populations (%)

	UoB Chemistry					National average (HESA)	
Year	**Female**		**Male**		**Total**	**Female**	**Male**
2009/10	35	**47%**	40	53%	75	**43%**	57%
2010/11	35	**41%**	50	59%	85	**43%**	57%
2011/12	45	**45%**	55	55%	100	**43%**	57%

Analysis of our postgraduate research applications data shows that the numbers of female applications (35.5 % 2011, Figure 6) are relatively lower than our female PG population (45 % in 2011/12). However, there is an increase of applications in 2013 (note application cycle not finished). Analysis of the offers and acceptances (Figure 7, Table 6) shows that in 2011 the number of offers to males and females were similar and in 2012 the offers to females were almost double than the male offers.

Figure 6. Postgraduate research applications by gender and year of entry (%)

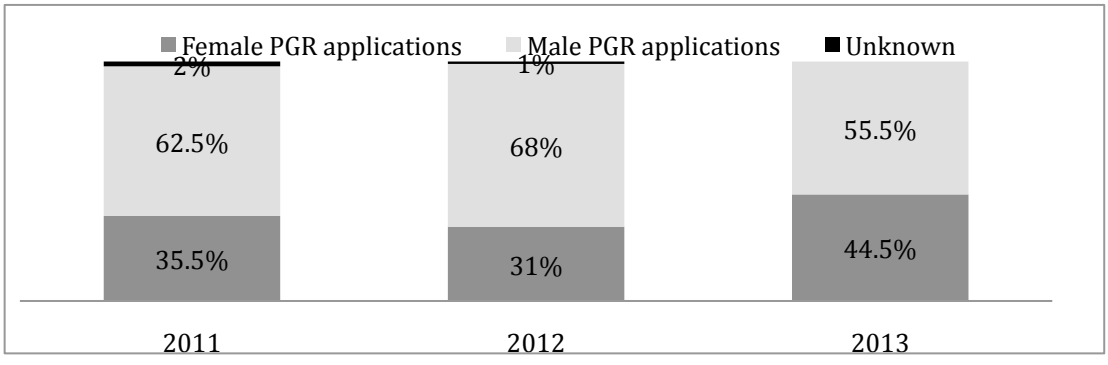


Figure 7. Postgraduate research offer and acceptance rates by gender and year of entry (%). Note The 'offers made' and 'offers accepted' rates are both presented as a % of applications received. The 2013 data are not finalised.

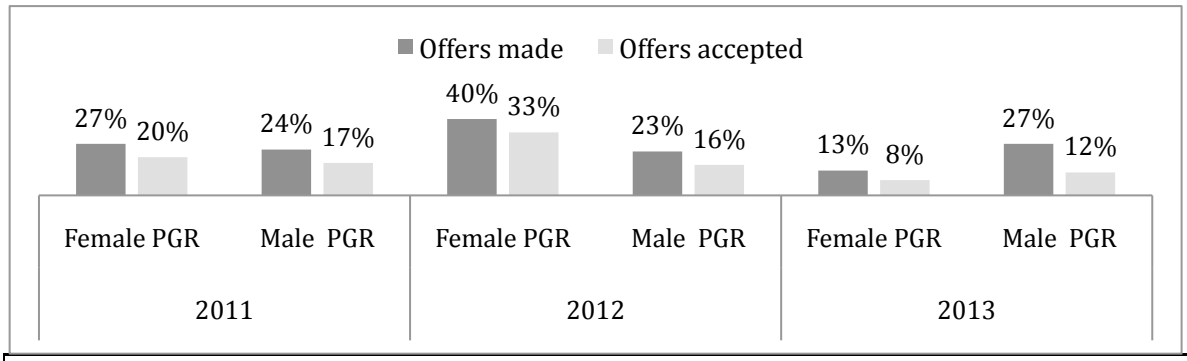


Table 6. PGR Applications, offers and acceptances (no.)

	Applications			Offers Made			Offers accepted		
	2011	**2012**	**2013**	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**
Female	94	73	48	25	29	6	19	24	4
Male	165	159	60	40	36	16	28	25	7
Unknown	5	2	0	0	0	0	0	0	0
Total	**264**	**234**	**108**	**65**	**65**	**22**	**47**	**49**	**11**

We will undertake the following actions as part of our plan:

- Continue to monitor PGR population and applications by gender ratio (action A.5).
- Analyse the outcomes of the focus groups with female post-graduate researchers and identify and implement changes to support their development and possible transition to an academic career (action C.1).

(v) Degree classification by gender

UG degree classification data shows a variable distribution (Figure 8, Table 7) with an overall increase in numbers of females obtaining 2.1/1st honours degrees in 2011/12 (76 %). The increase from 2010/11 may partly relate to the increased numbers on the MSci degree in 2011/12, which conversely reduced the number of 2.1/1st standard students in the final year of the BSc in 2010/11. There is a quality threshold that students must attain at the end of Year 2 to carry on with the MSci degree, otherwise they must progress to the BSc pathway.

There is an annual review of our UG programmes managed by the School's Quality and Assurance Officer who is also a member of the EPS College Quality Assurance Committee. Then annual programme review report is compiled with actions to be undertaken mainly by the Education Committee. The admission and performance data is analysed for gender and ethnicity and compared to College and UoB data. Student satisfaction and feedback is also examined. Changes are swiftly introduced *i.e* in 2011/12 session the Year 3 workload of assessed worksheets was reduced in response to staff and students concerns. There is very good practice in marking with anonymous exam marking of all examinations and the project modules (the Year 4 project plays a major part of the year mark) are double marked. Final degree classification at UoB is based on paper profiling (not *viva* examination), so no gender bias can be introduced at this stage.

There are several UG prizes based on performance awarded and we have identified that the advertisement and the successful awards should be more proactively communicated and analysed for gender balance.

Actions:

- We will monitor exam performance by gender ratio and degree classification data for BSc/MSci performance for gender balance (action A.6).
- Prizes and awards for UG performance will be communicated to staff and personal tutors with wider communication on the website (action D.1) and gender balance will be monitored.

Figure 8 . UoB Chemistry undergraduates receiving a first (1st) or upper second (2.1) (%)

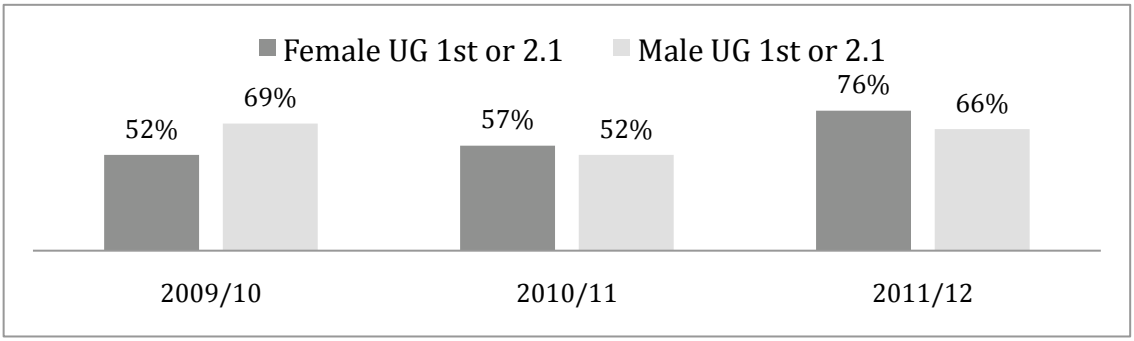


Table 7. Undergraduate degree classification by gender					
2009/10		**Female**		**Male**	
	1st	12	**37%**	7	**27%**
	2.1	5	**15%**	11	**42%**
	2.2	15	**46%**	8	**31%**
	3rd	1	**2%**	0	**0%**
	Pass	0	**0%**	0	**0%**
	Total	33	**100%**	26	**100%**
2010/11	**1st**	9	**30%**	12	**39%**
	2.1	8	**27%**	4	**13%**
	2.2	11	**37%**	14	**45%**
	3rd	1	**3%**	0	**0%**
	Pass	1	**3%**	1	**3%**
	Total	30	**100%**	31	**100%**
2011/12	**1st**	12	**28.5%**	18	**33%**
	2.1	20	**47.5%**	18	**33%**
	2.2	8	**19%**	15	**28%**
	3rd	2	**5%**	3	**6%**
	Pass	0	**0%**	0	**0%**
	Total	42	**100%**	54	**100%**

Staff data

(vi) Female:male ratio of academic staff and research staff

The School has observed a substantial increase in female academic staff since 2004, that has brought it in line with the sector average but there has been a decrease of researcher appointments that led to a drop of the proportion of female staff from 32% to 22% (Figures 9-11 and Tables 8 and 9). This is due to the reduction in postdoctoral Research staff during this period - due to end of RCUK and EU contracts - which has also affected male staff, although to a lesser extend. With the exception of 1 female Reader and 1 female Senior Lecturer, all other female academic staff are employed on Researcher and Lecturer grades. In a recent SWOT analysis of the School it was

identified that the percentage of Professorial staff (25 %) is small in comparison with other Russell group universities. As of March 2013 (not included in Table 8) there is one further promotion of a female to Senior Lectureship, and two other female appointments (Lecturer/Birmingham Fellow and teaching fellow). We have recognised that we need to improve recruitment and progression opportunities (Section 4).

- We will continue monitoring all staff data and investigate impact of recruitments processes (action A.7).

Figure 9. UoB Chemistry academic and research staff (%)

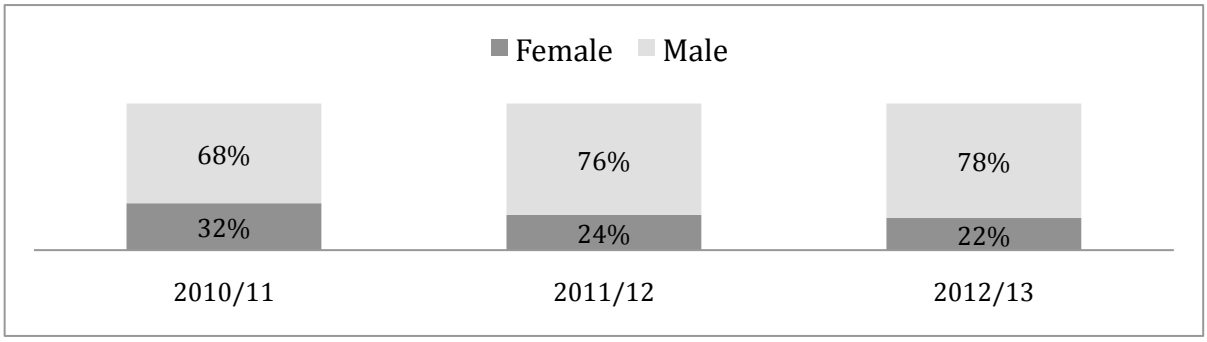


Figure 10. Comparison to sector averages (academic and research staff) (%)

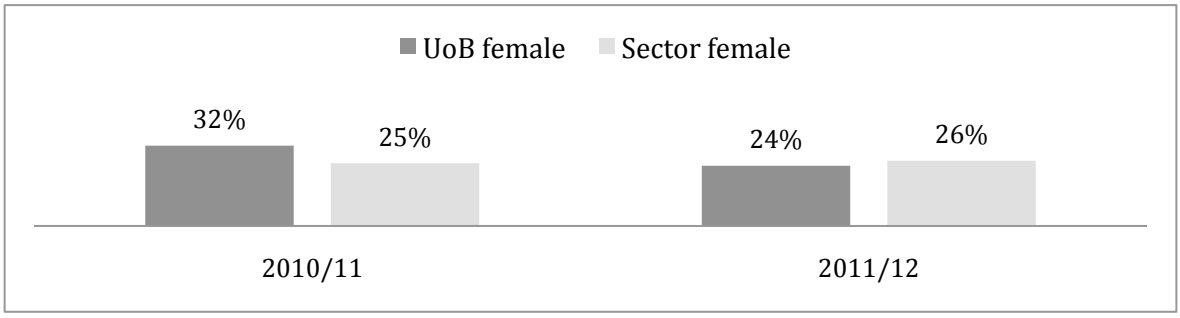


Figure 11 – Proportion of female Chemistry staff per grade (%)

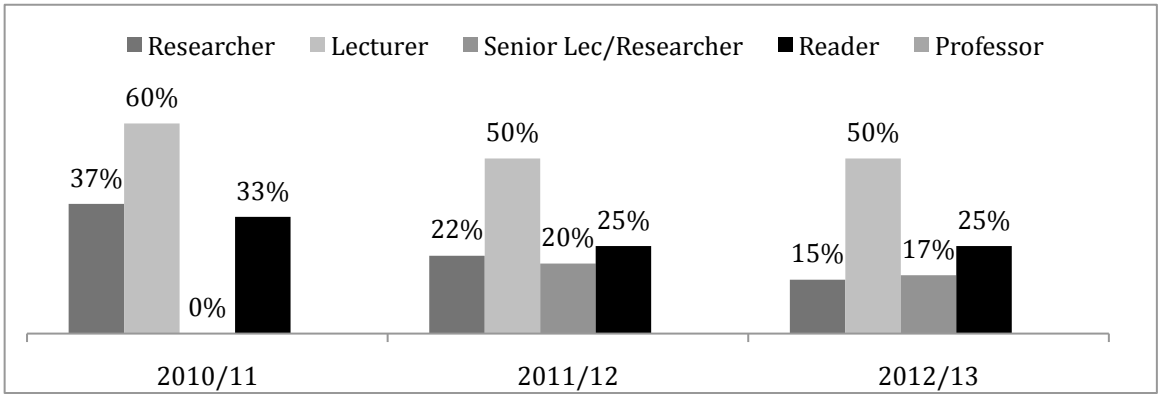


Table 8. Chemistry staff by gender and grade

	2010/11			2011/12			2012/13		
	Female	**Male**	**% Female**	**Female**	**Male**	**% Female**	**Female**	**Male**	**% Female**
Researcher	10	17	**37%**	4	14	**22%**	2	11	**15%**
Lecturer	6	4	**60%**	5	5	**50%**	5	5	**50%**
Senior Lecturer	0	5	**0%**	1	4	**20%**	1	5	**17%**
Reader	1	2	**33%**	1	3	**25%**	1	3	**25%**

Professor	0	8	**0%**	0	8	**0%**	0	7	**0%**
TOTAL	17	39	**32%**	11	34	**24%**	9	31	**22%**

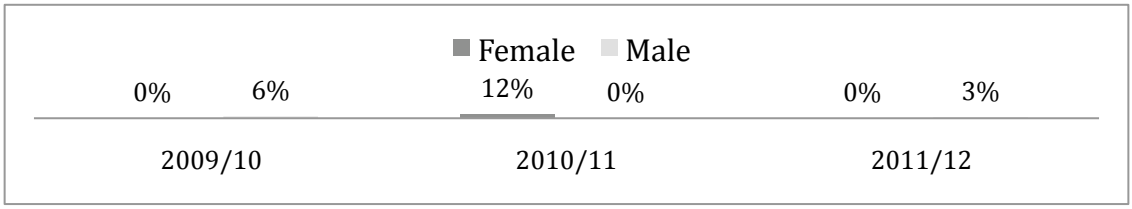
Table 9. Comparison with Chemistry sector average

	2010/11		**2011/12**		**2012/13**	
	Female	Male	Female	Male	Female	Male
UoB	32%	68%	24%	76%	22%	78%
Sector average	25%	75%	26%	74%	-	-

(vii) Turnover by grade and gender

The numbers are too small to extract meaningful trends (Figure 12) with two female researchers leaving in 2010 and two male researchers leaving in 2009 and one in 2011. The researchers were on fixed term RCUK/EU contracts to completion of the research grant.

Figure 12. Staff Turnover by gender (%) Note - Turnover is presented as a % of the female and male populations in that year.



(Section 3 Word Count: 1975)

Section 4 - Supporting and advancing women's careers

Key career transition points

a)

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

The overall number of job applications and female appointments has increased substantially in 2012, reaching 40 % (Figure 13), from a very low, 19 %, in 2010. The grade distribution in the three-year span shows 33 % of Lecturer appointments *vs* 17 % applications, an increase in conversion but a low number, 17 %, of researcher applications and appointments. It is recognised that the career progression from researcher to lecturer is a key transition point that needs to be supported by raising the job profile and supporting researchers towards and during the academic career paths. Our actions towards these targets, as described in sections 4b(i) and 4c, are aimed to create impact in the female academic numbers. Although the numbers of appointments are not high throughout in 2011 all of the five appointments (four researcher and one lecturer, Table 10) were male. The apparent increase of female academic staff mentioned in section 3b is based on female lecturer appointments -2 in 2004 and 2 in 2009- that do not appear in the presented data.

- We will monitor job applications and appointments for gender balance in order to have informed plans for increasing female numbers (action A.7).

Figure 13. Job application and appointment rates by year (%)

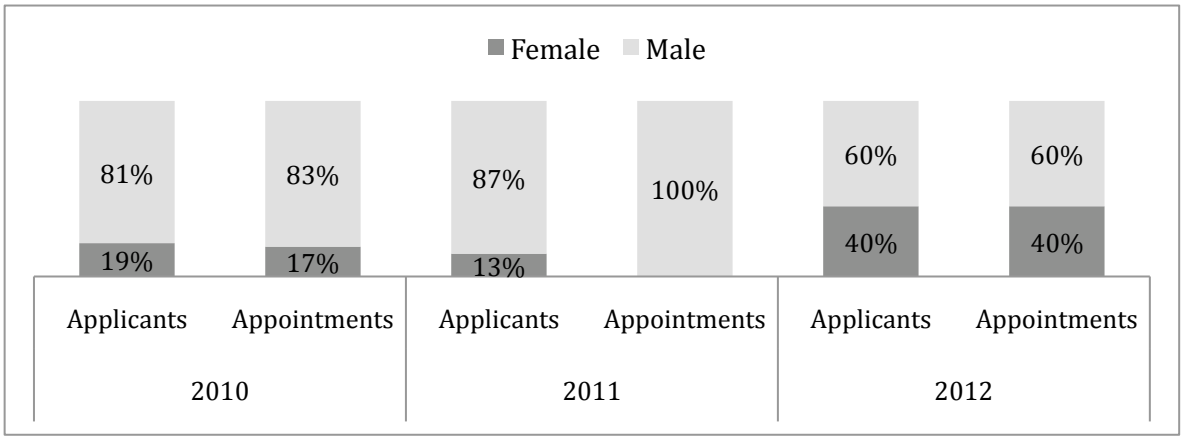


Figure 14. Total 2010-2012 application and appointment rates by grade (%)

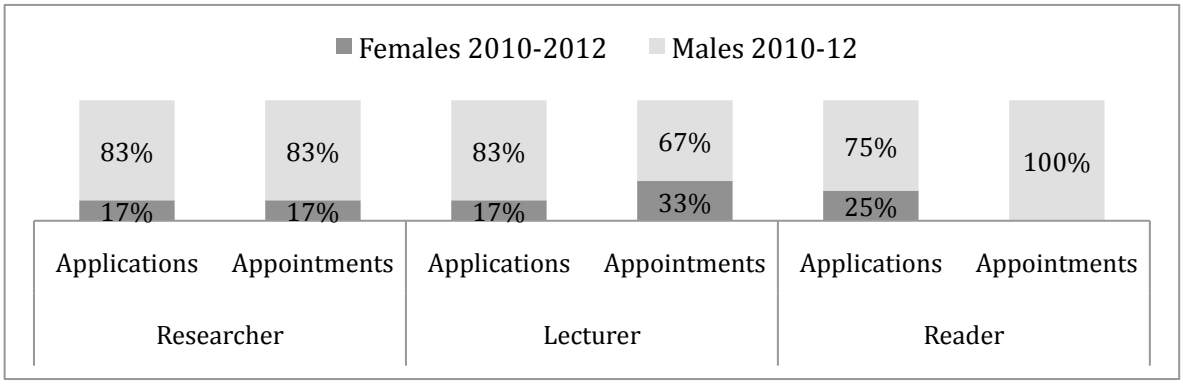


Table 10. Job applications and appointments						
2010	**Applicants**			**Appointments**		
	Female	**Male**	**% Female**	**Female**	**Male**	**% Female**
Researcher	13	58	**22%**	1	4	**20%**
Reader	2	6	**25%**	0	1	**0%**
Total	15	64	**19%**	1	5	**17%**

2011	**Applicants**			**Appointments**		
	Female	**Male**	**% Female**	**Female**	**Male**	**% Female**
Researcher	6	38	**14%**	0	4	**0%**
Lecturer	2	14	**13%**	0	1	**0%**
Total	8	52	**13%**	0	5	**0%**

2012	**Applicants**			**Appointments**		
	Female	**Male**	**% Female**	**Female**	**Male**	**% Female**
Researcher	1	2	**33%**	1	2	**33%**
Lecturer	1	1	**50%**	1	1	**50%**
Total	2	3	**40%**	2	3	**40%**

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

The percentages of female applications of all grades are shown by year (Figure 15) and by grade for the 2009-2012 period (Figure 16). The breakdown of numbers are presented in Table 11; there are

few cases submitted throughout the years. Two recent promotions (March 2013) a female to SL and a male to Professor are not shown in the data.

The promotions criteria are published by HR and a call for applications with a timeline of the process is widely publicised. In Chemistry the Promotions Committee, chaired by HoS, includes representatives from all research units to examine applications; more recently the new personal development review process (introduced in 2012) for academic staff, run by the Head of School, includes detailed planning for promotion. Following examination of the applications by the Promotions Committee, feedback is provided to unsuccessful applicants by the HoS. College-wide promotion workshops have recently been introduced by HR in response to the comments from the female academic staff focus group; they are open to all and will include examples of successful promotions of female members of staff, including cases where staff have taken career breaks to have children. HR has drafted a paper for College Board on a number of equality issues and progress on Athena SWAN and regular updates will be provided to the Board thereafter.
Further actions to these include:

- Promote actively the promotions workshops to our staff (action B.4).
- Examine from staff feedback the impact of the Promotions workshops in Chemistry and compare our data to other schools' success rates and share good practice with feedback from the College for future promotion support (action B.5).
- The Promotions Committee to meet ahead of the call for applications and proactively approach academic staff to consider preparation for promotion (action B.6).
- Monitor female success in promotions and time taken to achieve promotion compared to male peers (action B.7).

Figure 15. Promotions application and appointment rates by year (%)

Figure 16. All promotions application and appointment rates by grade 2009-2012 (%)

b)

i) Recruitment of staff

The HR Team (6 staff) dedicated to the EPS College oversees the procedures from advertisement to offers. There are extensive, detailed guidelines with clear mapping of the procedures on the staff intranet. The University Equality and Diversity Officer is in close contact with the Schools for advice and reports on UoB equality data are available on the equality intranet pages. The HoS Office with the School's Operation Manager oversees all processes and criteria to ensure that they comply with the University's policies. The Head of College has been strongly encouraged the engagement with the online equality and diversity programme with over 75% of the College's staff completing the programme.

Our procedure in researcher appointments involves short-listing by the grant holder and an interview panel with at least one other member of academic staff. The grant holder will return comments to HR for the rejected applications. It is recognised that only having one member of staff involved in short-listing is not best practice and that consultation with another member of staff will be advantageous to gain expertise advice in issues such as a candidate's career break or unusual career paths. It may not be possible to always involve a female member of staff to avoid an overload of the few female staff in the School. A first consultation with staff revealed that this practice has been tested previously in some appointments and was well received and hence, we will

now adopt this policy. We will require involvement of a female academic member of staff in interview panels for postdoctoral researchers only if a female candidate is interviewed, to avoid female academic staff being overloaded.

Appointment committees for academic posts are assembled by the Head of School, in conjunction with Research Unit/Theme leads, based on the academic expertise required for the post. Upon examination of the committee participation, there have been few cases with no female academic staff involvement. Interview panels usually include a female member of staff and we will now ensure that this is the case in all academic staff appointments.

For the advertisement of jobs, the Athena SWAN logo is being added to all further particulars for academic roles (acted by the College HR) and the cost of adding the logo to adverts is currently being explored. The Chemistry website is updated with information of available support at UoB and beyond.

Actions

- Review our researcher short-listing process so that at least 2 members of staff are involved in the short-listing process (action B.8).
- Involve female academic staff in all short-listing procedures for academic appointments (action B.9).
- All interview panels for academic staff to involve a female academic member of staff. Interview panels for postdoctoral researchers to involve a female member of staff only when a female candidate is interviewed (action B.10).
- In all job adverts, a statement of the School's support towards Athena SWAN values to be added in further particulars (action B.11).

(ii) Support for staff at key career transition points

The first key career transition point is clearly that of PhD to postdoctoral researcher and the second is the subsequent step to an independent academic career. It was identified that female focus groups should take place, in the first instance, as opposed to mixed sex groups, to discuss any barriers that researchers may have experienced and provide some insight and suggestions to these career transition ponts. The questions were based on identifying career aspirations, developing a female researcher network and mentoring scheme, identifying development opportunities and proposing actions for the School and the College to undertake. The feedback will be further analysed as mentioned in 3b(iv) (action C1). Taking into consideration this feedback, together with proposals from the meetings in Chemistry between female staff and researchers as part of the SAT process (described in 2b) has led us to the following proposed actions:

- Organise seminars of guest speakers promoting career paths with work-life balance (action B.12).
- Follow up from the focus groups, with questionnaires to both male and female postdoctoral and doctoral researchers (action B.13).
- Expand the discussion and analysis of Chemistry-staff feedback from upcoming University questionnaires for gender ratio (action B.14).
- Encourage inclusion of images on our website in promoting successes (action B.15).
- Promote information dissemination for grant applications, important to postdoctoral researchers in the process of establishing an independent career (action C.2).
- The annual performance and development review, recently introduced for academic staff will be expanded to postdoctoral researchers and will form an important opportunity for one-to-one advice with an academic member of staff other than the project supervisor (action C.3).

From the postgraduate student feedback we have received, it is identified that doctoral students believe that although there is an established careers advice network for undergraduates, the activity for doctoral researchers is limited. UoB has recently invested £5 million in its multi award-winning careers and employability service, *Careers Network*, and this has resulted in an expansion in specialist careers consultants embedded within the schools, who can offer guidance tailored to each academic subject area. The University has endorsed the *Researcher Development Framework* and offers a series of training courses (some on line) and workshops on personal effectiveness (*i.e* academic writing), engagement, influence and impact (*i.e* talent pool for researchers, a transferrable skills programme with industry) or support on library sources and software. However, it is recognised that the UoB postgraduate career pages with support in CV and letter writing, and examples of PhD careers need to be advertised more widely within the School.

The actions we will take to address these issues that are key to doctoral student career transition, include

- Advertise more widely the career events aimed at doctoral researchers and update links on the school's website to the intranet pages of the career development training and include examples of successful female graduates on the school website (action C4).
- Organise more career events aimed at Chemistry postgraduates (action C.4).

Career development

c)

(i) Promotion and career development

*Academic Staff***.** The recently introduced annual *Performance and Development Review* (PDR) for academic staff is conducted by the HoS with all academic staff. There is supporting documentation that provides a comprehensive view of all aspects of research and impact, teaching, outreach, esteem, administration and citizenship as well as a publicised benchmarking of all activities. This transparent and clear procedure is aimed to assist in career development and provide a good model for expectations of progress for all members of staff. The support for Athena SWAN values is clearly highlighted in the document in areas of outreach and citizenship. The quality of work is taken into account in research impact aspects, teaching feedback and overall citizenship. Promotion is being discussed during the PDR review and suggested actions are proposed. The University's promotion criteria make clear that career breaks and part-time working will be taken into account when assessing the quantity of outputs for promotion.

Postdoctoral Researchers The previously held *Staff Development Review* also included postdoctoral researchers and it will now be replaced by the PDR. It is expected that this will be in place within the year and it will highlight individual career development needs and support action planning.

UoB provides a variety of development programmes including entrepreneurship (the *Medici programme*), leadership, time-management, grant writing workshops, self-assertiveness sessions and science communications training, important for outreach. It is usually up to individual to take up the training, which is now also highlighted during PDR. The programmes are advertised in the College's weekly and monthly newsletters, the University's Buzz newsletter (also in Facebook and Twitter) and highlighted courses are communicated to staff by emails from the HoS office. It has been identified that there is very little participation from postdoctoral researchers in these programmes. A new post, *People and Organisational Development Consultant* (PODC) will be appointed in the College and will assist in Athena SWAN activities. Further actions include:

- Provide links with the College PODC to tailor developmental courses to the needs of postdoctoral researchers and advertise, proactively encourage participation in Chemistry (action C.5).

(ii) Induction and training

Academic Staff and Postdoctoral Researchers. The induction process is initiated by a meeting with HR that provides a check-list for "actions for the first few weeks" such as payroll, security card. There is detailed information about flexible working and resources for staff on the HR website. For the early career staff, the probation documents are also given at that first appointment with HR for subsequent meetings with the HoS in the first month. In the first few days the appointee meets with the HoS, the School Operations and Technical Managers and the Chemistry Health and Safety Officer who explain all procedures and regulations. The Operations Manager is responsible for the introduction of the appointee to the support staff.

All newly appointed early career academic staff are assigned a mentor. The mentor assists in the induction of the new staff member and advises throughout the probationary period *via* regularly held meetings. The mentor comments on the staff annually in the probationary form. Mentors are assigned based on closeness of academic expertise and, in some cases, female staff have been assigned to female early career staff, although this is not the case for all, due to the very small number of senior female academic staff. The Academic Women Network in the EPS College is planning to hold coffee mornings once every couple of months in each School, to facilitate informal discussions and networking. There are several events in the College, including information on grants and lectures that encourage networking at all levels. We have identified that the induction of postdoctoral researchers is usually left to the supervisor.

- We will prepare a booklet "Introduction to the School", which includes information committees and membership, dates of meetings, key contacts for purchasing, accounts, finance and "hot tips" from recently appointed staff (action D.2).
- We will introduce whole school seminars to be given by the postdoctoral researchers once every year for the recent appointees, to provide an introduction to their background and their planned project. These will be followed by a social gathering to provide an opportunity of the researcher to meet other academic staff at the beginning of their appointment (action point D.3).

Postgraduate Students. All postgraduate students are provided with a booklet upon arrival with codes of practice, induction course timetable, key contacts, welfare tutors, list of academic staff and documentation of progress monitoring. All postgraduate students attend an Induction course that starts the first morning of the term. There is an initial session that includes the requirements and expectations of a PhD in Chemistry, supervisory arrangements, monitoring and progression, student support structure, School structure, names and locations of key people and highlights times, dates and contents of future sessions. Additional sessions include both University and School level chemical and safety training, University Guild and Graduate School introductions, information skills and Library/IS services, research ethics and demonstrating/teaching training (provided by both the Centre for Learning & Academic development and Chemistry Staff). This culminates in a School Research Awareness Event where students from all years are invited and there are posters highlighting research from all groups in the School as well as efforts made to assist students in organising their own social and professional development activities. For students who do not have English as their native language, there is a presentation from Staff of the University EISU (English for International Students Unit) followed by free testing of language development workshops.

The students are required to fill in a *Development Need Analysis* form during their first term and discuss it with their supervisor. It is updated annually and assists the student to identify important for career development. The University has endorsed the *Researcher Development Framework* and offers a series of training courses (some on line) and workshops on personal effectiveness (*i.e* academic writing), engagement, influence and impact (*i.e* talent pool for researchers, a transferrable skills programme with industry) or support on library sources and software.

(iii) Support for female students

Undergraduate students. All undergraduates are assigned an academic member of staff as their personal tutor who mentors the student throughout their studies; each semester the students meets with the mentor for a progress meeting (a record of which is retained). There are also two welfare tutors in the School, a female and a male academic member of staff that the student can approach to discuss welfare matters, which may not wish to discuss with their personal tutor. The welfare and personal mentoring is taken into account in the workload model of the School.

An established anonymous survey "*Introductory Questions*" is distributed to first year undergraduates by the Quality and Enhancement Officer to address the students' initial experiences of University life; the results are distributed to staff and Year Directors. The questionnaire is anonymous and aims to address students expectations and concerns about University life. We plan to introduce questions for gender equality information to discover if female expectations and career aspirations differ from males and also address issues concerning admissions (choice of UoB and degree).

Postgraduate students Doctoral students are assigned a second academic supervisor, additional to their PhD supervisor, to help in monitoring their progress. Regular review meetings between the student and the two supervisors are recorded together with the monthly supervisor meetings. In a recently introduced procedure, the student discusses a proposed thesis plan, gives a talk within the research unit and an interview as part of an 18 month-progress review. There are also two postgraduate mentors (a female and a male academic member of staff) that the student can approach if a problem arises. Additionally, the College has launched a PhD Alumni mentoring scheme (March 2013) with similar objectives to a scheme that we run for our final year undergraduates (the students are assigned a mentor from the alumni database who meets and advises the students on career progression).

Actions to support female students include:

- Introduce a new arrangement that the student has the right to request a female tutor (UG) or a female second academic supervisor (PG) (action C.6).
- Examine the current alumni database for gender balance and invite female alumni to mentor students in the existing scheme (action D.4).
- Modify our Year 1 undergraduate questionnaire to include gender balance information and information of career aspirations related to the degree (action C.7).

Organisation and culture

d) Male and female representation on all committees and decision-making committees

The School has a Committee structure with established participation of undergraduate and postgraduate students as well as postdoctoral researchers. Undergraduate students participate in the School and Education Committees while postgraduate and postdoctoral participation is established in School and Research Committees. The following list indicates current committees,

female staff participation and annual frequency of meetings:

School Committee: all academic staff and representatives of support staff, termly meetings.
Executive Management Group: four meetings , 1 female:7 male.
Education Committee: five meetings, 1 female: 10 male.
Research Committee: five meetings, 1 female: 10 male
Safety Committee: five meetings, 1 female: 7 male
Staff Student Committee: four meetings, 2 female: 5 male
Research Liaison Committee: five meetings, 1 female: 5 male
Quality Audit Group: one review meeting, 1 female: 7 male
UG Admissions Group (including Outreach): sixteen meetings, 1 female: 3 male

The Staff Student Committee and the UG Admissions group report to Education Committee. Postgraduate student issues are discussed in the Research Committee; the Research School Liaison Committee is chaired by a postgraduate student, and includes student representatives from all research units, representative of postdoctoral researchers, the postgraduate admissions tutor, the postgraduate tutor responsible for the students' progress during their PhD. The staff participation in all committees has been based on the administrative role of the individual. We have identified that the female participation is low, reflecting in part the low number of senior female staff; however we need to avoid committee overload at this stage and aim to increase the female staff numbers in decision-making committees such as Education, Research and Executive Management Group.

- Review committee participation annually and consider balance issues with the aim to increase female participation in decision-making committees (action D.5).

e) Academic and research staff on fixed-term contracts and open-ended (permanent) contracts.

In essence all academic staff (including Birmingham Fellows and RC Fellows) hold permanent contracts, and postdoctoral researchers hold fixed-term contracts as shown in Table 12. Exceptions (such as a part time Professor, 0.2 FTE, for an interim period after his move to the Diamond Light Source) are rare. There have been a low number of female postdoctoral appointments as highlighted in staff data and in the job applications section. In addition, there is a low number of postdoctoral fellows across the board applying for their own fellowships. We plan to encourage these applications as detailed in the recruitment part of this application. All academic staff are full-time, while a 38% of all non-academic staff are in part time contracts. Although this may be due to the flexibility of academic working, it may also be that staff have previously believed that part-time employments might adversely affect/reduce their research. However, this should now be addressed with the clear workload model (described in the following part) and the transparent PDR model in the School.

Table 12. Fixed-term and permanent contracts by gender (%)

f) Workload

Two teams of academic staff, in the last 12 months, worked to put together a workload model that considered all activities around teaching and administration. The activities were calibrated against those used in Physics and Biosciences. This workload model then integrated duties outside the School (*i.e*. membership of RSC committees, editorship of journals), to allow a balanced allocation of duties going forward, and identify how much time there was for research activities.

The Teaching data includes lectures, examining, tutorial, lab demonstrating and marking, project supervision, internal PhD vivas, external outreach activities to schools and sixth form colleges and

external examining at other HEIs. The model has weighting factors that allow for: (a) whether a lecture course is being given for the first time, (b) the number of students in the lecture. The administrative data were collected from input by all staff to the amount of time dedicated to administrative roles. Activities involving promoting women in science and Athena SWAN as well as all are taken into account. The workload is discussed during PDR where the staff can discuss changes of a role or compare teaching and administrative loads, in order to bring transparency and equitabilty to staff workloads.

- We will review the workload model biannually for additions, changes or any issues that appear in PDR processes and have not been included (action D6).

g) Timing of departmental meetings and social gatherings

We have reviewed the timing of the School Committee meetings, research seminars and social gatherings in order to be considerate to staff with young children and other caring roles. We have identified that 9.30 am-3 pm will be the core hours that all committees, meetings and seminars should take place. We have discussed the implementation of this with staff at School Committee and during Research Committee. The School has changed the seminar organisation from January 2013 to be administered by one academic member of staff with input from all research units to facilitate timing and organisation of seminars within the core hours.

We have identified that some *ad-hoc* meetings may take place out of these hours if early notice is given for staff to make care arrangements but this should not be viewed as usual practice. The new policy for the timing of all committee meetings and most seminars has been fully adopted with exception of postgraduate organised seminars that will be changed from May 2013. Our teaching commitments span between 9 am to 6 pm. It is a great advantage that the timetable is prepared by an academic member of staff early in advance in May of the preceding academic year, which allows staff to plan childcare arrangements well ahead of time and identify any unsuitable scheduling. We identified that some social gatherings of academic staff that involved participation of undergraduate students and researchers were organised at late times. Our actions in this section include

- Implement the identified core times in all seminars taking place in the School (action D.7)
- Implement that School-organised social gatherings are within family-friendly, core hours (action D.8).

h) Culture and environment

The young profile of the staff brings an open, accessible, friendly working atmosphere aided by the general attitude of “sharing the responsibilities” across many of the activities. The latter has been greatly enhanced by the transparency of the workload model and consideration of heavy teaching and administrative loads. The staff socialize during twice weekly coffee mornings, including postdoctoral, support staff and PG, UG committee members. Postgraduate students together with postdoctoral researchers organise several social events, a thriving student-organised research presentation programme, and a whole-School research awareness event followed by social gatherings. The undergraduates enjoy a dedicated large space for studying, the popular ‘Reading Room” and have a separate room for social gathering with vending machines.

There are several social events just before Christmas or Easter breaks, after graduation ceremony. The HoS has been organising *ad-hoc* meetings with academic staff, or postdoctoral researchers and postgraduates to gauge opinions on upcoming issues about operations of the School and discuss new developments as they emerge. There is an “open door” policy by the HoS and all senior staff, that brings no barriers for early career staff to approach and ask questions. Although there is no

formalised mentoring programme, staff are happy to assist, share experiences and support colleagues towards their applications for promotions, research grants or sharing notes for dissemination of good practice in teaching.

There are several staff with young families and there is good support when emergencies occur and teaching or administrative substitution is required with short notice. The HoS is a great supporter for celebrating successes for all levels, which are shared by email at the first instance, followed by updates on the website.
We have identified that we need to strengthen presence of female role models in the School, either as guest speakers or as external examiners or as visiting alumni. In 2011-12 around 10 % of the seminar speakers were female. We have identified that we do not have any female alumni visiting the School. Destination of leavers' data is currently collected centrally *via* the *Destination of Leavers in Higher Education* survey. The HoS has been in discussions with the alumni College support officer of best ways to initiate data collection. Our actions include

- Promote and monitor invitations of female guest speakers with the aim of a significantly increased number in the next two academic years (action D.9).
- Collect a wider Chemistry alumni database and introduce an "exit questionnaire" for postdoctoral researchers to maintain contact after they leave (action D.4).
- Organise a social gathering of academic staff where families are welcome (*e.g* picnic visit to local botanical gardens) (action D.10).
- Create and Athena SWAN activities diary to assist with the actions overseen by the Athena@Chem and coordinate with other College and School operations (action D.11).

j) Outreach activities

In the last year we have established a database to capture the School related Outreach activities both external (*i.e* topical and career talks delivered to schools) and internal (e.g. *Chemistry Factory Days* and *Masterclasses* hosted by the School). It has proved an efficient mechanism for auditing purposes and for identification of the extent to which we engage with local schools, their type and location. Once sufficient data are available, we plan to compare to the Admissions database in order to ascertain the effectiveness of our activities and, more importantly, whether there are schools that we should be targeting with the aim to increase female applications. We have enthusiastic staff that are involved in outreach activities, a female and a male academic member of staff were involved in Thinktank (the Birmingham Science Museum) *activities for Year 8 students*. Fifty postgraduates from the PSIBS programme (an equal mix of female and male) were also involved during February half term time in "*Meet the Scientist*" experiments at Thinktank. With British Science Festival at Birmingham next summer, the School will have an ideal opportunity to strengthen outreach with activities having a strong presence of female staff. In the Open Days and Admission Days, several female postgraduate students participate demonstrating experiments and hosting the visitors in tours of the school. We have identified inspiring female academic staff to give talks on Admissions and Open days and we aim to increase the female numbers for outreach activities (actions in Section 3), taking into consideration the workload of the female academic members of staff.

Flexibility and managing career breaks

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k) (i) Maternity return rate

There has been one maternity leave in the last 3 years (Table 13) and the member of staff came back to work full-time. There is also one postdoctoral researcher currently on maternity leave and one doctoral researcher that took maternity leave and completed her PhD on time.

Table 13. Maternity return rate (%)

Year	Instances of maternity leave		Returning staff	
2009/10	1	**100%**	1	**100%**
2010/11	-	**-**	-	**-**
2011/12	-	**-**	-	**-**

(ii) Paternity, adoption and parental leave uptake

There have been 5 paternity leaves in the last 3 years, 2 taken by Professors and 3 by Senior lecturers. There have been no adoption leaves taken. Two paternity leaves were taken by postgraduate students.

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

There have been no formal applications for flexible working from academic staff as it has not seemed to be required based on the School environment and an informal flexible system.

m) (i)Flexible working

Many academic staff work flexibly without making a formal application to do so. The HoS is fully supportive of this approach and encourages staff to use flexibility in their working pattern not only to maintain a positive work-life balance in how they manage their workload but also to use their judgment for efficiency and effectiveness to achieve their targets. Many staff work flexibly with or without family commitments. There is also great support between colleagues when emergency absences occur to cover for teaching duties even marking in cases.

(ii) Cover for maternity and adoption leave and support on return

Although there has not been a formal policy cover for maternity leave, good scheduling from HoS, flexibility in teaching arrangements between staff, has allowed all teaching and administration to be delivered with no disturbing effect to the students. The school has a clear detailed policy in Health and Safety for pregnant female staff and students. It has been recognised that there is a need for making time for staff to adjust upon return from maternity leave, especially towards their research programme.

- We will introduce new return to work after maternity arrangements such that the member of staff has a reduced load the first semester upon return from maternity leave, with a maximum commitment of teaching one lecture course and no administrative roles (action E1).

The College has recently supported female staff that have had childcare-related career breaks to re-establish their research. The staff with projects within EPSRC remit applied for funds to buy-out teaching time, meet childcare costs so they can attend conferences or buy-in extra research support. In Chemistry, a female member of staff was successful in attracting funds to buy additional research support and meet childcare costs to attend a conference.

(Section 4 Word Count: 4986)

Section 5 - Any other comments

A. There is a biannual *Staff Satisfaction Survey* (open to academic and support staff in Chemistry). The **2011** survey highlighted some issues and it is anticipated that the recent changes will show positive impact in the upcoming survey. Below the areas where women gave higher (>5% above men) positive scores than men are highlighted:

- I have the information I need to do my job well
- Overall, I enjoy the job that I do
- The University does a good job of keeping me informed about matters affecting me
- I am able to strike the right balance between my work and home life

- I am comfortable with the amount of work I am expected to do
- I am motivated to contribute more than is normally required to complete my work
- I would recommend the University as a place to work
- I think there are sufficient opportunities for long term career progression at the University

However, there were some areas that the women scored lower that 5 % from men:

- My work gives me a feeling of personal accomplishment
- I am able to make decisions that enable me to work effectively
- I feel able to speak up and give my views/suggestions on the way things are done at the University
- I have opportunities to raise questions and make suggestions
- There is effective communication within my immediate work area

There were many responses that the percentages showed agreement in opinion either positive or negative:

- I am clear about what I am expected to achieve in my job (positive)
- Overall, I enjoy the job that I do (positive)
- I am able to access the right learning and development opportunities when I need to (positive)
- I have a regular opportunity to discuss my development with my manager (negative)
- Major change is managed effectively by the University (negative)

B. The College support in the Athena SWAN activities has been very important to assist with matters that are better handled in an efficient and timely way for the wider base of Engineering and Physical Sciences like the focus groups, developmental courses, job advertisements, issues of promotions (i.e the Promotions workshop).

C. In the School the recently appointed Early Career Birmingham Fellows/Lecturers have settled in very quickly and have been successful in their research taking-off with grant funding. An example is Zoe Schnepp, moved to UoB from Japan, who states “The induction period was very well organized, and I had already been given a date and time for my day 1 meeting with personnel even before I had left Japan! At this meeting I was given various documents about my probationary period and requirements, information on staff benefits and a very useful checklist of things to complete within my first month”. Professors Johnston, Hannon and Tucker with young families have been using flexible working to collect kids from primary school when required, attend school plays and sports days.

(Section 5 Word Count: 497)

Section 6 - Action plan

University of Birmingham, School of Chemistry
APPENDIX

FOCUS GROUP QUESTIONNAIRES for FEMALE POSTDOCTORAL AND POSTGRADUATE RESEARCHERS

Executive Summary
This report was commissioned to ascertain the views of female post-doctoral researchers in CoEPS , and the post graduate researchers in the Schools of Chemistry and Chemical Engineering in relation to the gender imbalance in CoEPS. It would also explore how a women's network might support female researchers and contribute to addressing the imbalance.

In summary, the focus groups revealed that
· The lack of maternity provision and the lack of security and stability of fixed term research contracts are significant barriers for women.
· The culture of research and academia is seen as pressurised, with long hours, competitive and unfriendly and this appears to deter women more than men.
· The timing of the academic career path tends to militate against women who want to have children.
· Many of the issues identified appear to apply equally to men, – short term contracts, the perception that the University does not value postdoctoral researchers, the lack of a career path for professional researchers. Some of these issues are likely to be University-wide, yet other colleges in the University have a more equal gender distribution.
· Response to a female network was luke-warm, and most respondents do not want female-only provision.

Recommendations

1. Benchmark practices with other colleges to find out how they are managing post-doc contracts, and how they make them more appealing to women.

2. Be creative about the possibilities offered in research

a. **Promoting the benefits** – research can be flexible and family – friendly.

b. Non-standard contracts –offer more part time and job share research contracts, or have some contracts specifically based on administration roles.

3. Clarify / improve maternity provision – researchers would like arrangement to be clear and transparent, and if possible standardised, in order to facilitate movement between universities. And ideally they would like it to be possible to take maternity leave during research contracts, without it having an excessively negative impact on them or on the research project

4. Mentoring - develop a structured process to support mentoring

5. Careers Advice – on opportunities in academia and industry

6. Guest speakers – senior people to share their experiences of developing their careers and balancing career and family commitments

7. Facilitate networking – researchers want to know who they can talk to, and to be able to discuss their circumstances with other people who have had similar experiences.

FOCUS GROUP QUESTIONNAIRES for FEMALE ACADEMIC STAFF

A series of focus groups with female academics in the College of Engineering and Physical Sciences was held in the autumn term with the aims of:

- Identifying blockers to female career development and progression
- Identifying what support an academic women's network could provide, in terms of personal and professional development activities

35% of the female academic population of the College attended. The executive summary of the report is below.

Executive Summary

Findings:

- Barriers to career progression primarily affect women who take time out to have families.
- Staff want access to a network of other female academics to talk to
- More structured support for mentoring would be helpful
- Opportunities to develop skills, knowledge and behaviours in specific areas would be helpful to some, and such activities should be open to all staff, not just women.
- Improving the information, guidance for and awareness of managers and Heads of Schools could help them to provide better support for female academics.
- Balancing of admin, teaching and research was felt to be a problem for women in general, and particularly for those working part time.
- Female staff may delay applying for promotion until they are certain they are ready; improvements in the transparency of the process and encouragement to apply may be helpful

Recommendations:

- Facilitate networking so that women can make contact with others in a similar position.
- Mentoring - develop a structured process to support mentoring that gives access to appropriate mentors to support different situations.
- Guest speakers - Invite women in senior positions to share their experiences of developing their careers and balancing career and other commitments.
- Run training session / workshops to develop specific knowledge, skills and behaviours
- Improve support for managers and Heads of Schools

School of Chemistry, University of Birmingham
Athena Bronze Action Plan

A. Data and Supporting Evidence			
Action	**Responsibility**	**Timeline and planned impact**	**Section**
1. Monitor entrants to the **Access scheme** for gender balance; include its promotion during our outreach efforts for female students. Liaise with UoB Access Scheme Officer in Student Recruitment and Outreach.	UG Admissions Team School Outreach Officer	September 2013 and annually thereafter. The data will enable us to assess effectiveness of these activities and modify if required.	3b(i)
2. Monitor **UG student admission data** by gender ratio. Annual report to Education Committee EMG School Committee	UG Admissions Team	September 2013 and annually thereafter. Use the data to identify opportunities to increase proportion of female students and to assess the effectiveness of our activities to address this (Actions B1,B2).	3b(ii)
3. Monitor **UG applications data** including offers and acceptances for gender balance and degree preference and identify issues to address in advertising and course provision. Annual report to Education Committee EMG	UG Admissions Team	September 2013 and annually thereafter. Ensure that our admissions process continues to be appropriate for both female and male applicants and that our course portfolio is attractive to both genders.	3b(ii)
4. Monitor the gender balance of **PGT students and applications** of the newly introduced programmes as part of our action plan activities. Annual report to PG Admissions Tutor Research Committee EMG	Heads of PGT	November 2013 and annually thereafter. Assess how these new courses are being received in the marketplace and identify any gender issues arising.	3b(iii)

5. Monitor **PGR population and applications** by gender ratio. Annual report to PG Admissions Research Committee EMG	PG Admissions Tutor	November 2013 and annually thereafter. Ensure that our advertising documentation is attractive to both genders and that our admissions process continues to be appropriate for both female and male applicants.	3b(iv)
6. Monitor **exam performance** by gender ratio and **degree classification data** for BSc/MSci performance *vs* gender balance. Annual report to Quality Audit Group Education Committee EMG	Exam Officer Quality and Assurance Officer	June 2013 and annually thereafter. Identify any gender issues arising in UG performance. If issues arise Education Committee will review whether changes to teaching or examining or support are required.	3b(v)
7. Monitor **staff data, job applications and appointments** for gender balance. Biannual report to HoS EMG	HoS Office, Operations Manager	June 2013, annual report. Assess the increase in female applications in response to our recruitment efforts and this will inform on the impact and effectiveness of our changes.	3b(vi) 4a(i)
B. Key career transition Points, Outreach, Appointments and Promotions			
1.Target more visits to girls-only **schools** and ensure that visits to mixed-sex schools are gender balanced in terms of the UoB staff/students participating. Annual report to Admissions Team, Education Committee EMG	School Outreach Officer	From September 2013, annually thereafter. Engage with a greater number of female prospective applicants in order to raise the number of female applicants.	3b(ii)
2. Review our arrangements for **pre-application open days** to ensure that female staff and current students are fully represented. Identify inspirational female academics to be involved in **outreach** activities.	UG Admissions Team	From the next admissions cycle (September 2013). Ensure that female role models are visible in order to raise the number of female applicants.	3b(ii)

3. Review our **UG recruitment materials** and our website to include more information and examples of careers in chemistry and to promote female success stories/role models. Annual report to EMG Education Committee	UG Admissions Team	From November 2013, biannually Ensure that career examples and female role models are more visible in order to raise the number of female applicants.	3b(ii)
4. Advertise actively the **promotions workshops** to our staff.	HoS	April 2013 and ongoing Impact will be greater transparency in requirements for promotion and how to prepare promotions applications, making promotion more readily accessible for all staff.	4a(ii)
5. Examine from staff feedback the **impact of the promotions workshops** in Chemistry and compare our data to other schools' success rates and share good practice with feedback from the College for future promotion support. Report to Promotions Committee, EMG	Athena@Chem HoS Office	March 2014 and annually thereafter. Review and feedback on effectiveness of the workshops and whether our staff are being effectively supported to achieve promotion and identify any gender issues.	4a(ii)
6. Proactively approach academic staff to consider preparation for **promotion.**	Promotions Committee	November 2013 and annually thereafter. Enhance the quality of applications for promotion.	4a(ii)
7. Monitor female success in promotions and time taken to achieve promotion compared to male peers.	HoS office	October 2013 and annually thereafter. Identify any gender issues in promotion allowing us to plan how to address this, in conjunction with the College and University.	4a(ii)
8. Review our researcher **short-listing process** so that at least 2 members of staff are involved in this process.	HoS office Operations Manager	April 2013. Make our researcher appointment processes more robust and ensure that applicants with less common career paths receive full consideration.	4b(i)

9. Involve at least one female academic staff in all **short-listing procedures** for **academic** appointments.	HoS	April 2013. Increase female participation in decisions for appointments.	4b(i)
10. All **interview panels** for academic staff to involve at least one female academic member of staff. Interview panels for postdoctoral researchers to require involvement of a female member of staff only when a female candidate is interviewed.	HoS Office Operations Manager	May 2013. Ensure that female applicants see a female role model, enhancing our attractiveness to female applicants in the recruitment process.	4b(i)
11. In all job adverts, a **statement** of the School's support towards Athena SWAN values to be added to the **further particulars**.	HoS Office Operations Manager	June 2013. Increase applications from female applicants and applicants of either gender who have caring or family commitments or plan to have in the future.	4b(i)
12. Organise seminars by **guest speakers promoting career paths** with work-life balance.	Athena@Chem	From October 2013. Provide role models for our students, researchers and staff raising the importance of this balance and providing opportunities to discuss different ways to achieve it. It will also serve to share best practice from and to other institutions.	4b(ii)
13. Follow up from the previously set focus groups with **questionnaires to both male and female postdoctoral and doctoral researchers**. Report to PG Tutor Research School Liaison Research Committee EMG	Athena@Chem	March 2014. Provide data to plan further actions in support of these researchers so that numbers of our researchers transitioning into academic posts may be increased. Identify any gender specific issues.	4b(ii)

14. Analyse Chemistry-**staff feedback** from upcoming University questionnaires for gender equality. Biannual report to HoS EMG	Athena@Chem	As soon as University staff questionnaire results are published. Use feedback to plan any further actions to support all staff in their career development.	4b(ii)
15. Include more images on our website **promoting successes**.	Chemistry Website Officer	May 2013 and review. Provide greater visibility to successful role models at all levels in our School, increasing the aspirations of all.	4b(ii)
C. Career Advice and Student/Researcher Support			
Action	**Responsibility**	**Timeline and planned impact**	**Section**
1. Analyse the outcomes of the **focus groups of female post-graduate** researchers and identify and implement changes to support their development and possible transition to an academic career. Report to PG Tutor Research School Liaison Research Committee	Athena@Chem	June 2013. Plan actions to further support the student development and career paths	3b(iv)
2. Promote information dissemination for **grant applications**, important to **postdoctoral researchers** in the process for establishing an independent career and monitor submissions. Report to Research Committee	Chemistry Research and Development Officer	From Summer 2013 for the system to be fully operational for September 2013. Assist postdoctoral researchers in progressing to an independent career; Aim to increase the number of individual applications of individual researchers.	4b(ii)
3. The annual **performance and development review**, recently brought into action for academic staff will be expanded to postdoctoral researchers and will form an important opportunity for one-to-one advice with an academic member of staff other than the project supervisor.	HoS	To be introduced in 2014. To support and assist researchers in developing their career with advice, and planning. The process will have positive impact for female researchers unsure about progressing to the academic career path.	4b(ii)

4. Advertise more widely the **career events** aimed at **doctoral researchers** and organise more events aimed at Chemistry postgraduates; update links on the school's website to the intranet pages of the career development training and include examples of successful female graduates on the school website.	Postgraduate Tutor Chemistry Website Officer	Summer 2013. Improve the career information experience of the postgraduates that may impact especially on females thinking about academic vs other careers.	4b(ii)
5. Provide links with the College PODC to tailor **developmental courses** to the needs of **postdoctoral researchers** and advertise, proactively encourage participation in Chemistry.	Athena @ Chem Research School Liaison	October 2013 and annual review. To establish a set of courses and promote to researchers. To enhance researchers career prospects and support female researchers identifying key areas of development.	4c(i)
6. Introduce a new arrangement allowing the student to request **a female tutor** (UG) or a female second academic supervisor (PG).	Administration Manager PG Office	September 2013. To support the experience of female students and ensure no barrier to have a female tutor or advisor	4c(iii)
7. Modify our Year 1 **undergraduate questionnaire** to include gender balance information and information of career aspirations related to the degree.	Quality Enhancement Officer	October 2013 To identify any differences affecting females in career aspirations, University expectations and learning.	4c(iii)
D. Culture, Communication and Organisation			
Action	**Responsibility**	**Timeline and planned impact**	**Section**
1. Prizes and awards for UG performance will be communicated to staff and personal tutors with wider communication on the website. Report to Education Committee	Director of Education Committee	From 2013/14 academic year. To celebrate successes of students, highlight successes of females.	3b(v)
2. Prepare a **booklet** "Introduction to the School of Chemistry" to be distributed to new staff.	Administration & Operations Managers	Summer 2013 To aid induction to School, communications and transparency.	4c(ii)

3. Organise new, whole school, **introductory seminars** to be given by the new postdoctoral researchers.	Seminar Organiser	September 2013, annually thereafter. To enhance the experiences of incoming researchers to induction to school, strengthen interactions with School staff that can informally advice, share experiences.	4c(ii)
4. Examine the current **alumni database** for gender balance, collect a wider Chemistry alumni database and also introduce an "exit questionnaire" for postdoctoral researchers to establish good contacts.	Chemistry Careers Officer College Alumni Officer	October 2013 and annually. To invite female alumni as mentors within existing schemes for UG and PG students	4c(iii) 4h
5. Review **committee participation** annually and consider gender balance issues	HoS	June 2013 and annually thereafter. Aim to increase female participation in decision-making committees.	4d
6. Review the **workload model** biannually for additions, changes or any issues that appear in PDR processes and have not been included.	Director of Education	Summer 2014 To ensure all parts of academic work are considered in the model.	4f
7. Implement the identified **core times** in all seminars taking place in the School.	Seminar Organiser	June 2013 To ensure consideration of staff with commitments in their participation in meetings and seminars.	4g
8. Implement that School-organised **social gatherings** are within family-friendly, core hours.	HoS office	April 2013 To ensure consideration and avoid any exclusion of academic staff.	4g
9. Promote and monitor **invitations of female guest speakers**.	Seminar Organiser	June 2013 To significantly increase the numbers of female speakers in the next two years.	4h
10. Organise a **social gathering** of academic staff where families are welcome (*e.g* picnic visit to local botanical gardens).	HoS office	Summer 2013 To foster an environment amongst colleagues open to families.	4h

11. Create an "**Athena Swan Activities" Diary** to assist with the actions overseen by the Athena@Chem. Report to EMG HoS	Lead of Athena@Chem	May 2013 To ensure that the Athena@Chem oversees all actions and coordinates with other committees in the School diary of meetings.	4h
E. Career Breaks			
Action	**Responsibility**	**Timeline and planned impact**	**Section**
1. Introduce a new arrangement that the member of staff has a reduced load the first semester upon return from maternity leave.	HoS	Summer 2013 Facilitate female staff managing their return to work alongside the demands commitments to their new family member(s); to create time for staff to revive their research programme after their maternity leave.	4m(ii)

Key to Action Plan

HoS = Head of School, EMG = Executive Management Group
PGT=Postgraduate in taught courses, PGR=Postgraduate in research degrees
PG=Postgraduate, UG=Undergraduate
PODC= People and Organisational Development Consultant