Athena SWAN GOLD Department Award Application

Name of University: University of Southampton

Department: Chemistry

Focus of Department: STEMM

Date of current Silver award: November 2014

Date of Gold application: November 2017

Date of University Silver Athena SWAN award: November 2016

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1.0 Letter of endorsement from the head of department

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20th November 2017
Ruth Gillian
Athena SWAN Manager
Athena SWAN Charter
Equality Challenge Unit
First Floor, Westminster Tower
3 Albert Embankment
London
SE1 7SP

Dear Ruth,

I am delighted to offer my full endorsement to Chemistry's application for an Athena SWAN Gold Award. Since joining Southampton Chemistry in 1991, I have been committed to education, outreach and public engagement; I am driven by a desire to remove barriers to success. As HoD, I am an active member of our EDI team, directly involved in promoting our Athena SWAN ambitions in the widest sense, including policy changes, decision-making and the preparation of our Gold application.

As a flagship department, we are very proud of our progress in EDI, first receiving our Bronze award in 2012 and Silver in 2015; these principles continue to shape the way our department functions. We were the first department at Southampton to receive Silver and are considered a beacon of Athena SWAN principles across the University, helping colleagues in other departments to shape their EDI priorities, and contributing significantly to the University Athena SWAN Silver Award (2016).

Embracing the Athena SWAN values makes a real difference to Chemistry staff and students. Responses to the University's Staff Engagement Survey and to Chemistry's EDI Survey indicate that staff experience a genuine feeling of fairness and belonging, with openness and inclusivity at the heart of our culture. In 2017, 95% of our staff agreed that "Chemistry is a great place to work", an increase from 80% in 2012.

Successful Bronze and Silver actions include:

- 100% of our staff (academic, support, PDRA) have completed EDI training. (SA 6.1)
- A core-hours policy; all meetings are held during family-friendly hours, enabling staff to be engaged and have influence. (Bronze action)
- EDI chairs directly report to our Policy and Resources Committee and Faculty Executive Group, and as HoD I ensure we are mindful of EDI considerations in all our decision-making. (SA 8.4)
- All-staff briefings to facilitate transparency and engagement.
- Monthly PDRA events including fora with the HoD (and Dean at alternate meetings) and seminars to enhance ECR development and collegiality. (>60% attendance, SA 6.6)
- An annual all-staff family barbeque. (SA 7.7)
- Annual appraisals for all academic, PDRA and support staff. (98% completion, SA 6.3)
- Extensive support for staff experiencing difficult personal circumstances; reflected in recent feedback (92% agreed they felt "well supported in their current role").
- Email policies to promote good work-life balance and manage staff and student expectations; receiving positive feedback. (SA 7.4)
- Outreach responsibilities included in our workload model. (SA 1.5)
- A 6-monthly Chemistry Newsletter with an EDI focus to celebrate success across the department. (SA 7.5)
- A dedicated annual budget (£2000) for the promotion of EDI. (SA 8.3)

We are also a beacon for promotion of EDI in our extensive outreach programme, championing the values of Athena SWAN externally by not only ensuring a 50:50 M:F team delivering events, but also providing strong direction to teachers to allocate pupil places equally by gender.

We continue to identify and address areas where improvements are required, such as part-time undergraduate and postgraduate study. We champion initiatives to raise awareness of EDI considerations and influence policy within the University and nationally to make cultural change, particularly around our beacon activities in outreach and through diversifying pathways at UG, PG and PDRA level.

I believe that the department's success depends on nurturing a culture of collegiality and mutual respect, allowing us to achieve our ambitions; Athena SWAN is at the core of this. I am proud to submit our application for your consideration. I confirm that the information in this application (including qualitative and quantitative data) is an honest, accurate and true representation of the department. Data has been presented, where available, from the last six years.

Yours sincerely,

Professor Gill Reid

577 words

Contents

1.0 Letter of endorsement from the Head of Department 2

Table of Contents 4

Glossary of Abbreviations 6

2.0 Description of the Department 8

3.0 The Self-Assessment Process 13

(i) Description of the self-assessment team 13

(ii) Account of the self-assessment process 17

(iii) Plans for the future of the self-assessment team 18

4.0 A picture of the department 22

4.1 Student data 22

(i) Numbers of men and women on access or foundation courses 22

(ii) Numbers of undergraduate students by gender 23

(iii) Numbers of men and women on postgraduate taught degrees 30

(iv) Numbers of men and women on postgraduate research degrees 32

(v) Progression pipeline between undergraduate and postgraduate research degree 37

4.2 Academic and research staff data 39

(i) Academic staff by grade, contract function and gender: research-only, teaching and research or teaching-only 39

(ii) Transition of staff between technical and academic roles 45

(iii) Academic and research staff on fixed-term, permanent and zero-hour contracts by grade and gender 46

(iv) Academic leavers by grade and gender and full/part-time status 48

5.0 Supporting and advancing women's careers 49

5.1 Key career transition points: academic staff 49

(i) Recruitment 49

(ii) Induction 52

(iii) Promotion 53

(iv) Department submissions to the Research Excellence Framework (REF) 56

5.2 Key career transition points: professional and support staff 56

(i) Recruitment and Induction 56

(ii) Promotion 58

5.3 Career development: academic staff 59

(i) Training 59

(ii) Appraisal/development review 60

(iii) Support given to academic staff for career progression 61
(iv) Support given to students (at any level) for academic career progression 61
(v) Support offered to those applying for research grant applications 62
5.4 Career development: professional and support staff 64
(i) Training and induction 64
(ii) Appraisal/development review 65
(iii) Support given to professional and support staff for career progression 66
5.5 Flexible working and managing career breaks 66
(i) Cover and support for maternity and adoption leave: before leave 67
(ii) Cover and support for maternity and adoption leave: during leave 67
(iii) Cover and support for maternity and adoption leave: returning to work 68
(iv) Maternity return rate 69
(v) Paternity, shared parental, adoption and parental leave uptake 69
(vi) Flexible working 70
(vii) Transition from part-time back to full-time work after career breaks 71
5.6 Organisation and culture 72
(i) Outreach activities 72
(ii) Visibility of role models 78
(iii) Beacon activity 79
(iv) Culture 80
(v) Timing of departmental meetings and social gatherings 82
(vi) HR policies 83
(vii) Workload model 84
(viii) Representation of men and women on committees 85
(ix) Participation on influential external committees 86
6.0 Case studies: impact on individuals 88
7.0 Further information 93
8.0 Action plans 95
(i) Summary of status of key aims implemented from or since Silver submission (2014) 95
(ii) Gold Action plan 105

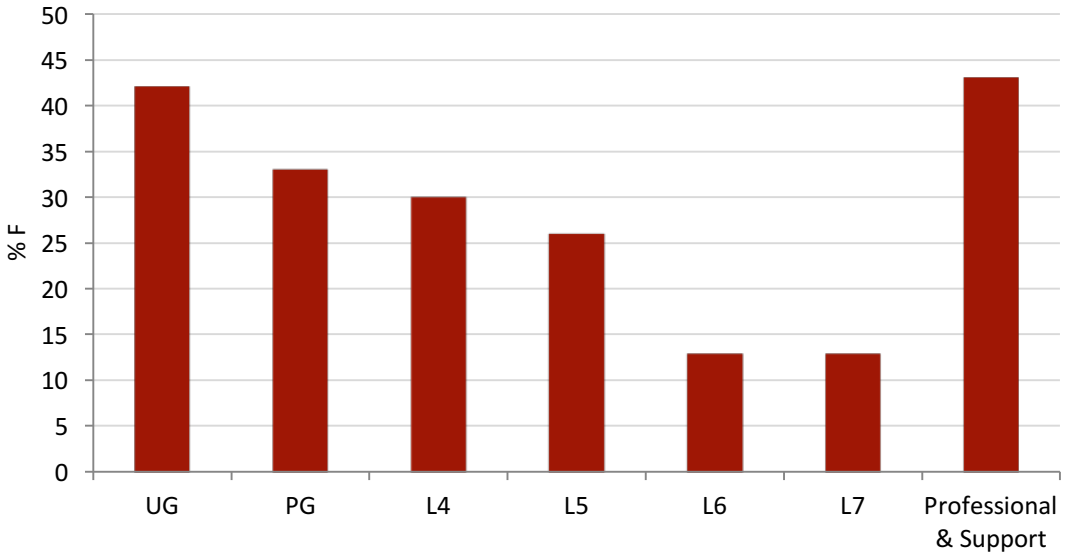
Glossary of Abbreviations

Abbreviation	Definition
A	Action
AU	Academic Unit
AS	Athena SWAN
CPRC	Chemistry Policy and Resources Committee
CREC	Chemistry Research and Enterprise Committee
DoP	Director of Programmes
DoR	Director of Research
EC	Early Career
ECR	Early Career Researcher
EDI	Equality, Diversity and Inclusion
EO	Equal Opportunities
EQC	Education and Quality Committee
ERE	Education, Research and Enterprise job family
F	Female
FNES	Faculty of Natural and Environmental Sciences
FTC	Fixed Term Contract
FTE	Full Time Equivalent
f/t	Full-time
SFY	Science Foundation Year
HEI	Higher Education Institute
HoD	Head of Department
HoGS	Head of Graduate School
HoRG	Head of Research Group
HR	Human Resources
L	Level
M	Male
MChem	Master of Chemistry (an Undergraduate Masters degree)
NMR	Nuclear Magnetic Resonance
PCAP	Postgraduate Certificate in Academic Practice
PDRA	Postdoctoral Research Assistant
P&S	Professional and Support
PDU	Professional Development Unit
PG	Postgraduate
PI	Principal Investigator
PPDR	Personal Performance Development Review (appraisal support staff)
p/t	Part-time
REF	Research Excellence Framework

RG	Russell Group of Universities
RS	Royal Society
RSC	Royal Society of Chemistry
SA	Silver action
SES	Staff Engagement Survey
SFY	Science Foundation Year
STEMM	Science, Technology, Engineering, Medicine and Mathematics
T	Total
Theano	Group supporting women in STEMM subjects
UCAS	Universities and Colleges Admissions Service
UG	Undergraduate
UoS	University of Southampton
URF	University Research Fellow
WiSET	Women in Science, Engineering and Technology
WSC	Winchester Science Centre

2. Description of the department

The University of Southampton is a Russell Group University, ranked 14th overall and 9th in the RG (Times HE Table, 2016). Chemistry was 13th in the UK in the 2016/7 Academic Ranking of World Universities and was placed 8th for 'research power' in REF2014. Chemistry combines a vibrant research environment and graduate school, with a large undergraduate community engaged in a portfolio of stimulating degree programmes; Chemistry achieved 94% overall student satisfaction in the 2017 NSS. We offer many opportunities for UG placements both abroad and in industry ~50 per year, as well as (paid) internships and vacation placements in house; higher degrees include both MSc and PhD. Chemistry has an international reputation for world-leading research and enterprise, our work being published in leading scientific journals (94% of our REF2014 submission was assessed as world-leading or internationally excellent). External research awards of £12.7 million in 2016/17 represented an all-time record.



Departmental colleagues (2016/7)

	UG	PG	Researcher **L4**	Lecturer / researcher **L5**	Associate Professor **L6**	Professor **L7**	Professional & Support **(P&S)**
F	189	53	16	6	1	3	10
M	264	108	37	17	7	21	13
%F	**42%**	**33%**	**30%**	**26%**	**13%**	**13%**	**43%**
Total	453	161	53	23	8	24	23

Figure 2.1 % Female colleagues in Chemistry.

UoS is organised into eight Faculties; Chemistry sits within the Faculty of Natural and Environmental Sciences with a new Dean, Prof. Rachel Mills, appointed in 2016. Since 2016 Chemistry is led by Prof. Gill Reid, who is advised by the *Chemistry Policy and Resources Committee* (56 %F) that includes the Director of Research, the Director of Programmes, Head of Finance, HR and Head of Operations.

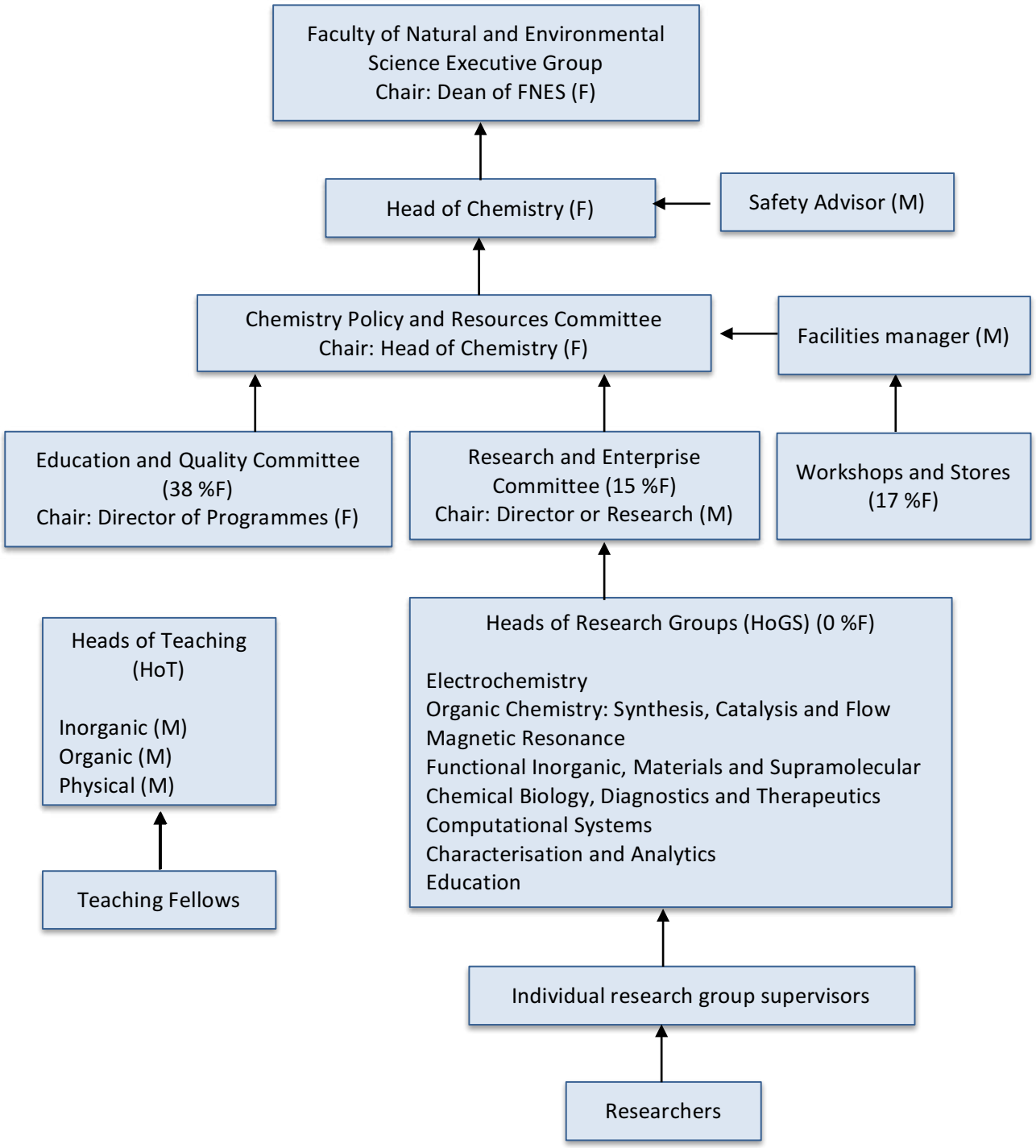


Figure 2.2 Line management and reporting structure in Chemistry: EDI is represented within every group and committee.

We have 107 academic staff at L4-7 (24 %F), 23 P&S staff, 161 postgraduates and 453 undergraduates housed in modern facilities on the main University campus. As part of its commitment to providing the best environment for research and education, the UoS is investing in major refurbishment of our buildings from 2018, EDI aspects will be considered. (**Actions 7.7**).

Our UGs' experience is pivotal to us; we support this by developing a one-to-one student-tutor mentor relationship and by small group tutorial teaching. Changes to the personal tutor arrangements in 2016, introduced four timetabled meetings between first years and their tutors before Christmas, thoroughly establishing a firm bond. First year survey results indicate students are more confident about seeing their tutors should problems arise (SA 2.4)

To support staff, briefing meetings are held throughout the year, keeping staff up-to-date on University policies, updates to degree programmes or support available to students. This ensures that staff give the correct advice to their tutees and helps recently appointed staff to feel confident giving advice.

Figure 2.3 Centre: Syma Khalid promoted to Professor in 2016, Chemistry has many examples of senior female staff that are excellent role-models.

> *"I have been encouraged to apply for awards and promotions by my department, within the ten years I have been at Southampton I have been promoted to senior lecturer and then full professor "*
>
> Prof Syma Khalid.

EDI practices have been embedded in our culture since our early gender equality work with the RSC in 2007. In 2015, Chemistry was the first department in the UoS to receive an Athena SWAN Silver award and we have **100% completion of EDI training across all staff** (SA 6.1). Beacon activities include our EDI team sharing best practices with other aspiring Bronze and Silver departments and contributing strongly to the University achieving an AS Silver award in 2016 (SA 8.4). Since Silver, we have made significant progress, not only do we have progressive female leadership (Dean and HoD), but have accomplished many Silver actions (Figure 2.5). We have a quiet room used for breast-feeding, prayer or rest and baby changing facilities (SA 7.2). Our

tearoom provides a central hub to encourage conversation and interaction between all staff, students and visitors.

We believe it is essential to support women in their careers at every level and to actively encourage all staff to maintain a healthy work-life balance. There is a strong culture of mentoring; all new staff are appointed a mentor as part of their induction, whilst other staff offer mentoring in specific areas for example, flexible working. 100% of our REF-eligible staff were returned in REF2014 (18 %F), and annual appraisals for all staff and research fellows include discussion on each individual's development and career progression.

As part of our preparation for this Athena SWAN Gold application, Chemistry invited Prof. Lesley Yellowlees (Chemistry, Edinburgh, Chair of E&D committee, RSC) to deliver a seminar followed by a round-table discussion in February 2017 with a University-wide invitation (Figure 3.4). Chemistry is active in the University's WiSET[1], a group that has been supporting women's careers since 2005 (founded by Prof. Andrea Russell, Prof. of Electrochemistry).

Figure 2.4 Professor Lesley Yellowlees addressed all staff in Chemistry staff (70% attendance), as well as staff from other parts of the University (~100 attendees).

> *"The diversity and equality training is a very valuable and interesting module that gave me an insight into what can at times be a very confusing and challenging subject. I would encourage everyone to partake in this enlightening training module"*
>
> Mr Alan Glass, Technician, Chemistry Mechanical Workshop

[1] WiSET = Women in Science, Engineering and Technology

2014	• Developed a first year UG survey for feedback on student experience (SA 2.1) • Workshop run to explain promotion expectations (SA 5.3) • EDI training made compulsory for all academic staff by HoD (SA 6.1) • Support staff representation of EDI team introduced (SA 8.1) • Staff Engagement Survey introduced, 65% response (SA 7.5) • Concordat ECR Careers Conference established (SA 5.4) • Seminar to prospective RS URF applicants: EDI chair invited speaker (SA 4.1)
2015	• Prioritised increasing female participants in outreach activities (SA 1.2, 1.3) • Established a PG and PDRA network (SA 3.1, 6.6) • Fridge installed in the quiet room (SA 7.2) • Increased Case Studies on EDI website from5 to 9 (SA 7.1) • Mandatory training for staff on new UoS Appraisal process (SA 6.3) • Annual 'Voices of Experience' career event initiated (SA 2.2) • Departmentally-funded PDRA places on Irène-Joliot Conference introduced (SA 5.4) • Promotion roadshow delivered (SA 5.3)
2016	• New female HoD • Increased diversity in UG recruitment literature, posters and website (SA 1.1) • Changes to Personal Tutor system to improve pastoral support (SA 2.4, 6.8) • PDRA profiles included on Chemistry's staff website (SA 5.4) • LGBT representative joined EDI team (SA 7.6) • Terms of Reference for EDI team formalised (SA 8.1) • Dedicated budget (£2000) and admin support for EDI activities approved (SA 8.3) • EDI chair nominated as Staff Engagement Survey champion (SA 8.4) • Teaching allocations of PDRAs formalised (SA 5.4) • Tariff for outreach and recruitment included in workload model (SA 1.5) • Supported UG student through part-time degree (SA 2.5) • Visiting schools recommendations on gender balance established (SA 1.2) • New induction booklet written (SA 5.1) • UG representatives on EDI team increased 1UG 2014, 3UG 2016 (SA 8.1)
2017	• Tariff included in workload model for Athena SWAN submission (SA 8.6) • Introduction of an induction checklist (SA 5.1) • Staff email guidelines published (SA 7.4) • Departmental newsletter launched (SA 7.5) • External consultation: Lesley Yellowlees, Clare Viney seminars (SA 8.7) • First Ishbel Campbell prize for EDI awarded (SA 8.2) • Performed L4 pay audit (SA 6.7) • Development of a workshop on 'professional behaviour' (SA 7.5) • Discussion forum with female role-models (academic and industrial) (SA 3.2) • PDRA seminar programme introduced (SA 6.6)

Figure 2.5 Key Achievements since our Silver Award in 2014 (excludes %F increases in recruitment) for further details of actions and impact see 8 (i): table of key aims since Silver AS SWAN; pages 95-104)

1016 words

3. The self-assessment process

(i) Description of the self-assessment team (EDI team)

The self-assessment is undertaken by the EDI team whose concern is to ensure changes are made to departmental practices and culture to provide an equal, fair and diverse working environment and to oversee implementation of Chemistry's Action Plan. Membership of the EDI team reflects a range of work-life experiences (23 %F part-time; 14 %M, 36 %F carers) and provides opinion from different sections, grades and responsibilities. Representation from groups including, the Concordat team, PG, UG, HR and the University EDI team, is considered essential for consistency and progression. Our team comprises 22 members (9 men, 13 women) and is co-chaired by two female academics. The HoD also attends to provide authority and influence to effect change. Membership is voluntary, but to ensure representation from across our community, members can be proposed. The Term of Office is three years, with no more than two consecutive terms in the same role. Allocation of staff time for EDI work is fairly represented in the workload model with an additional allocation for preparation of Athena SWAN submissions. (SA 8.6)

Figure 3.1 Chemistry received the first Silver award within the University of Southampton (2015), which contributed to the University achieving Silver in 2016.

The EDI team

Dr Katherine Jolley
Postdoctoral Researcher (ERE)
Postdoc Representative
To identify areas where improvement, support or guidance is needed for PDRAs currently and progressing to the next stage of their career.

Prof Jeremy Frey
Professor of Physical Chemistry (ERE)
Link to the HoRGs and research sections
A strong supporter of interdisciplinary research and teaching, using this experience to overcome barriers in the wider E&D agenda.

Luke Shearing
Marketing Officer (MSA)
Communications and Marketing Representative
To support the campaign promoting key messages through all our literature and media around the ethos of Athena SWAN.

Alex Maryan-Instone
PhD Student (PGR)
LGBT Representative
Alex's role allows the LGBT community to voice ideas and feedback ensuring the department remains inclusive and welcoming for all.

Julie Herniman
Senior Experimental Officer in Mass Spectrometry (TAE)
Experimental Officer and Technical Staff Representative
Joined EDI team in 2012, to ensure that staff in experimental officer and technician roles have a voice regarding EDI issues.

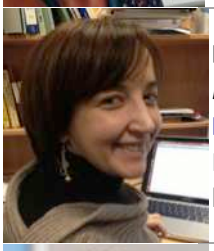
Dr Lynda Brown
Senior Research Fellow (ERE)
Co-chairs EDI Team in Chemistry
Joined Chemistry in 1996, holds a permanent position following a RS Fellowship; married to an academic, balances career with motherhood.

Prof Gill Reid
Professor of Inorganic Chemistry (ERE)
Head of Chemistry (2016-present)
Joined Chemistry in 1991, Gill is influential in outreach and widening participation activities and committed to promoting EDI through her leadership.

Dr Marina Carravetta
Associate Professor (ERE)
Co-chairs EDI Team in Chemistry and WiSET Representative
Joined EDI team in 2013. Secured a permanent lectureship after her RS Fellowship, she works part-time to look after her son.

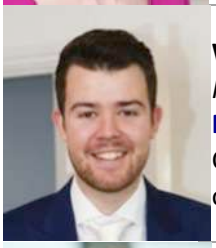
Dr Simon Gerrard
Lecturer; Outreach Coordinator and Admissions Officer (ERE)
Outreach and Admissions Representative
Joined as PhD student (2004), PDRA for 5 years, progressing to Lecturer and Admissions Tutor; currently Outreach Coordinator/Teaching Fellow.

Dawn Dunlop
F*aculty Administrative Officer* (MSA)
Secretary to EDI Team and Administrative Staff Representative
Joined Chemistry from Student Administration team; has worked at the University for 4 years; part-time for work-life balance.



Dr Maria Concistre
Postdoctoral Researcher (ERE)
PDRA Representative
Maria co-ordinates the postdoctoral seminars; her husband works in Chemistry; they both work flexibly to care for their young family.

Janice Sumner
Administrative Officer (MSA)
Administrative Staff Representative
In 2015 Janice joined the EDI Team to give a voice to administrative staff within Chemistry.



William Hale
PhD Student (PGR)
PhD Student Representative
Commenced his PhD in 2015, Billy is one of the postgraduate representatives, communicating issues or concerns raised by this community.

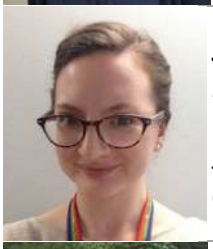
Alex Melhuish
University Equality Charter Advisor (MSA)
University EDI Representative
Alex's role is to provide a strong link between EDI agenda in Chemistry and the wider University.

Dr Russell Minns
Royal Society University Research Fellow (ERE)
Concordat Champion
A member of the Concordat group that supports career progression of ECRs. Russell has three children so often works flexibly.

Prof Andrew Hector
Professor of Inorganic Chemistry (ERE)
Postgraduate Admissions Tutor
At Southampton as a PDRA and URF, Andrew joined the EDI team in 2015. His research group has 5 nationalities (50 %F).

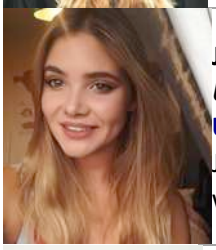
James Eills
PhD Student (PGR)
PhD Student Representative
James is a member of the Southampton University PG community connecting chemistry PGs with the wider University.

Dr Kelly Kilpin
Postdoctoral Project Coordinator (ERE)
Postdoc Representative for PDRA Community
A PDRA who has transitioned from a research career into scientific project management; works part-time and is married to an academic.



Jess Gusthart
PhD Student (PGR)
PhD Representative
Joined EDI team to represent postgraduate women and play a part in how the department continues to strive for equality.

Bethan Morgan
Undergraduate Student (UG)
Undergraduate Student Representative
Beth has balanced her studies with working in the Students Union, keen to improve the accessibility and inclusivity of Chemistry.



Jennifer Small
Undergraduate Student (UG)
Undergraduate Student Representative
Jenny, currently a third year MChem student, balances her studies with a passion for water-sports.

Cathie Holmes
HR Business Partner (MSA)
HR and Faculty Representative
Cathie's role is key to good practice, she also manages the demands of working full-time whilst a mum to two boys.

(ii) An account of the self-assessment process

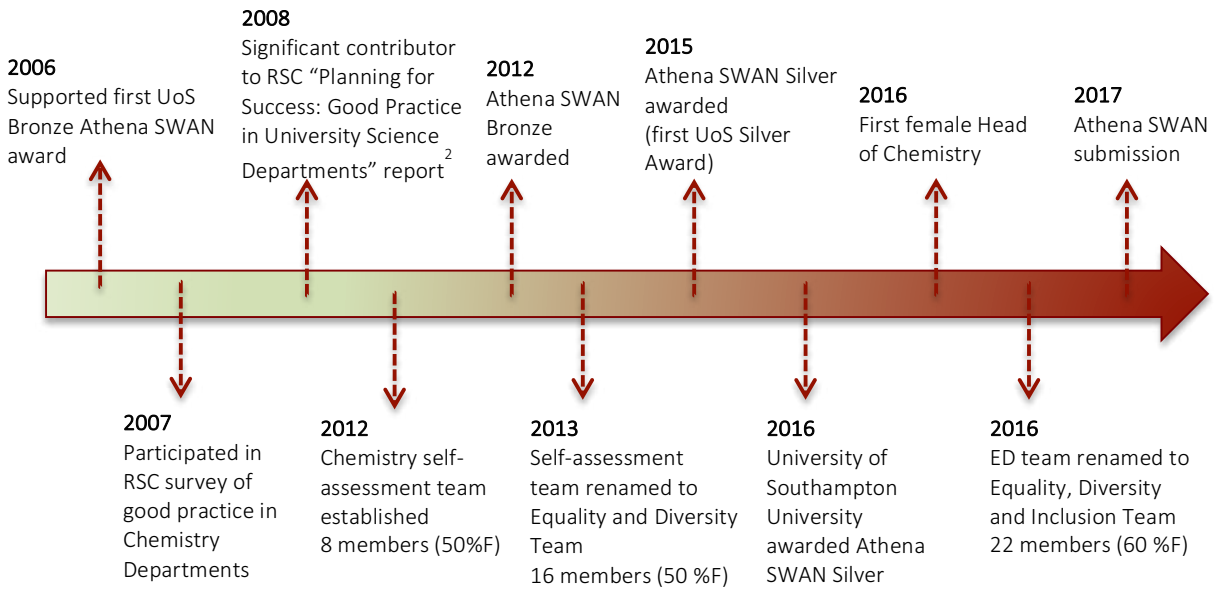


Figure 3.2 A timeline of the self-assessment journey in Chemistry with headline changes depicting our progress.

- The EDI Team meets bimonthly to monitor and implement the current Action Plan and develop the strategy in recognition of Chemistry's strengths and weaknesses. The meeting agenda/minutes are circulated by email to all members and published on University Intranet. All members report on behalf of the communities they represent and participate in the events organised.
- Key areas considered include scrutiny of data, under-represented groups, pay-gap analysis, advising and influencing senior management, induction, promotion, appraisal and other staff/student matters.
- All staff are regularly informed and consulted on EDI policies, events and actions through email communication (directly from HoD), Chemistry's Equality website (Figure 5.2), EDI noticeboard, departmental staff meetings and forums.
- EDI Team Chairs and HoD regularly attend Faculty and University EDI meetings and advise other departments, including non-STEMM disciplines. The EDI group has a wide-ranging influence in communicating EDI values; its members sit on many other working groups throughout Chemistry, the UoS, nationally and internationally (Figure 3.7). (SA 8.4)
- We survey our Year 2 UGs to review their Year 1 experience; this is reported to the EDI team and issues form new actions, 52% response. (SA 2.1)
- Chemistry staff are requested (by the HoD) to complete an annual questionnaire. The data are analysed by the EDI team, providing benchmark statistics on progress and highlight areas for improvement. Staff participation has improved significantly from 61 responses in 2012/13 (55% return) to 105 responses in 2017 (87% return) (Figure 3.3).

[2] Royal Society of Chemistry *Planning for Success: Good Practice in University Science Departments* (RSC, 2008), cited by "*In pursuits of female chemists*" Nature, vol 476, p 273 (2011).

	2012/13		2013/14		2014/15		2015/16		2016/17	
	F	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**
Level 4	4	5	8	14	4	11	4	15	8	22
Level 5-7	9	27	10	32	5	35	5	32	7	33
TAE	1	2	2	5	0	1	4	11	1	8
MSA	1	1	1	2	4	1	3	2	7	1
Undisclosed	11		7		5		10		18	
Total	15	35	21	53	13	48	16	60	23	64
Year Total	**61**		**81**		**66**		**86**		**105**	
Response rate	**55%**		**71%**		**57%**		**70%**		**87%**	

Figure 3.3 Response to staff surveys has increased significantly, an indication of the increased awareness of Chemistry's EDI ethos and increased collegiality within the department.

External advice has come from conference attendance, invited seminars, discussion and consultation.

2014	Athena SWAN workshops, London	EDI chair (F)
2013, 2016, 2017	Joliot-Curie Conference (ECR career meeting with focus on career development for academic women)	5 PDRA's (3F, 2M)
2015, 2016	LGBT STEminar Scientific Conference	1 L5 staff, 1 PDRA (2M)
2015	Dame Prof Jane Francis (Director British Antarctic Survey)	Invited lecture
2015	Suw Charman-Anderson (Founder of Ada Lovelace Day)	Invited lecture
2015	Dr Emily Grossman (Science broadcaster)	Invited lecture
2016	Professor Jane Hill (Biology, York, Gold AS)	Invited lecture
2017	Claire Viney (CEO Careers Research Advisory Centre)	Invited lecture Discussion group
2017	Professor Lesley Yellowlees (VP, University of Edinburgh)	Invited lecture Discussion group
2012-ongoing	Dr Sean McWhinnie (Oxford Research and Policy)	External consultant advice
2016/17	York (Chemistry/Biology), UCL (Cell Biology) Edinburgh (Chemistry), Imperial (Chemistry) Cambridge (Physics)	Athena SWAN Gold applications examined

Figure 3.4 External consultation for self–assessment process; EDI Team members present at all events.

(iii) Plans for the future of the self-assessment team

- The EDI Team will meet bimonthly to ensure implementation and evolution of the current and future Action Plans.
- Membership will be regularly reviewed to ensure reinvigoration and representation from across Chemistry, with a term no longer than three years and no more than two consecutive terms in the same role. (SA 8.6)
- The Team will continue to support attendance at EDI-related meetings through its dedicated budget; opportunities will be open to all relevant staff. (SA 8.3)

- The Team will report on and identify actions based on data from the Annual Staff Survey, First Year Survey, NSS feedback and the Staff Engagement Survey (2018).
- The Team will ensure that all sectors of staff have a voice with respect to matters affecting career progression and satisfaction, independent of line management *via* representatives from all sectors.
- The Team will take positive action to ensure equality in areas of gender, age, disability, ethnicity, class, sexual orientation, religion and intersectionality via action planning in response to staff feedback.
- The HoD, will continue to report to CPRC, facilitating decision-making and ensuring senior buy-in; the Chair will report quarterly at Faculty and University level.
- Progress updates will be disseminated through email, website, seminars, newsletter and meetings.
- A dedicated sub-group will report specifically on Beacon actions at each meeting.

The preparation of this submission was a team effort (Figure 3.5):

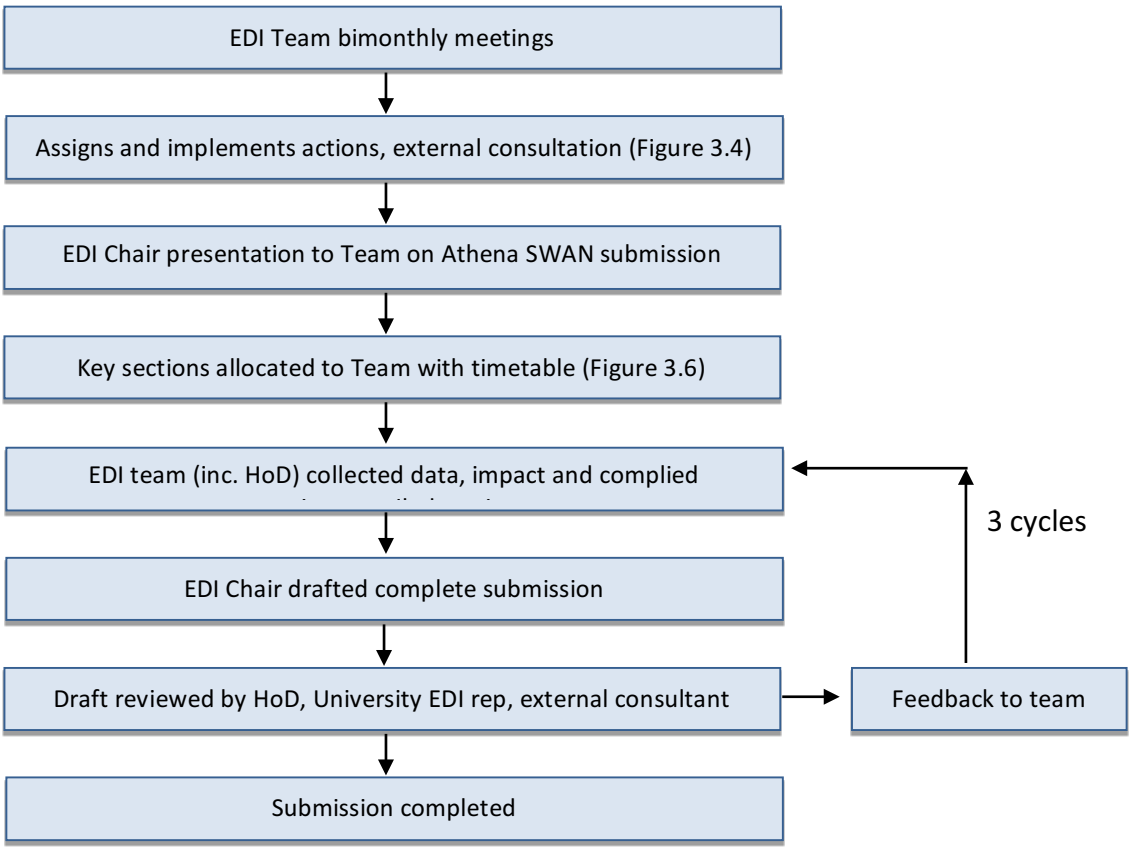


Figure 3.5 The self-assessment process from implementing actions to preparing Athena SWAN submission.

Sections	Team member/s responsible	Representation EDI team/Chemistry
1.0 HoD Letter	Gill Reid	HoD
2.0 Description of department	Gill Reid Lynda Brown	HoD Co-chair
3.0 Self-Assessment	Lynda Brown	Co-chair
4.0 Picture of the department	Lynda Brown Simon Gerrard Dawn Dunlop	Co-Chair Outreach/Admissions MSA
5.1 (i-iii) Recruitment, induction, promotion academic staff	Russell Minns	Concordat Champion
5.1 (iv) REF	Gill Reid	HoD
5.2 (i,ii) Key transitions P&S staff	Janice Sumner Gill Reid	MSA HoD
5.3 Career dev. academic staff	Andrew Hector	PG admissions
5.4 Career development P&S staff	Richard Brown Cathie Holmes Gill Reid Mandy Pervin	MSA HR HoD Faculty MSA Officer
5.5 Flexible working/career breaks	Marina Carravetta	Co-chair
5.6 (i) Outreach	Simon Gerrard	Outreach/Admissions
5.6 (ii) Visibility of role models	Andrea Russell Gill Reid	Director of Programmes HoD
5.6 (iii) Beacon activity	All	EDI team
5.6 (iv) Culture	Lynda Brown	Co-chair
5.6 (v) Timing of meetings	Lynda Brown	Co-chair
5.6 (vi) HR policies	Cathie Holmes Gil Reid	HR HoD
5.6 (vii) Workload model	Andrea Russell	Director of Programmes
5.6 (viii) Representation on committees	Lynda Brown Dawn Dunlop	Co-chair MSA
5.6 (ix) Participation on external committees	Gill Reid	HoD
8.0 Action plans	All	EDI team
Proof reading	Alex Melhuish Sean McWhinnie Gill Reid Kelly Kilpin	University EDI External Consultant HoD PDRA
Lead and compiling	Lynda Brown	Co-chair

Figure 3.6 Shared preparation of the Athena SWAN submission.

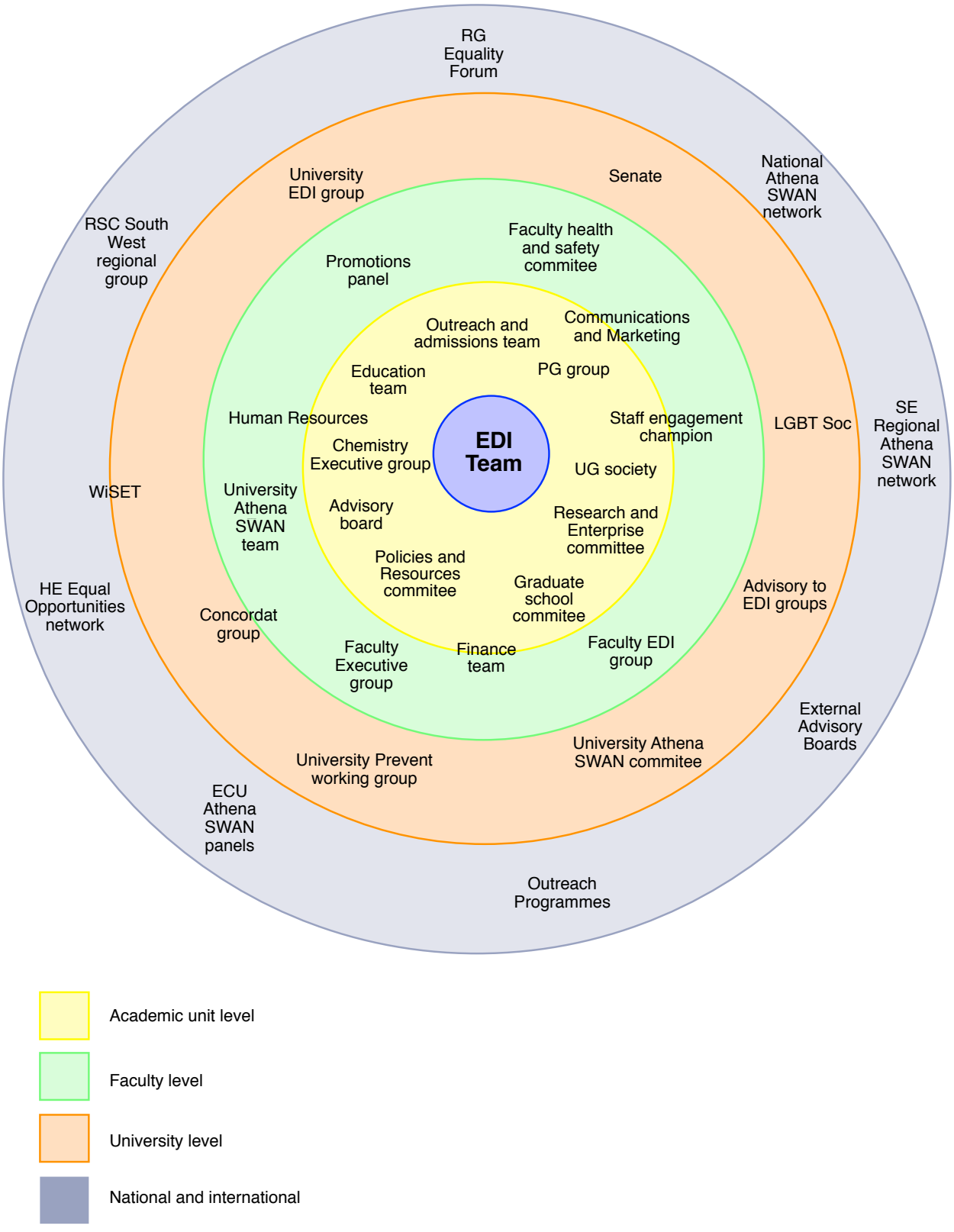


Figure 3.7. Chemistry's EDI Team members contribute to groups internally and externally to ensure that EDI issues are promoted and addressed.

636 words

4.0 A picture of the department

4.1 Student data

(i) Numbers of men and women on access or foundation courses

More female than male students registered in every year group since 2010. %F has remained high since 2013.

The faculty Science Foundation Year (SFY) provides a route into a Chemistry degree for applicants with non-standard backgrounds who do not necessarily have the traditional entry qualifications, e.g. mature applicants, those from parts of the world with different education systems or those without the pre-requisite subjects. Students apply for a specific degree through the SFY (*via* UCAS). Successful completion guarantees a place on this or any other relevant degree programme at Southampton, and degree options are actively promoted to SFY students. The SFY is advertised online, through UCAS and at University Open Days as a route to Chemistry and other programmes.

Whilst the number of students is relatively small:

- Moving SFY provision in-house (from Eastleigh College) caused an immediate increase in progression from 0 %F (prior to 2013) to 50 %F.
- Course improvements in the past three years have included recorded lectures, development of new software tools to improve interactive learning in labs and self-assessment through the use of 'talking mark schemes'.

Year	F	M	T	% F
2012/13	22 (0)	19 (4)	41 (4)	**54%** (0%)*
2013/14	17 (2)	16 (2)	33 (4)	**52%** (50%)
2014/15	22 (2)	11 (4)	33 (6)	**67%** (67%)
2015/16	35 (4)	23 (2)	58 (6)	**60%** (33%)
2016/17	23 (2)	19 (3)	42 (5)	**55%** (60%)

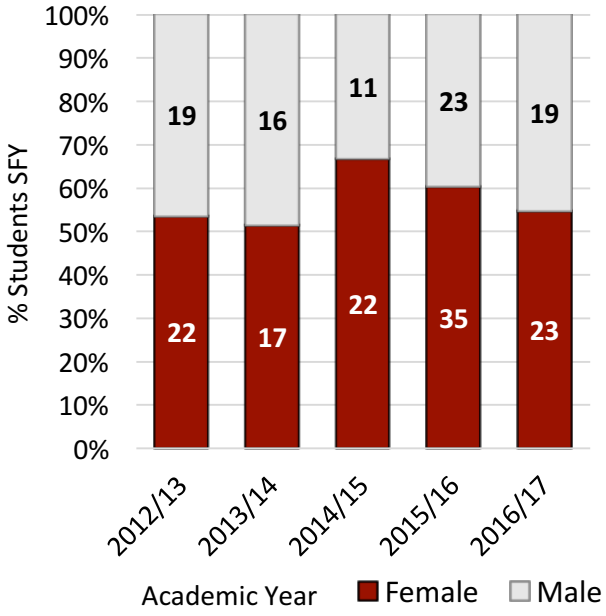


Figure 4.1. Total Science Foundation year cohort analysis.
** Numbers/% in parentheses correspond to SFY students progressing to Chemistry degrees.*

"You're not just sitting there taking notes, you're actively participating in the class. This allows you to not only understand, but enables you to appreciate the subject matter. The teaching instilled such a curiosity and fascination about chemistry within me that I changed my degree path to study chemistry"

Female 2nd year Chemistry UG about her SFY experience

(ii) Numbers of undergraduate students by gender

- **%F Total UG shows a significant and steady rise from 33% to 42%, to just below the national and RG average (2012/13 to 2016/17).**
- **This directly correlates with %F entrant increase over the same period (30% to 47%), predominantly Masters (28% to 48%).**
- **A University-wide increase in entry requirements (2016/17) caused a drop in the number of entrants.**

"Every student we take on should have a clear pathway to success"
Prof. Gill Reid, HoD

Year	F	M	T	%F	UK %F	RG %F
2012/13	128	265	393	**33%**	43%	43%
2013/14	144	263	407	**35%**	43%	43%
2014/15	152	285	437	**35%**	43%	44%
2015/16	198	312	510	**39%**	44%	44%
2016/17	189	264	453	**42%**	-	-

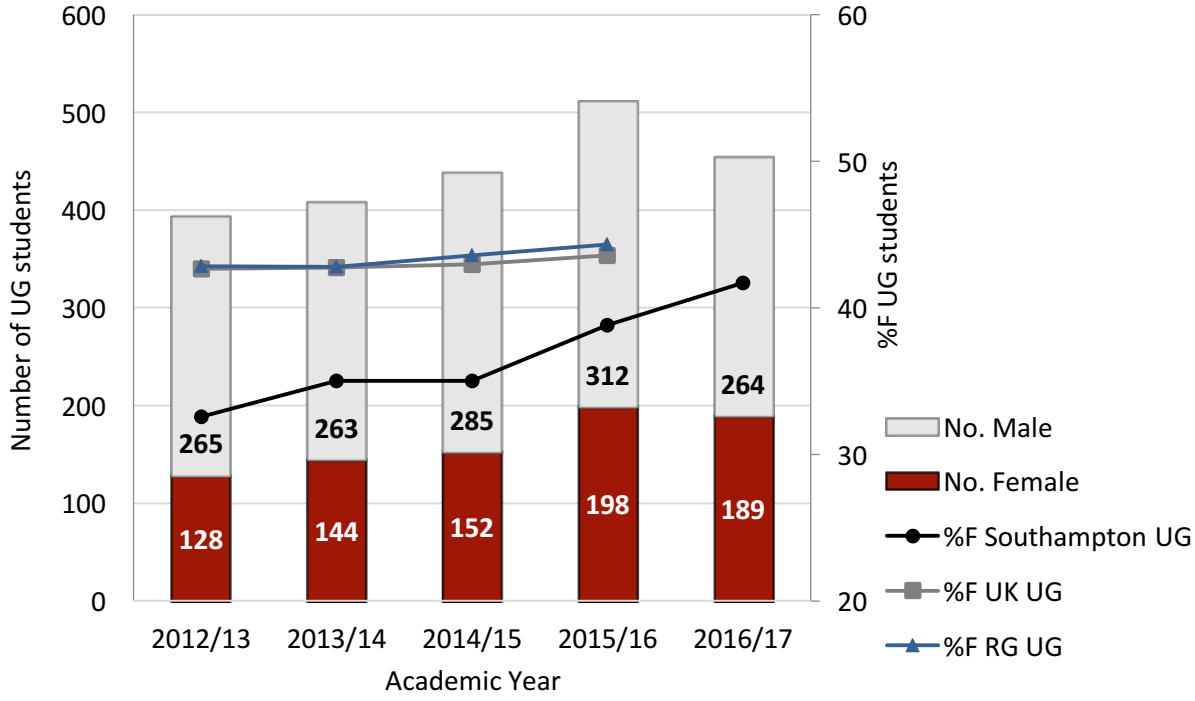


Figure 4.2. Total Undergraduates in Chemistry.

- Significant growth in UG numbers up to 2015/16 (+30% over 4 years; 55 %F increase vs. 18 %M). (SA 1.1, 1.2, 1.3)
- University prioritisation of student numbers over tariff in 2015/16 (peak at 198 F). Entry requirement increase from 2016/17 onwards caused a drop in applications.
- Change in University recruitment priorities showed little adverse effect on overall %F in total UG cohort (-5 %F, -15 %M in entrants – 2015/16 to 2016/17).
- The lower %F than the national and RG average is a concern, but the continued increase in the %F of entrants will enable %F to rise. **(Actions 1.3)**

- We will continue to strengthen our numbers through high visibility of females in all our literature, throughout the department and at our beacon outreach events and Open Days. **(Actions 1.5)**
- Chemistry aspires to be a **beacon** for flexible working, we aim to introduce an entry-level part-time BSc degree (6 years). Currently, we have had a 5 year p/t BSc accredited by the RSC, but not yet openly advertised online or through UCAS. Campaigning student finance bodies to extend loans beyond 6 years would benefit p/t students by enabling opportunities to repeat a year internally. Extending the loan period would also allow p/t MChem courses to be launched. **(Actions 2.1, 2.2, 2.3)**

Total UG BSc students

Year	F	M	T	%F	UK %F	RG %F
2012/13	38	56	94	**40**	44	44
2013/14	44	57	101	**44**	44	43
2014/15	35	57	92	**38**	43	44
2015/16	51	76	127	**40**	44	46
2016/17	48	72	120	**40**	-	-

Total UG Masters students

Year	F	M	T	%F	UK %F	RG %F
2012/13	90	209	299	**30**	41	42
2013/14	100	206	306	**33**	42	43
2014/15	117	228	345	**34**	43	43
2015/16	143	233	376	**38**	43	44
2016/17	133	185	318	**42**	-	-

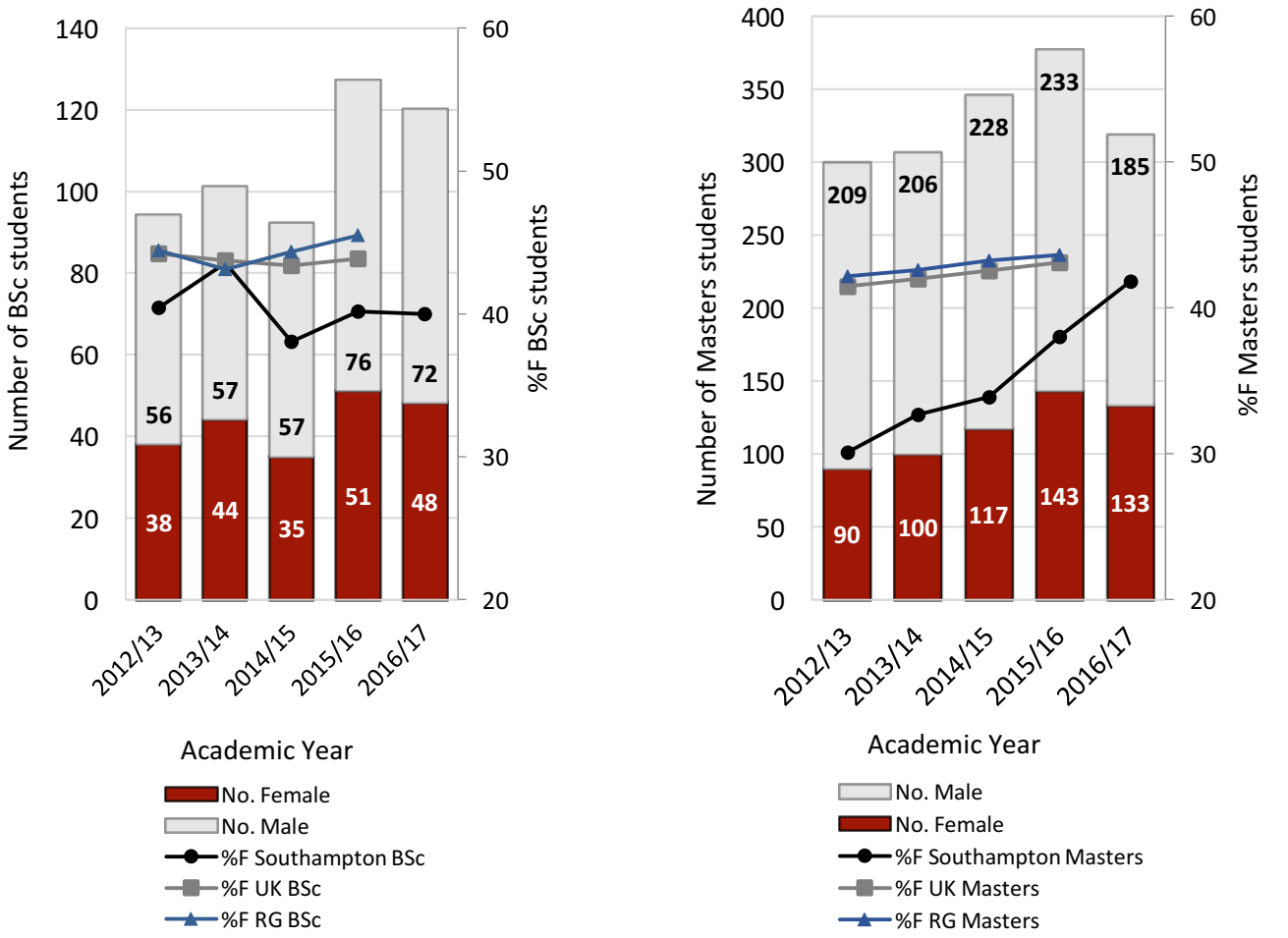


Figure 4.3. Total UG breakdown by BSc vs. Masters, %F uptake of Masters courses (MChem/MSci) rose from 30% in 2012/13 to 42% by 2016.

Previously (2009-2013), UG cohort analysis by course revealed that proportionally more females registered on the BSc over Masters. These Silver AS actions were to put in place to implement changes to readdress the balance: (SA 1.3, 1.4)

- Raised awareness of the MChem/MSci courses with females at Open/Visit Days.
- Actively encouraged suitably qualified students to choose MChem/MSci over BSc.
- Raised awareness among all students of opportunities to transfer between degree programmes, including from BSc to Masters.

These actions have had significant impact on %F Masters uptake, the cohort rising from 30 %F in 2012/13 to 42 %F by 2016/17.

Year	UK			EU			Islands & Overseas		
	F	M	**%F**	F	M	**%F**	F	M	**%F**
2012/13	107	271	**28%**	10	4	**71%**	18	7	**72%**
2013/14	127	262	**33%**	11	6	**65%**	13	12	**52%**
2014/15	136	272	**33%**	9	8	**53%**	11	14	**44%**
2015/16	181	291	**38%**	9	7	**56%**	10	12	**45%**
2016/17	191	275	**41%**	7	5	**58%**	5	7	**42%**

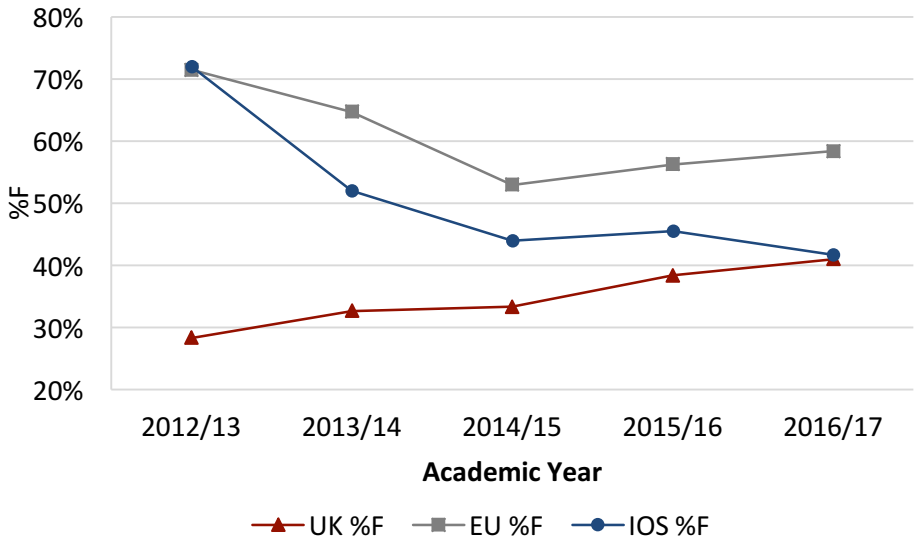


Figure 4.4. Total UG breakdown by residency (UK, EU, Islands & Overseas).

- Silver AS actions positively impacted %F for all students, especially UK/EU.
- Slight decrease in %F IOS observed in 2016/17.

Ethnicity	2012/13		2013/14		2014/15		2015/16		2016/17	
	%F	**%M**	**%F**	**%M**	**%F**	**%M**	**%F**	**%M**	**%F**	**%M**
White	**74%**	86%	**76%**	84%	**76%**	83%	**73%**	79%	**69%**	79%
Asian	**7%**	2%	**9%**	3%	**10%**	4%	**11%**	7%	**13%**	8%
Mixed	**4%**	4%	**5%**	4%	**4%**	4%	**6%**	4%	**7%**	5%
Black	**2%**	1%	**3%**	3%	**3%**	1%	**4%**	3%	**5%**	2%
Chinese	**5%**	3%	**3%**	1%	**4%**	3%	**3%**	3%	**2%**	2%
Other	**5%**	1%	**3%**	1%	**3%**	2%	**3%**	2%	**2%**	2%
Undisclosed	**1%**	2%	**1%**	3%	**0%**	2%	**2%**	1%	**1%**	1%

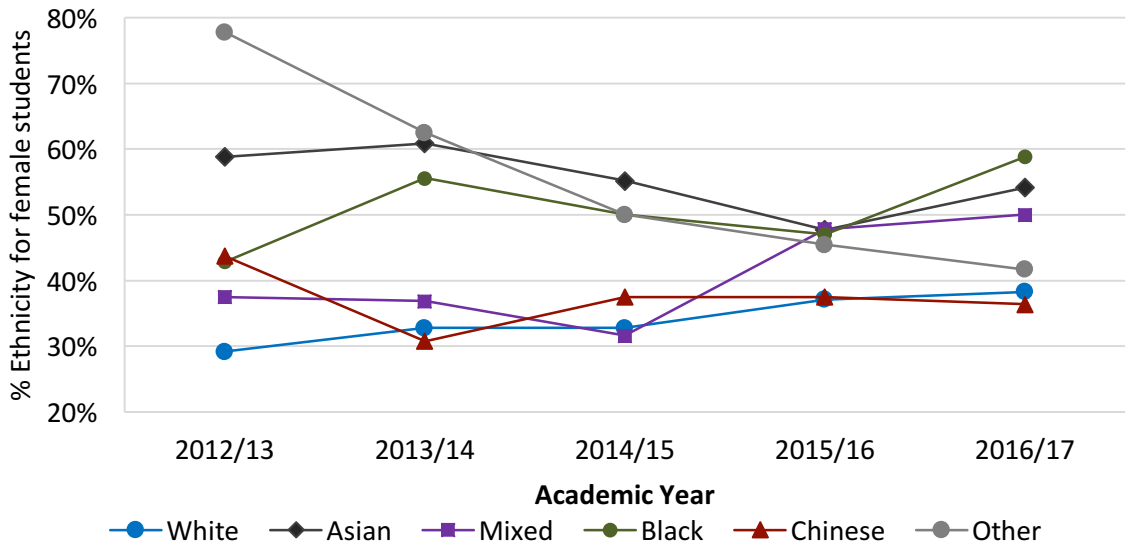


Figure 4.5. Total UG by ethnicity with increasing %F Asian, Mixed and Black students in last 5 years.

- %F white cohort consistently lower than male (last 5 years), and higher %F in all other ethnicities.
- Silver AS actions impacted on %F for mixed and other groups, except Chinese and other. (SA 1.1, 1.2, 1.3, 1.4)

Year	Gender	Applications	Offers	Acceptances	Entrants	Proportion of applicants made offers	Proportion of those made offers accepting	Proportion of those accepting offers entering	Proportion of applicants entering
2012/13	Female	261	240	58	29	92.0%	24.2%	50.0%	11.1%
	Male	437	379	126	68	86.7%	33.2%	54.0%	15.6%
	% Female	**37%**	**39%**	**32%**	**30%**				
2013/14	Female	293	266	93	47	90.8%	35.0%	50.5%	16.0%
	Male	461	396	128	71	85.9%	32.3%	55.5%	15.4%
	% Female	**39%**	**40%**	**42%**	**40%**				
2014/15	Female	329	292	92	60	88.8%	31.5%	65.2%	18.2%
	Male	585	465	160	94	79.5%	34.4%	58.8%	16.1%
	% Female	**36%**	**39%**	**37%**	**39%**				
2015/16	Female	349	325	112	79	93.1%	34.5%	70.5%	22.6%
	Male	582	502	171	101	86.3%	34.1%	59.1%	17.4%
	% Female	**37%**	**39%**	**40%**	**44%**				
2016/17	Female	334	284	86	53	85.0%	30.3%	61.6%	15.9%
	Male	452	356	99	60	78.8%	27.8%	60.6%	13.3%
	% Female	**42%**	**44%**	**46%**	**47%**				
2017/18	Female	200	165	38	34	82.5%	23.0%	89.5%	17.0%
	Male	304	240	46	35	78.9%	19.2%	76.1%	11.5%
	% Female	**40%**	**41%**	**45%**	**49%**				
Overall	Female	1766	1572	479	301	89.0%	30.5%	62.8%	17.0%
	Male	2821	2338	730	425	82.9%	31.2%	58.2%	15.1%
	% Female	**39%**	**40%**	**40%**	**41%**				

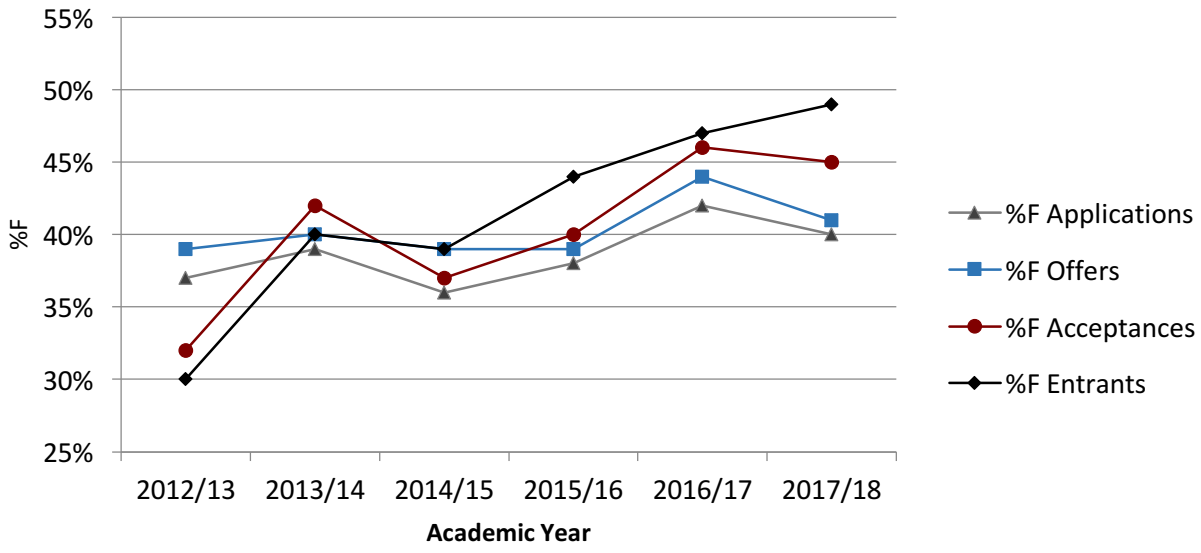


Figure 4.6. UG UCAS Admissions data analysis shows increase in %F applications over past 5 years has translated into offers, acceptances and entrants.

- Significant rise in %F entrants from 30% to 49% (2012-2017).
- Women are consistently more likely to receive offers than men, 89 %F compared to 83 %M (over last 6 years).
- Offer acceptance rates vary. Over the last 6 years, similar proportions of F/M accepted offers. However, women are more likely than men to enter having accepted offers. This difference was particularly noticeable in 2017/18 (90 %F, 76 %M).
- Substantial (19%) rise in %F entrants over 5 years, with a significant increase in the year following our AS Silver award. Reflects implementation of actions over the period since, i.e. addressing gender balance in all our promotional/advertising literature and the %F of volunteers delivering Open/Visit Days and outreach events. (SA 1.1, 1.2, 1.3, 1.4)
- Total applications/entrants has fallen since peaking in 2015/16, due to a University-wide increase in entry requirements, has not adversely affected increasing %F.

Year	Masters Entrants				Bachelors Entrants				%Masters *vs* BSc*		
	F	M	T	**%F**	F	M	T	**%F**	**%F**	**%M**	**%Total**
2012/13	19	50	69	**28%**	10	18	28	**36%**	**66%**	74%	71%
2013/14	35	56	91	**38%**	12	15	27	**44%**	**74%**	79%	77%
2014/15	35	65	100	**35%**	18	25	43	**42%**	**66%**	72%	70%
2015/16	52	63	115	**45%**	27	38	65	**42%**	**66%**	62%	64%
2016/17	38	41	79	**48%**	15	19	34	**44%**	**72%**	68%	70%
2017/18	18	20	38	**47%**	16	15	31	**52%**	**53%**	57%	55%

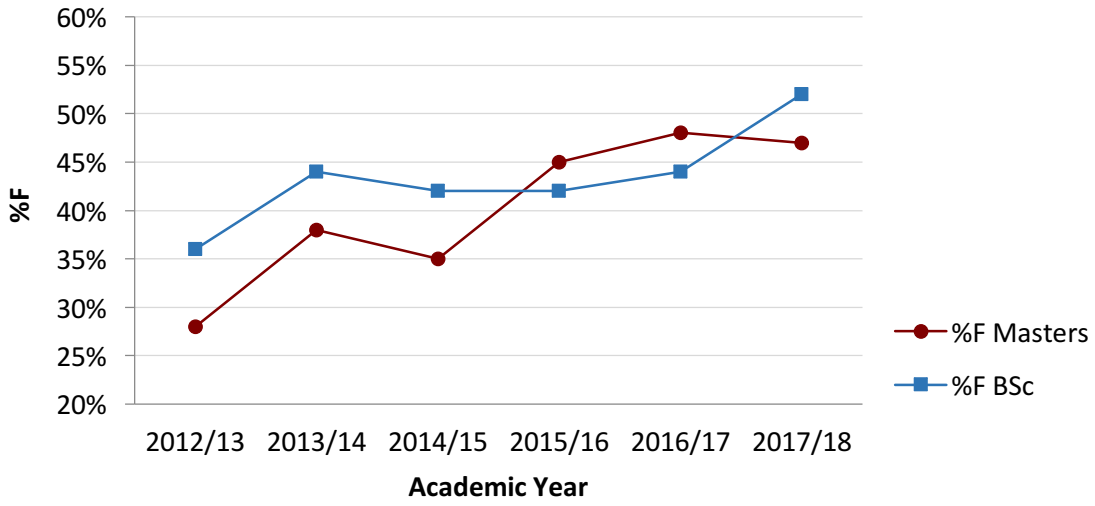


Figure 4.7. UG Entrant Degree Type (Masters vs. BSc), * % taken from a total of gender.

- Increase of 20 %F in Masters entrants over 5 years to 2016/17, compared to BSc (has hovered around 42%). (SA 1.4)
- %F entering Masters courses overtook the BSc for the first time in 2016/17.
- Increase in 2017/18 to 52 %F on BSc may have been influenced by nature of student cohort available in clearing.
- Decrease in %Total on Masters *vs.* BSc shows no gender bias. Entry requirement increase and Masters/BSc tariff differentiation may be contributory.

Year	First or Upper second		Lower second		Third/Pass		Total		First or Upper second*	
	F	M	F	M	F	M	F	M	**%F**	%M
MChem										
2011/12	16	31	0	2	0	2	16	35	**100%**	89%
2012/13	16	41	3	6	0	1	19	48	**84%**	85%
2013/14	18	31	2	5	0	0	20	36	**90%**	86%
2014/15	21	42	0	10	0	0	21	52	**100%**	81%
2015/16	16	37	1	2	0	0	17	39	**94%**	95%
BSc										
2011/12	2	6	2	7	1	3	5	16	**40%**	38%
2012/13	4	8	4	6	2	4	10	18	**40%**	44%
2013/14	9	9	10	11	5	6	24	26	**38%**	35%
2014/15	6	9	6	9	3	3	15	21	**40%**	43%
2015/16	8	6	7	8	0	3	15	17	**53%**	35%

Figure 4.8. UG Degree Attainment (Masters vs. BSc, *% taken from a total for gender) shows gender does not inhibit attainment.

- Female UG students have regularly out-performed males in achieving first or upper second-class degrees (Masters: 94 %F vs. 87 %M; BSc: 42 %F vs. 39 %M).

Figure 4.9. Undergraduate Chemistry prize winners graduation photo, July 2017.

(iii) Numbers of men and women on postgraduate taught degrees

No apparent barriers by gender, maintaining at least 50 %F entering PGT programmes since 2014.

Since 2014, we have offered taught postgraduate courses: MSc Chemistry, MSc Electrochemistry and MSc Instrumental Analytical Chemistry. These are advertised through websites and PGT specific literature, suitable applicants are interviewed.

Year	F	M	T	% F
2014/15	2	0	2	**100%**
2015/16	7	5	12	**58%**
2016/17	2	2	4	**50%**
2017/18	7	7	14	**50%**

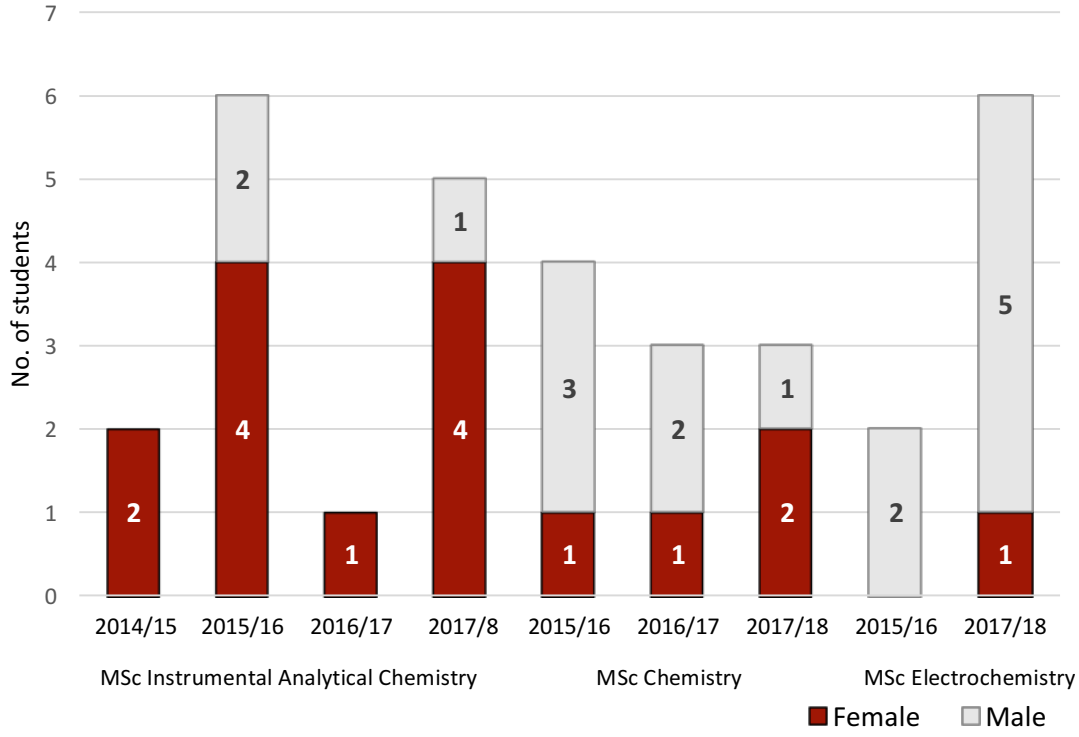


Figure 4.10. Men and women on Taught Postgraduate (PGT) courses.

We intend to grow our PGT courses by:

- Encouraging overseas students to apply, strong links with China.
- Recruitment fair in Saudi Arabia, 1M and 1F to attend.
- Improving support for students from different educational backgrounds.
- MSc in Magnetic Resonance is currently under development.
- Increased recruitment from our current UG through presentations.

(**Actions 1.2, 1.4, 1.8**)

Year	Gender	Applications	Offers	Acceptances	Entrants	Proportion of applicants made offers	Proportion of those made offers accepting	Proportion of those accepting offers entering	Proportion of applicants entering
MSc Chemistry									
2015/16	Female	11	4	2	3	36.4%	50.0%	100.0%	27.2%
	Male	18	3	3	3	16.6%	100.0%	100.0%	16.7%
	% Female	**38%**	**57%**	**40%**	**50%**				
2016/17	Female	33	5	3	2	15.2%	60.0%	66.7%	6.1%
	Male	32	7	6	2	21.9%	85.7%	16.7%	6.3%
	% Female	**51%**	**42%**	**33%**	**50%**				
MSc Electrochemistry									
2015/16	Female	2	0	0	2	0.0%	0.0%	0.0%	100.0%
	Male	5	3	2	2	60.0%	66.7%	100.0%	40.0%
	% Female	**29%**	**0%**	**0%**	**50%**				
2016/17	Female	2	0	0	0	0.0%	0.0%	0.0%	0.0%
	Male	17	7	4	0	41.2%	57.1%	0.0%	0.0%
	% Female	**11%**	**0%**	**0%**	**0%**				
MSc IA Chemistry									
2013/14	Female	11	0	0	0	0.0%	0.0%	0.0%	0.0%
	Male	8	0	0	0	0.0%	0.0%	0.0%	0.0%
	% Female	**42%**	**0%**	**0%**	**0%**				
2014/15	Female	46	6	3	0	13.0%	50.0%	0.0%	0.0%
	Male	48	4	1	0	8.3%	25.0%	0.0%	0.0%
	% Female	**49%**	**60%**	**75%**	**0%**				
2015/16	Female	37	11	4	2	29.7%	36.4%	50.0%	5.4%
	Male	50	6	2	2	12.0%	33.3%	100.0%	4.0%
	% Female	**44%**	**65%**	**66%**	**50%**				
2016/17	Female	40	11	6	0	27.5%	54.5%	0.0%	0.0%
	Male	30	6	5	0	20.0%	83.3%	0.0%	0.0%
	% Female	**57%**	**65%**	**55%**	**0%**				
Overall	Female	182	37	18	9	19.8%	48.6%	50.0%	4.9%
	Male	208	36	23	9	17.3%	63.9%	39.1%	4.3%
	% Female	**47%**	**49%**	**44%**	**50%**				

Figure 4.11. PGT Admissions data demonstrates high %F applications to acceptances for our most established PGT course (MSc IA Chemistry), 0 entrants, courses not ran.

Figure 4.12. National Crystallography Service X-ray facility used as part of MSc Instrumental Analytical Chemistry programme.

(iv) Numbers of men and women on postgraduate research degrees

- **PG network, an essential part of supporting and attracting female PGs (SA 3.1).**
- **Consistently more females choose part-time study than males, but the opportunity is offered to all.**

PGR positions are advertised through websites and PGR specific literature, suitable candidates are interviewed and accepted.

Year	F	M	T	%F	UK %F	RG %F
2012/13	53	92	145	**37%**	40%	40%
2013/14	52	102	154	**34%**	41%	40%
2014/15	58	94	152	**38%**	41%	39%
2015/16	60	110	170	**35%**	40%	39%
2016/17	51	106	157	**33%**	-	-

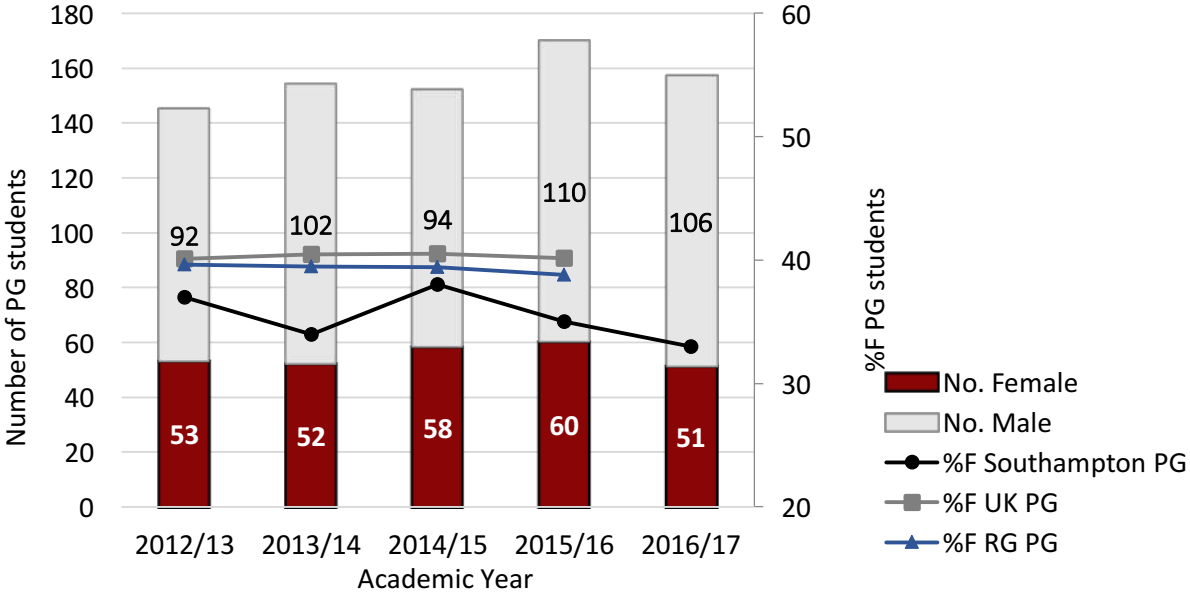


Figure 4.13. Number of men and women on research postgraduate degrees (PGR), MSc by Research and MPhil/PhD (FT and PT).

- Comparison with UK and RG sector data shows that %F PG is slightly below average.
- Decline in %F over the last two years is of concern.
- In line with our actions for UG enrolment, we will re-examine our PG literature for gender bias and review our recruitment processes, including advertising, interviewing and selection. We will target a consistent 42 %F (above the RG and national average) by 2021. (**Actions 1.2, 1.4, 3.2**).

Year	MSc by Research			MPhil/PhD (full time)			MPhil/PhD (part time)		
	F	M	**%F**	F	M	**%F**	F	M	**%F**
2012/13	4	10	**29%**	44	81	**35%**	5	1	**83%**
2013/14	3	7	**30%**	43	94	**31%**	6	1	**86%**
2014/15	0	3	**0%**	53	90	**37%**	5	1	**83%**
2015/16	0	6	**0%**	55	103	**35%**	5	1	**83%**
2016/17	1	9	**10%**	48	96	**33%**	2	1	**67%**

Figure 4.14. Number of men and women on research postgraduate degrees (PGR) by programme.

- Poor %F uptake of MSc by Research indicates this is unattractive to female students. We will examine reasons for this and strive to increase female entrants to at least 35% by 2020. (**Actions 1.4**)

Year	UK			EU			Islands & Overseas		
	F	M	**%F**	F	M	**%F**	F	M	**%F**
2012/13	32	59	**35%**	17	23	**43%**	9	20	**31%**
2013/14	30	67	**31%**	14	21	**40%**	8	22	**27%**
2014/15	38	64	**37%**	15	20	**43%**	8	21	**28%**
2015/16	38	70	**35%**	12	13	**48%**	7	18	**28%**
2016/17	36	68	**35%**	10	15	**40%**	8	20	**29%**

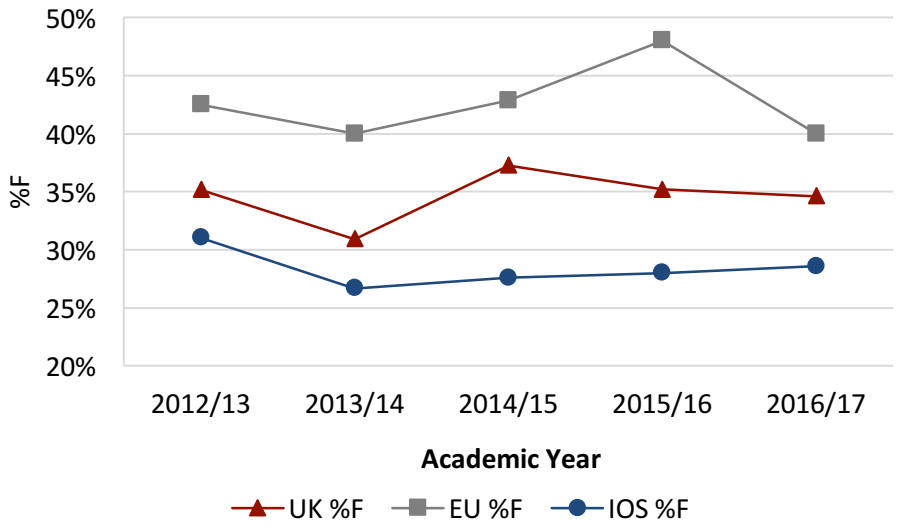


Figure 4.15. Total PGR breakdown by residency (UK, EU, Islands & Overseas).

- Increase in %F of EU PGR up to 2015/16; drop in 2016/17.

Ethnicity	2012/13		2013/14		2014/15		2015/16		2016/17	
	%F	**%M**	**%F**	**%M%**	**F%**	**%M**	**%F**	**%M**	**%F**	**%M**
White	**76%**	77%	**75%**	77%	**75%**	77%	**80%**	81%	**78%**	79%
Asian	**8%**	4%	**11%**	3%	**11%**	4%	**5%**	3%	**4%**	2%
Mixed	**5%**	1%	**4%**	2%	**2%**	2%	**0%**	2%	**0%**	3%
Black	**2%**	3%	**0%**	3%	**3%**	1%	**2%**	1%	**2%**	0%
Chinese	**3%**	6%	**4%**	8%	**3%**	8%	**7%**	3%	**9%**	5%
Other	**5%**	5%	**7%**	4%	**6%**	5%	**7%**	7%	**7%**	7%
Undisclosed	**1%**	4%	**0%**	3%	**0%**	3%	**0%**	4%	**0%**	5%

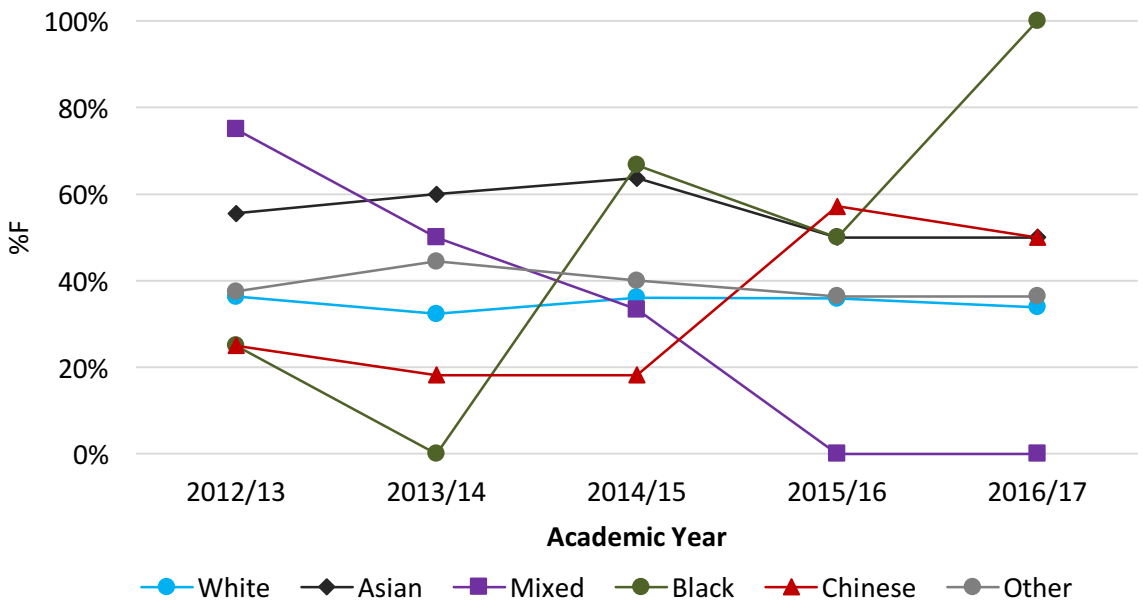


Figure 4.16. Total PGR breakdown by ethnicity.

- No difference in %F white *vs.* %M cohorts.
- Consistently higher, but decreasing, %F of Asian students *vs.* %M.
- Apparent significant increase in %F of Black and Chinese students.

Year	Gender	Applications	Offers	Acceptances	Entrants	Proportion of applicants made offers	Proportion of those made offers accepting	Proportion of those accepting offers entering	Proportion of applicants entering
2012/13	Female	86	47	22	23	54.7%	46.8%	104.5%	26.7%
	Male	138	77	36	32	55.8%	46.8%	88.9%	23.2%
	% Female	**38%**	**38%**	**38%**	**42%**				
2013/14	Female	84	43	25	17	51.2%	58.1%	68.0%	20.2%
	Male	161	61	41	35	37.9%	67.2%	85.4%	21.7%
	% Female	**34%**	**41%**	**38%**	**33%**				
2014/15	Female	81	27	18	15	33.3%	66.7%	83.3%	18.5%
	Male	172	58	29	25	33.7%	50.0%	86.2%	14.5%
	% Female	**32%**	**32%**	**38%**	**38%**				
2015/16	Female	59	30	18	16	50.8%	60.0%	88.9%	27.1%
	Male	148	54	32	25	36.5%	59.3%	78.1%	16.9%
	% Female	**29%**	**36%**	**36%**	**39%**				
2016/17	Female	56	28	14	14	50.0%	50.0%	100.0%	25.0%
	Male	129	53	30	32	41.1%	56.6%	106.7%	24.8%
	% Female	**30%**	**35%**	**32%**	**30%**				
2017/18	Female	74	35	21	20	47.3%	60.0%	95.2%	27.0%
	Male	145	63	33	35	43.4%	52.4%	94.3%	24.1%
	% Female	**34%**	**36%**	**39%**	**36%**				
Overall	Female	440	210	118	85	47.7%	56.2%	72.0%	19.3%
	Male	893	366	201	149	41.0%	54.9%	74.1%	16.7%
	% Female	**33%**	**36%**	**37%**	**36%**				

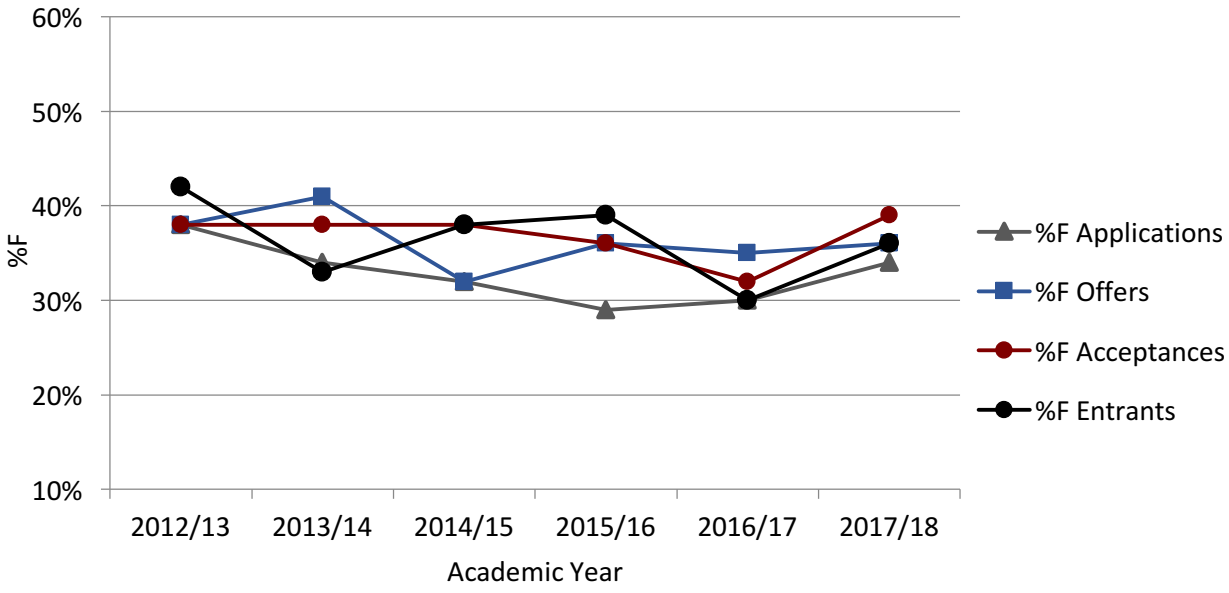


Figure 4.17. PGR Admissions data analysis.

- %F offers consistently higher than applications (average 36% vs. 33% respectively, anomalous drop in %F acceptances and entrants for 2016/17 only.
- %F conversion of applicants to entrants across the PGR programmes shows significant fluctuation. Acceptances remain close to 40 %F from 2012-2017 (except 2016/17).
- EDI team will investigate the postgraduate recruitment process by focus groups with first year PG students and final year UG. (**Actions 1.2, 1.4, 3.1, 3.2, 3.3**)

Research Section	Entry Year	F	M	Total	%F	%F Section Average
Chemical Biology	2015	0	1	1	**0%**	**64%**
	2016	4	1	5	**80%**	
	2017	3	2	5	**60%**	
Characterisation and Analytics	2015	4	0	4	**100%**	**75%**
	2016	2	0	2	**100%**	
	2017	0	2	2	**0%**	
Chemical Education	2015	1	1	2	**50%**	**33%**
	2016	0	1	1	**0%**	
	2017	0	0	0	**0%**	
Computational Systems Chemistry	2015	1	3	4	**25%**	**30%**
	2016	3	7	10	**30%**	
	2017	3	6	9	**33%**	
Electrochemistry	2015	2	5	7	**29%**	**30%**
	2016	2	7	9	**22%**	
	2017	3	4	7	**43%**	
Inorganic, Materials and Supramolecular	2015	2	4	6	**33%**	**25%**
	2016	2	4	6	**33%**	
	2017	2	10	12	**17%**	
Institute for Life Sciences	2015	0	1	1	**0%**	**14%**
	2016	0	3	3	**0%**	
	2017	1	2	3	**33%**	
Magnetic Resonance	2015	1	2	3	**33%**	**25%**
	2016	1	1	2	**50%**	
	2017	0	3	3	**0%**	
Organic Chemistry	2015	2	5	7	**29%**	**32%**
	2016	0	3	3	**0%**	
	2017	4	5	9	**44%**	
TOTAL	2015	13	22	35	**37%**	**34%**
	2016	14	27	41	**34%**	
	2017	16	34	50	**32%**	

Figure 4.18. PGR Entrant data analysis by research section.

Year	Pass					Academic failure			% Awarded	
	Full-time		Part-time		Total Pass					
	F	M	F	M		F	M	Total	%M	**%F**
2011/12	17	27	0	0	44	2 (FT)	0	2	61%	**39%**
2012/13	14	24	5	9	52	0	0	0	63%	**37%**
2013/14	15	28	3	5	51	0	0	0	65%	**35%**
2014/15	10	33	1	2	46	0	0	0	76%	**24%**
2015/16	17	28	2	0	47	0	0	0	60%	**40%**

Figure 4.19 PGR degree attainment (MSc by Research, MPhil/PhD).

- %F increased in 2015/16 following research group transferral in 2013.
- The % not awarded degrees is low, showing no significant gender bias (taking into account institutional transfers). The robust progression process and support we have in place ensures this is maintained.

Figure 4.20. Postgraduate Graduates 2017

(v) Progression pipeline between undergraduate and postgraduate student levels

- **DLHE data indicates no gender barrier in UG to PG progression (40 %F vs. 42 %M).**
- **Average progression to PG study is higher than the RG average.**

Year	UG			PGT + PGR			**UG to PG**
	F	M	**%F**	F	M	**%F**	**%F difference**
2012/13	128	265	**33%**	53	92	**37%**	**4%**
2013/14	144	263	**35%**	52	102	**34%**	**-2%**
2014/15	152	285	**35%**	60	94	**39%**	**4%**
2015/16	198	312	**39%**	65	117	**36%**	**-3%**
2016/17	189	264	**42%**	53	108	**33%**	**-9%**

Figure 4.21. UG to PG pipeline total cohort comparison, significant rise in UG %F not reflected in recent PG cohort.

- The drop in %F in 2016/17, despite increasing UG %F, is noted and will be addressed through actions to increase %F PG entry both externally and internally within the current UG cohort. (**Actions 1.4, 2.4, 3.1, 3.2, 3.3**)

Year	Cohort		Responses		PG Study			**UoS**: % UG→PG progression*		**RG:** % UG→PG progression
	F	M	F	M	F	M	T	**%F**	%M	T
2011/12	25	49	20	41	8	20	28	**40%**	49%	39%
2012/13	24	60	19	53	8	24	32	**42%**	43%	36%
2013/14	39	54	33	48	10	17	27	**30%**	35%	36%
2014/15	30	67	25	62	15	25	40	**60%**	40%	35%
2015/16	32	61	29	55	9	22	31	**31%**	40%	-
TOTAL	150	291	126	259	50	108	158	**40%**	42%	36%

Figure 4.22. DLHE data for UG to PG progression, * based on survey responses from UG Chemistry students 6 months after graduation.

Figure 4.23. Stephanie Chapman (MChem, PG student, Chemistry), received the prestigious Salters' Prize (2015) for UK's most outstanding young chemists, our previous winners: Stephanie Newland (2012) and Emma Stuart (2011).

1337 words

4.2 Academic and research staff data

(i) Academic staff by grade, contract function and gender: research-only, teaching and research or teaching-only

- **Positive encouragement of females to apply for promotion has seen three promotions of female colleagues to L5, L6 and L7 in the past four years. (SA 5.3, 6.3)**
- **At L7, over last 6 years we have above average %F, current level of 13 %F (3F).**

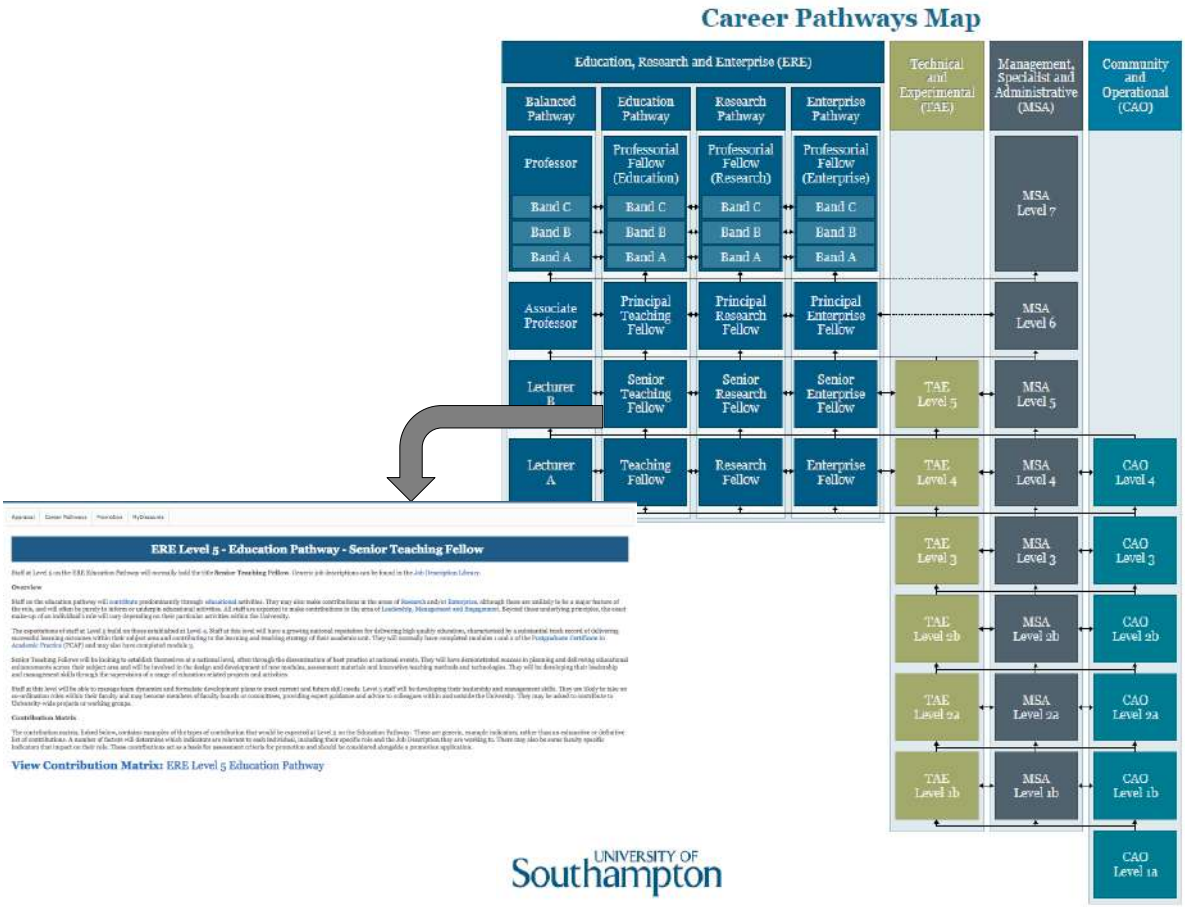
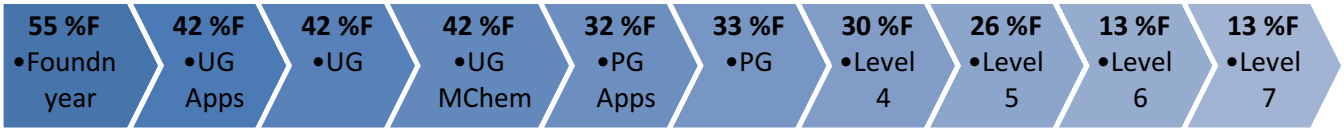


Figure 4.24. Our career pathways map (from University intranet) each pathway has its own guidance for career progression and promotion criteria

The UoS uses grades 1-7 for staff with 4 career pathways available to University graded staff[3],. Professional staff belong to the MSA job family and technicians belong to TAE. Academics (including postdoctoral researchers) are appointed at levels 4 – 7.

[3] Education, Research and Enterprise (ERE), Technical and Experimental (TAE), Management, Specialist and Administration (MSA) and Community and Operational (CAO)

The schematic in figure 4.25 depicts the 'leaky pipeline' in Chemistry at Southampton showing the gradual decline in %F throughout the career stages (2017 data); it highlights attrition points for action.



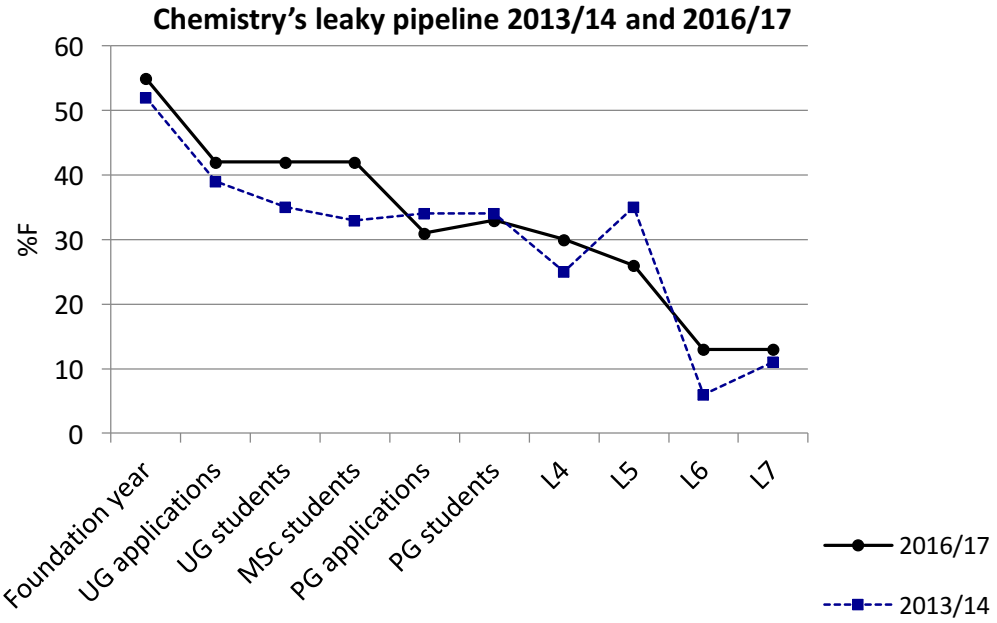


Figure 4.25. Chemistry's leaky pipeline (2013/14 vs. 2016/17).

An increase in %F is visible at most levels (2013/14 vs. 2016/17). The improved pipeline reflects our recent work, but still emphasises key areas needing attention: PG applications/entrants and %F academic staff, especially at levels 6 and 7. At L4 many staff are on FTC, and we recognise that this has a more pronounced effect on female retention.[4] Whilst our %F staff has improved since our Silver award, we intend to increase this further, and take action as follows:

- Reviewing the PG recruitment process. (**Actions 1.4, 2.4, 3.1, 3.2**)
- Improve mentoring process for PDRAs. (**Actions 4.3, 5.5**)
- Development/retention of our current female staff alongside the active recruitment of excellent female candidates for future posts. (**Actions 5.1**)

[4] (i) The Chemistry PhD: the impact on women's retention. A report prepared by Jessica Lober Newsome for the UK Resource Centre for Women in SET and the Royal Society of Chemistry; (ii) Mapping the future: physics and chemistry postdoctoral researchers' experiences and career intentions. A report for the Institute of Physics and the Royal Society of Chemistry.

Year	Level 4 *Research (PDRA), Teaching & Enterprise Fellows*						Level 5 *Lecturer, Senior Fellows*					
	F	M	T	**%F**	UK %F	RG %F	F	M	T	**%F**	UK %F	RG %F
2011/12	13	34	47	**27%**	28.3%	27.8%	4	11	15	**27%**	-	-
2012/13	16	43	59	**27%**	30.8%	31.1%	5	13	18	**28%**	32.6%	26.5%
2013/14	15	45	60	**25%**	31.1%	31.5%	7	13	20	**35%**	33.4%	27.7%
2014/15	15	45	60	**25%**	31.0%	30.0%	7	16	23	**30%**	30.6%	25.2%
2015/16	9	37	46	**20%**	31.9%	31.9%	7	14	21	**33%**	31.8%	26.0%
2016/17	16	37	53	**30%**	-	-	6	17	23	**26%**	-	-

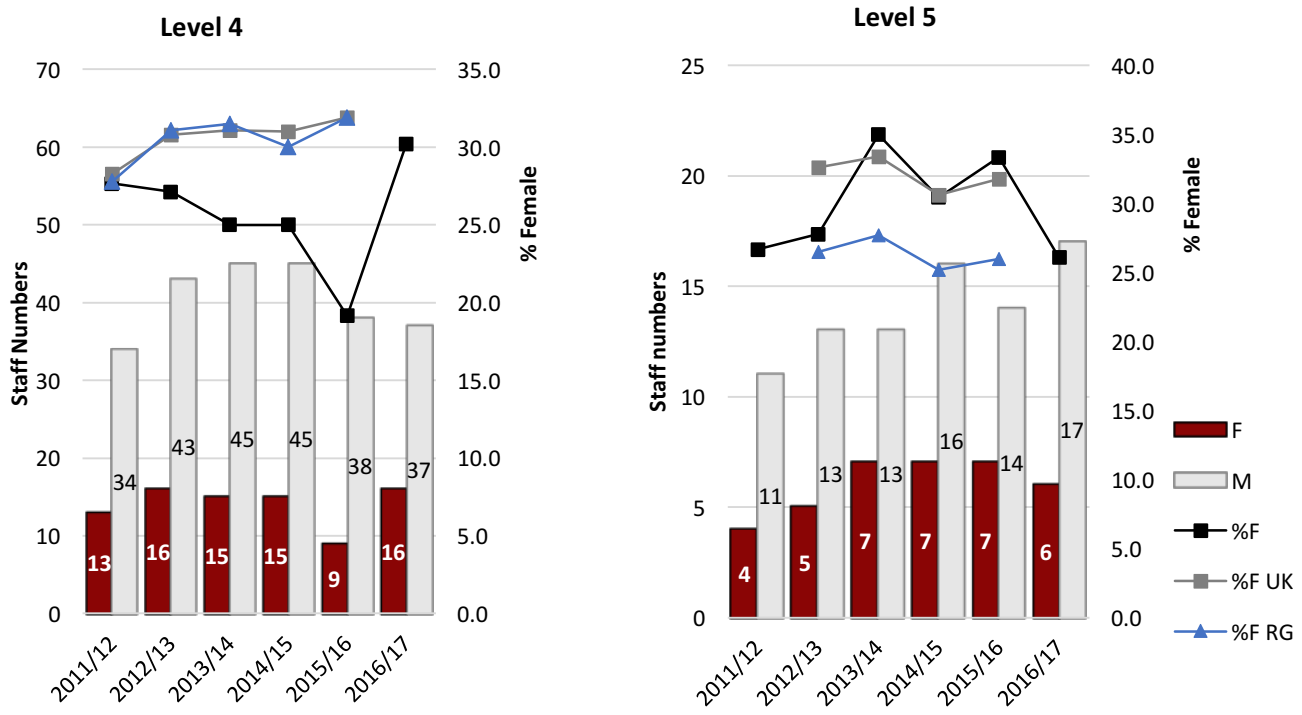


Figure 4.26. Level 4 and 5 staff analysis, majority of L4 staff are PDRAs on FTCs.

- The %F academic staff at L4 varies each year with a significant drop in 2015/16. This was identified by the EDI team as a cause for concern and action, including raising staff awareness; re-introduction of PDRA seminars and forum were implemented in 2016. (SA 6.6) Gratifyingly, in 2016/17 the %F increased to 30% (just below UK and RG average). However, maintaining and increasing the %F L4 staff remains a priority for the EDI team. (**Actions 4.2**)

- The %F L5 staff have been at, or above, the national and RG average for the past three years, with a slight drop in 2016/17 (due to the promotion of a L5 female to L6 and promotion of L4 males).

Year	Level 6 *Associate Professor, Principle Fellows*						Level 7 *Professor, Professorial Fellows*					
	F	M	T	**%F**	UK %F	RG %F	F	M	T	**%F**	UK %F	RG %F
2011/12	0	11	11	**0%**	-	-	2	15	17	**12%**	7.9%	7.7%
2012/13	0	15	15	**0%**	18.5%	15.8%	2	16	18	**11%**	8.6%	8.3%
2013/14	1	15	16	**6%**	17.7%	15.1%	2	16	18	**11%**	8.8%	9.1%
2014/15	1	15	16	**6%**	18.1%	18.1%	2	14	16	**13%**	9.3%	9.6%
2015/16	1	10	11	**9%**	17.1%	17.1%	2	19	21	**10%**	10.3%	10.4%
2016/17	1	7	8	**13%**	-	-	3	21	23	**13%**	-	-

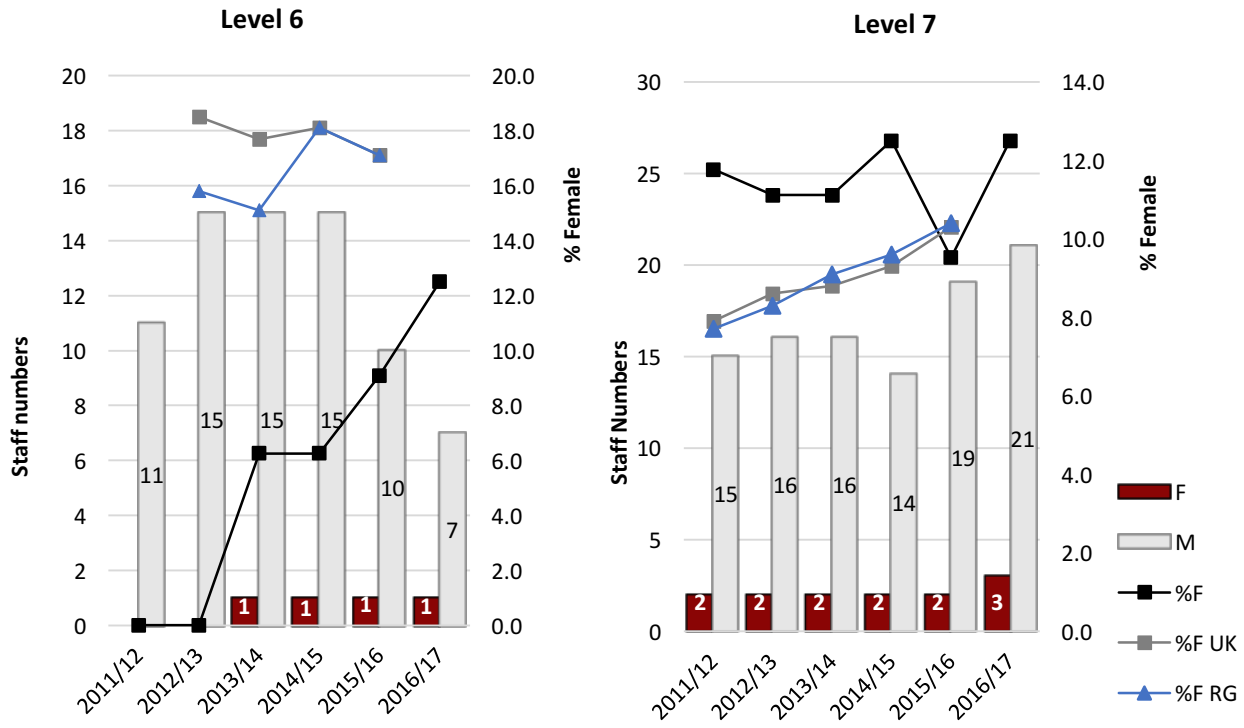


Figure 4.27. Level 6 and 7 staff analysis, drop in male L6 staff due to internal promotion and external appointments.

- Since 2011, the total academic staff cohort has increased from 90 to 107 and female academics have risen from 21% to 24%, slightly below the national/RG averages of 25% (2015/16 HESA data).

Level 4	Research and Teaching				Research only				Teaching only				Enterprise				Total Staff
Year	F	M	%F*	%M	F	M	%F	%M	F	M	%F	%M	F	M	%F	%M	
2011/12	1	0	**2**	**0**	12	32	**26**	**68**	0	2	**0**	**4**	0	0	**0**	**0**	47
2012/13	1	0	**2**	**0**	15	42	**25**	**72**	0	1	**0**	**2**	0	0	**0**	**0**	59
2013/14	1	0	**2**	**0**	14	44	**23**	**73**	0	1	**0**	**2**	0	0	**0**	**0**	60
2014/15	0	1	**0**	**2**	15	44	**25**	**73**	0	0	**0**	**0**	0	0	**0**	**0**	60
2015/16	0	3	**0**	**6**	9	34	**19**	**72**	0	1	**0**	**2**	0	0	**0**	**0**	47
2016/17	0	2	**0**	**4**	16	34	**30**	**63**	0	1	**0**	**2**	0	1	**0**	**2**	54
Level 5																	
2011/12	1	2	**7**	**13**	3	4	**20**	**27**	0	5	**0**	**33**	0	0	**0**	**0**	15
2012/13	2	4	**11**	**22**	3	4	**17**	**22**	0	5	**0**	**28**	0	0	**0**	**0**	18
2013/14	3	6	**15**	**30**	4	4	**20**	**20**	0	3	**0**	**15**	0	0	**0**	**0**	20
2014/15	2	6	**9**	**26**	5	6	**22**	**22**	0	4	**0**	**17**	0	0	**0**	**0**	23
2015/16	2	5	**10**	**24**	5	5	**24**	**24**	0	4	**0**	**19**	0	0	**0**	**0**	21
2016/17	2	9	**9**	**39**	4	4	**17**	**17**	0	4	**0**	**17**	0	0	**0**	**0**	23
Level 6																	
2011/12	0	10	**0**	**91**	0	1	**0**	**9**	0	0	**0**	**0**	0	0	**0**	**0**	11
2012/13	0	13	**0**	**87**	0	2	**0**	**13**	0	0	**0**	**0**	0	0	**0**	**0**	15
2013/14	1	12	**6**	**75**	0	2	**0**	**13**	0	1	**0**	**6**	0	0	**0**	**0**	16
2014/15	1	14	**6**	**88**	0	0	**0**	**0**	0	1	**0**	**6**	0	0	**0**	**0**	16
2015/16	1	10	**9**	**91**	0	0	**0**	**0**	0	0	**0**	**0**	0	0	**0**	**0**	11
2016/17	1	7	**13**	**87**	0	0	**0**	**0**	0	0	**0**	**0**	0	0	**0**	**0**	8
Level 7																	
2011/12	2	14	**12**	**82**	0	1	**0**	**6**	0	0	**0**	**0**	0	0	**0**	**0**	17
2012/13	2	15	**11**	**83**	0	1	**0**	**6**	0	0	**0**	**0**	0	0	**0**	**0**	18
2013/14	2	15	**11**	**83**	0	1	**0**	**6**	0	0	**0**	**0**	0	0	**0**	**0**	18
2014/15	2	13	**13**	**81**	0	1	**0**	**6**	0	0	**0**	**0**	0	0	**0**	**0**	16
2015/16	2	17	**10**	**80**	0	1	**0**	**5**	0	1	**0**	**5**	0	0	**0**	**0**	21
2016/17	3	19	**13**	**75**	0	1	**0**	**4**	0	1	**0**	**4**	0	1	**0**	**4**	25

Figure 4.28. Academic staff by grade, contract function and gender, most L4 are research-only PDRAs, most L5-7 are on balanced (research & teaching) pathway.

**%F, %M fom a total of all staff*

	Level 4			Level 5			Level 6		Level 7	
Year	Total	% R&T	%R	Total	%R&T	%R	Total	%R&T	Total	%R&T
2011/12	13	8%	92%	4	25%	75%	0	-	2	100%
2012/13	16	6%	94%	5	40%	60%	0	-	2	100%
2013/14	15	7%	93%	7	43%	57%	1	100%	2	100%
2014/15	15	0%	100%	7	29%	71%	1	100%	2	100%
2015/16	9	0%	100%	7	29%	71%	1	100%	2	100%
2016/17	16	0%	100%	6	33%	67%	1	100%	3	100%

Figure 4.29. Female academic staff by grade, no female staff are on teaching-only pathways and all L6 and L7 females have balanced research & education pathways.

Figure 4.30. Professor David Read, Professor of Chemical Education. Awarded with a National Teaching Fellowship by the HEA (2017); his best practice is recognised within the UoS and nationally.

Year/FTE	Level 4		Level 5		Level 6		Level 7		Total		
	F	M	F	M	F	M	F	M	F	M	%F
2011/12											
FT	11	34	4	11	0	11	2	13	17	69	**25%**
PT	2	0	0	0	0	0	0	2	2	2	**50%**
2012/13											
FT	14	38	5	12	0	15	2	14	21	79	**21%**
PT	2	5	0	1	0	0	0	2	2	8	**20%**
2013/14											
FT	15	43	5	13	1	15	2	15	23	86	**21%**
PT	0	2	2	0	0	0	0	1	2	3	**40%**
2014/15											
FT	14	43	4	16	1	15	2	12	21	86	**20%**
PT	1	2	3	0	0	0	0	2	4	4	**50%**
2015/16											
FT	7	38	3	14	1	10	2	17	13	79	**14%**
PT	2	0	4	0	0	0	0	2	6	2	**75%**
2016/17											
FT	14	37	3	17	0	7	3	20	20	81	**20%**
PT	2	0	3	0	1	0	0	1	6	1	**86%**

Figure 4.31. Academic staff by full-time or part-time contracts.

(ii) Transition of staff between technical and academic roles

- **We have successfully supported a case for 'in-level-transfer' to an academic post.**
- **The individual was supported by their line-manager and HoD, taking their case to the Dean for consideration and action.**
- **The individual was given a similar support package to new academic staff, including PhD studentships, mentoring *via* a senior member of staff and relevant personal development and training workshops to help initiate independent research.**

- The job family structure at the UoS provides clear mechanisms to facilitate staff transition from technical to academic pathway and reflects the academic promotion process.
- As part of the career development and appraisal process, all staff are encouraged to discuss their ambitions with their line-manager. Typically, where the question of a job family transfer arises, the line-manager will work with the individual to explore appropriate pathways. (SA 6.3) (**Actions 6.2**)

Figure 4.32. Dr Mark Light made the transition from TAE pathway to ERE pathway as X-ray Diffraction Manager in 2016 (see case studies).

(iii) Academic and research staff on fixed-term, permanent and zero-hour contracts by grade and gender

Year/ Contract type	Level 4		Level 5		Level 6		Level 7	
	F	M	F	M	F	M	F	M
2011/12								
Fixed Term	12	34	1	4	0	0	0	1
Permanent	1	0	3	7	0	11	2	14
% FT	92	100	25	36	0	0	0	7
2012/13								
Fixed Term	15	43	0	5	0	0	0	1
Permanent	1	0	5	8	0	15	2	15
%FT	94	100	0	38	0	0	0	6
2013/14								
Fixed Term	15	45	2	5	0	0	0	2
Permanent	0	0	5	8	1	15	2	14
%FT	100	100	29	38	0	0	0	13
2014/15								
Fixed Term	15	45	3	8	0	0	0	1
Permanent	0	0	4	8	1	15	2	13
%FT	100	100	43	50	0	0	0	7
2015/16								
Fixed Term	9	38	3	6	0	0	0	1
Permanent	0	0	4	8	1	10	2	18
%FT	100	100	43	43	0	0	0	5
2016/17								
Fixed Term	17	37	2	4	0	0	0	0
Permanent	0	0	4	13	1	7	3	21
%FT	100	100	33	24	0	0	0	0

Figure 4.33. Academic staff by level and contract type.

- L6-7 are permanent, except one semi-retired Professor on a specific grant.
- At L4, most staff are research-only PDRAs on grant-funded FTC; the only two examples of permanent L4 staff have been female, both promoted to L5. (Figure 4.32)
- Currently, 67% of L5 women are permanent and, on average, 71 %F L5 are on permanent contracts (62 %M), indicating little gender barrier to contract type at this career stage.
- We avoid appointing staff to FTCs (except on research grants), using probationary to assess and develop individuals to meet the role during that period ensuring suitability for longer term.

Contract type	Level 4		Level 5		Level 6		Level 7	
	F	M	F	M	F	M	F	M
Research only								
Fixed Term	16	33	2	3				
Permanent			2	1				
Research & Education								
Fixed Term		2						
Permanent			2	9	1	7	3	19
Education only								
Fixed Term		1		1				
Permanent				3				1
Enterprise								
Fixed Term	1							
Permanent								1

Figure 4.34. Academic staff by level, contract type and pathway, summary for 2016/17.

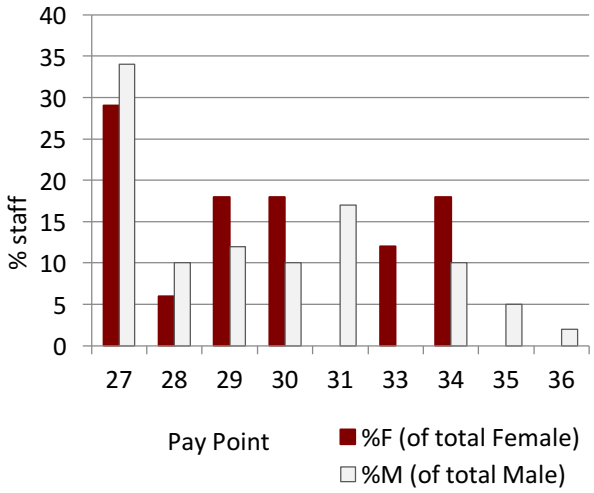
M/F	FT		Transition to Open-Ended			Current Position	
	Level	**Pathway**	**Level**	**Pathway**	**Year**	**Level**	**Pathway**
M	4	R	5	R&E	2008	7	R&E
M	4	E	5	E	2009	7	E
F	4	R	5	R&E	2010	6	R&E
F	4	R	5	R&E	2010	7	R&E
M	4	E	5	E	2015	5	E
M	4	R	5	R&E	2015	5	R&E
F	4	R	5	R	2015	5	R
M	4	R	5	R&E	2016	5	R&E

Figure 4.35. Academic staff supported in transition from fixed-term to open-ended contracts (2008-2016), R = Research; E = Education.

	Demonstrator		External Examiners		Fees*		Temp Bank	
Year	F	M	F	M	F	M	F	M
2011/12	24	52	0	0	76	119	8	3
2012/13	31	50	0	1	55	86	4	1
2013/14	42	68	1	1	47	83	4	1
2014/15	34	66	1	1	68	104	5	0
2015/16	41	68	1	1	48	70	6	0
Total	172	304	3	4	294	462	27	5

Figure 4.36. Casual workers, demonstrators = PG laboratory teaching, *Fees include UG/PG paid for outreach activities.

Spinal point	M	F	%M	%F
27	14	5	34	**29**
28	4	1	10	**6**
29	5	3	12	**18**
30	4	3	10	**18**
31	7	0	17	**0**
33	0	2	0	**12**
34	4	3	10	**18**
35	2	0	5	**0**
36	1	0	2	**0**



4.37. Gender pay study conducted by EDI team 2017 (Level 4 staff).

- No significant gender pay-gap; average pay point for females is slightly higher (29.6) than the males (29.2); from total males, 34 %M were on the lowest pay point and only 29 %F.
- For L5-7 the University published [5] an equal pay report in 2015, this stated that there are no significant gender pay-gaps for all employees at the same grade. (SA 6.7)

(iv) Academic leavers by grade and gender and full/part-time status

		2011/12		2012/13		2013/14		2014/15		2015/16	
		F	M	F	M	F	M	F	M	F	M
L4	FT	4	5	4	5	4	5	6	10	2	9
	FTE			0.4*					0.5*		
L5	FT	1									1
	FTE				0.5*						
L6	FT			1							
	FTE										

***Figure 4.38. Number of staff leaving the department (FT/PT)**, *1 staff member*

- Staff turnover at L5-7 is very low, and all staff leavers in this category left for academic positions at other institutions. The turnover is higher for L4 staff (predominantly PDRAs on grant-funded FTC), with a total of 21F and 35M leaving in the last five years. (**Actions 4.2, 5.1**)
- Exit interviews are conducted with all leavers (L4-7).

<u>700 words</u>

[5] University-of-Southampton equal pay report (2015)

5.0 Supporting and advancing women's careers

5.1 Key career transition points: academic staff

(i) Recruitment

All staff involved in recruitment undergo compulsory training on EDI and unconscious bias. (refreshed every 4 years).

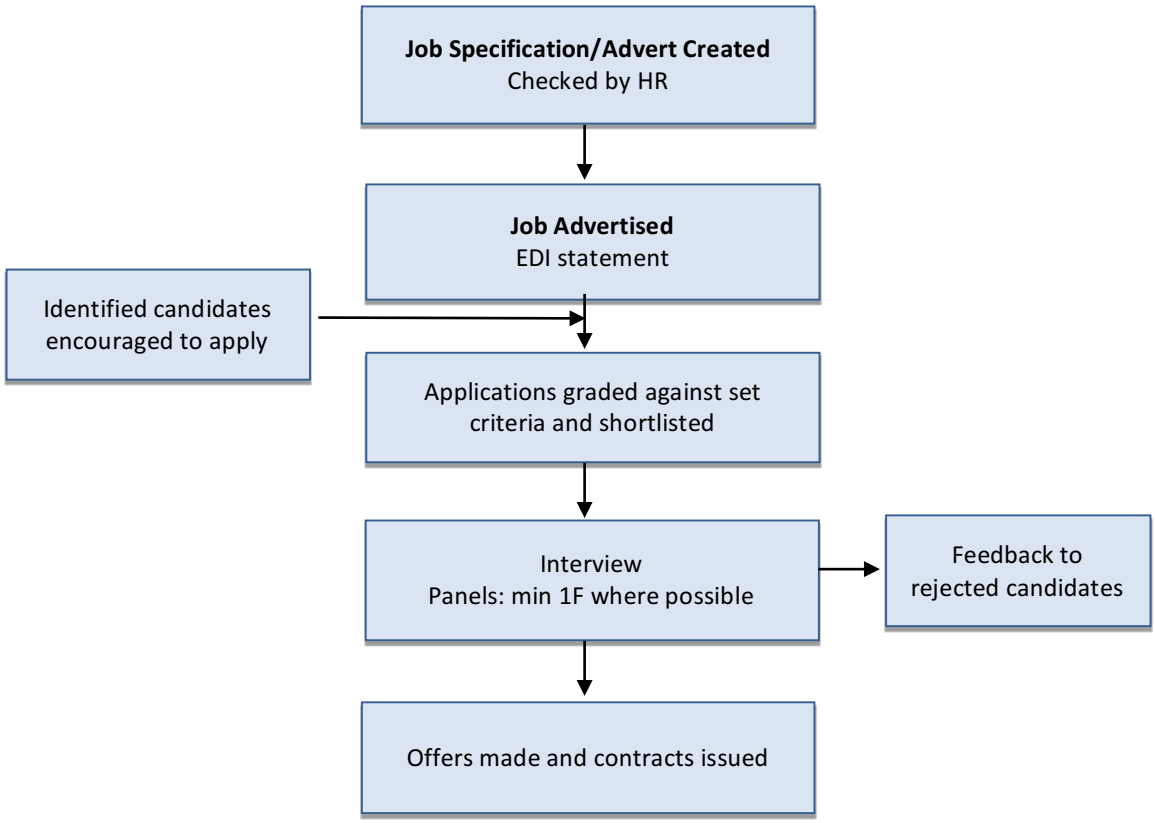


Figure 5.1 The recruitment process

- Chemistry's recruitment process is shown Figure 5.1, led by HR who ensure EO policies are adhered to and staff understand the process.
- All adverts include a statement embracing equality and encouraging diversity with a link to our equality website and carry the Athena SWAN logo. (Bronze action, Figure 5.2).
- For academic staff the interview panel is checked for gender balance by HoD. (SA 5.2)
- L4 positions are shortlisted against job criteria by academic staff, %F at each stage is monitored and checked by HR, ensuring this is performed fairly.
- For PDRA appointments, we endeavour to have at least one female on the interview panel. To formalise this and avoid overload on female staff, we will invite PDRAs to assist with interviews also providing further career development. (**Actions 5.7**)
- For academic positions, staff are actively encouraged to identify promising candidates from under-represented communities, e.g. through conferences. Dr Nuria Garcia-Araez (F, L5) was identified as a promising young scientist by Profs. Bartlett and Russell at a

conference. She was invited to visit and encouraged to apply for the position. Nuria was shortlisted (60 %F), offered and accepted the post. In the past 5 years, we have only had one significant recruitment process (2015/16), applicants were 17 %F and interviewees 17 %F.

- Applications are monitored through an EO section, this section is not seen by the shortlisting/interview panel.

Figure 5.2. Chemistry diversity web-pages gives candidates further information on our EDI work and policies.

Year		Applications	Shortlisted	Offers made	Contracts issued	Proportion of applicants shortlisted	Proportion of those made offers	Proportion of those offered had contract issued	Proportion of applicants entering
Level 4 Recruitment									
2012/13	F	45	12	5	5	27%	42%	100%	11%
	M	203	42	24	22	21%	57%	92%	11%
	%F	**18%**	**22%**	**17%**	**19%**				
2013/14	F	46	13	6	5	28%	46%	83%	11%
	M	135	34	15	13	25%	44%	87%	10%
	%F	**25%**	**28%**	**29%**	**28%**				
2014/15	F	45	7	4	4	16%	57%	100%	9%
	M	233	37	13	11	16%	35%	85%	5%
	%F	**16%**	**16%**	**24%**	**27%**				
2015/16	F	147	26	10	9	18%	38%	90%	6%
	M	462	66	21	20	14%	32%	95%	4%
	%F	**24%**	**28%**	**32%**	**31%**				
2016/17	F	55	12	5	4	22%	42%	80%	7%
	M	123	32	13	11	26%	41%	85%	9%
	%F	**31%**	**27%**	**28%**	**27%**				
Level 5 Recruitment									
2015/16	F	15	2	0	0	13%	0%	0%	0%
	M	71	10	3	3	14%	30%	100%	4%
	%F	**17%**	**17%**	**0%**	**0%**				
2016/17	F	2	0	0	0	0%	0%	0%	0%
	M	7	0	0	0	0%	0%	0%	0%
	%F	**22%**	**0%**	**0%**	**0%**				
Level 7 Recruitment									
2012/13	F	0	0	0	0	0%	0%	0%	0%
	M	1	1	1	0	100%	100%	0%	0%
	%F	**0%**	**0%**	**0%**	**0%**				

Figure 5.3. Staff Recruitment in Chemistry

- %F appointed at L4 is greater than the %F applicants, and %F applicants entering is greater than or equal to %M (most years).
- Since 2012, 3 L5 staff recruited (100 %M), but shortlist was 17 %F.
- We aim to increase our %F applications at all levels. (**Actions 5.1**)

(ii) Induction

On their first day starters receive an induction pack and a short document with key details and contacts containing links to full guidelines, highlighting baby-changing facilities, breastfeeding/quiet room and our policies regarding flexible working, maternity/paternity leave (SA 5.1).

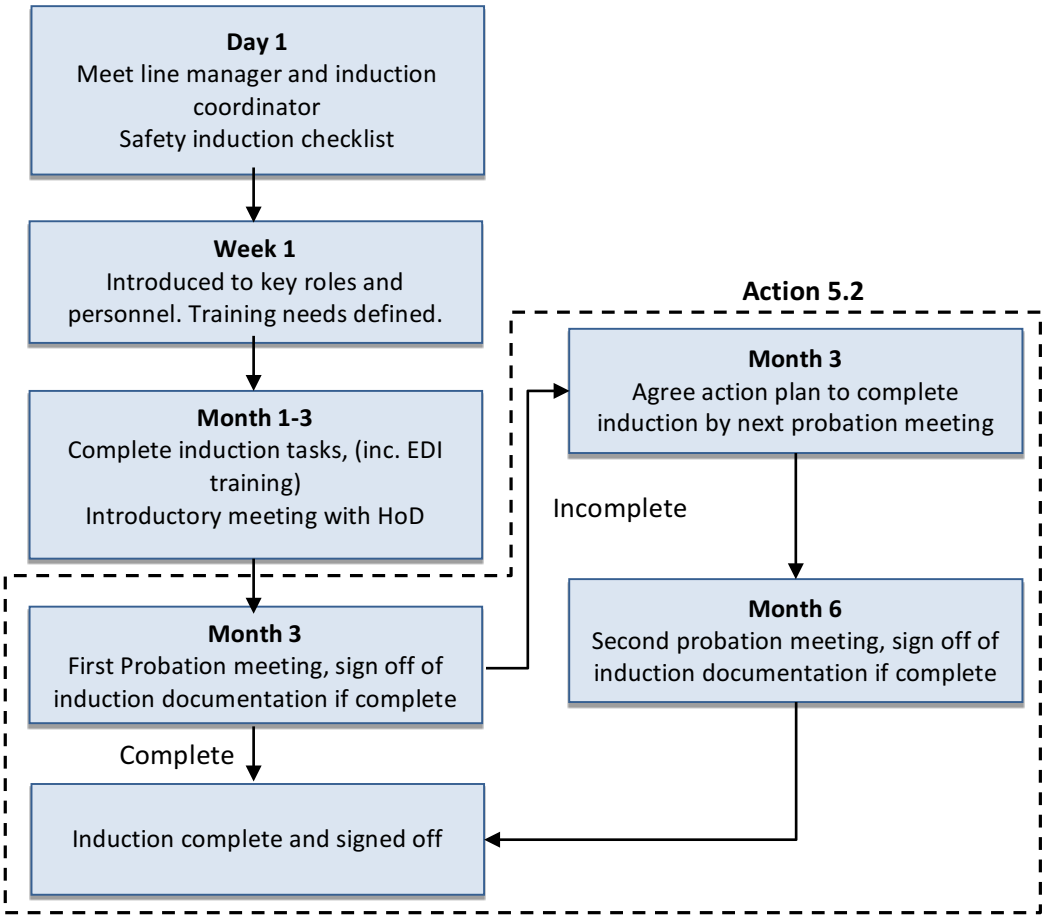


Figure 5.4. Induction process in Chemistry for all staff (L4-7)

- New induction material and welcome meetings run quarterly. (SA 5.1)
- New starters are assigned an induction coordinator who oversees the process and ensures all actions are complete, for PDRAs this is the supervisor.
- An email from HoD informs about compulsory EDI training and two additional online training modules; unconscious bias and managing diversity, compulsory for staff involved in recruitment. (SA 6.1)
- All staff are assigned a mentor to provide advice outside of the usual line-management structure.
- New staff have a reduced teaching (1/3 load in Y1; 2/3 in Y2) and administration workload, ensuring adequate time to develop their research and are required to complete PGCAP and other appropriate training.
- Despite our improvements, feedback from focus groups have highlighted aspects not working to the required level, information is not always circulated when needed and the dissemination of local details can be inconsistent. (**Actions 5.2**)

(iii) Promotion

87% of our staff agree that they had access to a line-manager or mentor who provides helpful advice and support with their career aspirations. (Actions 5.4 to address remaining 13%).

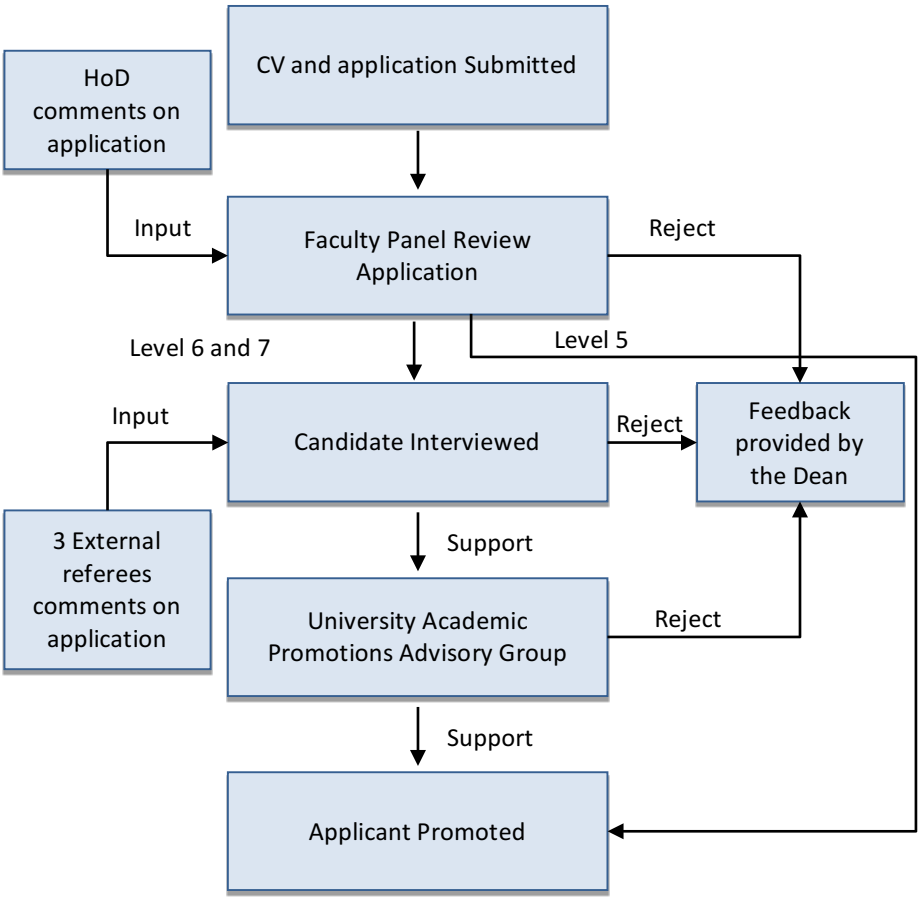


Figure 5.5. The promotion process

- All staff are regularly emailed by the HoD to communicate promotion deadlines and procedures.
- L5 promotions are decided by faculty review.
- For L6/7, applications are assessed at promotions panel and through external references, then passed to the advisory group for quality assurance and ratification. If not supported, detailed feedback is provided by the Dean or a nominated representative.
- The promotion process runs annually and staff can put themselves forward, however, support for applying for promotion is discussed at appraisals. (SA 6.3)
- The University has a promotions website detailing expected contribution for each level (Figure 5.4); in 2016 roadshows to raise awareness of the process and encourage applications advertised to all staff by email included the statement:

"As monitoring data shows that women have been less likely than men to make applications for promotion, the University would particularly encourage women to attend, however, the session is open to all people who might be considering applying for promotion."

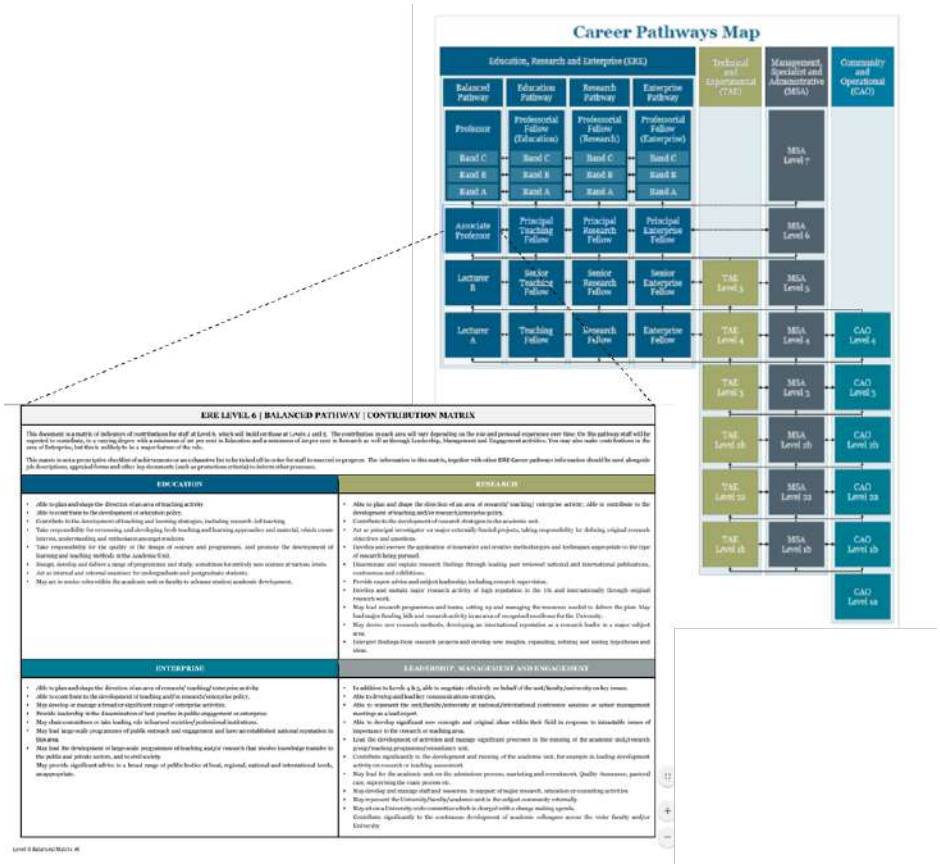


Figure 5.6. Snapshot of the balanced pathway level 6 contributions matrix; considers education, enterprise, research and leadership and management.

		Male			Female		
Year	Level	Applied	Promoted	% Success	Applied	Promoted	% Success
2012/13	5	0	0	**0%**	1	1	**100%**
	6	4	3	**75%**	1	1	**100%**
	Total	4	3	**75%**	2	2	**100%**
2013/14	6	0	0	**0%**	1	0	**0%**
	7	3	2	**67%**	0	0	**0%**
	Total	3	2	**67%**	1	0	**0%**
2014/15	6	1	1	**100%**	0	0	**0%**
	7	6	5	**83%**	0	0	**0%**
	Total	7	6	**86%**	0	0	**0%**
2015/16	6	0	0	**0%**	1	1	**100%**
	7	4	3	**75%**	1	1	**100%**
	Total	4	3	**75%**	2	2	**100%**
2016/17	6	2	1	**50%**	1	0	**0%**
	Total	2	1	**0%**	1	0	**0%**
	Total	**20**	**15**	**75%**	**6**	4	**67%**

Figure 5.7. Applications for promotions and success rate

- Success rates for M/F applicants are similar over the past 5 years.
- Female academics are on all promotion panels (including the Dean and HoD)
- Through the annual appraisal process and mentoring we actively encourage promotion applications from female staff.
- Further support is offered through attendance at conferences such as the Joliot-Curie conference (supports aspirations of academic careers, especially for women) and since 2015 the department has covered the costs for 1-3 PDRAs. Chemistry actively identifies and encourages suitable candidates (including PDRAs) to participate in 'Springboard', a professional development programme for women. (SA 6.2)
- We acknowledge guidelines and criteria need more clarification (**Actions 5.4, 6.1**)

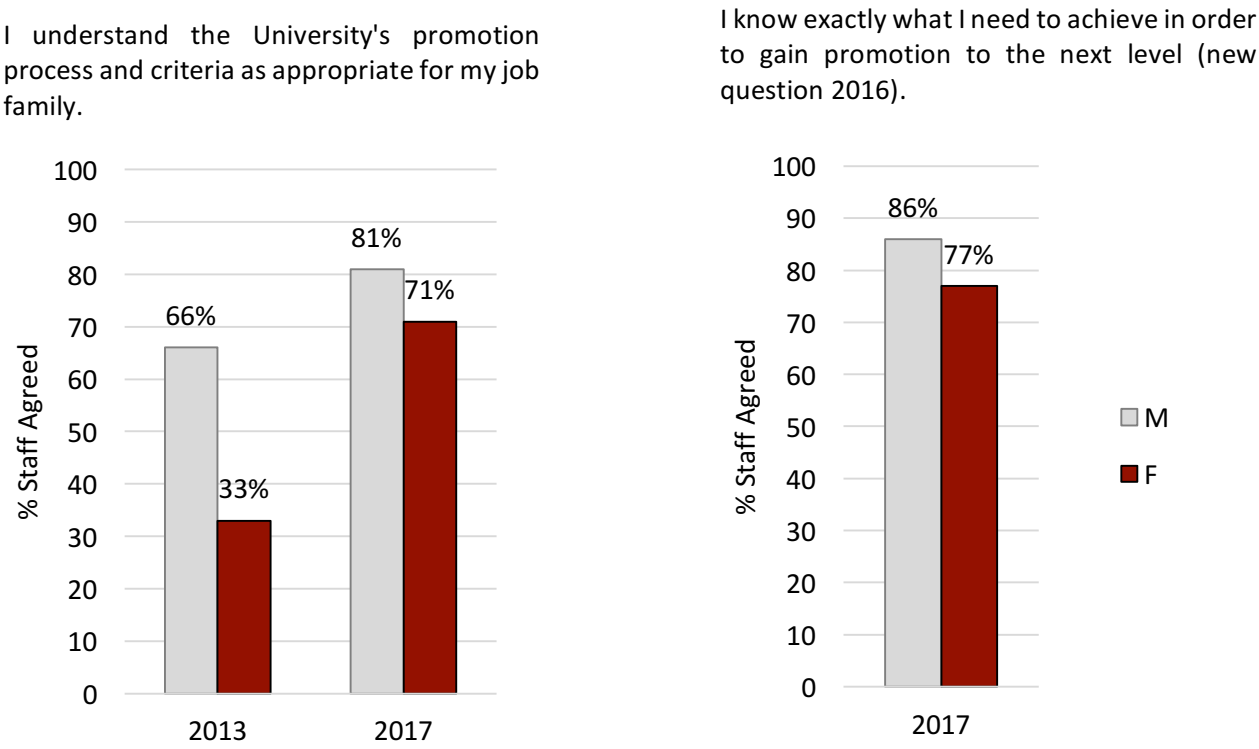


Figure 5.8. Response to staff survey questions on promotion.

"I can honestly say that attending Springboard changed my life, I felt in control, gained a sense of purpose and the confidence needed to further my career, whilst meeting some fantastic female role-models"

Dr Lynda Brown, L5 academic staff

(iv) Department submissions to Research Excellence Framework (REF)

REF2014, 100% of our REF-eligible staff were returned; 82 %M and 18 %F, a significant uplift in %F compared to RAE2008 (87 %M, 13 %F).

We sought approval from HEFCE in advance for a reduction in the number of outputs required for those staff working part-time and/or with exceptional circumstances. All staff were treated in exactly the same way, with regular REF briefings, well-defined appraisal objectives and individual meetings with the REF Champion and HoD to ensure staff were supported throughout the lead-in period to achieve the agreed targets. We intend to adopt the same approach for REF2021.

<u>864 words</u>

5.2 Key career transition points: professional and support staff

(i) Recruitment and Induction

- **Since 2014 EDI training by support staff has increased from 15% to 100% in 2017.**
- **Over the past six years there have been more females offered positions than males.**

Professional and support staff are key members of the Chemistry community, covering a broad range of roles.

Job family	Role	F	M	% F
TAE	Lab technicians	2	1	**66%**
	Mass spectrometry	2	0	**100%**
	NMR	0	2	**0%**
	X-ray	0	1	**0%**
	Glassblowers	0	3	**0%**
	Mechanical Workshop	0	2	**0%**
	Stores	0	2	**0%**
MSA	Facilities	0	2	**0%**
	Administrative	6	0	**100%**
	Total	10	13	**43%**

Figure 5.9. Professional and support staff in Chemistry.

- All new staff receive a welcome email from the HoD with staff induction information and Chemistry staff photos. (SA 5.1)
- All new appointees read and sign the UoS/Chemistry Health and Safety Policy.
- An email from the senior administrative officer explains the ethos of the department, requests EDI training and familiarisation with the 'Dignity at Work' policy.
- Staff members are appointed a line-manager who oversees their probation. All P&S staff (L1-3) have a 6-month probationary period, for L4 and above this is 12 months.

- Through the induction process, training needs are discussed (section 5.4 (i)).

	Application		Shortlisted		Offered		Contract issued		App/Offer	
Level 1b	F	M	F	M	F	M	F	M	**%F**	%M
2011/12	34	44	14	10	2	2	2	2	**5.9%**	4.6%
2012/13	16	47	4	6	1	1	1	1	**6.3%**	2.1%
2013/14	16	11	5	3	1	1	1	1	**6.3%**	9.1%
2014/15	9	9	5	5	2	0	2	0	**22.2%**	0%
2015/16	2	9	1	6	1	2	1	1	**50.0%**	22.2%
2015/16	12	9	7	2	3	0	2	0	**16.7%**	0%
Level 2a										
2012/13	13	17	2	2	1	0	0	0	**7.7%**	0%
Level 2b										
2012/13	1	0	1	0	1	0	1	0	**100%**	0%
Level 3										
2011/12	39	30	4	3	1	1	0	1	**2.6%**	3.3%
2012/13	0	1	0	1	0	1	0	1	**0%**	100%
2013/14	0	1	0	1	0	1	0	1	**0%**	100%
2014/15	3	6	0	3	0	2	0	2	**0%**	33.3%
2015/16	0	10	0	5	0	1	0	1	**0%**	10%
2016/17	10	12	2	0	1	0	1	0	**10%**	0%
Level 4										
2012/13	12	18	1	3	1	0	1	0	**8.3%**	0%
2014/15 (MSA)	2	7	1	6	0	1	0	1	**0%**	14.3%
2016/17	2	8	2	2	2	0	0	0	**100%**	0%
Level 5										
2011/12	3	6	0	4	0	1	0	1	**0%**	16.7%
2015/16	0	9	0	2	0	1	0	1	**0%**	11.1%
Total	174	254	49	64	15	17	12	14	**8.6%**	5.5%

Figure 5.10. Application and success data for recruitment of professional and support staff, all TAE appointments except shaded 2014/15 MSA appointment.

- At L3-5 there is a higher number of male applicants and entrants; we will review our advertising/recruitment procedures to address this, actively attracting female applicants to TAE roles. (**Actions 5.6**)
- 71 %M only (100 %F agreed) that they had access to a mentor (**Actions 6.2**)

'I have access to a line manager or mentor who provides helpful advice and support in line with my career aspirations.'

'Chemistry takes positive action to encourage people to apply for posts in areas where they are under-represented.'

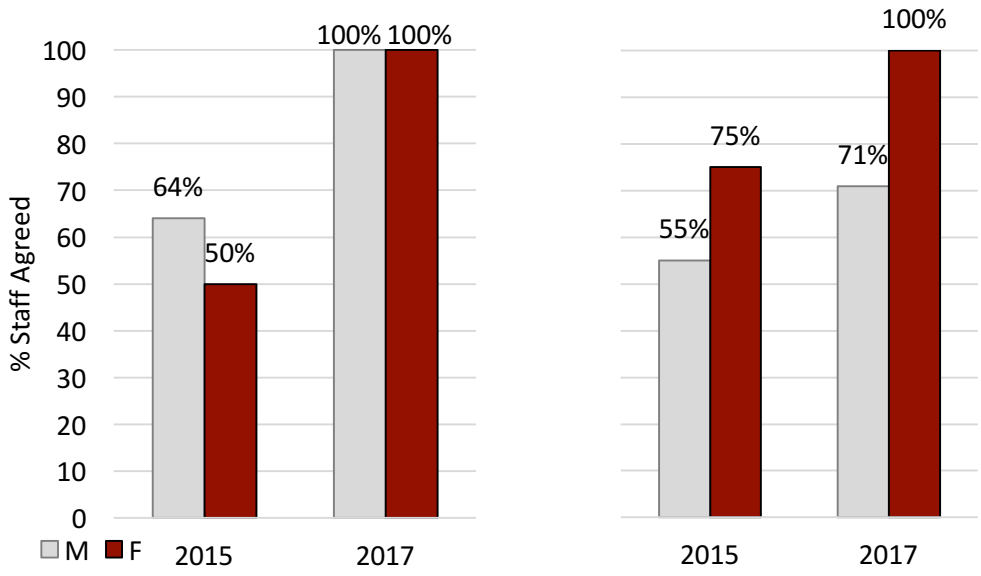


Figure 5.11. Response to staff survey 2015 (18 responses) and 2017 (20 responses); professional and support staff responses only.

(ii) Promotion[6]

Examples include:
Karen McKinstry: Deputy Head of Finance promoted to Head of Faculty Finance
Helen Barton; EU office promoted to Chemistry's Head of Finance

- We operate an establishment structure for support roles. Jobs are evaluated according to the University's approved methodology and assigned a level within the grading structure. The level is assigned to the role and not to an individual.
- Support staff promotions are through vacancies within the University at a higher level, advertised internally within the UoS where possible, prior to external advertisement.
- In exceptional circumstances where a role has grown to include additional responsibilities, UoS operates a regrading process to review the paygrade for that role. Where the role holder is fulfilling the requirements of the higher-level role, they move within the post and are effectively promoted.
- On-going career development/progression is discussed in annual appraisals and one-to-one meetings between staff and line-managers throughout the year. Where appropriate continued professional development training cannot be provided internally, opportunities to attend appropriate external CPD training are provided.
- However, staff surveys indicated that the promotions process was not understood by all support staff. (**Actions 6.8**)

361 words

[6] For an example of technical staff transitioning to academic staff see case studies (Dr Mark Light)

5.3 Career development: academic staff

(i) Training

- **All staff undertake a core package of training, including safeguarding and EDI. (SA 6.1)**
- **Four staff have recently achieved Senior Fellow of the HEA status.**
- **50% of staff currently have FHEA or SFHEA status, having taken PGCAP or equivalent.**
- **7 staff are currently studying for PGCAP or assembling portfolios for HEA Fellowship.**

	2011/12		2012/13		2013/14		2014/15		2015/16		2016/17	
Level	F	M	F	M	F	M	F	M	F	M	F	M
L4	1	22	12	19	5	28	8	22	2	13	11	39
L5	0	6	11	50	11	57	7	22	5	14	4	13
L6	0	2	0	30	0	30	1	37	0	4	0	4
L7	0	0	0	5	3	12	4	23	1	15	3	8
Total	**1**	**30**	**23**	**104**	**19**	**127**	**20**	**104**	**8**	**46**	**18**	**64**

Figure 5.12. Uptake of training for academic staff.

- All staff undertake a core package of Health and Safety, Display Screen Equipment, Safeguarding, and EDI training. In addition, further safety training is required for laboratory work, renewed annually and monitored by the Safety Advisor.
- New academic staff complete PGCAP (accredited by the HEA) as a probation requirement (unless exempt due to equivalent prior experience); included in their workload tariff. Staff completing are admitted as Fellows of the HEA. Support is given to staff in gaining FHEA status *via* the portfolio-based recognition process (PREP framework).
- Chemistry holds regular staff away days (2-3 per year) focussing on research and education topics. These inform the development of many aspects of policy, but also as a vehicle to inform staff of changes and of external factors that affect the department.
- Personal development training is offered via the University's Development Unit e.g. grant writing, presenting, supervision and leadership. The Chemistry administrator records completion of training annually.

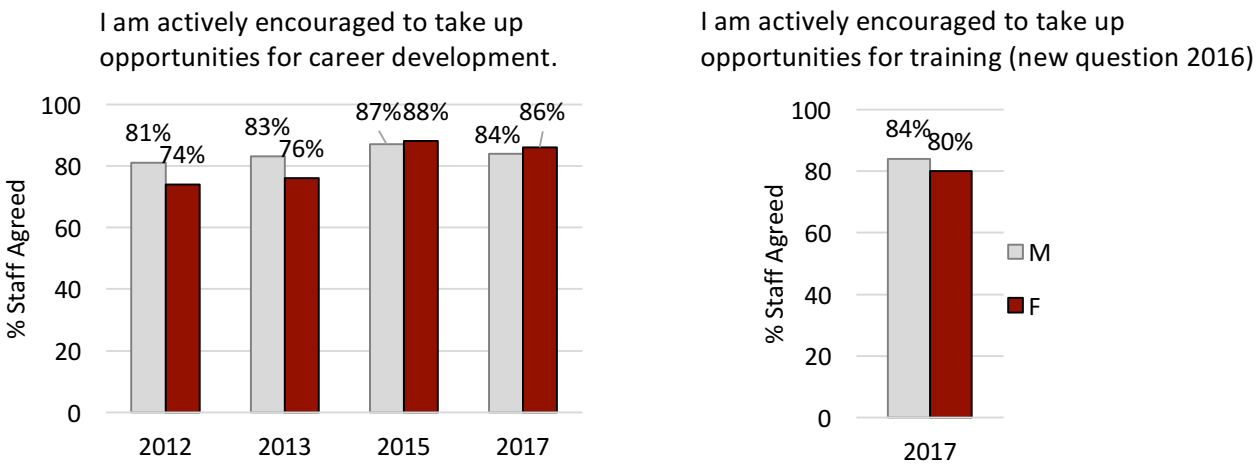


Figure 5.13. Survey response on attitudes to development/training opportunities.

(ii) Appraisal/development review

- **Appraisals are compulsory for all staff, including PDRAs. (SA 6.3)**
- **Mandatory training for staff performing appraisals and optional sessions for appraisees. (SA 6.3)**
- **Positive feedback (90 %F, 93 %M) indicated that their recent appraisal was useful in reviewing performance.**

- In 2014/15 the University introduced a new appraisal system; compulsory for all staff (L4-7, including PDRAs).
- For academic staff, these discussions include education, research, enterprise and leadership/management performance over the previous year, followed by open discussions to develop targets for the following year and longer-term career aspirations.
- Career aspirations, development needs, work-life balance, readiness and preparation for promotion are explicitly requested as topics for discussion. For recent appointees, including ECRs, regular meetings are implemented as part of probation.
- Prior to 2013, appraisals for PDRAs were inconsistent and completion rates low, reflected in negative comments in surveys and exit interviews. Now PDRAs have formal probationary periods and regular appraisals, regardless of the length and status of their contracts.
- PDRAs have the option of being appraised by their research supervisor or the HoRG.
- Summary remarks are forwarded to the HoD for inclusion in the overall review of the needs of all staff in Chemistry and the HoD PA maintains records of appraisal uptake.
- Staff comments indicated that when promotion should be applied for was not always clear from appraisal. (**Actions 5.4**)

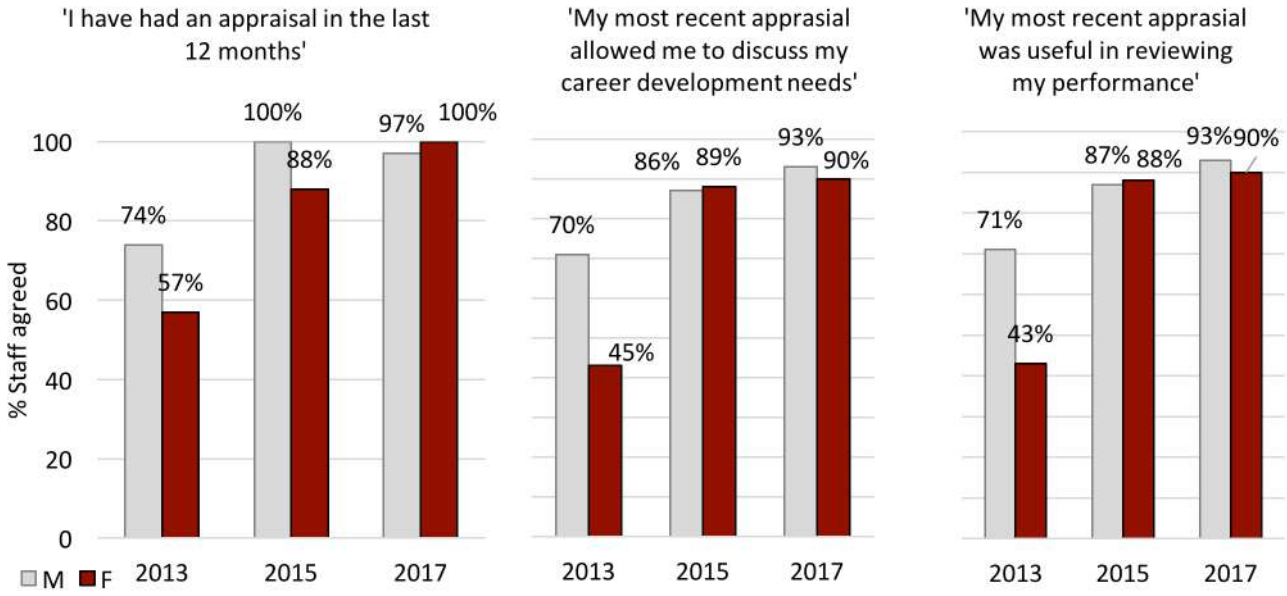


Figure 5.14. Staff response to surveys on appraisal, 97 %M and 100 %F have had appraisal increased from 57 %F and 74 %M in 2013.

(iii) Support given to academic staff for career progression

- **Inspirational female mentoring and leadership training promoted.**
- **86 %M, 83 %F agreed 'I am actively encouraged to take up opportunities for training'.**

- Recent appointees have a reduced teaching load over the first three years and are allocated a mentor with related interests to give advice/support. Holders of RS and EPSRC fellowships have a 50% teaching load.
- Chemistry outlines a set of metrics for the level of performance expected at different career levels so staff can monitor their progress toward promotion, these supplement the more general role descriptors used by the University. All pathways have been clearly defined and **two staff in Chemistry have been promoted to Professorial Teaching Fellow and Professorial Enterprise Fellow, the first in the University**.
- PDRAs have opportunities to enhance their profile through conference presentations, talking to visitors, teaching and outreach.
- All PDRAs now have their own profile page on the Chemistry website (updated annually) (SA 5.4) (**Actions 6.7**)
- The Careers Service provides support for CV writing, interviews and job searching. During appraisals PDRAs are encouraged to undertake University training. For further teaching training, we support applications for Associate Fellow of the HEA via existing Senior Fellows.
- Additional female mentoring opportunities promoted include WiSET, Senior leadership development programmes, women's leadership circles and Springboard. Female staff are identified and positively encouraged to attend by senior management and the EDI team. (SA 6.2) (**Actions 6.1**)

"Coming from a research background, the move into a management role required learning new skills. My line-manager has been supportive of me taking professional development courses, both internally and externally."
Dr Kelly Kilpin, Programme Manager (p/t)

(iv) Support given to students (at any level) for academic career progression

- **PhD students can apply for associate fellowship of HEA**

- All students have a personal tutor (UG and MSc) or an second supervisor (PhD), who acts as an independent mentor. Students and PDRA's can also take up other individual/group mentoring, provided by the department or University.
- The Careers Service presents their services to UG/PG students during induction at the start of each year, and to final year placement students during re-induction.
- Placement students are supported with their applications.
- Additional UG briefings are provided on PhD programmes.
- For MSc students, a dedicated skills module supports development in scientific writing,

presentation, CVs and interviews (also available to PG's as an optional module).

- PGs have opportunities in presenting, teaching and outreach. Training is provided in teaching, including lab demonstration, with structured feedback on performance.
- PGs are supported to apply for Associate Fellowship of the HEA, and three PhD students have been working toward this in 2016-17.

Figure 5.15. Lucy Mapp PhD student in X-ray crystallography working towards HEA associate fellowship and campaigner for gender balance[7]

(v) Support offered to those applying for research grant applications

87 %F; 86 %M agree 'I have a line-manager or mentor who provides helpful advice and support with my career aspirations'.

	No. Grant applications			Grant Awarded (£)		
Year	F	M	**%F**	F	M	**%F**
2012/13	14	60	**19%**	390,853	3,296,985	**11%**
2013/14	12	62	**16%**	0	7,802,063	**0%**
2014/15	12	62	**16%**	1,211,702	6,021,882	**17%**
2015/16	12	64	**16%**	1,335,324	15,710,172	**8%**
2016/17	12	77	**13%**	1,251,921	2,679,630	**32%**
Total	62	325	**16%**	4,189,800	35,510,732	**11%**

Figure 5.16. Number of grant applications and value of grants awarded to Chemistry staff.

[7] **http://www.womanthology.co.uk/female-crystallography-pioneers-motivated-me-pursue-my-passion-for-chemistry-lucy-mapp-chemistry-student-university-southampton/**

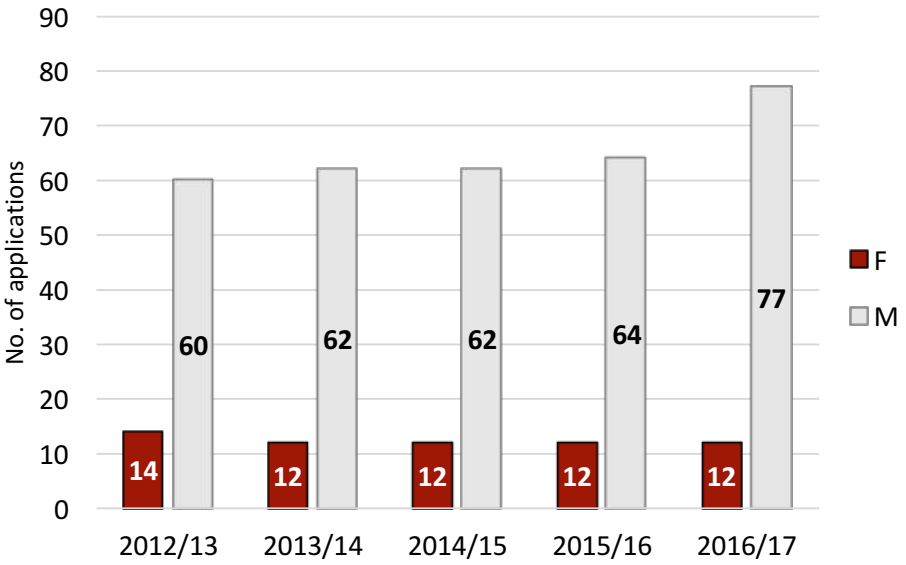


Figure 5.17. Number of applications by PI gender by year

- We have a structured process of reviewing grant applications internally before submission.
- We provide a monthly newsletter to all our ECR staff making them aware of funding calls, including schemes to advance women's careers, e.g. RS Dorothy Hodgkin fellowships, L'Oréal-Unesco for Women-in-Science.
- Support in-kind for proposed projects (e.g. equipment, space, studentships) is administered by the DoR; important for Fellowship applications where departmental support is critical.
- For interview practice and confidence-building, we run mock panels and involve staff that have direct experience of the specific type of interview.

Year	No.	%F	Applications	Status
2015/16	1	100%	External applicant supported for RS URF including mock interviews	Not awarded
	1	100%	Internal new member of staff supported for EPSRC Fellowship application; including mentoring, coaching and interview practice	Awarded
	2	50%	2 internal ERC fellowship applications	1 Awarded
2016/17	3	33%	3 internal fellowship applications	Under review
	2	50%	2 internal fellowship applications	In preparation

Figure 5.18. Recent fellowship applications

We have developed a transparent process for dealing with applications from prospective ECR Fellowship applicants (internal and external), including nominating a Senior Mentor to advise applicants to develop proposals and mock interviews. This information is publically accessible on the Chemistry web-pages and promoted internally via PDRA forums and ECR conferences.

Figure 5.19. Dr Nuria Garcia-Araez, lecturer, awarded an EPSRC Individual Fellowship, 2017 to aid her research into lithium-air and lithium-sulphur batteries.

> *"The department was very supportive during the whole process of fellowship application. From useful scientific discussions with colleagues, suggestions to improve text, very strong financial support, an extremely hard but useful mock interview to down-to-earth conversations that prevented an increase of my stress levels."*
> *Dr Nuria Garcia-Araez*

1021 words

5.4 Career development: professional and support staff

(i) Training

100 %F; 100% %M support staff agreed 'I am actively encouraged to take up opportunities for training'.

Online training for MSA/TAE staff covers a wide range of needs e.g. specialist software (budgets, web-pages, HR training). The UoS is currently developing a leadership management framework to further enhance development opportunities. All our support staff have completed EDI training and where training cannot be provided centrally, Chemistry fully finances opportunities for external training (Figure 5.20). Most MSA training is provided centrally.

Glassblowers (3, 100 %M)	British Society of Scientific Glassblowers qualifications
	American Scientific Glassblowers Society meeting (2016) Certification.
	Events UK (2017) and Europe (2016); training of others
	Enterprise activities (training by Chemistry academic staff)
Laboratory technicians (2, 100 %F)	**HEaTED** (leading provider of PD for the technical workforce in HE, UK)
	PG demonstrator training; supporting teaching
	Training in delivering public events
Mechanical Workshop (2, 100 %M)	Internal and external training in lifting assessment, manual handling, project management
	Invested in new equipment with specific training

Figure 5.20. Selected examples of internal and external training provided to TAE staff in Chemistry

Figure 5.21. Mrs Sally Dady (Left), Senior Administrative Officer, started working in Chemistry 3 day a week, increased to 3.5 and now works 4.

> *"I have been on all relevant training, and have the opportunity to identify training opportunities through my appraisal"*
> Rob Dalley, Workshop manager

(ii) Appraisal/development review

Support staff agreed:
My most recent appraisal discussion was useful
……in reviewing my workload' 100 %F, 100 %M.
……in reviewing my performance' 100 %F, 100 %M.
…..allowed me to discuss career development and goals for the next year 100 %F, 100 %M.

- Annual appraisal takes the format of PPDR for support staff.
- Prior to PPDR the staff member completes and submits relevant paperwork to facilitate the conversation.
- Staff have a meeting with their line-manager to review the previous year's achievements and outcomes and to discuss any future training, development and career planning to enable the staff member to achieve their full potential.
- The outcome of the PPDR informs a decision about staff rating and recognition.
- Progression and PPDR uptake is monitored by the Faculty Operating Officer.
- The uptake for appraisals for support staff in the last year was 82% (two technical staff on maternity leave; will have appraisal on return). (**Actions 6.2**)
- Compulsory online appraisal to commence 2018/19

(iii) Support given to professional and support staff for career progression

100 %F; 100% %M support staff agreed 'I have access to a line manager or mentor who provides helpful advice and support in line with my career aspirations'.

Career development discussions are integral to PPDR, and although there are sometimes limited opportunities for promotion, all options are reviewed to ensure staff are satisfied in their current roles. In general, we do not have high turnover of our support staff. The UoS also has a technical staff forum that meets twice a year offering mentoring, networking opportunities and discussion of technical training needs. Six support staff from chemistry are members, who in turn provide development mentoring to others. Further mentoring occurs through engagement with academic staff to advance skills in relevant areas such as enterprise and public engagement.

Figure 5.22. John Fosbraey (Chemistry technician, 14 years) says "he loves his job"; HE Technician of the Year (RSC, 2016) for his 'unstinting support and encouragement of his students'.

382 words

5.5 Flexible working and managing career breaks

The CHEMSTAFF page provides staff access to all policies, before getting in touch with HR, line managers or safety officer to discuss their personal circumstances.

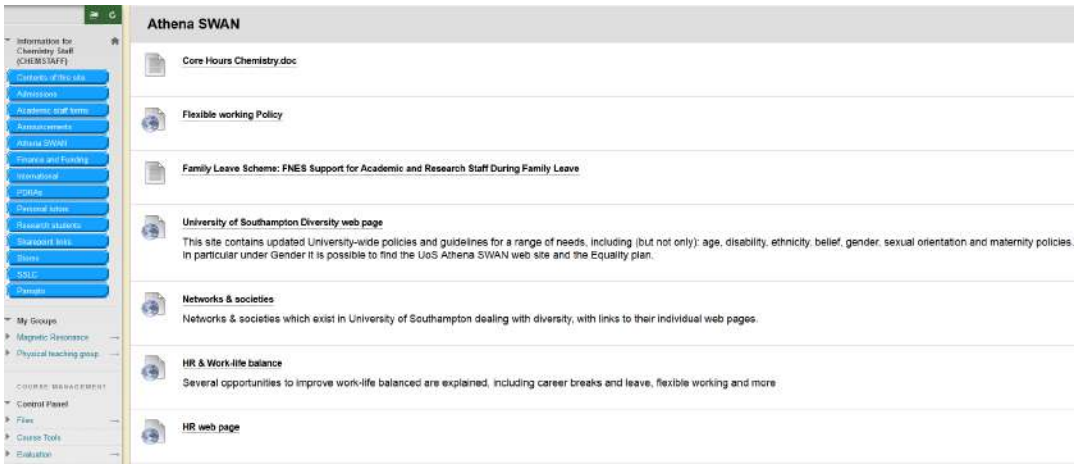


Figure 5.23. The Athena SWAN section of the CHEMSTAFF webpage; provides staff immediate access to policies on topics covered in section 5.5.

Chemistry is a **beacon** of family support at UoS, policies implemented from Athena SWAN bronze have been subsequently applied University-wide. The Family Leave Scheme, originating from a Chemistry bronze action and now a faculty scheme, covers maternity, paternity, adoption leave and is assigned on a case-by-case basis. It provides financial support (up to £10k / 6 months) to extend FTC or to allow continuity of research and career progression during periods of leave, especially beneficial for ECRs returning to research after a break. **(Actions 6.3**)

(i) Cover and support for maternity and adoption leave: before leave

Safety for expectant females is taken very seriously. As soon as pregnancy is disclosed, the safety advisor oversees a comprehensive risk assessment; additional requirements are assessed and met based on the individual's research and associated work environment.

- Chemistry follows the Faculty policy on maternity leave and provision for females and their supervisors during pregnancy.
- Preparation for cover during leave is discussed with the individual's line manager in the first instance, and targets are adjusted accordingly to account for leave.
- The HR officer provides a briefing for all staff on University policy and finance.
- FLS can be used to mitigate any impact on individual career, e.g. hiring replacement staff for hazardous laboratory work to allow the female to continue research in alternative environment.

"My line-manager, colleagues and H&S officer were very supportive throughout my pregnancy. We went through every detail of the chemicals and practicals to protect me from anything that could be a risk to my baby, allowing me to perform deskwork if needed. Before returning, I had a meeting with my manager to discuss future working hours. He was very supportive of my request to delay my return date. Overall I feel very lucky to have been working in this department whilst pregnant as I had a lot of support".
Dr Lizeth Avendaño, Teaching laboratory technician

(ii) Cover and support for maternity and adoption leave: during leave

- University policy allows new parents to take up to 12 months maternity leave, with full pay for the first six months (or 13 weeks with statutory maternity pay). Annual leave is accrued and carried over on return to work.
- Employees are eligible for full pay on maternity leave if they have 52 weeks service at the 15th week before expected childbirth. They must return to the University for 52 weeks following leave; if they resign within that time they must repay the additional maternity pay.
- The University is aware of the detrimental impact on FTC employees, the policy is under review. Chemistry mitigates this problem by extending contracts wherever possible to ensure at least 12 months remain when parents return to work.
- Staff are offered 'keeping-in-touch' days, arranged by their line manager, but often prefer to communicate through email and informal meetings as required.
- During absence, staff continue to receive departmental news and invitations to events by email, unless they choose to opt out of this.

- Arrangements for cover are made in consultation with the individual's line manager, e.g. supervision of the individual's research group (all students have a 2nd supervisor in addition to their primary supervisor; this person normally provides cover). Teaching assignments are fairly allocated to other staff.

> *"During leave, I have been in touch by email with colleagues and had informal meetings with my manager to discuss my return to work arrangements including, changing my working hours to part-time."*
> Ms Diana Fernandes, Laboratory technician

(iii) Cover and support for maternity and adoption leave: returning to work

A bookable quiet room, with a booking system gives priority to feeding mothers, including UG students, and is now equipped with a dedicated fridge to store milk. Adjacent baby-changing facilities, also used by breastfeeding UG students. (SA 7.1)

- Teaching and administrative loads for the first year of staff returning from leave are discussed with their line-manager and reduced accordingly.
- Requests for p/t working on return are always considered.
- The University nursery facilitates the transition back to work (2-minute walk from Chemistry); a University childcare voucher scheme is available.
- Extending employment for staff on FTC requiring more than 6 months parental leave is not straightforward if close to the end of a grant. Extensions are often limited to 3 months. Our FLS is used to extend the contract of staff where the funding body does not provide assistance.
- We will campaign the research councils and policy-makers for greater employment flexibility, to allow researchers to use the funds provided over a wider timeframe, also relevant for PDRAs wishing to reduce their %FTE. (**Actions 6.3, 7.1**)

Figure 5.24. In 2013, Dr Maria Concistrè took 6-months maternity leave on full pay, with 13 months left on her contract. On return, the Faculty financed an extension to Maria's contract by 7 months. Maria is currently a L4 researcher.

"I want to thank the Faculty for taking care of me, giving me the opportunities important not only for my research but also for my career and family life"
Dr Maria Concistrè

(iv) Maternity return rate

- Initiatives highlighted above are reflected in our data; all female staff who went on maternity leave since 2011, returned to work.
- One L4 female left for a new job after 12 months at the end of her FTC. The L1 and L2 females currently on leave have indicated they plan to return to work.

Year	Acad. staff	Prof. & Support staff
2012/13	1 x L4	-
2013/14	1 x L4	-
2016/17	-	1 x L1
2016/17	-	1 x L2

Figure 5.25. Maternity leave uptake.

(v) Paternity, shared parental, adoption and parental leave uptake

100 %M agreed that they had access to adequate provision to work flexibly and support their caring responsibilities, 2017.

- University policy allows eligible staff two weeks paternity leave on full pay (based on 26 weeks of service with the University at the 15th week before expected childbirth).
- Since 2012, 12 periods of paternity leave have been taken.
- Staff on paternity leave make their own arrangements for work cover. It is recognised that even though colleagues are willing this process should be formalised. (**Actions 6.4**)
- Currently the University does not pay split-parental leave, this is under review.

Year	Acad. staff	Prof. & Support staff
2012/13	3 x L4 1 x L5	-
2013/14	2 x L6	-
2014/15	2 x L6	-
2015/16	1 x L5 2 x L7	-
2016/17	1 x L6	-

Figure 5.26. Paternity leave uptake

"The arrival of our two children was certainly a big change for me, and I was very happy to be able to take paternity leave, and then work more flexibly afterwards. At that time I did not have significant administrative responsibilities, so the teaching timetable presented the biggest issue. Fortunately, my colleagues and line-managers were supportive, swapping slots and rescheduling. I didn't ever feel pressurised not to take important timeout with my family. This has been my experience throughout my time at Southampton, I have always felt that I can have these conversations with colleagues at all levels."
Professor Richard Brown

(vi) Flexible working

Flexible working is at the heart of our ethos in Chemistry, and we reflect that at all levels. Part-time working is negotiated on a case-to-case basis and handled by line-managers and HoD, trained to manage this.

Year	L1	L2	L3	L4	L5	L7	Total
2011/12	3M - 3M +			2M - 1M + 1F -		1M -	11
2012/13				2M - 4M +	1M - 1F +	1M +	9
2013/14	1F +			1M + 1F +		3M - 3M +	9
2014/15				2M - 1M +	1M - 1F + 1F -	1M -	7
2015/16					2F - 1F +	2M -	5
2016/17	1F -	1F +	1M -	1F +	1F +	2F + 1F -	8

Figure 5.27. Part-time working successes, all applications were approved (change in FTE indicated by + increase and - for decrease).

"Chemistry were supportive of my decision to work part-time and were very flexible in my working pattern to accommodate my needs."
Mrs Sally Dady, Senior Administrator

- Variations to working hours have occurred at all levels (both M and F).
- All applications for part-time working were approved; it is Chemistry's policy that unless there is a very good reason not to, applications will be supported.
- For academic staff flexible working is widespread on an informal basis and staff are free to organise their time flexibly around their core responsibilities. Focus group comments described this as "the main perk of the job".
- During annual appraisal work-life balance is discussed.
- Our flexible-working policy is available (website) and emailed to staff by the HoD. It is common practice that staff help each other to cover teaching slots.
- Timetabling of teaching is managed centrally, individuals can request changes for family

commitments and requests are matched whenever possible. 2016 a new policy allows staff to request 5 specific hrs/week without teaching, without special arrangements.

- Our positive attitude to part-time working is extended to UG and PGR students. F/t UG students have switched to p/t, and in 2017/18 Chemistry enrolled a BSc student directly onto a p/t degree. We have had a numerous successful p/t PhD students. (**Actions 2.2, 2.3, 4.1**)

> *"After I was diagnosed with anxiety disorder, I changed from full-time to part-time. The relief was immediate. I had time each week to spend on improving my wellbeing. Being part-time broke the cycle of suspend, resume studying, suspend."*
> Female part-time PhD student

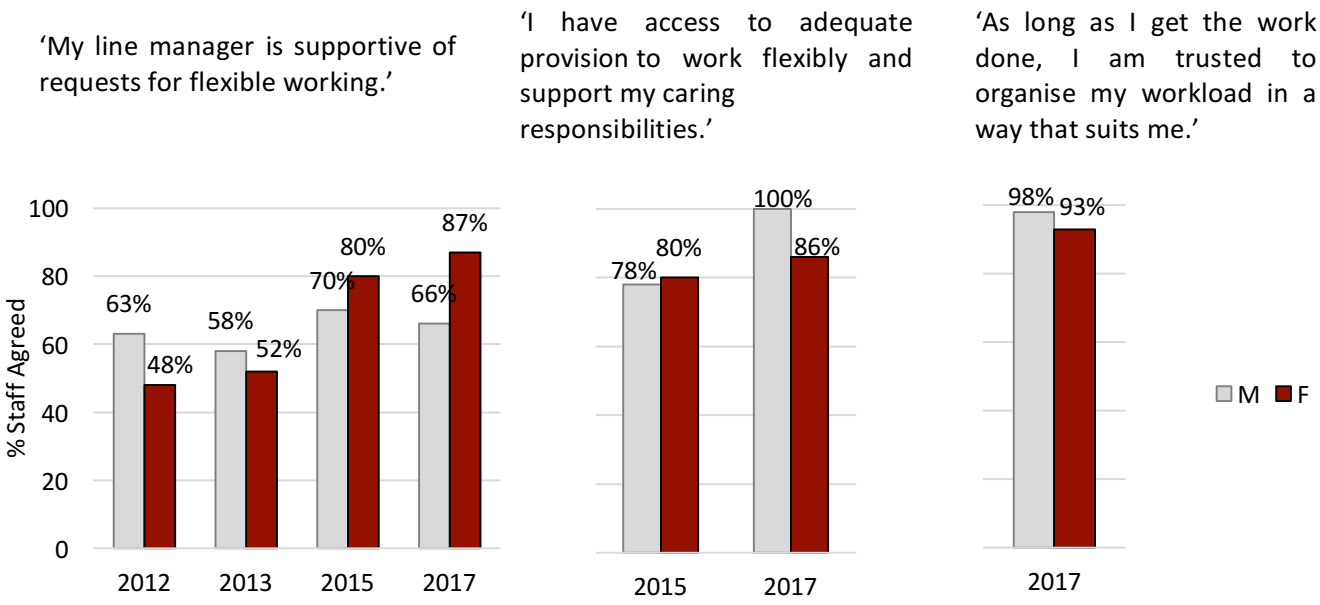


Figure 5.28. Response to questions on flexible working.

(vii) Transition from part-time back to full-time work after career breaks

When questioned, staff said that they felt 'fully supported' in this transition.

- A total of 14 staff made this transition in the last five years.
- A discussion with line-manager ensures that needs are met on a case-by-case basis.

Year	L1	L2	L3	L4	L5	L7	Total
2012/13				1M			1
2013/14				3M		1M	4
2014/15	1F			1M 1F		2M	5
2015/16				1M			1
2016/17		1F				2M	3

Figure 5.29. Number of staff transitioning from part-time to full-time work.

1320 words

5.6 Organisation and culture

(i) Outreach activities

Chemistry is a beacon of outreach with an extensive and evolving programme, designed for Year 5-13 (Key Stage 2-5) students and the general public. We aim to "stimulate interest from the earliest years, combat stereotypes, to train teachers to encourage girls to pursue STEM careers." [8]

Prof. David Read and Dr Simon Gerrard develop, coordinate and lead our outreach activities, with support from the Faculty Admissions and Outreach team and significant contributions from students and staff. Our events involve the whole department with significant female representation at every level, particularly amongst UG and PG students. One of our regular activities, 'slime & silly' putty, saw approx. 1000 visitors take part in 2017 alone. In addition to staff and the National Crystallography Service (Chemistry), 37 UG/PG volunteers contributed in 2017 (46 %F), and outreach and admissions are formally recognised in the staff workload mode (SA 1.5); staff participation reflects the gender ratio in the department.

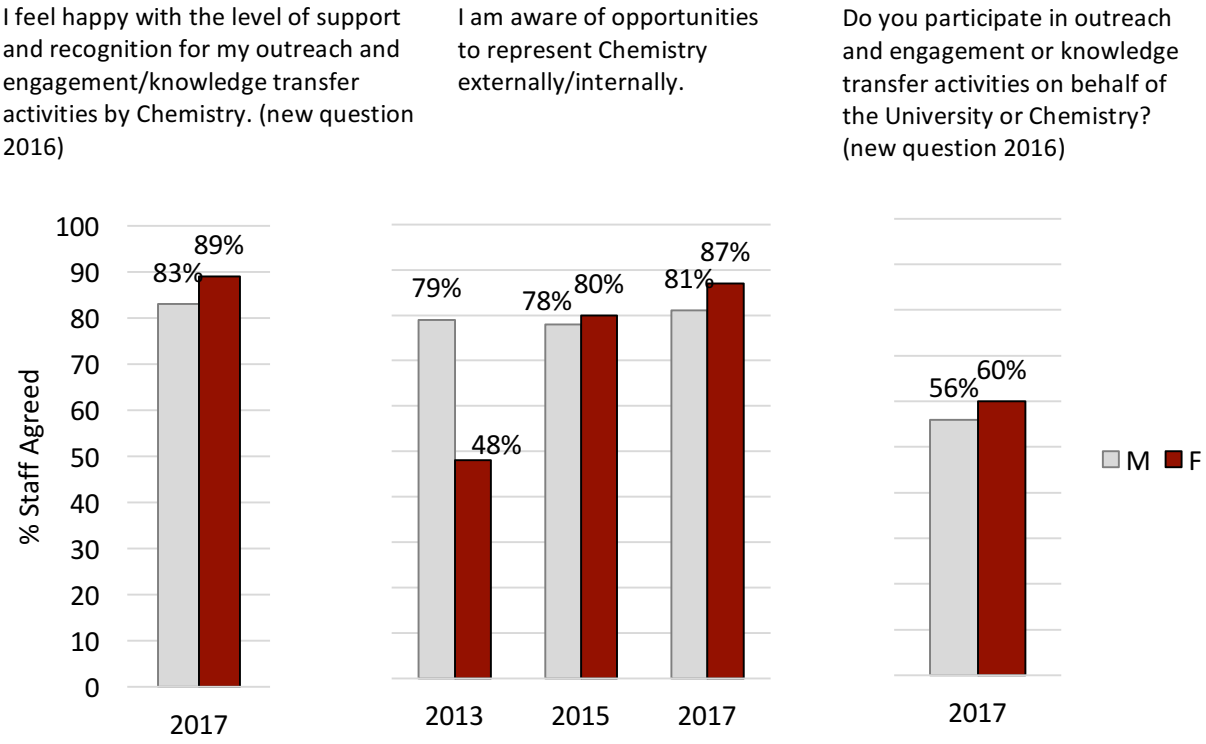


Figure 5.30. Responses to staff survey (academic staff).

[8] *Cracking the code: Girls and women's education in Science, technology, engineering and mathematics (STEM) UNESCO Report 2017*

We aim to increase staff involvement in outreach, through research/careers talks at schools and colleges, and in-house activities. We currently have 279 school/college contacts from primary to sixth-form (Year 5-13), including grammar, comprehensive and independent schools, both mixed and single-sex. We also work closely with the University's widening participation manager, and in 2017, made contact with an additional 8 WP schools. Our contacts also include a local home-schooling group, who attend events most years; we welcome home-schooled individuals. (**Actions 1.5, 1.6, 1.7, 7.3**)

Figure 5.31. We have close, long-standing contact with 6 all-girls schools who attend key events every year.

We run seven headline in-house events:

- **Twilight Laboratory Sessions** (Y12) running for 12 years, this hands-on practical event runs over 9 days, and includes one all-female event. Due to high demand, we introduced a new Summer Twilights event in 2017, running over 5 days. Good conversion to applications, including for STEMM/Chemistry, with increasing %F.

TWILIGHTS	Attended	% F	UCAS Apps to UoS	%F	STEMM	%F	Chemistry	%F
2014/15	279	**47%**	55	**49%**	48	**48%**	12	**33%**
2015/16	317	**57%**	62	**44%**	53	**40%**	14	**50%**
2016/17	369	**59%**	79	**61%**	64	**59%**	9	**89%**
2017/18	309	**55%**	-	-	-	-	-	-
Summer 2017	98	**58%**	-	-	-	-	-	-

Figure 5.32. Twilight event attendees and UCAS application breakdown; 21% of attendees (61 %F) applied to study at the UoS (2016/17).

- **Work-Shadowing** (Y12) was the first event of its kind in the University, running since 2002. Students considering a degree in a chemistry-related area, apply to shadow PG/PDRA research chemists. **Experience Day** (new, 2017) combined work-shadowing with established problem-solving lab skills workshop and interactive talks.

WORK-SHADOWING	Apps	% F	Allocated	% F	Attended	% F	UCAS Apps UoS Chem	% F
2013	86	**43%**	86	**43%**	-	**-**	23	**35%**
2014	55	**47%**	54	**44%**	50	**50%**	16	**25%**
2015	76	**45%**	76	**45%**	71	**46%**	16	**27%**
2016	74	**62%**	50	**60%**	45	**58%**	9	**44%**
WS 2017	65	**58%**	54	**56%**	50	**54%**	-	-
Exp. Day 2017	38	**45%**	37	**46%**	34	**44%**	-	-

Figure 5.33. Work-Shadowing event applications, allocations and attendees, and UCAS application to Chemistry at the UoS.

- **Natural Product Masterclass** (Y10) trialled with 6 schools in 2016, increased to 12 days in 2017. 17 Schools attended, 305 students, including one all-girls school, 7 new WP schools, a local home-schooling group and one home-schooled child. 37 UG volunteers, 35 %F. Alumnus-funding enabled us to provide 8 schools with funding towards transport and teaching cover costs. Otherwise they would not be able to attend.

- **Chemistry Challenge** (Y7/8) forensics-style challenges; pupils competing in mixed teams of 4, judged by academic staff. Consistently high %F attendees.

- **Science All Around Us** (Y5/6) hands-on, inspiring activities for children from local schools. Increasing %F volunteers from 2013-2017.

CHEMISTRY CHALLENGE	Attended	% F
2014	53	**60%**
2015	60	**55%**
2016	24	**58%**
2017	68	**59%**

SCIENCE ALL AROUND US	Attended	UG/PG Volunteers	% F
2012	232	20	**50%**
2013	236	19	**47%**
2014	391	25	**56%**
2015	347	19	**63%**
2017	109	14	**79%**

Figure 5.34. Chemistry Challenge and Science All Around Us event attendees and volunteers; %F of Science All Around Us volunteers consistently high (average 65 %F over 5 years).

- **Christmas Science Lecture -** an exciting show with educational demonstrations. 252 attendees (2016).

- **Southampton Science & Engineering Day** - major University public science fair with talks and demos for all ages. Running for 15 years, it is now part of the Southampton Science & Engineering Festival week. Received British Science Association award for 'Best

Engineering Event' in 2009 and 'Best STEM institution event' in 2014. Chemistry's Gill Reid co-founded this event.

We also run a **Chemistry Undergraduate Ambassadors Scheme** part of a University-wide scheme, this optional Y3 module gives students Chemistry teaching experience in schools. Since 2016, we have included this paragraph in invitations for all outreach events (SA 1.2):

> *"We will also endeavour to maintain a gender balance at these events, as part of our department's wider Equality and Diversity ethos. With this in mind, it would be fantastic if you are able to do the same within your groups (if applicable), but we acknowledge this depends entirely on your students and their interests."*

TWILIGHTS	UG/PG Volunteers	% F
2013	22	**46%**
2014	16	**63%**
2015	14	**50%**
2016	14	**29%**
2017	19	**47%**
Summer 2017	8	**38%**

SCI & ENG DAY	UG/PG Volunteers	% F
2013	52	**39%**
2014	43	**44%**
2015	27	**41%**
2016	33	**49%**
2017	39	**49%**

Figure 5.35. Twilights and Science & Engineering Day event volunteers; average 54 %F (Twilights) and 44 %F (Sci & Eng Day) volunteers over last 5 years.

Figure 5.36 Student UG Volunteers; recruitment is achieved by advertisement to UG and/or PG students (depending on the target age group).

"I enjoyed applying knowledge from what I had learned in lesson into a real-life situation. It helped me to understand how things worked in reality rather than in theory/diagrams."
Female student from Barton Peveril College

In 2016/17 we introduced the Ishbel Campbell Award to recognise an individual who has promoted EDI within Chemistry, making a positive difference through significant contributions to outreach and engagement with Athena SWAN. (SA 8.2)

Figure 5.37. UG Tim Deehan receiving the Ishbel Campbell Award for commitment to Outreach; Ishbel was a founding academic in Chemistry, a committed teacher and an inspiration for women in science.

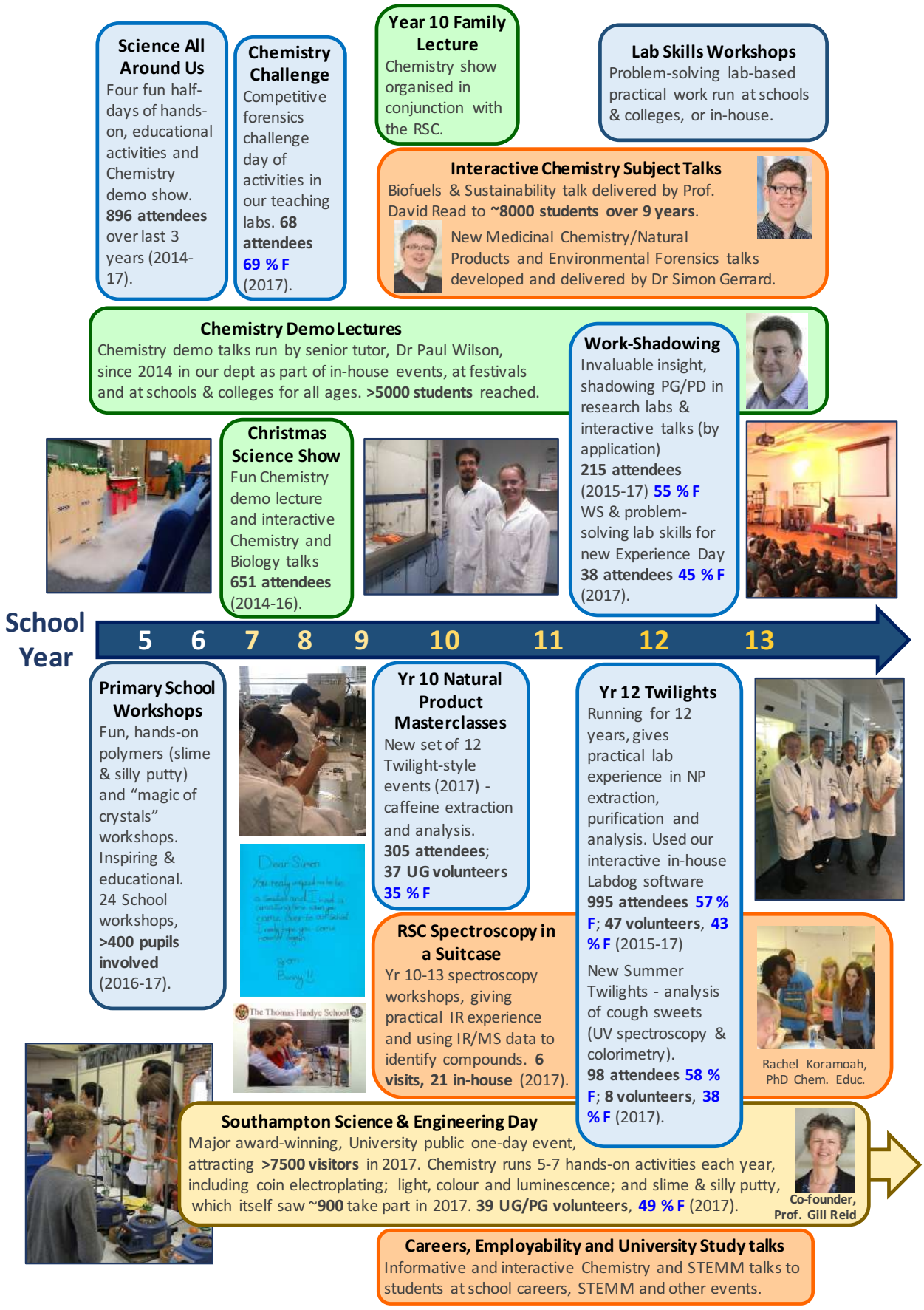


Figure 5.38 Summary of our Beacon outreach programme.

1003 words

(ii) Visibility of role models

In our 2017 survey 94 %M, 83 %F agreed that "women as well as senior men are visible role models in Chemistry".

Since our AS Silver Award in 2015, within Chemistry there has been a considerable increase in the visibility of female role models:

- Professor Andrea Russell served as DoP for 5 years completing her term in 2017.
- In 2016, Professor Rachel Mills was appointed as the first female Dean of the Faculty.
- Professor Gill Reid was appointed as the first female Head of Chemistry, 2016.
- Professor Syma Khalid became Head of Teaching in Physical Chemistry (following promotion to Professor, 2015).
- Dr Marina Carravetta became Year Tutor for Parts 3/4 and Employability Coordinator.
- Dr Lynda Brown received the Dean's Prize and was shortlisted for the 2017 VC award for her work on EDI.
- Female representation is very evident within the wider senior management structure in the Faculty, including Amanda Pervin (Head of Faculty Operations), Karen McKinstry (Head of Faculty Finance), and Jo Hickey (Deputy Head of Faculty Finance); all of whom sit within Chemistry.
- Between 2014-2017 we had 180 seminar speakers, 20 %F, we intend to raise this. (**Actions 6.5**)

Figure 5.39. Professor Andrea Russell (2nd from left, co-founder of WiSET) unveils a mosaic collage of Ishbel Campbell (1906-1997) composed of 'selfie' photos of women at Southampton.

(iii) Beacon activity

Leadership and Innovation
• Chemistry is committed to increasing and promoting diversity through an extensive programme of outreach and public engagement. • Innovations include statements on invitations to participating schools/colleges to encourage gender balance, raising awareness amongst teachers; pro-active selection of outreach teams to ensure diversity and gender balance at all events. This is evidenced by high %F attending events, growth in %F in Y1 intake and increase in %F volunteers delivering events. (SA 1.2) • Prof Gill Reid has co-written a memorandum of understanding between UoS and Winchester Science Centre to "bring research to the world", specifically addressing equality and diversity. (**Actions 1.7**) • We have established a p/t pathway through our BSc programme (RSC Accredited). The programme has already been used to help several students with particular needs. (SA 7.5) • The leaky pipeline: a key part of this is the transition from PhD to PDRA; we have enabled many PDRA's to work p/t; Fellowships have been undertaken p/t, extending the funding. period. (SA 2.2, 2.3, 4.1) • We continue to be a beacon of outreach practice across UoS and externally (other HEIs, RSC events, partner organisations) (**Actions 1.6, 1.7**) • We are creating scholarships for p/t study by engaging with alumni and industry. (**Actions 2.1**) • Chemistry is leading on the first EDI EPRSC bid for £500,000 to develop a workshop and online resources to address negative behaviours well known to effect women in STEMM.[9]
Sharing
• Prof Gill Reid (Chemistry) co-founded the Southampton Science and Engineering Festival in 2001. This annual flagship event involves virtually all STEMM and STEMM-related disciplines in the UoS, as well as external partners (e.g. Winchester Science Centre, Marwell Zoo) now reaching an audience >7000. • Working with the RSC Outreach Working Group and other partners (Salters, Wellcome Trust) to increase consideration of EDI issues within the outreach strategy at a national level. • Southampton hosts Chemistry FE/HE teaching conferences (ViCE-PHEC 2016, annual RSC Post-16 Teachers' Conference). • Sharing of best practice initiatives with departments internally and externally (STEMM and non-STEMM); workload model (SA 8.4); email guidelines (SA 7.4); EDI financial commitment (SA 8.3); first year survey (SA 2.1); personal tutee system, including staff training (SA 2.4, 6.8)
Ambitions
• To increase opportunities for part-time UG and PG programmes, recognising there still many barriers which can exclude individuals, e.g. with caring responsibilities, financial hardship. P/t pathway will be actively advertised, also opening an opportunity for upskilling those in Chemistry careers. (**Actions 2.1, 2.2**) • Senior staff to engage with relevant bodies (e.g. Student Finance England) to develop easily accessible routes to funding for p/t study. (**Actions 2.3**) • We recognised in the case of 'Standard Grants', current guidelines around grant extensions are such that the options for appointing p/t PDRAs are limited. We will engage with funding bodies including UKRI, Royal Society, Wellcome Trust, etc., to create and increase visibility of pathways that facilitate more flexible working practices for PDRAs. (**Actions 4.1, 7.1**) • To share our best practice and progress further internally and externally (**Actions 7.3, 8.3**)

[9] ASSET 2016: experiences of gender equality in STEMM academia and their intersections with ethnicity, sexual orientation, disability and age, report by Equality Challenge Unit, 2016.

(iv) Culture

Chemistry's culture is extremely collegiate, friendly and inclusive. This is reflected by the low staff turnover (no female has left since 2011), and high staff satisfaction (**Figure 5.33**).

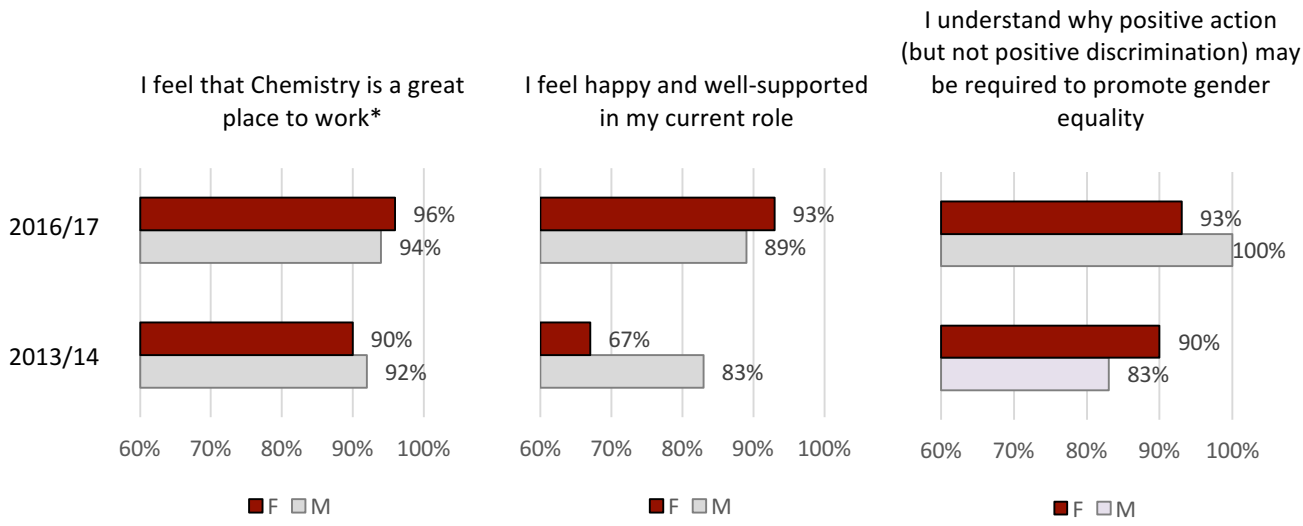


Figure 5.40. Responses to staff survey. *asked to comment on both genders, results from own gender shown.

In recent years, several staff have required periods of leave due to ill health; colleagues have willingly stepped in at very short-notice. When required, additional cover has been provided by appointment of FTC staff.

Figure 5.41. The Chemistry tearoom.

The heart of the department is Chemistry's tearoom (refurbished 2017), open to all (UG, PG and staff) both mornings and afternoons. Socialising regularly promotes an inclusive culture and this is where most networking occurs. Students (at induction) and newly-appointed staff are encouraged to use this relaxed opportunity to meet with friends/colleagues; feedback praised this interaction greatly. Many informal meetings (e.g. PDRA talks), focus groups, and social/admissions events take place here, giving the department a real sense of community.

We co-run our Faculty International Student Support Group, which nurtures an integrated community within our EU/international students; the only such initiative in the University, commended by Student Union VP Education (2008) and VP (2009).

- Co-run by Chemistry since 2010 for UGs, included SFY and PGT students from 2015.
- Supported by international student tutors, administrative staff and funding.
- Welcome meeting and comprehensive information pack provided.
- Friendly, free lunchtime feedback sessions, skills training and science-specific English language classes.

Figure 5.42. Left: welcome trip to New Forest for EU/overseas UG and PG, 2017; right: trip to RS Science Exhibition, London for EU/overseas UG and PG, 2017 (with Dean, Prof. Rachel Mills)

Athena SWAN principles are promoted in all we do. EDI training is compulsory for all staff and we are proud to have 100% completion. Staff retrain every four years, monitored by the PA to HoD; 94% staff agreed they understood the importance of promoting gender equality and understanding unconscious bias.

We encourage feedback and value the opinions of all. Following our SE survey, results were presented in focus groups (L7, L6/5, L4, support staff) and discussion encouraged. A comments box was also placed outside the tearoom for anonymous feedback.

From this, we identified key areas for action to improve our culture:

- **Value and recognition, celebration of successes:** Established a whole department newsletter, published every 6 months. (SA 7.5) (**Actions 8.5**)

- **Email and work-life balance:** In response to concerns at being 'constantly connected', we composed guidelines for staff-staff emails (staff-student policy established in 2012, Bronze action). The EDI team will gather feedback on effectiveness (SA 7.4) (**Actions 7.4**)
- **Communication:** We are developing a role-play based workshop to encourage respectful relationships and facilitate colleagues to choose professional, unbiased behaviours beneficial to themselves and those they interact with. Our department is now leading an Institutional EPSRC EDI bid on this work. (SA 7.4) (**Actions 8.6**)


University of Southampton

Chemistry Newsletter

September 2017

Inside your Newsletter:

1 Introduction
2 FED Awards 2017
3-4 Celebrations and Congratulations
4 Promotions
4 Building News
4-5 Staff 1 to 1
6 Undergraduate contributions to research papers
6 Technicians make it Happen
7 Outreach
8 Beyond Chemistry
9 The Science of Cupcakes

Important Dates

University Open Days
Saturday 9 September 2017
Sunday 10 September 2017
Saturday 14 October 2017

Postgraduate Open Day
Wednesday 22 November 2017

Freshers:
11 September- 6 October 2017

Semester 1:
Thursday 28 September 2017 - Saturday 27 January 2018

Christmas vacation:
Sunday 17 December 2017 - Sunday 7 January 2018

Semester 1 exams:
Monday 18 January - Friday 27 January 2017

Semester 2:
Monday 29 January 2018 - Saturday 16 June 2018

Introduction

Professor Gil Reid, Head of Chemistry

As Head of Chemistry, it is my pleasure to introduce our inaugural Chemistry Newsletter. The newsletter, which will be published twice a year, is intended to enable all members of the department to share their own individual successes, as well as team achievements, whether personal or professional. Success in Chemistry at Southampton now and in the future is undoubtedly down to the spirit, commitment and collegiality of everyone in our community. We can rightly be extremely proud of all the great things that have happened over the last year, and this is one way to enable us all to reflect on and celebrate these successes.

I hope you will all contribute your news to future editions so that we can enjoy sharing it!

Do you have an article you wish to contribute to a future edition? Please email Lynda Brown L.J.Brown@soton.ac.uk or Dean Dunlop on D.Dunlop@soton.ac.uk

Athena SWAN Silver Award

Figure 5.43. First edition of our Chemistry Newsletter, September 2017.

(v) Timing of departmental meetings and social gatherings

87 %F, 85 %M agreed meetings, developmental and social events are scheduled between 9-4pm.

- In 2012 we implemented a core-hours policy ensuring all meetings take place within family-friendly hours of 9am-4pm. Seminars are scheduled for a Wednesday afternoon to avoid clashes with teaching. (Bronze action)
- Research groups organise their own meetings, but staff are flexible and take into account work-life balance issues.
- The only exception is the RSC seminars, starting at 5pm to allow external attendance. The opportunity to meet speakers during the day is available to staff to meet the needs of those with family/caring commitments.
- Staff social events are at varied times; colleagues catch-up over lunch, graduation parties are within the working day, coffee is offered at the end of seminars and larger social gatherings organised at weekends in term-time (our annual family barbeque is held at a weekend).

Figure 5.44. Sharing diversity in cuisine over lunch embracing our multicultural society

(vi) HR policies

- **Chemistry makes it clear its policies in relation to equality. (Figure 5.45)**
- **The HR Business Partner is involved at an early stage in the application of policies and procedures to ensure consistency.**

The HR partner advises the HoD of policy updates at monthly meetings to ensure understanding and cascading of information (via email and/or at all staff meetings). Previously HR policies were circulated on an adhoc basis, over the last two years the University's 'Equal Opportunities'and 'Dignity at Work and Study' policies are emailed to all staff annually, also contained in the induction pack.

Disciplinary procedures are laid out on the UoS HR pages on-line. When a grievance is raised, it is communicated to the Executive Group and guidance sought from the HR partner for an appropriate course of action. Our survey results (Figure 5.45) reported that 92 %M and 83 %F are 'confident that my manager would deal effectively with any complaints about harassment, bullying or offensive behaviour'. The EDI team is concerned that some staff may feel that their grievances are not taken seriously. Therefore, we have designed an interactive workshop for staff which will seek to improve communication and professional behaviour. We feel that a hands-on approach may be most effective at improving workplace culture and gender equality. (**Actions 8.6**)

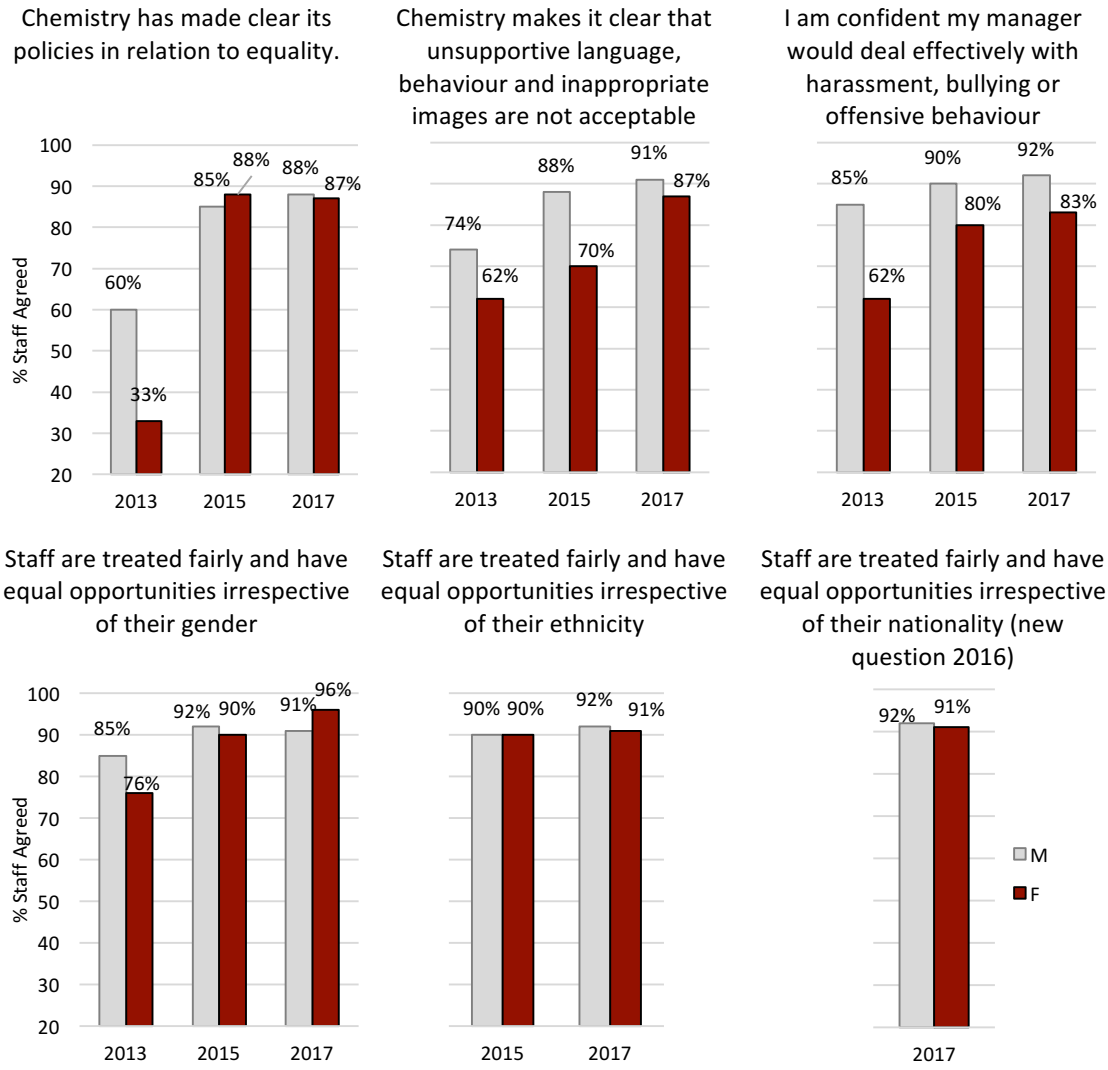


Figure 5.45. Responses to staff survey questions on policy and staff behaviour

(vii) Workload model

- Chemistry operates a workload tariff model based on a points system, with a full teaching load corresponding to 450 points/year, or approximately 30% FTE, for full-time staff.
- From 2016-17 we allocated 35 points to outreach/admissions.
- The teaching tariff is adjusted according to class size, module coordinator roles, methods and development of new teaching to reflect the increased effort.
- Pastoral care duties and significant administrative duties are included in the tariff.
- Workload allocation is reviewed annually in discussion with line-managers.
- New members of staff are allocated reduced teaching, administrative and outreach workloads, building up over 3-5 years to develop skills. This supports career start-up (together with PhD studentships and financial support).
- PDRAs are allocated a teaching workload of 100 points. Formally recorded, this recognises the extent and importance of their involvement. (SA 5.4)
- Senior roles are rotated on a 3-5 year cycle, appointments to roles are via consultation with CPRC on the basis of skills, workload tariff (ensuring that a few staff do not have all the demanding roles and providing a teaching workload reduction for such roles) and consideration of leadership skills development.

The details of the tariff model are available to all staff, the usefulness of the model is checked and weightings of parameters adjusted to account for changing workloads attributed to certain tasks. **The tariff is also adjusted to allow for part-time working or temporarily varied for flexible working needs**.

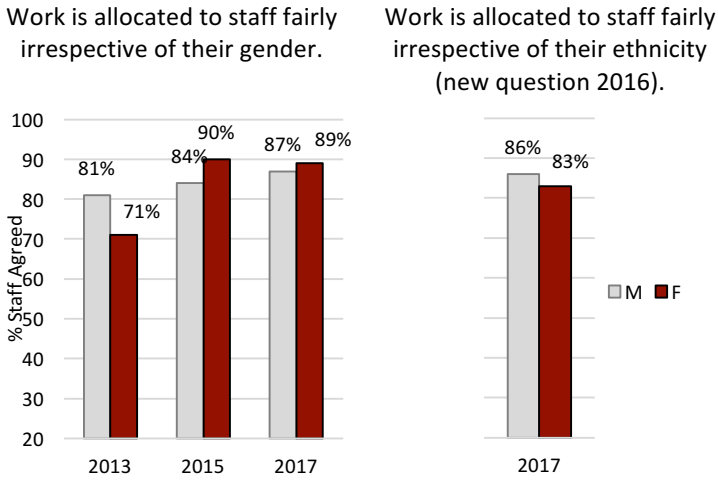


Figure 5.46. Responses to 2017 staff survey questions on work allocation, to increase transparency a histogram plot of workloads is presented and published annually.

(viii) Representation of men and women on committees

The %F on most committees exceeds or matches %F staff in Chemistry, monitored by HoD to ensure fair representation without overloading females in the department.

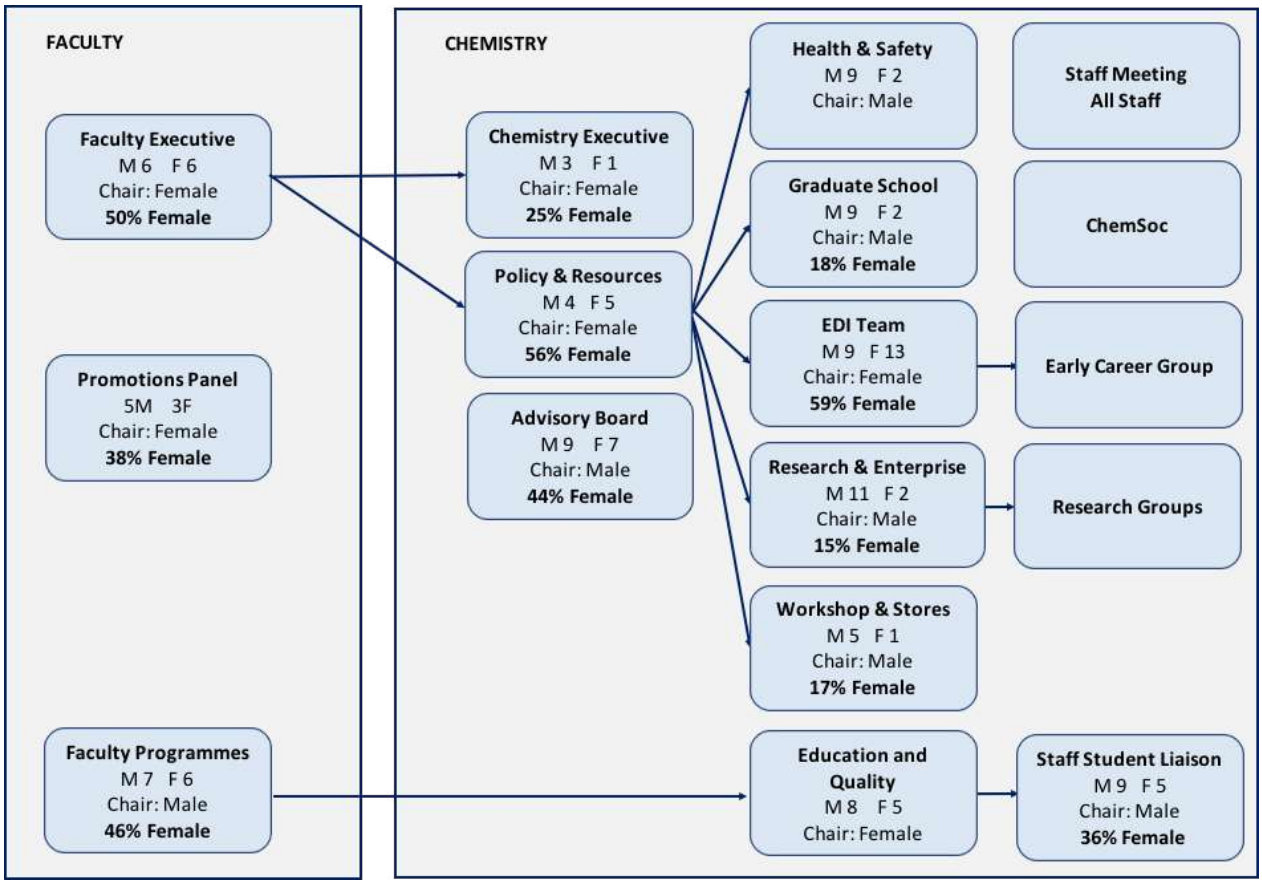


Figure 5.49. Committee structure and %F on each committee.

- Committees feed up to Chemistry Policy and Resources Committee, and Chemistry Executive Group, where decisions about policy and personnel are taken.
- Senior positions are determined by the management/administrative roles already taken on by staff on these committees.
- Senior roles are selected by consultation with staff and allocated based on the workload model; the term is usually 3-5 years, except the permanent roles of Safety Advisor and Facilities Manager.
- Committee structure and management arrangements are covered in induction material and communicated to all staff via staff meetings, PDRA Forum, induction and email.
- Junior staff attend committees to provide experience and have input.
- Decisions are taken by *CPRC* in response to input from the Faculty, and numerous 'bottom-up' mechanisms, e.g individual requests, appraisals, conversations with mentors or from discussions over coffee. Decisions are fed-back through biannual all-staff briefings, PDRA forums and away-days, providing. These provide an open forum for discussion of decisions, aiding transparency and inclusion in the process.
- The ECR group meets to support career development and networking of PDRAs and this feeds into senior management on the EDI Team.

Committee	2013				2014				2015				2016				2017			
	F	M	% F	C*	F	M	% F	C*	F	M	% F	C*	F	M	% F	C*	F	M	% F	C*
Chemistry Executive	1	3	**25**	M	1	3	**25**	M	2	2	**50**	M	2	3	**40**	F	1	3	**25**	F
Policy & Resources	3	4	**43**	M	5	3	**63**	M	6	3	**67**	F	4	3	**57**	F	5	4	**56**	F
Advisory Board	3	13	**19**	M	5	10	**33**	M	6	10	**38**	M	7	9	**44**	M	7	9	**44**	M
Heath & Safety	3	8	**27**	M	4	8	**33**	M	3	9	**25**	M	2	9	**18**	M	2	9	**18**	M
Graduate School	3	12	**20**	M	4	9	**31**	M	4	9	**31**	M	3	12	**20**	M	2	9	**18**	M
EDI Team	11	6	**65**	M	9	10	**47**	M	8	9	**47**	F	9	9	**50**	F	13	9	**59**	F
Research & Enterprise	3	7	**30**	M	3	8	**27**	M	3	7	**30**	M	2	9	**18**	M	2	10	**17**	M
Education & Quality	4	11	**27**	F	3	11	**21**	F	3	9	**25**	F	5	6	**45**	F	5	8	**38**	F
Stff/Student Lialson	6	12	**33**	M	9	14	**39**	M	8	14	**36**	M	8	16	**33**	M	5	9	**36**	M
Stores & Workshops	0	6	**0**	M	0	6	**0**	M	0	6	**0**	M	1	6	**14**	M	1	5	**17**	M

5.50 Chemistry Committee's membership over the last five years, * C = Chair

(ix) Participation on influential external committees

Chemistry actively encourages all interested individuals to participate in external committees/bodies. Typically, CEG examines the complete staff list, identifies talents and expertise and after discussions with line-managers approaches the individual. We also encourage participation through discussions during staff appraisals. Examples of staff involvement is given (Figure 5.51).

Staff	External Committee
Prof. Phil Bartlett	President of the International Society for Electrochemistry Royal Society URF Panel
Prof. Andrea Russell	IUPAC Committee, Diamond Panels
Prof. Gill Reid	RSC Council (2011-2015) Chair RSC Outreach Working Group (2014-2018);
Prof. Malcolm Levitt	European Research Council Panels
Prof. David Read	Curriculum and Assessment Working Group (RSC), influencing GCSE and A-level curricula
Prof Jeremy Frey	European Research Council Panels

1903 words

6. Case studies: impact on individuals

Dr Lynda J Brown
Senior Research Fellow in Organic Chemistry (ERE)

In 2003 I returned to Chemistry as part-time PDRA (0.6 FTE) after having my first son. A year later I took a second maternity break (one year) and returned to the department for a further part-time PDRA. Supporting my independent career, mentors suggested that I should apply for a RS Dorothy Hodgkin Fellowship, to allow me to direct my own research whilst maintaining the flexibility I required with two children. I secured the DHF; for the first four years I worked 0.6FTE then moved to 0.8FTE and contributed to REF2014. In 2014 the department offered me a permanent academic position, I wanted to remain research focussed and upon my request I followed a research-only pathway.

My husband is also at UoS and whilst our children were young we managed to work a flexible shift system, one parent starting work early to allow collection of the children, and the other a late start to allow drop-off. I never experienced any resistance to my part-time working, I have only ever felt supported and accommodated and significantly, the department has never insisted on fixed working days, which has allowed me, not only to work from home, but to accumulate time off to alleviate the difficulty of finding childcare during the school holidays.

In my academic career to date I have been supported and encouraged by senior female mentors, line-mangers and colleagues, I have grown in confidence and leadership ability through their nurturing and courses such as Springboard, and was promoted from L4 to L5 in 2013. I have worked on EDI in Chemistry for a number of years and my work has been recognised by a Dean's award in 2013 and shortlisting for the VC award in 2017.

Dr Russell Minns
Royal Society University Research Fellow (ERE)

I joined the UoS in 2011 as a RS URF, initially on a fixed term contract. The department supported me through reduced teaching and administration roles which allowed me to obtain Fellow of the Higher Education Academy status through completion of PCAP. Further development opportunities in leadership and management enabled me to start to build a research group, ensuring the Fellowship was a success. Despite initially being on a FTC, I was always given exactly the same opportunities and support as any member of permanent academic staff. Financially, the department has supported the development of my research through two PhD studentships and in 2016 I became a permanent member of academic staff. Throughout, I have had an extremely supportive mentor who is a constant source of encouragement, advice and support.

Since joining the department I have had one period of paternity leave and due to the complexities of family life with three young children and the various travel requirements of the job, I have always been given the freedom to work flexibly on a very informal basis. A significant proportion of my research is performed at central laser facilities where beamtime allocations can be of the order of 3-4 weeks at a time. This obviously puts significant strain on family life, particularly as my wife is self-employed and suffers health problems that flair up rapidly such that preparing for them is impossible. The flexibility afforded by Chemistry means we can organise our work requirements around childcare, often at short notice.

Through the efforts of my line managers and the wider chemistry community I have always felt supported through these periods such that the impact on my family life and career has been minimised.

Dr Mark Light
X-ray Diffraction Manager (ERE)

I joined the UoS as a PDRA with the National Crystallography Service in 1998 and was subsequently appointed to the permanent role of X-ray diffraction manager in 2004. During the following years, my professional development was fostered by my line-managers and senior colleagues, enabling me to develop skills outside the role, such as teaching, student supervision and contributing to grant proposals.

As I reached the top of level 5, I expressed my desire to develop my technical role into a research direction. Senior management were very supportive of this idea and put things in place to enable the transition. I was assigned an academic mentor to help me fulfil my potential and was provided with a 3-year studentship to get my research started. As a result, my transfer from a technical to academic job pathway was smoothly completed in 2016.

At this time, I also talked to a member of the promotions panel who helped me align my ideas and goals with the requirements for promotion, and provided detailed and constructive feedback on a recent application. This was extremely useful in shaping my future plans and promotion expectations/aspirations.

As a manager of two research facilities, my workload does not fit easily within the University job family model and I had the reassurances of management that they understood this position. I have a reduced teaching load, and Chemistry effectively rewrote my job description allowing me the scope to develop personally and intellectually.

I have always felt very appreciated and supported throughout almost 20 years in Chemistry and indeed this support has improved throughout this time. In particular, I have found senior research staff extremely supportive of my ‘early career’ needs in terms of both advice and practical assistance.

Dr Marina Carravetta
Royal Society University Research Fellow
Assistant Professor (ERE)

I joined the UoS in 2003, first as a PDRA, then a URF and then promoted to Associate Professor a year ago. As an early career researcher URF, I received excellent mentoring from a senior female academic in a different research section. She has been my role-model, my first point of contact for general discussion and advice, helping me establish my own, independent research career.

In 2011, I gave birth to my son and after eight months of maternity leave, I returned to work full-time, by choice. My son was in the University daycare just across the road so I could see him often. My husband did work at the University, but then moved to a company and his work is now not very flexible. In 2015 my son started school, I changed my work arrangements to 0.8FTE. When I asked my line-manager to go part-time, they were fully supportive and this was complemented by extended discussions with senior female mentors on career choices. From their advice, I was able to identify key actions to allow me to focus on the targets required to achieve promotion. I was promoted to Associate Professor whilst on a part-time contract, demonstrating that progression is not measured based on %FTE, but on academic achievements.

Working daily on reduced hours, allows me to do the “school run”, maximising quality time at home with my son. My core teaching is set within my working hours. School holidays are shared, part of the time my husband takes my son to visit family in Norway allowing me to work full-time. For the remainder, I take my son to Italy where I am able to work on article/grant/lecture preparation, whilst valuing time shared with grandparents and extended family. I cannot express warmly enough how fortunate I consider myself for having a fulfilling career without sacrificing my family time.

Mrs Julie Herniman
Senior Experimental Officer, Mass Spectrometry (TAE)

I started at the UoS in 1998 as a technician in mass spectrometry on a 3-year, fixed-term contract. I was previously a technician at Cardiff University for 9 years, but mass spectrometry was a new field for me so I had lots to learn. Fortunately, I had a great mentor, Professor John Langley, who patiently passed on his knowledge and experience. At the end of my contract, the facility had expanded and with the backing of the HoD, I was taken on permanently as a technician and subsequently promoted to the post of experimental officer in 2002.

I have continued to train in modern analytical techniques and have taken courses in both mass spectrometry and chromatography to keep abreast of scientific developments and innovations. I was selected to attend Springboard Women's Development Course and this gave me the confidence to enrol to study for a part-time PhD. My working week is apportioned to allow me to spend time completing research and writing papers towards this. I am encouraged to attend national and international meetings and regularly give poster and oral presentations.

I have now been promoted to senior experimental officer and work alongside colleagues in the Characterisation and Analytics research group. I currently lead the operation and maintenance of a range of instruments and train facility users. With a particular interest in SFC-MS, I have been given the opportunity to work with industry to promote the use of this technique to other facilities. I support and mentor members of the mass spectrometry research group and I am co-supervisor to 2 PhD students.

1430 words

7. Further information

Athena SWAN is fully embedded in the culture of Chemistry and we are recognized as a leader of best practice within the UoS. We have mentored other departments, sharing our initiatives, polices and workload model. We have some prominent female role-models recognized internally and externally.

Professor Andrea Russell

Prof. Andrea Russell, was appointed as lecturer in 1997, was promoted to professor in 2007. At each step of the promotions process, Andrea received encouragement, support and guidance within Chemistry and in UoS more widely, by actively engaging in a number of development and networking programmes. All these activities contributed to her personal and professional growth. Andrea provides mentoring support to many junior colleagues across UoS, and has contributed in the "Women into Leadership" program for L4 female staff and the "Springboard" course for academic women. She is a co-founder of the WiSET group, which has now expanded to include non-STEMM subjects. She instigated the annual "Ishbel Campbell Lecture", in which prominent speakers are invited to talk about their career path and personal achievements.

Andrea led our first Athena SWAN application. As Director of Programmes (2012-2017) she has led the evolution of our curriculum with great concern for student needs. She has served the national and international chemistry community through the RSC, ISE, and IUPAC. She has organised a number of international symposia and conferences (e.g. Faraday Discussion and Gordon Conference). In each of these roles she has sought to increase the profile of female scientists.

Professor Gill Reid

Prof. Gill Reid, currently Head of Chemistry, joined the department as a lecturer in 1991, working her way up to Professor (2006), whilst also bringing up her two children in a period where the concept of a 'work-life balance' was unusual in academia and there were few role-models for female academics. Gill has a strong commitment to education, outreach and public engagement. She led Chemistry's Outreach Programme from 2000-10, leading several successful EPSRC and RSC projects in this area, receiving both University and RSC awards for her work in promoting chemistry.

Gill has worked with the RSC for many years, serving on Dalton Council and later as an elected member of RSC Council (2011-15). She currently chairs the Outreach Working Group responsible for delivering the RSC's strategy for promoting Chemistry to young people and to the public. In 2002, she co-founded the "Southampton Science and Engineering Day." Originally involving a small group of departments, this has event now attracts >7000 visitors each year.

Gill always finds time to be a mentor to students and young academics. She is driven by a desire to remove barriers to success, and having been fortunate to receive good advice at key times from colleagues herself, she appreciates how important this is for others.

450 words

8. Appendix: Action Plan

Key

Action arising from Silver submission action plan	Action Successful
Action arising since Silver submission	Action Ongoing
Beacon Action	

(i) Summary of status of key aims implemented from or since Silver submission (2014)

	Key Aim	Actions taken	Progress and Impact	
1.0 Outreach and UG recruitment				
1.1	**Review and update UG literature to increase diversity**	• 2016 all UG recruitment advertising overhauled, including website, literature and posters to increase diversity	2016/17 entrants increased to 47% F; 2017/18 49 %F	
1.2	**Increase female participants in outreach activities**	• All UGs emailed and request in lectures for UG volunteers • Introduced recommendations in comms to schools to consider gender balance • Introduced all female 'Twilight' outreach event	Volunteers average 51 %F (2014) 59 %F (2017) (across 6 main events) Attendees = 787, 52 %F (2014); 679, 59 %F (2017) (across 5 main events) Positive feedback collected from individuals and schools	

	Key Aim	Actions taken	Progress and Impact	
1.3	**Understanding factors affecting student course choices, BSc vs MChem**	• Focus groups with current UG students held • Informal discussions held at outreach events and HE advisors' day with teacher network to understand degree choices	Student applications to Chemistry, UoS from schools that have attended outreach events: Average applications (2014-2016) to Chemistry UoS (M&F): 25% BSc; 75% MChem Females applying: 2014: 25% BSc; 75% MChem 2016: 15% BSc; 85% MChem	
1.4	**Increase %F on MChem course**	• Improvements to marketing literature to raise awareness of MChem course at Open Days • Annual review at autumn EDI meeting on MChem vs BSc applications, offers, acceptances and entrants • All staff involved in Open Days and interviews briefed on pro-active approach to encourage females to apply for MChem, ability to transfer between degree programmes	%F uptake of MChem increased from 30% in 2012/13 to 42% by 2016/17 %F offered places is consistently higher than %F applying (on average by 2 %)	
1.5	**Recognition for staff involved in outreach activities**	• 2016/17 workload model adjusted to include outreach activities, enabling even distribution of workload across staff cohort	35 'tariff points' to each staff member for outreach and admissions contributions All staff contributed to admissions process (UCAS days/interviews)	
2.0 Support for UG Students				
2.1	**Develop and run a UG survey to gain feedback on student experience and support in Chemistry at UoS**	• 2014 survey prepared, employed, results analysed by EDI team • First year tutor consulted • Changes to personal tutor system to improve pastoral support includes compulsory initial and follow-up meetings • Survey revised and improved (2016), run annually	Survey results analysed Feedback in NSS scores (2016): 'I have received sufficient advice and support with my studies' 100% BSc students agreed 'I have been able to contact staff when I needed to' 100% MChem students agreed	

	Key Aim	Actions taken	Progress and Impact	
2.2	**Organise careers event with external female role models from academia and industry**	• UG Event "Voices of experience" first held 2015 • Invite extended to UG, PG and PDRA (2017) • Invited 4 speakers (min. 50 %F) • Feedback and attendance collected for analysis	39 attendees: 41 %F (2016) 4 speakers (75 %F) including Prof Jackie Akhavan Event to be organised 2018 (Gold action 2.4)	
2.3	**Presentation to final year UG on careers options including PG options**	• Sessions run for Year 3 and 4 on PG options, covering MSc and PhD programmes • Slides circulated to the whole year group.	Positive student response; now included in induction Event to raise awareness of PhD options with final year UG to be ran (2018) (Gold Action 2.4)	
2.4	**Improve pastoral UG student support**	• Changes to personal tutor arrangements ensures Year 1 students meet with tutors 4 times from September to December to aid transition • Now rolled out widely in the UoS	NSS 2016: 100% BSc students agreed they had sufficient advice and support with their studies Improved completion of special considerations forms (2017)	
2.5	**Support for part-time UG students**	• Successfully supported part-time UG student 2015/16 • Enrolled new student p/t 2016/17	Feedback from student in one-to one meeting positive Work commenced on entry level p/t UG degrees (Gold Action 2.2)	
3.0 Support for PG Students				
3.1	**Establish a postgraduate network and encourage social events**	• PG identified to organise • First PG event run in 2015 • Financial support allocated from HoD for society (2015)	Events well attended (~30 PG) Since 2016 society required more volunteers to become successful. Further financial support required (Gold Action 3.3) Southampton Union introduced PG community with events attended by Chemistry PG	

	Key Aim	Actions taken	Progress and Impact	
3.2	**Informal talks by internal female academics on career pathways and work-life balance – response to request from PG students**	• Female academics at different career stages (L5, 6 and 7) and industry volunteered • Informal event, advertised by email to all PGs and PDRAs • Decision to turn into an annual event	4 female academics and 1 female industrialist speakers 10 ECR attendees (70 %F) Positive response; event to be organised annually (Gold Action 4.3) One to one mentors established subsequently	
4.0 Support for key transition points				
4.1	**Support for ECR staff on Fellowship applications**	• Procedures established and communicated via web-site, including links on funding websites • Monthly ECR newsletter highlighting funding opportunities • Training for fellowship applications • Mock interview panels • Royal Society 'advice for applicants' meeting; included EDI chair as an invited speaker (2014, 2015) • ECR careers conference (members of Chemistry and EDI invited as speakers)	**2016/17:** 3 fellowship applications under review (33 %F) 2 fellowship applications advanced stages (50 %F) **2015/16:** Supported 1F external candidate Supported 1F internal candidate for EPSRC fellowship (awarded) Supported 2 ERC applications (50 %F)	
4.2	**Understand the first destinations of UG chemistry graduates, establish whether there are any significant gender differences**	• EDI outreach officer and PDRA rep produced a report analysing gender balance across UG Career Destinations (DLHE) • Main findings reported to EDI committee (2015), reviewed 2017	Data from 2011-2016 showed: No gender bias in level of job attained Leavers into full-time study fluctuated each year. On average over 5 years 40 %M; 39 %F entered full-time study.	

	Key Aim	Actions taken	Progress and Impact	
5.0 Staff recruitment, career progression and retention				
5.1	**Improve Induction processes for all new staff**	• New induction booklet prepared with links to all essential information, including EDI information • 3 monthly welcome meetings introduced • 3 monthly follow-up interviews to gain feedback on induction experience conducted • Introduction of new staff to the department through informal piece in Newsletter • Checklist prepared to ensure induction process is followed through with 3 month sign-off •	Handbook updated 2016/17 Feedback indicated electronic handbook was not sufficient Decision taken to provide paper copy to staff with H&S booklet on arrival (April 2017) Report on induction process and checklist impact to be written August 2018 (Gold Action 5.2)	
5.2	**AU manager to monitor gender balance on all shortlists for permanent staff appointments**	• All applications reviewed by members of the interviewing panel (25 %F) checked by HoD • Top scoring candidates are shortlisted	2016: chemical biology appointment; short list 4M, 1F (full provision made for candidate interviewee with a baby) Introduce policy to ensure a min %F on shortlist is achieved (Gold Action 5.1, 5.6)	
5.3	**Explaining promotion expectations**	• New promotions process launched October 2014 • A series of promotion road shows delivered • Promotion Interview training provided for candidates	2015/16 1 F promoted to L6, 1F promoted to Level 7	
5.4	**Support for ECR: Careers**	• ECR conference (Speakers included EDI team members) • All PDRAs given opportunity to have profile page with photo on departmental website, coordinated by	Attendees: 2014,110; 2015, 95; 2017, 77 Speakers: 2014, 50 %F; 2015 50% F, 95; 2017, 100 %F 28 profiles on website (22 %F)	

	Key Aim	Actions taken	Progress and Impact	
		departmental support staff (EDI team member) • EDI team offered fully-funded places to Irène-Joliet Conference • Teaching allocations of PDRA's formally recognised in workload model	EDI to monitor and promote uptake and gather feedback (Gold Action 6.7) Funded places Irène-Joliet Conference: 1F (2015); 1F (2016); 2F, 1M (2017)	
6.0 Support for all staff (Academic, professional and support staff)				
6.1	**All staff trained in unconscious bias and equality and diversity**	• Training made compulsory • HoD emailed all staff with instructions and deadline • HoD PA monitored to ensure completion by all individuals • Decision taken for staff to retrain every 4 years	2016: 91% staff trained 2017: 100% of all staff trained Staff survey "I understand the reasons that Chemistry promotes equality" 98% positive	
6.2	**'Springboard' programme offered to female academics**	• EDI chair and HoD identified and approached potential female academics to encourage participation • EDI agenda item to ensure annual response • Female professor from Chemistry as invited speaker	Between 2014-17 4 female academics attended, of which 3 subsequently achieved promotion.	
6.3	**Monitor new appraisal process**	• Annual appraisals compulsory for all staff, including PDRAs • Policy introduced that staff cannot conduct appraisals or interviewing without completing appraisal training and EDI training • Staff made aware of performance indicators for promotion and actively encouraged suitable females to apply for promotion • Staff made aware of performance indicators for non-traditional roles and career pathways	100 %F, 97 %M completion of appraisals 2016/17 100% EDI training completion 100% Appraisal training uptake Feedback in staff survey (2017) 85 %M, 87 %F said that they had had an appraisal in the last 12 months; 93 %M, 90 %F agreed appraisal discussion was useful in reviewing performance	

	Key Aim	Actions taken	Progress and Impact	
6.4	**Focus group to examine integration of non-academic and academic staff**	• Focus group run by EDI team member (Dec 2016) to discuss barriers to integration, EDI chair present • Key findings reported to EDI	17 attendees (35 %F) Achievements of non-academic staff celebrated in newsletter, by email and on website	
6.5	**Ensure a high % of female speakers for departmental seminars**	• Seminar organisers encouraged to include 25% female speakers	2014-2017 180 seminars, 36 female speakers (20 %F) %F to be increased (Gold Action 8.1)	
6.6	**Establish a PDRA network and encourage events**	• Group established 2015 • Budget allocated from HoD • First event 2015, talks, social events with pizza, etc. • Forum introduced 2017	On-going PDRA events include informal seminars; careers advice from female role models; ECR conference	
6.7	**Gender Pay Gap**	• EDI chair requested HR to conduct a pay audit on level 4 staff	Pay audit was conducted (2017) findings reported to HoD (no gender pay gap evident)	
6.8	**Staff training for changes to personal tutor program**	• Briefing meetings held for staff who serve as personal tutors • Staff kept up to date on the University regulations and changes to the degree programs or support available to students.	Feedback: staff found briefings useful and asked that they should remain a feature of our academic year	
7.0 Culture and celebration				
7.1	**Increase case studies with good work-life balance on website**	• Range of staff interviewed and case studies added to the website	Number of case studies increased from 5 to 9 since 2014 Continue to add diverse range of staff (Gold Action 8.2)	

	Key Aim	Actions taken	Progress and Impact	
7.2	**Improve quiet room provision**	• Fridge in quiet room for breast milk • Email sent to all staff to inform of provision • Booking system established with Chemistry admin support	44 bookings since 2014	
7.3	**PDRA staff and PG students to organise annual departmental sports tournament**	• Discussions of type of sporting event initiated • First event to be held 2018	PDRAs to organise (Gold Action 7.5)	
7.4	**Investigate culture of being 'constantly connected'**	• Four focus groups run to include all staff (L7, L5-6, L4, TAE) for opinion gathering • Policy sent to all staff managing email expectations	EDI to gather feedback on policy 12 months after publication (July 2018)	
7.5	**Biannual University Staff Engagement survey (SES)**	• Survey's undertaken in 2014, 2016 • EDI chair nominated as Chemistry SES Champion • Results presented to all staff via discussion groups • Feedback collected and analysed • Actions taken (see progress)	Key actions Newsletter to celebrate staff (Sept 2017) Email policy (July 2017) Workshop on professional behaviour in progress (Gold Action 8.6)	
7.6	**LGBT representation and awareness**	• LGBT representative joined EDI team (Alex Maryan-Instone, 2016) • Email to entire department to give point of contact for issues • Funded Alex to attend LGBT conference (2017)	Report of LGBT issues at EDI meetings 2018 create LGBT section on Equality website (Gold Action 8.2)	
7.7	**Staff social interaction**	• Staff annual barbeque run	2014 and 2015: ~45 attendees 2016: rained off!	

	Key Aim	Actions taken	Progress and Impact	
8.0 Communication and EDI team				
8.1	**Increase UG and support staff representation on EDI team**	• UG rep identified and approached • Subsequent UG volunteers accepted • Support staff member invited to join • Terms of reference updated to include minimum 2 UG representatives	UG representatives across the year groups (2014: 1 UG; 2016/17: 3 UG, 100%F) UG report at every EDI meeting Terms of reference to include support staff/EO	
8.2	**Introduce a prize for promotion of Chemistry to celebrate Ishbel Campbell, inspirational UoS female chemist**	• Financial backing from Chemistry department • Prize criteria defined • Prize awarded (exceptional commitment to outreach)	First prize awarded at Graduation (2017) Raise awareness of prize to encourage more nominations (Gold Action 7.6)	
8.3	**Financial commitment from department to EDI; budget for events and support**	• HoD agreed annual £2000 budget (2016) • Allocation of administrative support staff to the team (1 day per week) • £100 Ishbel Campbell annual award	3 PDRA attendance at Irène-Joliet conference (2017) supported financially PG attendance at LGBT conference supported financially Autonomy for EDI group to enable a programme of actions	
8.4	**Offer support to other departments external and internal on Athena SWAN actions**	• Silver AS submission shared with many departments across UoS • Workload model shared • Bimonthly Faculty and University meetings: EDI chair to share best practice • Extended to non-STEMM subjects • Invited wider University to round -table discussions with Prof Lesley Yellowlees • EDI Chair appointed Staff Engagement Survey champion, working with wider University	2015 Medicine awarded Silver Athena SWAN 2016 University awarded Silver Athena SWAN 2017 Biological Sciences Silver Athena SWAN	

	Key Aim	Actions taken	Progress and Impact	
8.5	**Annual review of UG and PG (F/M) applications, offers, acceptances and entrants. Comparison to national picture and RG universities**	• Annual report on student numbers established; provided to EDI team by admissions/outreach team • Outcome of report determines actions for increasing %F entrants	Increase in %F entrants UG from 39 %F 2014/15 to 49 %F in 2017/18 %F PG identified as area for action (Gold Action 1.1, 1.4, 3.1, 3.2)	
8.6	**EDI team structure and turnover**	• Terms of reference formalised • LGBT representative joined the committee (2016) • Advertised for volunteers or identified persons for underrepresented sections of department • No more than two consecutive terms and roles rotated every 3 years	Committee increased from 16 members (50 %F, 2013) to 22 members (60 %F, 2017) AS application contributions allocated extra tariff in workload model	
8.7	**External role models**	• Invited speakers to talk to all staff • Round-table discussions held (University-wide invitation)	Suw Charman-Anderson (2015), Prof Jane Francis (2015), Lesley Yellowlees (2017), Clare Viney, Vitae (2017)	

8. Appendix: Action Plan

The submission and action plan have been developed and written by the EDI team, led by Professor Gill Reid (HoD) and Dr Lynda Brown and signed-off by the Chemistry Policy and Resources Committee.

Key

Beacon Action

Action Ongoing

Action Introduced

(ii) Gold Action plan

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
1.0 Outreach and UG and PG recruitment						
1.1	**Present data from Athena SWAN submission to all staff**	• %F data: UG, PG, PDRA and staff to be presented at all staff meeting • Highlighting the low conversion rate in %F from UG to PG and to PDRA • Collect suggestions for actions to address leaky pipeline by staff questionnaire • Prioritise key actions and write implementation plan	Co-chairs HoD	Data to be presented at all staff meeting Feb 2018 Improvement of plan written by March 2018 Commence implementation by April 2018 Annual review of %F entrants (UG, PG, PDRA) every October	>45 %F total UG by 2022 PG entrants 40 %F by 2020 rising to 45% by 2023	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
1.2	**Understand career choices by UG**	• Hold focus groups with male and female final year UGs to establish attitudes towards research careers • Explore whether there are gender differences with PhD research, in particular	UG and PG Reps Co-chairs	Communicate with 2017/18 intake	Report presented to EDI team May 2018	
1.3	**Increase %F UG Programmes**	• Regularly review MChem vs BSc student data; applications, acceptances and entrants and report to EDI annually for review of actions • Increase female role-model (staff and students) in outreach events and school visits • Increase frequency of school visits targeting key geographical areas and demographics (WP) • Working with University International Office develop better relationships with UK International schools promoting Chemistry • Increase outreach events to more schools/colleges	Outreach Rep Co-chairs	Annual review each November	Increase %F BSc: 45%F MChem: 50%F by 2022 Increased staff/student participation in school visits (40 %F)	
1.4	**Increase %F PG Programmes**	• Run focus groups/survey with UG/PG on PG courses (PGT + PGR) • Examine and establish why the MSc by Research is less attractive to female students • Report feedback to staff involved in recruitment raising awareness of current %F and drive for gender equality in PG programmes • Improve PG literature (see 3.2) • Continued international visits to institutions in Saudi Arabia, China and Malaysia	HoD PG admissions	Focus groups/survey ran by April 2018 Report on feedback to EDI team then all staff by May 2018 Improved PG literature (see 3.2) by 2019	Increase %F entrants to at least 40% by 2020	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress
1.5	**Outreach volunteers request**	• All future communications requesting volunteers, to include statement that we endeavour to represent the whole community of students as role-models for attendees (gender, nationality and ethnicity) • Increase number of staff participating in outreach	Outreach Rep	From Oct 2017 onwards	Increased diversity at all outreach events >70% staff involved by 2020
1.6	**Promote gender equality and impacts from outreach practices**	• Prepare presentation on our key achievements and initiatives in gender equality in outreach • Present to faculties across UoS • Present nationally (other HEI's and RSC events, partner organisations)	Outreach Rep HoD Co-chairs	Commence 2018	Chemistry, UoS nationally recognised as leader in EDI in outreach
1.7	**Partnering with Winchester Science Centre**	• Building on newly established collaboration and MoU to organise events to promote Chemistry • Encourage 50% gender balance of volunteers and attendees • Run an all-female or WP-specific event • Develop a PG training module on Public Engagement and Science Communication	HoD Working with Head of Education WSC	Partnership started 2017 Events organised 2018, 2019	Events held Attendance monitored and analysed 50 %F attendees
2.0 Support for UG Students					
2.1	**Offer scholarships to under-represented UG groups**	• Finalise work started with the Alumni Office in the UoS to offer scholarship routes for UG and PG students in line with our EDI policy (caring needs, p/t study, disability, financial hardship) • Seek to create specific scholarships for p/t study by engaging with Alumni and industry	HoD Co-Chairs Comms Officer University EDI Officer	Nov 2017 informally agreed Finalise during 2018 Scholarship for 2018/19 intake	Scholarship funded Increase intake of p/t UGs from 2 in 2017

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
2.2	**Champion widening of p/t pathways to support EDI (recruiting directly) at both UG and PG level**	• Introduce high profile marketing of an entry level p/t BSc course • Introduce an entry level p/t BSc degree programme, which will run over 6 years	DoP HoD Co-chairs	Make plan for project commencing 2018 in line with 2.3	Entry level 6-year programme introduced First year applicants/entrants 15% with min. 40 %F Consecutive increase over subsequent years	
2.3	**Extending student finance for p/t degree programmes**	• Campaign with student finance bodies to extend student loans beyond 6 years to allow p/t students to benefit from opportunities like repeat internal years • Examine the financial support for students changing between f/t and p/t • Report on progress to Education & Quality Committee	DoP HoD Co-chairs	Make plan for project commencing 2018 in line with 2.2	Financial support approved 6 year programme RSC accredited and advertised by 2022	
2.4	**Support for UG career progression**	• Specific talk with final year UG to raise awareness of PG options • Extend work with UoS careers team and alumni to benefit student employability	Co-chairs	Event to be held April 2018	>40 attendees (>40 %F) Feedback survey included	
2.5	**EDI training for UG**	• Introduce lecture on EDI practice within chemistry during first year UG induction • Enrol all UG on EDI online training course with strong encouragement to participate	DoP	First lecture in September 2018 intake	First year survey includes questions on EDI issues 60% uptake of online EDI course	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
3.0 Support for PG Students						
3.1	**Improving PG experience**	• Compulsory EDI online training for all PG • Run focus group with PG for feedback on concerns with regards to supervision and contact with second supervisor and understanding low %F PG recruitment (see 1.4) • Report findings of focus group to EDI team • Write PG specific action plan for PG support and form action group (2 staff, 2 PG students)	HoGS PG action group	EDI training for PG commence with Oct 2018 intake Focus group ran and reported Feb 2018	>90% completion of EDI training monitored by senior administrative officer PG %F increased to >40% by 2020	
3.2	**Hold EDI group ½ day meeting to examine all PG recruitment literature, posters and website**	• Identify any areas of gender bias • Brainstorm ideas for increasing %F PG intake • Liaise with comms and marketing to bring about changes to literature	EDI team Comms Officer	Session Jan 2018	All literature revamped by 2019 PG %F increased to >40% by 2020	
3.3	**Support for PG Society**	• Examine overlap between University PG Society and Chemistry, determine need • If required, recruit volunteers for PG Society • Find routes to financial support	PG Reps HoD	Make decision on future of PG Society by Jan 2018	PG reps gather feedback from PG community via a short survey	
4.0 Support for key transition points						
4.1	**Raising the profile of p/t pathways**	• Engage with funding bodies including UKRI, (Royal Society), Wellcome Trust to create and increase visibility of pathways that facilitate more flexible working practices for PDRAs.	HoD Co-Chairs	Make plan for project commencing 2018 in line with 2.2, 2.3.	Staff survey results 2019, >90% agreed no barriers to p/t working	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
4.2	**Increasing %F PDRA**	• Raise staff awareness of %F PDRA in department • Encourage staff to proactively seek suitable female PDRA candidates via conferences and email networks	HoD All staff Co-chairs	Start end of 2017 for 2018 recruitment onwards	%F PDRA at 30% (2017 level) in 2018. Rising to 35% by 2020, 40% by 2022	
4.3	**Female mentoring support**	• Annual informal mentoring lunch session for PhDs and PDRAs with female academics and industrialists in Chemistry • Invite PGs and PDRAs	Co-Chairs	First session Sept 2017 Next session Sept 2018	Annual attendance: >3 female mentors >12 attendees	
5.0 Staff recruitment, induction, career progression and retention						
5.1	**Increase the %F staff at levels 5-7**	• Proactively seek potential external female candidates ready for academic positions as they become available (L5-L7). • List assembled from staff contacts, seminar and conferences speakers, and national research profiles	HoD Executive Group Co-chairs	Continuous from Nov 2017	Increase %F staff L5-7 to: 20% by 2020 25% by 2023	
5.2	**Ensure completion of Induction process**	• Checklist developed and implemented to formalise staff induction process and the timeframe for completion • Report on induction process and checklist impact • Gather feedback on quarterly induction briefing for all new staff by Executive Group	Concordat Rep	Checklist approved by Dec 2018 Report by August 2018	Staff survey 2018 improved scores on all induction questions for new staff	
5.3	**Improve PDRA mentoring**	• Continue to promote mentoring contacts • Collect details of PDRA mentoring uptake and effectiveness • Formalise the mentoring process	PDRA Reps HR	April 2018 start for formalisation by Sept 2018	100% PDRA's requesting a mentor have one assigned	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
5.4	**Respond to staff survey to improve understanding of promotions process**	• Publish document in lines with University guidelines to staff explaining exactly what is needed to gain promotion to the next level • Communication to all staff involved in appraisals to ensure promotion conversations occur during annual appraisal	HR Senior Res. Rep	Oct 2018 promotions round	Staff survey results: raised from 67% to >80% of staff understanding what they needed to do to get promoted	
5.5	**Support for female ECR development**	• Annual review of suitable candidates for Springboard and Joliot-Curie conference	EDI team	Candidates identified three months prior to course/conference	Min. 1F attendee at Springboard Min. 3F/M attendees at Joliot-Curie conference	
5.6	**Increase %F in specific support roles**	• Examine recruitment process for support roles for gender bias • Identify actions to refresh process • Shortlisting with a min %F balance	HoD Admin officers Tech/Expt. Rep	Initiate review Feb 2018	%F applications for support roles increased from 20% to 40% by 2020	
5.7	**Increase %F representation on appointment panels**	• Train and involve our PDRA cohort in the recruitment panel for L4 staff. • Development experience for the early career researchers involved.	HoD PDRA Reps	Commence Dec 2017 by email to all staff	Increased pool of female staff eligible for panels Min. 33 %F on all panels	
6.0 Support for all staff (Academic, professional and support staff)						
6.1	**Supporting ECR career development**	• Approach RSC to host Joliot-Curie conference • Secure University financial support • Include feedback questionnaire	HoD Co-chairs Senior Res. Rep	Host conference 2019 or 2020 (dependant on RSC)	Conference held with good attendance >60 %F	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
6.2	**Support for technical and admin staff**	• Ensure all appraisals occur for professional staff, gather feedback on effectiveness • Raise awareness to encourage conversations on staff transitions and ambitions in appraisals • Interview technical staff members on experience of maternity leave and return • Action improvements required • Run focus group to understand why lower %M have successful mentoring than female	Admin officers Tech & Exp Rep	Monitor for appraisal round 2017/18 and annually	100% appraisal completion	
6.3	**Examine uptake of family leave policy**	• Investigate if policy is known, understood and utilised by all staff • Ensure budget is sufficient, if not campaign to University for increased funds	HR HoD Co-chairs	Sept 2017 under review	Policy awareness and uptake increased	
6.4	**Supporting paternity leave**	• Department to formalise reassignment of educational tasks in absence due to paternity leave • Paternity leave: improve and streamline HR procedures to remove pressure on staff	DoP HR	Commence actions Oct 2017	Short maternity / paternity survey (Jan 2019) Positive response	
6.7	**PDRA profiles on Chemistry website**	• EDI to monitor and promote uptake and gather feedback on improvements • Devise system for regular updates on annual basis	PDRA Reps Admin officers	Report from Admin each Dec	>increase from ~75% to 90% PDRA profiles on website by Oct 2018	
6.8	**Support for promotions process for P&S staff**	• Run focus group to understand staff needs • Clarify guidelines to support staff • Ensure promotion conversation occurs in appraisal	HoD	Focus group ran by May 2018 Guidelines booklet produces by AUG 2018	Increase in support staff satisfaction with promotions process in 2018 survey	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
7.0 Culture change and celebration						
7.1	**Policy change**	• Lobby the research councils and policy makers to allow for greater employment flexibility, in order to allow researchers to use funds provided over a wider time span, to account for their time on leave	EDI team led by HoD	Form a working group Jan 2018	Policy change by 2020	
7.2	**External Consultation**	• Invite inspirational speakers to the UoS to discuss EDI issues and promote good practices; organise round-table discussions to share best practice	Co-chairs Suggestions from EDI team	Assemble programme plan Nov 2017	Min. 1 talk invited each academic year	
7.3	**National dissemination of best practice**	• EDI members to speak nationally e.g. other HEI, non-STEMM depts. about our EDI journey within Chemistry with a focus on our beacon activities	Co-chairs EDI team volunteers	Talk prepared by March 2018	Min 3 talks presented by 2019	
7.4	**Reduce 'constant connected' nature of job**	• EDI team to gather feedback on its effectiveness and implementation of email guidelines • Email policy amended with required updates • Email policy resent to staff by HoD every 12 months	Senior Res. Rep	Feedback gathered from August 2018	SES improved scores on work life balance question (4) from 24% to >60%	
7.5	**Social sports event**	• PDRA staff and PG students to organise annual departmental sports tournament	PG/PDRA Reps	Commence Jan 2018	Successful event held 2018 (>30 participants)	
7.6	**Ishbel Campbell prize**	• Raise staff awareness of prize to encourage more nominations of UG, PG or PDRA's	HoD Co-chairs	October 2017	Number of nominations improved from 2 to >5 in 2018	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
7.7	**Influence buildings refurbishment**	• EDI team contribute to plans to ensure gender, disability, family-friendly and social considerations are taken into account	HoD Co-chairs	Commences Dec 2017	New building work includes required spaces e.g. gender-neutral toilets or improved quiet room	
8.0 Communication and EDI team						
8.1	**Increase %F seminar speakers**	• Email from HoD to all seminar organiser requesting min 25 %F speakers in all sections • Data on %F speakers gathered annually by EDI chair	HoD SES Rep	Email sent Nov 2017	%F seminar speakers raised to 25% by Nov 2018 35% by 2020	
8.2	**Improve Chemistry Equality website**	• Continue to add a diverse range of staff case studies • Create a LGBT section	LGBT Rep Comms Officer Co-Chairs	LGBT section by March 2018	Response from LGBT community in department for future actions	
8.3	**Noticeboard**	• Overhaul EDI noticeboard • Specific team member responsible for upkeep • Include new outreach activities display area with data on gender balance	Outreach Officer TAE Rep	Commence Jan 2018	Increased profile of EDI team 70% staff involved in outreach by 2020	
8.4	**EDI training for PG students**	• Work with central University team to gain licences require to roll-out EDI training to PG students • Online completion rate to be monitored by HoGS	University EDI officer	For Sept 2018 intake	100% PG students trained by 2019	

	Key Aim	Actions	Responsibility*	Timescale	Success Measure / Progress	
8.5	**Chemistry Newsletter**	• Gather feedback on first newsletter by informal conversation • Compile 2nd Newsletter • Establish dedicated team for Newsletter production • Widen audience (alumni, open days) • Share this best practice with other depts.	Comms Officer SES Champion	Feedback by end of November 2017 2nd newsletter March 2018	SES survey 2018, improved scores on questions related to staff value and celebration	
8.6	**Improving communication**	• Workshop development in progress on 'professional behaviour' with external consultant • First workshop with senior staff 2017 • Follow-up workshops 2018 • Full application to EPSRC EDI call: culture change	SES Champion HoD	First workshop Dec 2018 Outline submitted Nov 2017; if successful full application Apr 2018	SES survey 2018, improved scores on questions related to communication	

*Key to individuals involved (not named in table as responsibility transfers with role if individual changes):

HoD	Gill Reid
DoP	Andrew Hector/Andrea Russell
Co-chairs	Lynda Brown, Marina Carravetta
SES Champion	Lynda Brown
PDRA Representative	Kelly Kilpin, Maria Concistre, Katherine Jolley
Senior research Representative	Jeremy Frey
Outreach and admissions (UG/PG)	Simon Gerrard/Andrew Hector
PG Representative	William Hale, James Eills, Jess Gusthart
University EDI officer	Alex Melhuish
UG Representative	Jennifer Small, Bethan Morgan, Hiba Azim

Concordat Representative	Russell Minns
HR Business Partner	Cathie Holmes
Administrative officers (MSA Rep)	Janice Sumner, Dawn Dunlop
Communications Officer	Luke Shearing (followed by his replacement end of 2017)
LGBT Representative	Alex Maryan-Instone
TAE Representative	Julie Herniman