

WARWICK POSTDOCTORAL SOCIETY OF CHEMISTRY EQUALITY AND DIVERSITY REPORT

Introduction

On Friday March 8th, the Warwick Postdoctoral Society of Chemistry (PSoC) hosted a special seminar and Research Fellow Forum to mark International Women's Day (IWD). This event was designed to i) Celebrate the contribution of women in the department, and ii) Explore issues surrounding equality and diversity, and particularly how they pertain to the Department of Chemistry.

The event was formed of two halves. Firstly, a seminar showcasing the work of four women from the department: Dr Samantha Lau (Research Fellow); Dr Minkyung Kang (Research Fellow); Dr Manuela Tosin (Associate Prof.); and Dr Nicola Rogers (RSC board member), who presented to a diverse audience (in both academic field and demographic) of Postdoctoral Research Associates (PDRAs), PhD, and permanent academics from Chemistry. While Dr Rogers is a Senior Research Fellow in the department, it was in her capacity as a Royal Society of Chemistry (RSC) Early Career Representative that she spoke, delivering the details of the RSC's recent [report](#) on the diversity landscape of the chemical sciences in the UK.

The second half of the event comprised of a round-table discussion amongst postgraduate and postdoctoral members of the Department of Chemistry, exploring the question "What can we do to address issues of equality and diversity within the Department of Chemistry?" A suggestion box was also placed at the front of the forum and in the chemistry common room to collect candid and honest opinions from the community. It is on this part of the event that this report focuses, with the aim of highlighting the key ideas expressed during the discussion, and the actions we as individuals, and as a department, can take to further the diversity and equality landscape in chemistry.

The purpose of this discussion was two-fold:

- I) To identify and explore the landscape of equality and diversity within the department.
- II) To address and explore possible solutions to any issues raised as a result of I).

The discussion was attended by 40 researchers, 58% of which were female, 42% male; 53% of the attendees were postdoctoral researchers, 35% PhD candidates and 12% held other positions, such as teaching fellows, technical staff etc.

The discussion took place in groups of between 6 and 8 with each group moderated by a member of the PSoC committee, using the RSC diversity landscape report as a background and starting point. This report suggests that, nationally, while 44% of undergraduates in chemistry are female, there is a steady decline in the number of women progressing through the academic career track, with women making up only 9% of professors. *This is reflected in Warwick's own statistics, which shows 42% of undergrads are women, but only 6% of our professors (this is represented by only a single female professor still permanently employed in the department).* This makes such discussions as the one reported here very timely, and of great import to the department and the university. Recent events regarding the [group-chat incident](#) were also a catalyst for this event, raising questions regarding the university's own commitment towards equality on campus. The upcoming REF2021 has also clearly taken the issues of equality and diversity to heart, with a new section required from institutions which outlines what codes of practice exist and how the research environment is structured to aid equality

and diversity within that environment. While the event and this report began with a gender based focussed, it quickly became apparent that many of the issues being discussed were pertinent to equality and diversity more generally and the report has thus developed to tackle more than this original premise. With these points in mind, the early career network in the University of Warwick's chemistry department set out to discuss the reasons behind the above statistics and events and what can be done at all levels to tackle both these issues and their underlying causes.

Section 1: Work/life balance

When discussing issues of equality in the workplace, particularly in terms of gender equality, work/life balance is a topic that comes up time and again. While it might seem at the surface that this is an issue that would affect all workers equally, there are many problems associated with work/life balance that are gender codified, and these must be considered if a fair, equal, and diverse workforce is to be realised.

Issues discussed

Specific issues that were raised at the PSoC IWD event regarding work/life balance have been outlined below. In particular, caring responsibilities, be it of older family members or infants, are still very female codified in modern society, and the impact of this on our female workers must be considered.

"[I was] told I can't do this as I am a woman, with no support from [my] supervisor."

- **Pregnancy and child care** – Becoming pregnant was a consistent concern amongst the Early Career Researchers (ECR) at the forum, saying it is unclear what the department's maternity/paternity procedure is, or how it protects female researchers from suffering setbacks in their careers due to the extended periods of vacancy required for such a situation. There is a clear disconnect between men and women on this issue, and much more needs to be done about it.
- **Overworking culture** – It is an unfortunate truth that caring responsibilities, for children, elderly/sick relatives etc., continue to fall primarily on women in our society. While this is due to biases which are somewhat beyond the control of the department, the culture of overwork in the Department of Chemistry and in academia in general fuels the separation between those with and those without caring responsibilities, often leaving them feeling guilty or persecuted as a result.
- **Perception of sacrifices required** – This point links in with the previous one above, and with latter points in this report regarding differing confidence levels in men and women (see section 3). It is the general impression among PhDs and PDRAs that an academic career will require some level of sacrifice, which is either beyond what many are willing to accept, or, more importantly, beyond what they feel capable of. This is somewhat exacerbated by poor support networks, the dominating culture of overwork already mentioned, and the lack of female role models in the department.

"We would like to stay in academia but search for security – we feel pressure from family and ourselves."

Solutions advised

Although the event was aimed at highlighting issues faced by ECRs we wished to encourage productive and positive discussions, focussing on finding potential solutions for the issues raised. Thus the question was posed, what can we as individuals and we as a department do to combat the issues raised around attitudes? Potential solutions, or actions to mediate the problems outlined above that were discussed at the forum, are summarised below. These have been put in order according to the range of those responsible and ease of implementation from the simple to the more complicated.

- Advertise changes to funding eligibilities that now often take into consideration career breaks.
One of the many problems that PhDs and PDRAs confront is that, while there are a lot of resources available to help them throughout their career, many are aware of only a small portion of the range that exists. PSoC is happy to help by advertising all the resources available to ECRs in one place, which all PDRAs and ECRs should be made aware of as part of their induction. This includes Daphne Jackson fellowships, Wellcome Trust Career Re-entry fellowships, etc.
- Promotion of sensible email use – tagline ‘I don’t expect you to respond to this email outside of your normal working hours’.
A practice that was raised at the IWD forum was that some colleagues now include in their email signature a line that explicitly states they do not require a response outside of normal working hours. PSoC believes this is a good practice that should be spread throughout all staff of the department in an effort to move away from a toxic overwork culture that puts those with caring responsibilities at an unfair disadvantage, increases stress levels, and decreases productivity in the department.
- Transparency and improvement in maternity/paternity leave policy/legal/financial advice for PhD students and staff considering family leave.
A problem that was consistently raised at the forum was that many PhD students and ECR staff are unaware of the university policy for maternity/paternity leave, and if department policy differs from this in any way. This should be made more transparent, and again, PSoC is happy to help in aiding this transparency, as well as liaising between management and PDRAs regarding how the department might improve upon university policy. It has been suggested that PDRAs be allowed to “freeze” their grant clock during maternity/paternity leave, the expense covered by the department, to ensure that they can return to their research without losing opportunities to publish and hence advance.
- Set core hours (e.g. 10 am – 4 pm) to manage effective flexible working hours strategically for the whole department.
Following on from the culture of overwork, while we recognise that flexibility in working hours is very beneficial for a diverse workforce, it can lead to people being expected to respond to emails or attend meetings that fall outside of the hours that they are able to work. Setting core hours outside of which people can be reasonably expected not to have to attend meetings or immediately respond to emails will assist in preventing overwork between those people whose working days do not fully overlap.
- Women-only fellowship opportunities.
While positive action can be a controversial topic, the discussions in the IWD forum suggested that there was a lot of support for more women-only fellowship opportunities. In a department with only a single full-time female professor, the PSoC committee suggests that working with the department and university to generate more funding for female researchers, above and beyond what already exists, would be a great step forward in creating a more balanced and diverse workforce in chemistry.

“You’re the first woman to teach us anything!” – First year undergrad to a PDRA, filling a lecture slot from a male colleague’s course.

Section 2: Environment

The working environment in the chemistry department, and particularly how this environment impacts equality and diversity in our workforce, has already been touched upon in the previous section. Here we expand further upon more specific points around the environment and attitude of members of the Department of Chemistry.

Issues discussed

Specific issues that were raised at the PSoC IWD event regarding the working environment have been outlined below. In particular, the impact a majority white male workforce (particularly in higher paid roles) has on the working environment, especially when considering female/ Black, Asian and other non-white minority ethnic (BAME) workers, was raised multiple times on March 8th and cannot be ignored.

“During my undergraduate [course in] Physics, I only had 3 female lecturers.”

- **Leadership figures propagate their characteristics** – Unconscious bias is now a well proven fact and is exceptionally difficult to combat, as it takes a great strength of will and determination to recognise the problem in oneself, let alone get past it. There is a strong trepidation among the PhDs and ECRs in chemistry that such biases exist within the department, and that the male bias in our leadership team will continue to propagate itself.
- **White male-dominated teaching’s impact on female/BAME undergrads** – Many people at the PSoC IWD forum raised the issue that they were not presented with female/BAME role models in their day-to-day interactions with their departments as undergrads, and that this is a problem which continues in our chemistry department currently. This was also extended to such things as interview panels for PDRA positions, in which many people reported that women on the panels felt like “token efforts” who were there more to make up the numbers than being expected to fully participate.
- **Conflict, recognition, and accountability** – This was a major issue that was highlighted several times during the forum. In particular, it is felt that there is little recognition of the issues of inequality that exist within the department, and following from that, many people reported that they would choose not to raise these issues to the appropriate bodies, as there appears to be little accountability within the department, particularly for those in more senior positions. This was coupled with the fact that a great many of those present at the forum were entirely unaware of what the appropriate disciplinary procedures are, should they wish to report instances of prejudice within the Department of Chemistry.

“There is a ‘club’ mentality [of] pre-established networks.”

Solutions advised

- Increase understanding/transparency in disciplinary actions and procedures, so people are empowered and protected to complain.

As mentioned above, there is a general lack of understanding regarding disciplinary procedures in the university and the department and also, given the recent events with the group-chat incident, a lack of confidence in those procedures to find fitting solutions and deliver appropriate reprimands. Increasing the transparency of these procedures is paramount in creating a culture where prejudice cannot exist. PSoC is happy to assist with this by hosting special Research Fellow Forums aimed at educating PhDs and ECRs on their rights and on university/departmental procedure, as well as feeding back to the department management of the opinions of the postdoc community on that procedure.

- More events for women/minorities to foster a greater sense of community and belonging.
In a majority white male environment, it can be difficult for women and people from non-UK ethnical backgrounds to feel like they are fully a part of the community or to have the confidence to stand up to male counterparts on issues of conflict. A greater network for women within the department, and across the faculty and university, will help to foster that sense of belonging and support. PSoC intends to host more events targeted at women and BAME researchers and asks that the department consider doing similarly.
- Training (particularly for PDRAs) on dealing with staff issues/difficult situations (particularly if you manage people).
PDRAs are at a point in their career where they would like to be trained formally to deal with running their own group. This must include adequate mental-health first aid training, and PSoC would suggest that such training should be expanded to include supervisors at all levels. The stories and opinions gathered at the IWD event suggest that current PDRAs feel that they do not have nor do not know about adequate training programs to help them transition into excellent group managers, and that many permanent academic staff who manage them might also benefit from more extensive training, or revision training in this particular aspect of the job.
- Appoint mental-health first aiders.
As an extension of the last point, much in the way the department currently has nominated trained first aiders, it has been suggested that a mental-health first aid team be put in place.
- Mentoring programs should be expanded to PhDs/female PhD forum.
Many positive things were said at the PSoC IWD forum on the utility of the Women Mentoring Scheme. This brings women together and gives them the sense of community that can be lacking in a male dominated department. PSoC would suggest that this mentoring scheme be extended to PhD students, and to cover other protected characteristics which might be underrepresented in the department, such as sexual orientation, other gender identities, or ethnicity. We would also suggest that official mentoring of PhD students from PDRAs, particularly on a pastoral level, would be beneficial to everyone, and that this might be extended up the chain, such that early career permanent academic staff were assigned to mentor PDRA staff outside of their research group.
- Female representation (and that of other protected characteristics) must be increased.
This comment was stated by numerous people at different points throughout the event. One of the major issues that was raised by both PhDs and PDRAs was the lack of female role models within the chemistry department. Many panels, committees, etc., are dominated by male members, a reflection of the overall issue of imbalance in the staffing of the department (and universities nationwide), and this imbalance discourages women, propagating the issue to future generations. While we recognise that little can be done in the very short-term, due to the inescapable fact of the gender imbalance that currently exists in chemistry, particularly in senior roles, PSoC feel that this is a point worthy of

reflection for chemistry management. This point is further reflected upon in the next section.

“We need more women on everything!”

Section 3: Attitudes

The third major point highlighted by a number of the discussions was the issue of differing attitudes of both individuals and the department towards themselves, each other, or the other factors discussed. This covers a number of aspects of ECR life, in particular those mentioned below.

Issues discussed

- **Confidence** – Many people, in particular women, felt they lacked confidence in themselves and their ability to navigate the academic landscape, also suggesting they felt largely under-prepared and under-trained for the new expectations placed on them as they climbed the ladder. Additionally, they found that often in meetings they were shouted over by more confident colleagues and struggled to make themselves heard or felt as if their input was considered worthless.
- **Competition** – Academia is a notoriously competitive environment, and it was noted in several instances that this level of competition may actually lead to and support discrimination. The general feeling seemed to indicate that the out-weighted numbers of ECRs compared to available positions lead to feelings of vulnerability, as we are considered replaceable.

“Lose weight to get the right balance” – suggestion box

“Balanced as all things should be – Thanos the Mad Titan, 2018” – suggestion box

- **Conversation** – Recognition that there are problems was one of the points raised in a number of ways. A few people were left wondering whether the problems were imagined after dismissive responses from management and other sources, a few were surprised to find that they are in fact not alone with the challenges they have faced. More than one reported feeling isolated by differences with those around them. The quotes highlighted above indicate the lack of acknowledgement of such problems, which are often trivialised and not taken seriously as a result.
- **Attitudes towards gender** – Examples such as male colleagues discussing a paper of female authorship based on their appearance as opposed to the scientific content, or of being made to feel ridiculed in scientific presentations were also raised. Whilst we hope such incidents are isolated and discouraged on all levels, it is important to acknowledge their existence and work towards fostering an environment of respect.

“Female mentors have encouraged me to do things I didn’t have the confidence to do”

Solutions advised

- On a personal level you can make sure you listen to your colleagues, see the value in their suggestions. Often an outside perspective can make the key difference.

It is clear from the testimonies of those who attended the PSoC IWD forum that there has been in the department at times and from a few individuals, a lack of the basic dignity and respect that we can all expect. PSoC will work hard to promote equality, and the values of dignity and respect, but such things are always easier when following a strong example from leaders of the community. As such, we would request the utmost support from department management in our pursuit of these values.

- The female mentoring scheme in the department aims to bring together women across the levels of academia and offer encouragement and support to ECRs.

- Initiatives to talk about equality.

PSoC will, in the future, be running many more events similar to the IWD mini-symposium and forum to continue to promote diversity and equality in the department, but we would hope that we are not working alone in this endeavour. The results of this forum, along with recent events, suggest that there is a long way to go before true equality can be achieved and that much more work must be done at all levels.

- A symposium for women/BAME by women/BAME was suggested as a safe space to discuss work and results in a positive and encouraging environment.

Again, PSoC will continue to put on events such as the IWD seminar, but we would suggest that similar events targeted at different levels of the department, from students to permanent academic staff would also be beneficial in developing and supporting an encouraging and collegiate environment.

- Self-marketing and assertiveness training would be beneficial.

The issue of a lack of confidence in women, compared to men in equivalent situations with equivalent knowledge and expertise, is well documented and came out of the forum from many PhDs and ECRs. Training sessions, which PSoC is willing to assist in putting on, in assertiveness, self-marketing, or risk taking, were highlighted as something that many members of the department would welcome. There was, however, a legitimate worry that this can be seen as 'victim blaming', changing women to fit a male-biased culture. We should not, and call on chemistry management to also not, lose sight of the fact that there is much work still to be done at Warwick and in universities worldwide to change the culture so that it does not institutionally bias against any particular group.

- Invite postdocs to staff meetings and to be represented on interview panels/committees.

Representation and recognition was a major issue raised multiple times at the IWD forum, as was female representation on panels and committees. Both of these issues could be solved by management being open to greater PDRA/ECR representation in all collegiate activities within department, including interviews, staff meetings, cluster meetings, etc.

- Compulsory training for academics, with self-reflection during Personal Development Reviews (PDR) at all levels.

Given what has been said at the IWD forum, and in the suggestion box after the event, there are clearly some members of the chemistry department faculty that require retraining on dignity and respect in the workplace. This ties in closely with comments and opinions already expressed here regarding recognition of and accountability for those in the department who may not be living up to the high standards that we would all hope to maintain regarding dignity, respect, equality, and diversity. PSoC believes that this training should be compulsory to all academics, along with the training mentioned in other sections of this report, and that the performance of employers/supervisors with respect to their, and with input from, their employees/student should be a point of self-reflection for all staff at PDR. This might be best achieved by having an aspect of the PDR process that is carried out by someone other than a person's line manager, so that people can speak more openly and honestly. It has also been suggested that PDRs be made compulsory, to help catch problems before they develop into major issues.

- Working with networks to identify other issues and their solutions.
The purpose of PSoC is to create a network for the PDRA community in chemistry to have their voice heard on all issues that may affect them, but many networks already exist that are trying to be heard on these issues. PSoC is committed to working with these networks (e.g. Equality, Diversity, and Inclusion; LGBTUA+ taskforce; disability staff network etc) to continue to identify issues surrounding equality and diversity and to work to find solutions to any problems identified.

General

Some points raised were difficult to assign to a particular subsection of issues, but rather were relevant to several or all of those discussed previously.

“Inclusion and Diversity feels like a false promise; stronger actions are required!”

- **We should sign-post resources and people** – Often what you need is there if you only knew where to look for it, perhaps the phrase “can’t see the wood for the trees” is appropriate here. As PSoC and as an appendix to this report we have compiled a list of resources relevant to the issues discussed.
- **We need more career advice, including the expectations for career paths** – The statistics themselves highlight the low numbers of ECRs actually retained in academia, and many people struggle with working out the alternative career paths that are both relevant and of interest to them. Often recruiters are not specialised enough, or careers fairs are heavily weighted towards a particular field. PSoC plans to organise Research Fellow Forum sessions addressing this and will look to investigate what could be done as a department, however, greater support from the department on these matters would be appreciated.
- **Actions/symposia are part of PSoC** – PSoC will work to voice the concerns and protect the rights of the ECR community including working against the idea, which has been raised by several PDRA’s, that their only purpose is to perform the experiments the PI wishes them to perform. All ECRs have the right (indeed the responsibility) to further their careers, improve their training, and seek out opportunities for collegiate activity.

“How can we solve a societal problem; I can’t do anything to make a difference!”

It may seem like a huge challenge to tackle but making a difference on a societal level can only ever come about if we make a difference on an individual level first. PSoC will act as voice of the ECR body passing on to management the points that they want us to raise, and planning/hosting symposia, training sessions, and other actions. However, there cannot be the change in culture necessary to enact true equality in our community without support and action on the part of management, and we hope that this support will be forthcoming, and that management and the ECR community can work together to finally solve these issues.

Conclusions

The PSoC IWD special seminar and Research Fellow Forum worked to identify and offer solutions to the issues of equality and diversity that affect the Department of Chemistry. From the above, the discussion was very productive and a great many actions were suggested for improving the diversity landscape and equality culture of the department. Below, those actions that PSoC will be taking forward, and those suggested for the department to consider, are summarised.

PSoC Actions	Department/University Actions
Advertise funding opportunities	Targeted funding advertisement
Promote sensible working hours	Promote sensible working hours and set core hours
Signpost maternity/paternity leave procedure	Improve maternity/paternity leave procedure – pay for PDRA parental leave
Host forums on disciplinary procedure/worker's rights	Greater transparency in disciplinary procedures
Host events by and for women and BAME researchers	Host/fund events for women and BAME researchers
Host and signpost PDRA training to prepare for becoming PIs	Host/fund PDRA to PI training
Host and signpost mental-health first aid training	Appoint departmental mental-health first aiders
Assist in setting up PhD women mentoring scheme	Expand women mentoring scheme to PhDs
Setup a PDRA-PhD mentoring system	Increase diverse representation on important panels and committees – could be achieved by increasing PDRA representation simultaneously
Promote equality, diversity, dignity and respect, in addition to hosting forums on these topics	Take stronger action to promote equality, diversity, dignity, and respect
Continue IWD events, emphasising “for women by women” approach	Host departmental IWD events at all levels, as well as hosting special BAME events
Host and signpost assertiveness training	Host/fund assertiveness training courses
Host and signpost career advice forums and events	Host/fund career advice forums and events
Work as a point of contact to support PDRAs	Compulsory mental health training for those with pastoral care roles
Work with existing networks (LGBTUA+, disability, ED&I) to continue to identify problems that exist and their solutions	Increase positive action – fund women only fellow/scholarships, particularly women of colour
	Compulsory PDRs with a greater emphasis on reporting upwards on the performances of employers/supervisors from employees/students
	Improve recognition and accountability of diversity and equality issues that exist in the department

It is clear from the PSoC IWD forum that there is much more that can and should be done to improve the diversity and equality landscape of our department. However, PSoC believes that by working closely with the department to achieve the goals set out above, this department can and will become the best in the country for students and staff at all levels, from all backgrounds, and of all demographics. We believe this is the very least we should be striving for and that together we can make this happen.

The Warwick Postdoctoral Society of Chemistry Committee.

Dr Michael Staniforth – President – Senior Research Fellow – Stavros group



Dr Tania Read – Vice President – Research Fellow – Macpherson group



Dr Anthony J. Lucio – Communications and Welfare Officer – Research Fellow – Macpherson group



Dr Nat das Neves Rodrigues – Treasurer – Research Fellow – Stavros group



Dr Cinzia Imberti – Secretary – Research Fellow – Sadler group



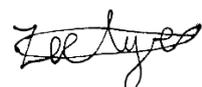
Dr Anish Mistry – Events Officer – Research Fellow – Scott group



Dr Nicola Rogers – Events Officer – Senior Research Fellow – Scott group



Dr Zoe Ayres – Industrial Contact – Research Scientist – Hach



Appendix: Relevant Resources

University wide maternity policy:

<https://warwick.ac.uk/services/humanresources/internal/policies/maternity/>

University childcare:

<https://warwick.ac.uk/services/childrensservices/>

<https://warwick.ac.uk/services/humanresources/internal/payroll/info/salaries/vouchers/>

University wide academic processes (probation/promotion/leave/recruitment):

<https://warwick.ac.uk/services/humanresources/internal/academicprocesses>

Diversity Training:

<https://warwick.ac.uk/services/equalops/diversitytraining>

https://warwick.ac.uk/services/equalops/diversitytraining/staff_networks_poster_4.pdf

https://warwick.ac.uk/services/equalops/diversitytraining/equality_resource_list.pdf

Wellbeing:

<https://warwick.ac.uk/services/humanresources/internal/wellbeing>

Advice for Staff in distress:

<https://warwick.ac.uk/services/counselling/staffcounselling/>

Advice for staff helping students in distress:

<https://warwick.ac.uk/services/counselling/staff/>

<https://warwick.ac.uk/services/counselling/staff/distress>

Flexible working guidelines:

<https://warwick.ac.uk/services/humanresources/internal/wellbeing/flexibleworking>

Mental health:

https://warwick.ac.uk/services/counselling/informationpages/mental_health

Sick Pay:

<https://warwick.ac.uk/services/humanresources/internal/policies/absence>

Prescription safety glasses:

https://livewarwickac.sharepoint.com/sites/human_resources/HR%20Documents/Safety%20glasses%20process.pdf

Funding sources:

<https://warwick.ac.uk/fac/sci/chemistry/chemintra/research/funding>

<https://warwick.ac.uk/fac/sci/chemistry/chemintra/research/funding/external>

<https://warwick.ac.uk/fac/sci/chemistry/chemintra/research/fundingopportunities/>

<https://www.rsc.org/awards-funding/funding/>

<https://epsrc.ukri.org/funding/>

<https://bbsrc.ukri.org/funding/>

Chemistry HR (for anything not covered in the above, the Chem-HR page has an extensive range of resources available):

<https://warwick.ac.uk/fac/sci/chemistry/chemintra/hr/>