

# A novel area specific approach to **Women** supporting **Women** in Chemistry

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## **The Problem: Gender Disparity in STEM and Chemical Sciences**

Within the chemical sciences the lack of retention and progression for women and those with protected Equality and Diversity characteristics is pronounced (RSC, 2018). **Supramolecular chemistry** sits at the interface of many scientific areas however, despite the scale and scientific diversity of this interdisciplinary community, there is a significant lack of retention and career progression for women across the chemical sciences when compared to other STEM disciplines (RSC).

## **In summary: Women In Supramolecular Chemistry:**

- **Only 12 publications** from the international community were contributed to the 2018 Special Issue of *Supramolecular Chemistry* highlighting the achievements of women within this field.
- **Only 5 female Principal Investigators** attended the UK's 2018 RSC MASC interest group conference (150 attendees).
- **Male speakers outnumbered women 4:1** at the 2019 International Supramolecular and Macrocyclic Chemistry conference.
- **Only 1 woman has won the RSC's Bob Hay lectureship prize** for SC in 18 years.
- **Only 2 women have served on the RSC's MASC committee** since 2001.

**If you think you can help us please get in touch!**

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**Women In Supramolecular Chemistry** <sup>®</sup>

*Supporting equality and diversity within the chemical sciences - Please fill in our survey and let us know your views!*

*"many women are invisible to the community"*

*"I have participated in a conference with 1% women speakers"*

*"to be able to remotely access information, general support or just a chat would help combat the feeling of loneliness"*

*"it's almost as though women who have taken career breaks in chemistry seem to just fall off the radar, with no support from the department, and that those that really push forwards with their career are seen to be really "pushy" or "over-reaching."*

**Who we are:** We are a uniquely qualified collection of supramolecular chemists and social scientists that span all career levels, with the skills and support required to initiate a global network which will contribute to the retention and progression of women within the chemical sciences.

**Our aim:** To produce a flagship international community and mentoring network (**WISC**) that will increase diversity within the global supramolecular chemistry community, with a specific initial focus to increase the proportion of women employed within science post-PhD. This subject specific approach to support Women in STEM may then be used as a scaffold within other areas of unmet need.

## **Solving the problem**

- 1. The survey:** Using literature resources we have designed an active survey to capture the views of those working in the field, and so far this is echoing the findings of the RSC with regard to perceptions of the gendered nature of chemistry and perceptions of career breaks: *"it's almost as though women who have taken career breaks in chemistry seem to just fall off the radar, with no support from the department, and that those that really push forwards with their career are seen to be really "pushy" or "over-reaching."* Others described their fear of being able to have a family and stay in the discipline, or maternity leave of just 3 months. Interestingly, when asked about experiences of taking career breaks, the most positive were from white men...
- 2. Working independently and the need for mentoring:** In many countries researchers work in fixed-term post-doctoral positions after their PhD for periods of time >3 years, and have to demonstrate independence to secure a permanent job. Short-term precarious contracts discriminate more against women, making it difficult to settle down, secure a home and start a family if they choose to do so. Staff are often unable to access career development and training opportunities. Without support, making the leap to independent research is hard. Chemical sciences are failing at this career stage (RSC, 2018;2019). Sometimes mentoring is available, however it is often general or peer mentoring, which, whilst it can be beneficial, means that the expertise and experience from a senior perspective is not available.
- 3. Face-to-Face networking:** The first WISC workshop is due to take place in Italy 2020. Other WISC events have been 'piggybacked' onto key supramolecular chemistry conferences both in the UK (MASC19 and MASC20) and internationally (ISMSC2020).
- 4. Financial investment:** Alongside the RSC we are looking for funders/sponsors to work with us to continue this work to develop: **1)** field specific mentoring clusters; **2)** maintain an up to date website; **3)** travel bursaries (which include child care costs); **4)** bespoke subject specific workshops; **5)** opportunities for post-docs to develop independent research profiles; **6)** an administrator (to run the above!).

**References:** RSC (2018) Diversity landscape of the chemical sciences; RSC (2019) Breaking the barriers: Women's retention and progression in the chemical sciences; Phipps & Young (2015) 'Lad culture' in higher education: agency in the sexualisation debates. *Sexualities*, 18(4):459-479.