



Improving Gender Diversity and Recruitment

Share learning and good practice



The WISE Ten Steps

Share learning and good practice

is one of the WISE Ten Steps.

The Steps form a unique diagnostic and change management tool that helps to remove complex barriers and create an inclusive and diverse culture leading to innovation, improved performance and a long-term competitive advantage.



Sharing Learning and Good Practice

Improving gender balance is both a challenge and a business imperative across the entire STEM industry. This work requires that individual companies collaborate with each other to share best practice, thereby sustaining a wealth of female talent and creating a more diverse pool at senior level. This will deliver benefits to the whole industry.

The Faraday Institution and its commitment to women in STEM

The Faraday Institution, the UK's independent institution for electrochemical energy storage research, was set up three years ago to help overcome key industry challenges in battery and energy research. The organisation works to help boost research and collaboration across multiple projects and currently has over 50 industry partners. It currently works with more than 450 researchers at 20+ universities.

The organisation has made a strong commitment to developing the skills of women and other protected groups in this sector, since it believes that creating a diverse and innovative pool of talent is essential to tackling challenges around climate change.



The Institution's work

The organisation is currently running ten major research projects that aim to solve challenges around battery efficiency, longevity and recycling among other things. It helps researchers to work collaboratively with each other, the member institutions and other members of the battery community.

Moving the dial on gender

Currently, just 30% of the battery research community are women and this is lower at more senior levels. The organisation set up a working group in 2019 to look at diversity and has since launched several initiatives, complementing those already set up within its member universities, to address this imbalance. The results have been impressive. It's two big initiatives are the FUSE Undergraduate Internships and the Phd programme.

FUSE – Undergraduate Internships

The Faraday Undergraduate Summer Experience (FUSE) runs every year, forms a part of the Institution's undergraduate attraction programme, and acts as a feeder group for the Faraday Institution PhD Programme. The organisation increased the number of interns from 18 in 2018, to 50 interns in 2020 with a further 50 interns being recruited currently. The percentage of female interns increased from 33% in 2018 to 42% in 2020.

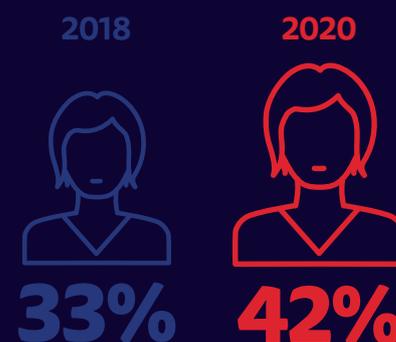
By the end of the programme, those that would consider taking a PhD in battery research increased from 26% at the beginning of the course to 84%. Some 96% said they would consider a career in the battery field following the programme.

The Faraday Institution PhD programme

The PhD programme lies at the heart of the Institution's skills work. The organisation currently sponsors 44 PhD students, increasing to 58 next year and the bespoke training seeks to increase the knowledge, skills and aspirations of individuals. The cohort's gender balance moved from 15% female in 2018 to 50% in 2020.



Female interns employed by The Faraday Institution



How the Institution achieved these results

External activities:

- **Masterclasses**

In 2021 The Faraday Institution ran a series of online masterclasses for SEO London STEM undergraduate students to highlight the internship opportunity. These events covered topics such as *A day in the life of a battery researcher*, *Why batteries?*, *A PhD focusing on battery technology* and *A day in the life of a battery entrepreneur*, all presented by experts working in the field.

- **Marketing**

Opportunities were advertised widely both in the host universities as well as with other academic institutions and via education charities such as SEO London. The institution also made good use of social media channels.

- **Fully electric engagement programme event**

Prior to the pandemic, the organisation ran face-to-face events including the Fully Electric Engagement Programme. This ran in February 2020 in partnership with SEO London. Around 50 undergraduate students taking degrees in STEM subjects attended the event held at the Royal Academy of Engineering. Representatives from Williams Advanced Engineering, Jaguar Land Rover, and Rolls Royce showcased their career opportunities at the event.

- **PhD researcher spotlight video**

On International Women's Day 2020, the organisation released the first of its battery researcher showcase videos, focusing on the inspiring work of 3rd Year PhD student Dana Thompson. Based at the University of Leicester, she's looking for cutting edge ways to recycle lithium-ion batteries. Dana's battery career journey began when she was a FUSE summer intern back in 2018.

- **Big Bang Fair outreach**

In March 2019, The Faraday Institution celebrated science, technology, engineering and maths with young people in the UK via the Big Bang Fair. This was held at the NEC and attended by 80,000 visitors. Several Faraday Institution PhD researchers who are trained as STEM Ambassadors communicated with attendees about batteries to inspire young people to pursue a career in the field.

- **Fully charged battery box - outreach**

The organisation has since collaborated with Renee Watson at the Curiosity Box to create the Faraday Fully Charged Battery Box resource for schools. With a newly launched Faraday STEM Network, the organisation is also involved in the forthcoming Smallpeice Trust Fully Electric Challenge which will provide 50 Year 11 pupils with a taster of the skills needed to create a fully electric future.



Dana Thompson
PhD student, and member of The Faraday Institution ReLiB Project



The Faraday Institution's work with partners:

The organisation also works closely with its researchers and partner universities to embed diversity initiatives across its projects and community. For example:

- The Faraday Institution makes gender targets and guidance around best practice around recruitment and retainment of women available to its partners.
- The organisation regularly runs masterclasses with experts in the field on a range of topics. One was led by Kevin Coutinho, Athena Swan Manager at UCL, on why diversity is so important to achieving positive research outcomes.
- In 2020, Faraday ran an in-depth series on how to identify and challenge poor workplace behaviours. This included a focus on intersectionality and wellbeing.
- In 2020, the organisation collated and distributed blogs from members of the community around their own experiences. These provided members with advice, particularly on working through the pandemic.
- The organisation works with a range of diversity experts. These include SEO London and WISE, and training providers such as Skills4.
- The Institution will be launching its EDI charter to the community imminently. The document is expected to evolve in response to the community's needs.
- EDI Leads and Training Champions are being embedded within each of the ten research projects.
- The Institution's grant terms allow it to withdraw funding should a partner not comply with the EDI policies and practices.

• Women's programme

In 2021 The Faraday Institution partnered with Skills4 to deliver EMPOWER a six-month career development programme for 15 women in the community at different stages of their career. The programme aimed to address the low numbers of women at senior levels.

The programme involves group training sessions and encourages the women to seek mentors. The cohort are also provided with one-to-one coaching around what might be holding them back in their career and what they need to do to be successful.

The Institution recently launched a similar Thrive programme for Black, Asian and ethnic minority individuals, based on the women's programme, and using the same model and trainers.

Conclusion

In the three years since its inception, the achievements of The Faraday Institution community around gender balance have been remarkable. WISE hopes that other members looking to positively impact the knowledge, skills and aspirations of the future workforce might be able to use some of the techniques deployed here.



Kevin Coutinho
Gender Policy Manager,
University College London



"This work aims to establish a 'cohort' model which brings people together in parallel along with a specialist trainer to create a collective 'shared' vision around a diverse industry."

Fran Long
Education & Training Lead,
The Faraday Institution