
The UK Industrial Decarbonisation Research and Innovation Centre (IDRIC)



Equality, Diversity & Inclusion (EDI) Strategy 2021-2024

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THE UK INDUSTRIAL DECARBONISATION RESEARCH AND INNOVATION CENTRE (IDRIC)

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Introduction to IDRIC:

The UK Industrial Decarbonisation Research and Innovation Centre (IDRIC) is a new UK research and innovation centre launched in 2021. IDRIC is the UK national focal point and international gateway for UK industrial decarbonisation research and innovation.

IDRIC is a UK-wide virtual Centre and a multi-partner project hosted by Heriot-Watt and led by world-renowned scientist Mercedes Maroto-Valer.

IDRIC EDI Champion Foreword:

“ I have always believed that: **'you can't be what you can't see'**.”



We have outstanding colleagues working on IDRIC in the research projects and in the wider industrial clusters, drawn from various backgrounds.

Our vision for the whole endeavour is that it should serve as a catalyst for the future talent pipeline while encouraging every participant to select their colleagues from all backgrounds and making energy transition an inclusive occupation.

I have long focused on equality in the workplace and promoting diversity and inclusion within employment.

In 2010, I was a co-founder of the 30% Club, which has pioneered a way to move more women onto boards and

senior management roles, and now has a global presence. Using the proceeds from my time as an entrepreneur, I established the Taylor Bennett Foundation in 2008, a charity that works with black and minority ethnic young people to help them get their first jobs in the communications industry. I am passionate about facilitating the careers and advancement of disadvantaged employees – and disadvantage comes in many forms, many of which are not visible to others. IDRIC will seek to eliminate those disadvantages within our project while inspiring the next generation to make energy transition their career of choice.”

Professor Heather McGregor CBE FRSE PFHEA CGMA

Provost and Vice Principal of Heriot-Watt University Dubai

Contents

Introduction	1
The Challenge	1
The Leaky Pipeline of Diverse Researchers	2
Monitoring and Intervention	3
Monitoring (2021 – 2024)	3
Intervention – IDRIC is planning three interventions	3
'You can't be what you can't see' – a media showcase for researchers (2022-2023)	3
'Nothing about us without us' – disability in research careers (2022)	4
Raising aspirations and expectations	5
EDI in IDRIC – a mission for all	6
References.....	7

Introduction

The 2021 United Nations climate change conference (COP26) drew the world's attention to the continuing climate crisis and the role of scientific research in delivering the solutions that are urgently needed. This research is not only in the sciences but also in the social sciences, where economic and financial modelling are informing comprehensive new policy frameworks targeting carbon neutrality.

Given this, it is surprising that scant attention is paid to the make-up of the energy transition research community. Evidence across a range of disciplines suggests that diverse teams can lead to more innovative solutions to societal problems (Rodriguez & Lehman, 2017) (Buchholz, 2021). Diversity in scientific research has been shown to lead to higher impact (Alshebi, Rahwan, & Woon, 2018). Diversity in teams leads to more innovation and higher productivity (Rock & Grant, 2016). Over time, the likelihood of financial outperformance from diverse teams has strengthened (Hunt, Prince, Dixon-Fyle, & Dolan, 2020). Yet few scholars have explored the diversity of the academic teams that are addressing the biggest and most pressing issues that the world faces.

The challenge

Diversity matters, which is why IDRIC has committed to an institution-wide strategic focus on achieving a diverse workforce and inclusive working environment led by an EDI Champion, Professor Heather McGregor. 23 research institutions are engaged in delivering the first wave of projects to support the UK's aim to have achieved net-zero industrial emissions by 2050 through decarbonisation activities within the industrial clusters, and IDRIC wants all of them – and the research teams that will come after them - to be as successful as possible. Therefore, IDRIC is actively building interventions to monitor and improve diversity in all its forms.

Academia has long been an occupational arena with significant under-representation of certain groups. The ideal academic is often idealised as one who can work long hours (evenings and weekends) without any other responsibilities or demands on their time and energy (Sang, Powell, Finkel, & Richards, 2015). Gender inequalities in academic careers have perhaps received the most attention in the literature, highlighting the incompatibility of a career defined by (international) mobility, long working hours and, for women, a lack of mentoring (Meschitti & Lawton-Smith, 2017) and feelings of imposter syndrome (Muradoglu, Horne, Hammond, Leslie, & Cimpian, 2021). There is also strong evidence of racial discrimination and inequality in UK academia (Bhopal, Brown, & Jackson, 2018), particularly acutely experienced by Black women academics (Sobande & Wells, 2021). Inequalities remain stubborn across all academic disciplines and are particularly stark in traditional engineering and physical sciences. However, they are also persistent in social sciences such as economics, which underpins much of the policy work in the energy transition, engineering and decarbonisation arena.

The leaky pipeline of diverse researchers

The Royal Society has examined UK higher education statistical data, revealing that while students from ethnic minority backgrounds are entering science in increasing numbers, there is a parallel increase in the numbers leaving science to pursue careers outside of academia (Royal Society, 2021). In the UK, employment outcomes for black and minority ethnic backgrounds persistently lag behind those of the white population. Structurally disadvantaged graduates across all protected characteristics may possess an abundance of human capital at the conclusion of their studies, in the form of skills and knowledge; however, they may not have been given support and opportunities to acquire necessary amounts of social capital, i.e. connections, which can benefit job acquisition in academia, (McGregor, Needham, & House, 2021) Further they may encounter bias and discrimination in recruitment processes, working environments, and career opportunities and progression.



Therefore, the IDRIC EDI strategy is to develop a stronger pipeline of diverse researchers and improve awareness of boosting diversity and inclusivity. The initial strategy and plan cover 2021-2024 in alignment with UKRI policies and principles.

Monitoring and Intervention

Monitoring (2021-2024)

The first and most critical activity has been to conduct a baseline analysis of the diversity of those directly employed in the IDRIC research community. This is defined as all those actively engaged in and employed by the first wave of research and innovation projects that make up IDRIC at any one time. A survey to monitor diversity was designed and developed by Professor Kate Sang, Professor Heather McGregor (Heriot-Watt) and Dr Christine Douglass (Chair of the Patient Liaison Group at the British Medical Association) and conducted in December 2021. This survey will be repeated at six-monthly intervals.

Intervention – IDRIC is planning three interventions

1. 'You can't be what you can't see' – a media showcase for researchers (2022-2023)

IDRIC will be embarking on an ambitious video project from January 2022, initially for a year, to make regular short 3-minute video profiles of people working in partnership with IDRIC. This project will feature female role-models and will also showcase the diversity of individuals currently involved with research relating to industrial decarbonisation. This will be supported by Dr Christine Douglass, who has a long track record of communicating science through media and diversity and inclusion in health care and medical education. Christine is currently Chair of the Patient Liaison Group at the British Medical Association.



The main aim of the video series will be to encourage career choices across all student identities at the university entry and exit stage. The series will also promote the benefits of a diverse workforce in STEM and specifically the decarbonisation agenda.

An additional benefit will be an archive of interviews with people associated with IDRIC, as IDRIC is expected to continue beyond its current agreed lifespan of 2021-2024.

The videos will be open-access and housed online and used with partners in education and mentoring programmes. IDRIC will also be exploring possibilities of public installations / exhibitions. IDRIC will set key performance indicators for the number of platforms, the number of views, and the level of engagement with the material generated and report on these KPIs twice a year.

2. 'Nothing about us without us' – disability in research careers (2022)

Nothing about us without us is a common phrase among disadvantaged and marginalised people regarding research. IDRIC plans to run workshops open to everyone, including IDRIC's non-academic partners, on the subject of disability in research careers, building on the work carried out at Heriot-Watt University <http://disc.hw.ac.uk/> and led by Professor Kate Sang.

These will be carried out twice a year so that everyone involved with the project has the opportunity to attend. IDRIC will aim to deliver these through using the lived experience of disabled researchers.



The main aim of the workshops is to raise awareness about the types of disability encountered in academic careers and both the legal requirements and the opportunities for inclusion that exist as the UK strives toward a more diverse workforce. We will monitor attendance and have a goal that all projects and partners attend at least one of the workshops during the year.

3. Raising aspirations and expectations

And finally, IDRIC plans to engage with Career Ready <https://careerready.org.uk/>, the national social mobility charity, to forge links with the next generation of scientists and engineers in areas of the UK that might not have many such opportunities.



The main aim of this is to inspire young people, especially women from disadvantaged backgrounds, to choose to work towards careers in industrial decarbonisation. Career Ready provides a mentor and a six-week paid work placement for every young person enrolled through their school. IDRIC will be looking to all IDRIC projects to provide mentors and placements for at least one young person per institution. We will monitor and report the engagement levels and the numbers of young people who have been supported.

EDI in IDRIC – a mission for all

In summary, IDRIC is planning to monitor the diversity of the workforce twice a year, is developing interventions to improve equality of opportunity for future researchers and will review the impact of its work twice a year and publish the results.

IDIC plans to establish an EDI steering committee to support the work of Professor McGregor, which will convene twice a year to discuss the impact of the interventions and consider possible new interventions to be introduced during the life of IDRIC.

The plans to embed diversity, equality and inclusion into IDRIC, both now and in the future. It will lay the groundwork for a diverse pipeline of researchers to carry on the important work that the IDRIC project is doing future of our planet. The IDRIC team and I hope you will all embrace our goal and support us as we all work towards this.



References

- Alshebi, B. K., Rahwan, T., & Woon, W. L. (2018). The preeminence of ethnic diversity in scientific collaboration. *Nature Communications*. doi:<https://doi.org/10.1038/s41467-018-07634-8>
- Bhopal, K., Brown, H., & Jackson, J. (2018). BME academics and the decision to leave UK higher education. In *Dismantling race in higher education* (pp. 125-139). Palgrave Macmillan.
- Buchholz, M. (2021). Immigrant diversity, integration and worker productivity: uncovering the mechanisms behind 'diversity spillover effects'. *Journal of Economic Geography*, 21(2), 261-285.
- Hunt, V., Prince, S., Dixon-Fyle, S., & Dolan, K. (2020). *Diversity Wins*. McKinsey.
- McGregor, H. J., Needham, K., & House, T. (2021). What role do social resources play for minority ethnic graduates in the graduate employment market? A review of a targeted market intervention. *Business Educator: Working Paper Series of the Centre for Management Learning and Business Education*, 1, 1-19.
- Meschitti, V., & Lawton-Smith, H. (2017). Meschitti, V. and Lawton-Smith, H., 2017. Does mentoring make a difference for women academics? Evidence from the literature and a guide for future research. *Journal of Research in Gender Studies*, 7(1), pp.166-199. *Journal of Research in Gender Studies*, 7(1), 7(1), 166-199.
- Muradoglu, M., Horne, Z., Hammond, M. D., Leslie, S. J., & Cimpian, A. (2021). Women—particularly underrepresented minority women—and early-career academics feel like impostors in fields that value brilliance. *Journal of Educational Psychology*.
- Rock, D., & Grant, H. (2016). Why Diverse Teams are Smarter. *Harvard Business Review*. Retrieved from <https://hbr.org/2016/11/why-diverse-teams-are-smarter>
- Rodriguez, S. L., & Lehman, K. (2017). Developing the next generation of diverse computer scientists. *Computer Science Education*, 27(3-4), 229-247.
- Royal Society. (2021, March 25). Ethnicity in STEM academic communities. Retrieved from <https://royalsociety.org/topics-policy/publications/2021/trends-ethnic-minorities-stem/>
- Sang, K., Powell, A., Finkel, R., & Richards, J. (2015). Being an academic is not a 9–5 job': long working hours and the 'ideal worker' in UK academia. *Labour & Industry: a journal of the social and economic relations of work*, 25(3), pp.235-249., 25(3), 235-249.
- Sobande, F., & Wells, J. R. (2021). The poetic identity work and sisterhood of Black women becoming academics. *Gender, Work & Organization*.