



Diversity and Inclusion Programme

To find out more, email diversityteam@raeng.org.uk

Progressing diversity and inclusion across engineering and science professional bodies



Rosemary Cook, Chair of the Progression Framework Implementation Group and CEO of Institution of Physics and Engineering in Medicine

The Progression Framework Implementation Group, set up in May 2018, is organising two workshops in 2019 to spread the use of the *Diversity and Inclusion Progression Framework* amongst all professional engineering institutions (PEIs) and science bodies.

The framework covers eight areas that are relevant to PEIs, including education, training and accreditation, and prizes and awards. It helps PEIs move from little or no activity to more, and more effective, actions to

ensure diversity and inclusion (D&I) in all their activities.

The implementation group aims to increase use of the framework from 50% to 75% of PEIs and science bodies. It also aims to achieve measurable improvement in those bodies' actions on D&I. This will be partly measured by a repeat of the benchmarking exercise in 2020, which some institutions undertook in 2017.

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To help PEIs and science bodies make progress, the group is bringing together a range of resources, case studies and blog posts on the [Science Council's website](#). The two workshops will provide intensive support and share learning among current users of the framework and the organisations hoping to start using it. The first workshop takes place on 16 May and focuses on D&I in prizes and awards programmes. The second will take

place on 10 September with a focus on education, training and accreditation. These areas were chosen as they had the lowest collective performance in the 2017 benchmarking exercise.

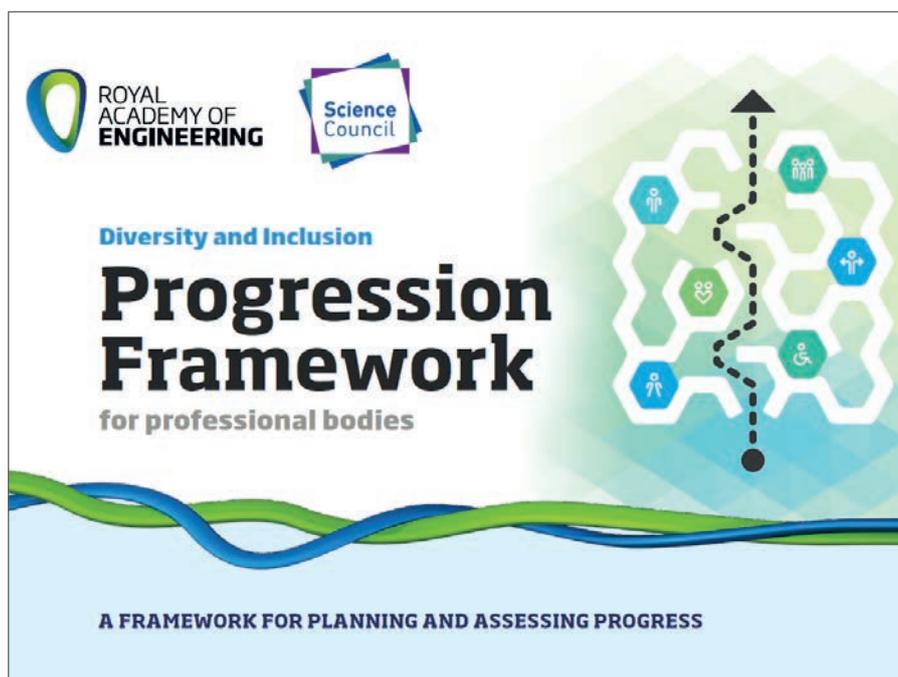
Rosemary Cook, Chair of the Progression Framework Implementation Group and CEO of Institution of Physics and Engineering in Medicine, said: 'I am really keen that we help PEIs and

science bodies who have not yet used the framework to get started. It is such a useful tool: it really takes all the effort out of creating a diversity action plan, by showing you what your organisation is doing best at, and how you can improve in other areas. By using the framework, you can also demonstrate success and value to boards and committees, which helps to embed their enthusiasm and commitment.'

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Professional engineering institutions

Increasing D&I in prizes, grants and awards



On 16 May, the Progression Framework Implementation Group (PFIG) will host its first workshop to improve performance, focused on prizes, awards and grants.

The joint Academy and Science Council PFIG, in partnership with Athena Forum, will host workshops

to improve collective performance in two areas that were found to be weakest in the 2017 benchmarking exercise. These areas were education and training, accreditation and examinations, and prizes, awards and grants. The first workshop will take place at the Institution of Engineering and Technology, Savoy Place with a

focus on prizes, awards and grants. It will explore challenges to progress and share good practice in relation to:

- transparency of process and judging
- minimising unconscious bias
- gathering data from and giving/receiving feedback nominees and applicants
- celebrating winners and
- planning for change.

Collective progression framework benchmarking found that engineering and science professional bodies were performing well in the areas of governance and leadership. For more on benchmarking results, [click here](#).

To register or express interest: PEIs: email Monica.Stancu@raeng.org.uk or call 020 7766 0725.

Science Council member body: email B.wagenbach@sciencecouncil.org or call 020 3434 202.

Information on the event is also available [online](#).

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Employers



Inclusive Recruitment Workshop - March 2019

Inclusive recruitment workshop

On the 4 March 2019, the Academy and Business in the Community jointly hosted an inclusive recruitment workshop.

Thirty-six representatives from engineering employers, academia and PEIs participated in a thought-provoking afternoon to find out how they could make their own recruitment processes more inclusive.

Sandra Kerr, Race Equality Director at Business in the Community, gave a keynote speech about why an

inclusive recruitment and selection process is key to making a difference and to increasing the diversity of people who are employed in engineering.



The workshop was based around the [Inclusive Recruitment Toolkit](#) which was launched by the Academy in 2018. The toolkit was developed by the Academy's D&I Leadership Group (DILG).

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Developing a D&I framework for small and medium-sized enterprises

The D&I and Enterprise Hub teams at the Academy are working jointly to develop a framework that will build on the PEIs framework to support improvements in D&I across small and medium-sized enterprises (SMEs).

Analysis by the Office of National Statistics for EngineeringUK indicates that the 'engineering industry' is dominated by smaller firms (those with under 50 staff), which account for 98% of all engineering businesses in the UK. This means that any attempt to

increase D&I across engineering must actively engage with smaller employers.

The new framework will be specifically designed for organisations employing 250 people or less - including startups, scale-ups and steady-state SMEs. It will be proportionate to organisation size, address SME D&I needs and aspirations, challenge the status quo and use a maturity model approach to support the integration of D&I across organisational functions.

In addition, it will address D&I in relation to recruitment and retention of people, as well as the risk of a lack of diversity in engineering design teams impacting on the appropriateness and effectiveness of engineering outputs and products.

To successfully deliver this project, the Academy is seeking engagement with SMEs to inform both the research and the pilot phases of framework development. Please get in [touch](#) if you would like to know more or to be involved.

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Graduate Engineering Engagement Programme ►



GEEP Students at BuroHappold October 2018

“The GEEP event has been an amazing experience. I am leaving feeling significantly more prepared for my graduate applications. I would highly recommend this programme to anybody looking to apply for a graduate scheme, at any stage of their career.”

GEEP student 2019

Employer involvement in the Graduate Engineering Engagement Programme (GEEP) continues to grow.

Between September and December 2018, four events were held by the Academy, BuroHappold, Aston University and BAE Systems. The events had 184 student attendees. Of these, 28% were women, 91% were from ethnic minority backgrounds, and 80% were from the newer post-92 universities or from socio-economically disadvantaged backgrounds.

The events are followed up with individual support from Standards for Educational Opportunity (SEO) for students who are applying for graduate and internship roles. For the first time this year, students who secure internships will be offered mentoring – with mentors drawn from programmes including the Academy’s Engineering Leaders Scholarships programme and the Queen Elizabeth Prize Global Engineering Ambassadors.

The aim of GEEP is to increase the transition of engineering graduates

from diverse backgrounds into engineering employment – with a focus on ethnic minority, female and socioeconomically disadvantaged engineering students from the newer post-92 universities. The programme is led by the Academy and delivered in partnership with SEO London and 16 engineering employers.

The Academy is in the process of recruiting new employers to the programme by 10 May 2019.

To find out more or get involved [email](#).

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Diversity and Inclusion Leadership Group



Diversity & Inclusion Leadership Group

The D&I Leadership Group (DILG) is a group of engineering employer and employer-led organisations collaborating to increase D&I in engineering. It consists of a strategic steering group and action groups that implement action on the ground.

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Majority Allies Action Group

The Majority Allies Action Group is developing a toolkit to support people who are, or wish to be, allies for D&I in engineering.

It is made up of engineering employer representatives and chaired by Loraine Martins, Director of Diversity and Inclusion at Network Rail. The idea for the toolkit and proposed contents were tested through a survey in November 2018, which 361 people responded to.

The action group have defined "ally" and "majority" as:

Ally: A person who actively promotes and has a passion for diversity and inclusion, supports those who may be different to themselves and stands up to actively combat barriers to inclusion.

Majority: The diversity group representing a notable majority in a given characteristic.

The summary of the results of the survey were:

1. People are motivated to be an ally from an emotional standpoint - understanding that people are treated unfairly and a need to address injustice.

2. Understanding, help and support from colleagues for what they are trying to achieve has helped people in being allies.
3. The main barriers and challenges that people have faced have been uncertainty around what the best thing to do is, and a lack of understanding of the ally role. In some instances, it appears that there is a lack of organisational support for the role.
4. Allies reported that they would like a clear role profile, information on best practice and a vehicle for sharing stories.

The action group will produce a toolkit to support current and future allies based on the feedback from the survey. This toolkit will include:

1. A description of what allies do
2. Information on the language of D&I
3. Guidance for employers
4. Case studies and stories from allies.

If you are willing to share your story of being an ally, please email the [Academy D&I team](#).

The toolkit will be launched in autumn 2019.

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Closing the engineering gender pay gap

The introduction of gender pay gap reporting in 2018 has provided an opportunity for renewed focus on increasing women in engineering.

The Academy will develop a profession-wide plan to close the engineering gender pay gap, through a partnership with the WISE Campaign, which produced the industry-led campaign, *Ten steps for retaining women in STEM*. The Academy has commissioned the WISE Campaign, in partnership with Verditer - an equal pay consultancy, to deliver a thorough analysis of the pay gap across engineering organisations and between individual engineers. They will also investigate the causes of the gap and develop an effective action plan to close it. The development of the plan addresses a public commitment made by the Academy in 2018 in response to [gender pay gap reporting](#).

The Academy will also partner with the Women's Engineering Society in 2019, its centenary year, to deliver a survey on the experiences of female and male engineers. These will be fed into the development of the gender pay gap action plan to ensure that it considers both the views of engineering employers and engineers themselves.



The Academy will bring engineering employers together at different stages of the project to ensure that the investigation is thorough and that key actions in the resulting plan are likely to have a positive impact on increasing and progressing women across the sector - especially into more senior roles.

If you are an engineering employer seeking to find out more about this, or want to get involved, please email [contact us](#).

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Leveraging the Culture Action Group

The Leveraging the Culture Action Group is considering using two aspects of the culture of engineering, as defined by the [Creating cultures where all engineers thrive](#) report to improve inclusion.

The group is chaired by David Jenkins, Engineering Practice Director - Transportation at Atkins, and is made up of representatives from a range of engineering employers.

The group will improve inclusion by developing material to support project management and team working across engineering

organisations. The involves development of a series of learning interventions a project team can use when they first come together, with the aim of ensuring the culture that develops within the team is inclusive.

The learning interventions will be launched by the end of 2019.

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D&I Inside the Academy ▶

Women's Engineering Society Conference 2019: remembering the past, celebrating the present, transforming the future

The Academy were headline sponsors of the Women's Engineering Society (WES) Conference 2019, which celebrated the achievements of women in engineering since the inception of WES 100 year ago.

Over 200 people attended and had the opportunity to hear about the

experiences of several women in engineering, including Air Marshal Susan Gray CB OBE FEng, engineer and most senior female military officer in the Armed Forces. The conference was opened by Elizabeth Donnelly, CEO of WES and followed by a keynote from Mandy Hickson, ex-fighter pilot and motivational speaker.

Other sessions reflected on the experiences of younger WES members, heritage displays, men as allies, how women can break the mould. Dawn Childs, WES President, gave the closing remarks, focusing on WES's vision for the next 100 years.

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Data driven culture change

On 27 November, the Academy's annual diversity and inclusion (D&I) event took place with a focus on how data can be used to drive culture change across engineering organisations. Over 130 people attended from more than 80 organisations.

Keynote speaker, Gary Kildare, Chief HR Officer at IBM, discussed how IBM is using data and artificial intelligence (AI) to develop more inclusive cultures. Henrik Hagemann, Co-Founder and CEO of CustoMem, spoke about culture change from an SME perspective. The Academy's D&I team also presented the findings from an Academy commissioned survey on D&I across engineering employment, giving attendees the opportunity to discuss implications for the profession. Emerging findings from the survey are that:

- SMEs need convincing of the benefits of D&I to their business.
- A significant proportion of engineering employers do not see a link between increasing D&I and reducing the engineering skills gap. However, many see links between D&I and organisational image and reputation, legal compliance, increased collaboration, and customer satisfaction.
- The industry is actively promoting engineering as a desirable career.
- Engineering employers do not only consider D&I in the context of HR, but also in the context of wider business activity such as product or service design, marketing, the supply chain, customer experience, and community relations.

The Academy's D&I programme and Enterprise Hub are embarking on a collaboration to develop a bespoke framework to help increase D&I across engineering SMEs, including startups, micros and scale-ups.

The D&I Measurement in Engineering guide was also launched at the event. Produced by members of the Academy's D&I Leadership Group (DILG), it provides a structure that employers can use to measure progress on D&I in their organisations. The guide can be found on the [Academy's website](#).

The next academy annual D&I programme event will take place on 24 October and will centre on sharing findings from the Academy project to close the engineering gender pay gap.

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Data monitoring

In November 2018, the Academy's Trustee Board agreed to support a campaign to encourage all Academy Fellows to self-declare their diversity data by the end of spring 2019. Data monitoring is essential to developing an evidence-based D&I programme.

Inclusive selection

In April 2019, employees across the Academy will attend an inclusive selection workshop to increase their understanding of how attraction and selection processes can be made more inclusive and achieve a more diverse range of grantees, awardees and prize winners.

Academy raises £441,000 for bursaries

The Academy raised £441,000 from the Sir Ralph Robins Scholarship fund, which will provide bursaries for undergraduate students from underrepresented and underprivileged backgrounds as part of its Engineering Leaders Scholarship programme.

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International Day of People with Disabilities

In celebration of the International Day of People with Disabilities, which took place on 3 December, some Academy employees wrote internal blogs that shared their experiences of disabilities such as anxiety and depression.

On 11 December, the Academy hosted a session on how to help employees with disabilities. It also raised awareness of Change100, an internship programme that unlocks the untapped potential of students and graduates with disabilities. More than 30 colleagues attended the session.

- In addition, the Academy has published a Building accessibility statement to promote features of its venue, Prince Philip House. The booklet highlights aspects of the building designed to make it more inclusive, [building accessibility statement](#). Braille business cards, which include the Wi-Fi password, are now available at reception.
- The Academy's editorial style guide has been updated and now includes an expanded version on inclusive language.

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Lesbian, gay, bisexual and transgender history month

Throughout LGBT history month, in February, the Academy teamed up with InterEngineering to share information on LGBT engineers with targeted resources to increase LGBT inclusion through a social media campaign.

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International Women's Day

To celebrate International Women's Day, the Academy extended its online profiles of female Fellows to inspire more women to become engineers and stay in the profession. New profiles have been added to celebrate women's engineering achievements and raise issues such as [fair recruitment](#), [effective retention](#), [fair pay](#) and [career progression](#).



Professor Sarah Hainsworth OBE FREng is Pro-Vice-Chancellor and Executive Dean for the School of Engineering and Applied Science at Aston University

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Diversity events calendar and notable dates

Royal Academy of Engineering events

MAY 2019

14 May

GEEP steering group (by invitation only) ►

The steering group of 16 engineering employers steers the successful delivery of the programme in partnership with SEO London.

16 May

D&I in prizes, grants and awards workshop ►

This workshop will share good practice and practical tips to increase D&I in the giving of prizes, grants and awards. If you would like to attend and are from a PEI, please contact [Monica Stancu](#). If you are a Science Council member body, please contact [B Wagenbach](#).

16 May

Progression Framework Implementation Group ►

A meeting of engineering and science professional body representatives working to increase D&I using the [progression framework for professional bodies](#). If you are a PEI, please contact [Monica Stancu](#) at the Academy. If you are a Science Council member body, please contact [B Wagenbach](#) at the Science Council.

New representatives are welcome.

JUNE 2019

5 June

Athena Forum ►

The Athena Forum aims to work towards a goal of proportional democratic representation in STEMM through providing a unified voice for influencing policy and effecting cultural change.

10 June

D&I Committee meeting (by invitation only)

The D&I Committee has the oversight of all Academy D&I programme and internal work. The Committee meets quarterly to discuss progress. If you would like to know more about the Academy's work on D&I, or get involved, please [contact us](#).

11 June

Diversity & Inclusion Leadership Group (DILG) steering group (by invitation only)

A meeting of engineering employers and employer-led organisations that steers the employer strand of the D&I programme. Participation is by invitation but if you would like to know more, please [contact us](#).

17 June

The Academy International Women in Engineering Day lunch ► (by invitation only)

As part of International Women in Engineering Day (INWED19), the Academy is hosting a special lunch where attendees can share their progressive ideas. This is the perfect opportunity for the next generation of engineers to network with senior industry leaders, providing a platform to share advice, experiences and encourage participation from both sides.

20 June

GEEP mentoring event (by invitation only)

The GEEP supports the transition of more students from diverse backgrounds into engineering employment.

21 June

Institution of Engineering and Technology - Gender Parity in Engineering ►

The Institution of Engineering and Technology (IET) is celebrating International Women in Engineering Day (INWED) at its third annual Women in Engineering conference in Birmingham using the INWED theme of 'transform the future'.

23 June

International Women in Engineering Day ►

Held on 23 June each year, INWED is an international awareness campaign to raise the profile of women in engineering and focuses attention on the amazing career opportunities available to women in this industry.

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Diversity events calendar and notable dates *continued*

24 June

WES INWED tea (by invitation only)

The Women's Engineering Society's afternoon tea event is an annual celebratory event for International Women in Engineering Day 2019 and recognises the fantastic achievements of the top 50 women in engineering. It will take place between 1.00pm to 5.00pm at the Academy, Prince Philip House.

27 June

STEMM disability advisory committee ► (by invitation only)

STEMM disability advisory committee provides support across science, technology, engineering, mathematics, and medicine for disabled workers, current and aspiring disabled students and their teachers. The committee meets quarterly.

JULY

5 July

Lesbian, gay, bisexual and transgender STEM day ►

The International Day of LGBTQ+ people in science, technology, engineering and maths (STEM) aims to help raise awareness and increase support. #LGBTSTEMDay

16 July

Celebration of LGBT STEM day ►

The Academy, in association with [InterEngineering](#), the network of LGBT in engineering networks will host an event in celebration of LGBT STEM Day.

SEPTEMBER

GEEP ►

In autumn, events giving employers the opportunity to engage directly with students will take place. Dates for engagement events will be released in May 2019. [Contact us](#) for more information.

10 September

D&I in education and training, accreditation and examinations

This workshop will share good practice and practical tips to increase D&I in education and training, accreditation and examinations. If you would like to attend and are from a PEI, please contact [Monica Stancu](#). If you are from a Science Council member body, please contact [B Wagenbach](#).

19 September

Athena Forum ►

The Athena Forum aims to work towards a goal of proportional democratic representation in STEMM through providing a unified voice for influencing policy and effecting cultural change.

23 to 27 September

National Inclusion Week ►

National Inclusion Week is an annual campaign run by Inclusive Employers to raise awareness of the importance of inclusion in the workplace and the business benefits of having a diverse and included workforce.

OCTOBER

24 October

D&I Programme annual event, London

Annual networking event to engage and consult with stakeholders about the D&I programme activities.

Contact us

For more on any aspect of the D&I Programme, or to get involved, please [contact us](#).



D&I team l-r: Monica Stancu (Manager), Gill Thomas (Senior Manager), Bola Fatimilehin (Head of D&I) and Arti Dillon (Project Officer)

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For more information on any aspect of the work mentioned in this newsletter, please contact diversityteam@raeng.org.uk

www.raeng.org.uk/engdiversity

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ROYAL
ACADEMY OF
ENGINEERING

DIVERSITY AND INCLUSION
PROGRAMME

Royal Academy of Engineering

We bring together the most successful and talented engineers from across the profession - our Fellows - to advance and promote excellence in engineering for the benefit of society.

We have three strategic priorities: make the UK the leading nation for engineering innovation and businesses, address the engineering skills crisis, and position engineering at the heart of society.

We are a national academy with a global outlook.

Diversity and Inclusion Programme Strategy 2016-2020

The Royal Academy of Engineering is running a programme to increase diversity and inclusion across the engineering profession.

Vision: An inclusive engineering profession that inspires, attracts and retains people from diverse backgrounds and reflects UK society.

Mission: Leading the engineering profession to challenge the status quo, stimulate cultural change, and improve diversity and inclusion.

The programme has three strategic aims:

1. Understand barriers to increasing D&I in engineering, employment, and professional registration.
2. Engage in partnerships to remove barriers to increasing D&I.
3. Deliver impact through effective communications.

The Academy is a member or supporter of the following organisations:



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