

Diversity & Inclusion in IOM3

October 2021

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Foreword

The Institute of Materials, Minerals & Mining (IOM3) is the global network for the materials cycle, promoting sustainability in the extraction, processing and use of materials across all sectors.

Over the past two years, IOM3 has made significant progress towards creating a more inclusive and diverse environment for all who interact with it, and is committed to continue supporting, promoting, and creating a dialogue for under-represented and minority groups in science and engineering in the future.

Making sure everyone can contribute fully to society is important for many reasons and excluding someone deliberately or accidentally because of a particular characteristic is both unfair and inefficient, and in some instances now illegal.

IOM3 also wishes to support its members in helping the sectors and industries in which they work be more inclusive, and therefore more attractive as career options to a wider range of people.

This document sets out the work that IOM3 has already done to improve its performance on inclusion, diversity and equality and identifies some steps that it wishes to take. It is also a call for contributions from IOM3 members and other stakeholders to help develop the overall strategy and approach. If you have suggestions or comments, please do contact IOM3 at ceo@iom3.org.

Neil Glover FEng CEng FIMMM, President of IOM3



Introduction

There is increasing acceptance in many societies of the need for organisations to be better at promoting inclusion, diversity, and equality (IDE). Some of this is driven by changes to society's view of the ethical position. For example, in 1984, 43% of Britons agreed with the statement 'a man's job is to earn money, a woman's job is to look after the home and family'; by 2017 that had dropped to 8%. Similarly, in 1983, 17% of Britons thought same-sex relationships 'not wrong at all'; by 2018 this had risen to 66%.

Another driver is the changing legal framework, such as the Equality Act 2010 in Britain, changes to legal arrangements for same-sex couples, etc.

A third important, more recently recognised, driver is the recognition of the additional value an organisation gets from having a more diverse workforce and an inclusive culture. The overall shortage we face in the pool of scientists, technologists and engineers available in the UK would be eased if more women, ethnic minorities, and people from disadvantaged backgrounds entered these fields. More workforce diversity is also linked to greater innovation, reduced reputational risk, better talent retention and less groupthink. The evidence is increasingly showing that promoting a more inclusive and diverse workforce and managing it appropriately is vital to continued organisational success.

IOM3 has traditionally had a strong focus on promoting women and younger people within materials, minerals, and mining. Its Women in Materials, Minerals & Mining (WIM3) and its Student & Early Career (SECC) Committees have been established for a long time. Indeed, currently, its membership percentage for women (17%) is higher than many other Professional Engineering Institutions and its student and early career work is often used as inspiration by its global professional body partners. In addition, the geographical spread (15000 in over ninety countries) and the breadth of technical interests of its members is another important source of diversity in IOM3 activities.

Recent developments

Over the past two years, IOM3 has undertaken several actions to build on this historic focus and further improve its performance on IDE.

Making the commitment

IOM3 has issued a statement on the importance of IDE and enshrined respect for it in its Code of Professional Conduct, which all members of IOM3 must follow. IOM3 has removed age-related criteria for its awards and medals, replacing them with a definition of early career¹. As described in more detail below, IOM3 participated in the Royal Academy of Engineering/Science Council Diversity and Inclusion Progression Framework self-assessment in 2021.



Member support

Alongside SECC and WIM3, IOM3 has established Member Networks for LGBTQ+ and allies (IOM3Pride); Ethnic Minorities in Materials, Minerals, & Mining (EMM3); and those who are disabled and allies (Able Different in Materials, Minerals & Mining, ADM3).

Opening up

In order to widen the field of applicants, all senior active supporter and volunteer (ASV) roles are now advertised to the membership via the member magazines (*Materials World* and *Clay Technology*), social media, and the website. This has resulted in a more diverse set of appointments (see below).

Modelling the role

IOM3 has committed to avoiding single-gender speaker panels at its conferences wherever possible, and more generally is seeking to ensure that all of its conferences, events and speaker panels have diverse representation in line with the aspirations it holds for the diversity of its membership. It is also using a range of diverse imagery on its website and in its promotional material and is showcasing a wider set of professionals in career profiles and the like.

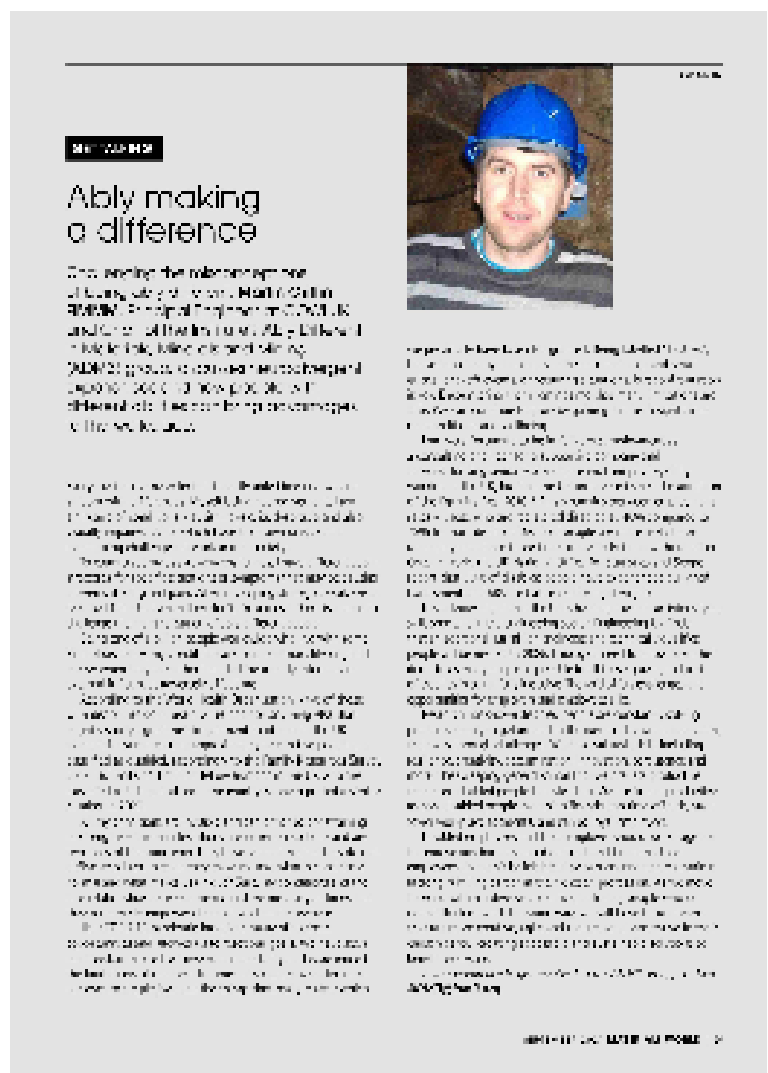
¹ The Institute defines early career as meaning someone who is (allowing for career breaks, e.g. parental leave) within:

- 10 years of the start of their first employment (or self-employment) in a materials, minerals or mining related role, or
- 6 years of completing their PhD (in a relevant subject), whichever is sooner

Sharing the message

IOM3 has also made significant efforts to reach a wider audience to create a healthy dialogue regarding diversity, using IOM3 social media channels and member magazines. IOM3 shows its support for various national and global diversity ‘Days’ via its social media channels, podcasts and articles. IOM3 also supports relevant diversity events, including with sponsorship and promotion. It exhibited and sponsored the LGBTQ+ in STEM virtual event in January 2021.

Materials World has invited conversations including on neurodiversity, LGBTQ+ engineers, Women in STEM, Black Miners in the UK and more. It has also featured articles in relation to Black History Month, Pride, women in engineering and so on. IOM3 is continuously looking for speakers and engineers to share their experiences of EDI in a wide range of areas within the industry.



Data gap

However, IOM3 has more work to do. The main issue currently is the lack of data – IOM3 currently can only collect information from members about gender and age and cannot therefore analyse other protected characteristics to understand what issues it faces – addressing this is a priority for IOM3. This was confirmed by the results of the Royal Academy of Engineering (RAEng)/Science Council’s Progression Framework self-assessment 2.0, which IOM3 undertook in 2021.

Progression Framework 2.0 self-assessment

The aim of the Framework is to help professional bodies in science and engineering to track and plan their progress on diversity and inclusion. This seeks to help professional bodies:

- Track their performance and progress against four levels of good practice, where Level 1 is the starting point and Level 4 the highest level of good practice
- Structure conversations internally about their performance and progress on diversity and inclusion
- Identify strengths and areas for development
- Plan next steps in making progress on diversity and inclusion
- Connect with and learn from other organisations in the sector, sharing successes and working to address challenges on diversity and inclusion

In June 2021, IOM3 received its results from the self-assessment. These are quoted below.

Strengths:

- Your self-assessment is in line with the median self-assessment for all organisations for five of the ten sections of the Progression Framework. Your submission includes compelling examples of the work you are doing.
- You already have some good practices in place, and are planning to build on these for the future. Your leaders are engaged, with diversity and inclusion firmly on the agenda of the Board and Senior Team.
- You have established a number of networks to better understand and address the needs of different membership populations, such as IOM3Pride, Ethnic Minorities in Materials, Minerals & Mining (EMM3), and Women in Materials, Minerals & Mining (WIM3), with a network for disabled IOM3 members and allies (Able Different in Materials, Minerals & Mining ADM3) also planned for the future.

Areas of development:

- You describe your current approach on diversity and inclusion as ‘somewhat ad-hoc’, lacking a vision, strategy or plan for the future.
- You also identify the limitations of your data collection practices. You currently only gather data on gender and age; insights into other areas such as the ethnicity of members are very limited.
- The absence of a strategy and plan, and the limitations of the data available to you, will together compromise your ability to assess the impact of the efforts you are currently putting into this work.

Recommendations for action:

- Take a collaborative approach to developing your strategy and plan, partnering with internal and external stakeholders to ensure you secure diverse inputs and maximum engagement. Co-creation is key to progress in this area.
- Extend the scope of your work to better understand and address the experiences of other under-represented groups in the industry. The networks you have already established will be a helpful source of insights and ideas for future action.
- Continue to develop the systems, processes and relationships that are needed to gather, analyse and make use of data on diversity and inclusion. Gathering the data will help you monitor and measure progress and target interventions more clearly.

Action plan

This document represents the next step on the journey for IOM3. As highlighted above, it needs to establish an overall, planned and coherent approach to improving its performance on IDE and would very much welcome comments and contributions to help in this journey. If you have views to contribute, please contact IOM3 at ceo@iom3.org.

Using the categories of the Progression Framework, each area of IOM3 activity has been assessed with respect to IDE, looking at what has already been done and what needs to be done next to further IDE. This is set out in this document.

In addition, before the end of 2021, IOM3 is aiming to conducting a survey on members’ experience and expectations of IDE, which will help it create new strategies for improving diversity and inclusion.

Tackling the data gap

IOM3 will introduce the facility to collect diversity data from its members, learners, conference delegates, award nominees, and other contacts in a form which will enable IOM3 to analyse the data to understand trends and issues. The IOM3 team will not be able to associate this data with an individual, to respect privacy. This action is fundamental to progress in many areas of IOM3 activity.

Membership and registration

Current situation

IOM3 member data show that women currently make up 17% of IOM3 members and 7.7% of registrants. The age range of members and registrants is 18-100+ years. No other data on protected characteristics is held.

Membership documents have been screened by Stonewall to check for the use of appropriate language.

Assessor panels for professional registration include at least one female if the candidate is female, wherever possible. Assessors receive regular refresher training, which includes IDE.

What we plan to do

This will depend on the feedback from the survey and on analysis of diversity data once collected.

Prizes, awards, and grants

Current situation

Awards and prizes are given for personal achievement, published work, contributions to the profession, outstanding service, distinguished careers, and the like. In 2021, the percentage of recipients of main prizes, awards and grants who are women is 21%, and 10% of prizes, awards and grants have been given to ethnic minorities (10%). As mentioned above, IOM3 has removed age-related criteria from its awards to recognise the greater range of career paths that people follow nowadays.

What we plan to do

IOM3 will introduce a new award in 2022 to recognise someone who promotes IDE in materials, minerals, and mining.

IOM3 is in the process of reforming how it disburses its grants and will seek to incorporate IDE concerns fully in the new arrangements.

Other actions will depend on the feedback from the survey and on analysis of diversity data once collected.

Governance

Current situation

IOM3 has undertaken a data survey for its top-level governance structure (Advisory Council and Executive Board). Ten members of EB (77%) and twenty of AC (50%) responded – the data in the table below is based on those responses plus (for age and gender) member records:

Characteristic	%AC	%EB	Characteristic	%AC	%EB
Gender Female	33	23	Age <30	10	0
Gender Male	67	77	Age 30-40	13	15
Gender Trans/Other	0	0	Age 41-50	30	15
Ethnicity White	90	92	Age 51-60	23	23
Ethnicity Other	10	8	Age >61	25	46
Disability	3	8	Religion Christian	18	15
Sexual orientation	0	0	Religion Other	6	8
			None/Prefer not to say	18	31

The five-strong Presidential team is currently made up of three women and two men, the first time there has been a female majority.

Appointments to senior active supporter and volunteer roles are now made following an open advertisement and a selection process. This has opened the opportunity up to a wider cross-section of members. For example, of the ten Technical Community Chairs appointed since this process was adopted, 3 are female and 1 comes from an ethnic minority background, compared to 0 and 0 respectively in their predecessor cohort.

As of August 2021, all candidates for such roles are required as part of their application to include a statement on what they plan to do to if appointed to support members and promote IDE.

The widespread use of virtual meetings has opened governance roles up to a wider audience, as the time commitment is significantly less (than having to travel to a physical meeting venue).

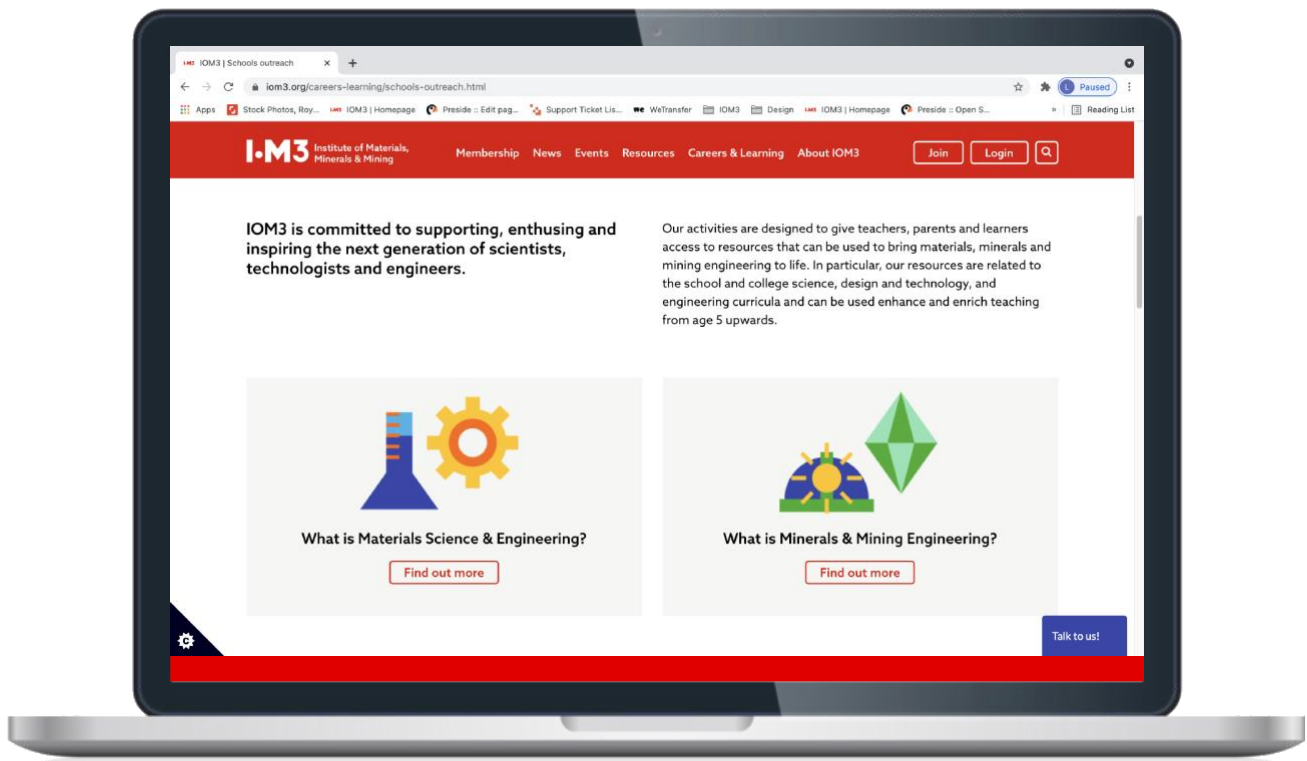
What we plan to do

As part of the Technical Communities review, each leadership group will be asked to review its approach to embedding IDE in its activities and membership and produce a plan of action that will be made public.

The default of virtual meetings will continue in the future, with one in-person meeting per committee per year.

The IOM3 Bye-laws will be amended (subject to Privy Council Office approval) to make the language gender-neutral.

Once we can collect diversity data, we will prioritise encouraging people in the governance structure to provide theirs and will review and analyse it as soon as we have enough. Further actions will then be determined.



Education and outreach

Current situation

Most outreach activity has been on pause for the past eighteen months. IOM3 has made its schools resources available online, meaning they are accessible to a wider range of students and teachers.

What we plan to do

IOM3 is in the process of reforming how it disburses its grants and will seek to incorporate IDE concerns fully in the new arrangements.

Accreditation

Current situation

Accreditation is a process of reviewing academic programmes and company IPD schemes against predetermined learning outcomes. Some aspects of IDE are covered within the learning outcomes and are therefore assessed as part of accreditation. Most IOM3 accreditation activity is undertaken under its licence from the Engineering Council and is therefore constrained by those requirements.

IOM3 accreditation activity routinely asks if safeguarding/IDE policies are in place and in use. This is also checked in discussions with students.

Accreditors receive regular refresher training, which includes IDE.

What we plan to do

IOM3 will continue to work with its main accreditation regulator, the Engineering Council, to develop and strengthen IDE aspects of accreditation.

Once the data gap has been addressed, IOM3 will be able to understand the diversity of its accreditation volunteers and will take any action necessary to address improvements identified.

Training

Current situation

IOM3 runs in-person and online training courses. Reasonable adjustments are made if a learner needs them, but otherwise the usual data problem means there is little understanding currently of what more should be done.

What we plan to do

IOM3 will seek to make more of its training courses available in a wider range of formats to suit different learning styles and availabilities. Other actions will depend on the results of the data analysis in due course.

Employment

Current situation

IDE is discussed by the IOM3 senior team and the case for it is clearly understood across the organisation. All team members have had access to unconscious bias training. IOM3 complies with its legal requirements and has in place a suite of policies to support IDE (flexible working, anti-harassment, etc). IOM3 collects extensive diversity data for its employees and regularly analyses it to check for issues around pay and diversity.

Gender

- 77% of the workforce are women
- 23% of the workforce are men
- 0% of the workforce are self-described/prefer not to say

Ethnicity

- 73% of the workforce is from a White British ethnic background
- 27% of the workforce is from a minority ethnic background

Disability

- 0% of the workforce identify as disabled

Religion

- 36% Christian (including Church of England, Catholic, Protestant and all other Christian denominations)
- 2% Hindu
- 2% any other religion
- 19% no religion
- 26% prefer not to say

Age

- 15% aged 29 and below
- 16% between 30 and 40
- 17% between 41 and 50
- 28% between 51 and 60%
- 11% aged 61+

Senior Leadership

- 66% are women
- 33% are men
- 0% are self-described/prefer not to say
- 66% are from White British ethnic background
- 33% are from minority ethnic background

IOM3 keeps its employment practices under review and seeks to offer IDE-supporting options such as part-time, remote, and flexible working. IOM3 seeks employee input on a range of issues and engages with external stakeholders and other professional bodies.

What we plan to do

IOM3 will seek opportunities to keep the thinking around IDE current and in team members' minds, for example in internal communications, team training and volunteering.

IOM3 will consult with team members about whether and if so how to collect other kinds of diversity data such as sexual orientation.



Communications

Current situation

IOM3 has made some active steps over the last year towards supporting IDE within its own memberships and reaching out to underrepresented groups, creating campaigns, banners, articles, and making active connections with external groups.

IOM3 is producing a steady programme of podcasts, opinion pieces and other forms of content on IDE-related matters. The new website has also been designed to be more accessible, including for those with visual impairment.

IOM3 now has a forward-looking calendar of 'Days', including days dedicated to IDE-related issues, and supports a range of them with social media, content, email signatures, and other methods.

What we plan to do

IOM3 will look for opportunities to partner with diverse communities and organisations to both learn more about IDE and also to improve how it communicates about it.

Events

Current situation

Recently, IOM3 adopted a firm policy of diverse speaker panels wherever possible. There is a clear event code of conduct that also covers diversity (including neurodiversity) issues.

The events team makes efforts to support speakers and attendees regarding diversity and accessibility, making adjustments to facilities, etc.

The switch to webinars in 2020 and 2021 has opened up participation to a wider audience, though at the same time some have struggled with the necessary technology.

What we plan to do

IOM3 will explore making greater connections with diversity groups to further IDE for events. These networks could lead to future collaboration for events and IOM3 could host its own diversity events. Other actions will depend on the results of the data analysis in due course.

Beyond IOM3

In addition to actions that IOM3 is undertaking to improve its own performance on IDE, it is also important to encourage organisations in the wider materials, minerals, and mining sectors to improve their performance.

IOM3 already asks education institutes to set out their policies on safeguarding and anti-harassment when it is asked to accredit courses (see above). In addition, IOM3 is today establishing a Task and Finish Group to bring together a set of high-quality case studies of companies in the foundation industries² with good approaches to promoting diversity and inclusion. These will then be published towards the end of 2022 and disseminated by IOM3 to help encourage others to follow suit. The group brings together representatives with experience of the foundation industries and with a strong interest in IDE.

Conclusion

IOM3 is committed to supporting IDE and improving how it conducts and implements this support. While much progress has been made, there is more to do, especially around creating a planned, coherent overall approach and implementing a robust diversity data collection mechanism.

The IOM3 Trustees and team look forward to working with members and other stakeholders to develop this overall approach and to continue to make IOM3 the inclusive, welcoming professional body for materials, minerals and mining.

² bulk chemicals, cement, ceramics, glass, metals, and paper