

**I.M3** Institute of Materials,  
Minerals & Mining

The global network for the  
materials cycle.

# 2020 END OF YEAR REVIEW

**As my Presidential term of office comes to an end, I look back on a year that would have been impossible to imagine 12 months ago.** Like many others, my working world shrunk overnight in March and I found myself fighting with my family members for desk-space in the house (and bandwidth on the internet!). These have been strange times indeed and I recognise that they have been associated with tragedy and loss for some and extremely difficult conditions both at home and at work for nearly everyone worldwide.

This time last year, when I wrote my Annual Review, I had plans to attend as many events as possible for the Institute, nationally and internationally. After a flurry of the activities in January and February, I was lucky enough to be invited to attend Scottish Plastic and Rubber Association Annual Dinner dinner in Edinburgh in early March. I am so glad to have attended this – and what a fantastic evening of excellent food, talks (and dancing) it was. Little did I realise at the time, this would be my final memory of an in-person visit as President.

Like so many others, life for the Institute has moved 'online' and I would like to congratulate the whole IOM3 team for the huge amount of work and the very large number of successes they have achieved. Fortunately, IOM3 CEO Dr Colin Church had already had the foresight to oversee upgrades and modernisation of IT equipment and data storage and so the team were well-placed to continue to serve the community even at the start of the first UK Lockdown. Sadly, some of the major conferences and events planned for 2020 have needed to be either cancelled or postponed, but there have also been some highly successful alternative format events. The Institute has been a hive of activity and the team have ensured that the profile of IOM3 has remained both relevant and visible. There has been a range of activities underpinning COVID response and a number of public policy statements have been submitted and published. The Institute has also offered a large number of training courses, online meetings and podcasts and I encourage everyone to look at what is available and take advantage of the excellent resources.

The conditions this year have also presented financial challenges for the Institute and where previously the Trustees had been optimistic that the activities planned would allow us to 'balance the books', through no fault of anyone, we have not been able to achieve our goal. The repercussions of this strange time will continue to be felt for several years to come, but with clear thinking and solid planning, the future for the Institute still looks bright.▶

## Professor Serena Best CBE FREng CEng FIMMM IOM3 President


*'Project Optimus has revolutionised the ability of the IOM3 staff to delivery member services. This has come live relatively recently and was delivered with an outstanding degree of professionalism.'*




As many of our members will have seen, we held our AGM 'online' for the first time in the history of the Institute. However, what occurred as a necessity this year, proved to be highly successful and I would like to thank everyone who took the time to participate in this. We had the largest attendance on record and it was wonderful that so many people were able to join the meeting from around the world. This certainly seems to be a platform that should be explored for future AGMs. The Advisory Board and Executive Board meetings have also been held "virtually" for the past nine months and this has worked extremely effectively and efficiently. Costs (both in terms of time and travel) are reduced substantially – the only regret is missing the ability to chat together informally and catch up over a cup of coffee, but even now there are new platforms emerging to enable that type of interaction.

I would like to congratulate the IOM3 Team for delivering successfully the two planned major projects over recent months, under extremely difficult circumstances. The first, Project Optimus has revolutionised the ability of the IOM3 staff to deliver member services. This has come live relatively recently and was delivered with an outstanding degree of professionalism. Rather oddly, this is characterised by a seamless (almost invisible) transition, for those of us who are member-users, but which will offer huge and powerful benefits to all of us as we move forward. Hopefully noticeable to everyone, has been the launch of our new Visual Identity and the new website. Once again this was developed by the in-house team and I have been extremely impressed by the impact that this has made.

Recently, the World Final of the Young Person's Lecture Competition took place. Originally, the plan was for the competition to be hosted by our friends in the Hong Kong local society, but like so many other activities this year, it became clear that any hope of a conventional, in-person event was impossible. However, I was delighted to be part of the 'virtual' event and by careful choice of timing, it was possible to welcome competitors from Australia, Brazil, Hong Kong, Malaysia, Russia, South Africa and the UK to present their talks live, to an international audience. I would like to congratulate those very talented competitors and, indeed, all who have taken part at every stage of the competition – the majority of which has taken place online



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Moving forward, I shall now take on the role of Chair of the Executive Board. It will be a significant challenge to match the outstanding contribution made by Martin Cox and I thank him warmly for everything that he has achieved. Martin has done far too good a job for us to let him escape completely – and we look forward to working with him in a new role in 2021. There have been a number of appointments as Chairs of Committees and Boards over the past few months. These have been advertised in Materials World and we have been delighted to see the level of interest from our communities. I have been very pleased to meet a number of people this way and am very grateful to everyone who has put themselves forward. One such process was involved in the appointment of a Vice President. We are very pleased that Christine Blackmore has taken the role. With Kate Thornton as Senior Vice President next year, it is interesting to see that women outnumber men in the Presidential train for the first time in our history.

I would like to thank, again, the many volunteers in the Institute for all of the work they do at many different levels, from Local Societies, to Committees, Boards and Divisions. People have continued to give their time for Accreditation work and Professional Review Interviews and our Technical Communities provide the essential link to the outward-facing activities of the Institute. I also offer my heartfelt gratitude to the IOM3 team for its commitment and hard work. As we move forward, I offer my very best wishes (and congratulations) to Neil Glover, who begins his term of office as President in January. I am sure that we will benefit greatly from his knowledge and experience. I wish him and all of us, less 'interesting times' in 2021.

In my Inaugural Speech, and also in my Annual Review last year, I highlighted the importance of communication. I believe that 2020 has highlighted how fundamental that message is to our operation as a global Professional Engineering Institution. I have been pleasantly surprised by our ability to adapt our mode of operation in ways that may lead to us to never quite return to the previous normal. I believe that the reach of IOM3 has actually expanded globally and the skills that have been learnt with communication have proved to be key to this.



**As our President sets out in her look back over 2020, it has been a demanding year for everyone, and IOM3 is no exception.**

We had anyway set ourselves some significant challenges for 2020 to follow on from our 150th anniversary, and then the pandemic hit. As it did for many others, this required a rapid change in working practices for volunteers and team members. Despite the external stresses of lockdowns – or indeed, in some cases, because of them – the volunteers and employees of the Institute have delivered some impressive things this year.

A planned major effort for 2020 was completion of our digital transformation project, Optimus. The first phase, replacement of our antiquated membership database, was delivered on time at the end of January. With effectively only four months to do it, this was an exceptionally intense period for the membership team, and our digital delivery partners tell us they have never seen more commitment, professionalism, or energy for such a project. This is now being complemented by the digitisation of tens of thousands of historic paper membership records. The following ten months saw almost everyone in the wider IOM3 team involved in the next phases, demonstrating the same levels of dedication to bringing together our different databases and, as the most visible aspect to the outside world, our new website. The database mergers will mean that for the first time, we are able to offer members a holistic service more tailored to your needs (so long as you tell us what they are – so please update your online profile!). The new website will continue to develop over time as volunteers and team members add, refine and improve its content. However, with its simpler navigation and ability to be used on the full range of internet devices (smart phone, tablet, computer), it addresses one of the major complaints members expressed in the 2019 Member Survey and in follow up discussions. It is also gratifying to note that the team kept within the original budget for this whole project, which cannot always be said for major IT projects.

The launch of the website has also brought with it the release of the Institute's new visual identity. The old visual identity of IOM3 was no longer fit for purpose and Trustees did not consider it adequately reflected Institute core values of being forward looking, dynamic, mindful, environmentally conscious, innovative, and global. As part of the development of the new website, therefore, they asked our talented in-house team to develop a new visual identity, which they have done based on widespread consultation, including of members via the 2020 Member Survey. So far, both website and visual identity have received a positive reception.▶

## **Dr Colin Church** **FIMMM CEnv CRWM MCIWM** **IOM3 Chief Executive**

*'Despite the external stresses of lockdowns – or indeed, in some cases, because of them – the volunteers and employees of the Institute have delivered some impressive things this year.'*



Another aspect of our planned digital work has been the introduction of an online catalogue for our library resources (ICON). This, combined with moving the physical library from the old warehouse into The Boilerhouse (the main building in Grantham), will make the wealth of material there much more accessible to members.

Of course, the pandemic and lockdown meant we had to develop several other digital offerings at a far faster pace than we had originally intended. Our education and training team was first out of the blocks, building on the Institute's existing online courses to add further offerings on technical and 'soft' skills, with over a hundred people viewing the webinar Presentation skills for online communication, for example. The membership team's adoption of online mentoring workshops for upgrades and professional registration (CEng, CEnv, CSci, etc) came hot on their heels. This has seen over 400 people attend and has led to us breaking our all-time records for both registrations as Chartered Scientist and total registrations with the Engineering Council in 2020. The conference and events team also stepped up to the mark, with 30 webinars this year with over five thousand registering, a highlight being almost 800 people attending live the energy materials webinar Making Better Batteries. The 'IOM3 Investigates...' podcast series is also doing well, already being listened to well over a thousand times since its launch in the early summer. Taking the Annual General Meeting online also resulted in unprecedented attendance levels, and the Young Persons' World Lecture Competition final, with an audience from ten countries, joined our growing array of events with international appeal – individuals from more than seventy countries joined one IOM3 event or another over the year, not counting local society events, which must also be a record!

In line with our Corporate Strategy, the Institute has also been growing its input into policy discussions. Over the course of the year, we have made six formal submissions to Parliamentary and Governmental consultations, produced contributions with CIWM and with the National Engineering Policy Centre to the Spending Review and kept up a drum beat of regular press comment.

Some aspects of the normal rhythm of Institute life have continued as we settled into our new governance arrangements: 2020 saw the appointment of a new Vice-President, Christine Blackmore; a new Honorary Treasurer, Vikas Mawkin and of twelve new Technical, Member and Professional Community Chairs:

- Jude Allan (Packaging)
- Mike Armitage (Applied Earth Science)
- Laura Baker (Iron and Steel)
- Dave Evetts (Local Affairs)
- Samuel Grisa (EMM3)
- Paul Hatton (Biomedical Applications)
- David Hughes (Polymers)
- Martyn Jones (Student & Early Career)
- Richard Oblath (Energy Transition)
- Emily Radley (IOM3Pride)
- Jim Shields (Membership)
- Ping Xiao (Surface Engineering)

Thank you to each of these new additions to leadership roles in the Institute for coming forward, and a corresponding heartfelt thanks to those who have moved on, especially Dr Mick May, who stepped down as our Honorary Treasurer after twelve years, and Mr Martin Cox, whose term as Chair of Executive Board and a Trustee has also ended.

With thanks to the many volunteers who have contributed, we have also made progress with the review of our Technical Communities and expect to be able to implement the changes before the summer of 2021.

Regrettably, like everyone else, we have had to abandon the physical meetings that I know are so valued by members. This has also affected the use of our buildings by members and customers alike, something we are keen to change when circumstances allow. ►

*'Looking forward to 2021, we should all be wary of making too many predictions, but the Institute will continue its journey to being the best professional membership body we can be, whether that is via online delivery or in person.'*

Looking forward to 2021, we should all be wary of making too many predictions, but the Institute will continue its journey to being the best professional membership body we can be, whether that is via online delivery or in person. Our biggest event is likely to be PVC2021, which hopefully will be a hybrid (that is, attendance physically or virtually is possible) event with the physical element in Edinburgh. Focusing on PVC in the circular economy, this will offer a comprehensive and varied programme of international speakers, high-quality papers, and exceptional networking opportunities in a hybrid conference format. 2021 should also see the delayed COP26 meeting, where the leaders of the world will descend on Glasgow in the early winter to negotiate the next steps of our attempts to keep climate change below 2 degrees. IOM3 - working in partnership with other professional bodies and alone - will continue its contribution to these discussions as part of its work to support professionals in materials, minerals, and mining to be heroes of the transition to a low-carbon, resource-efficient future, not villains.

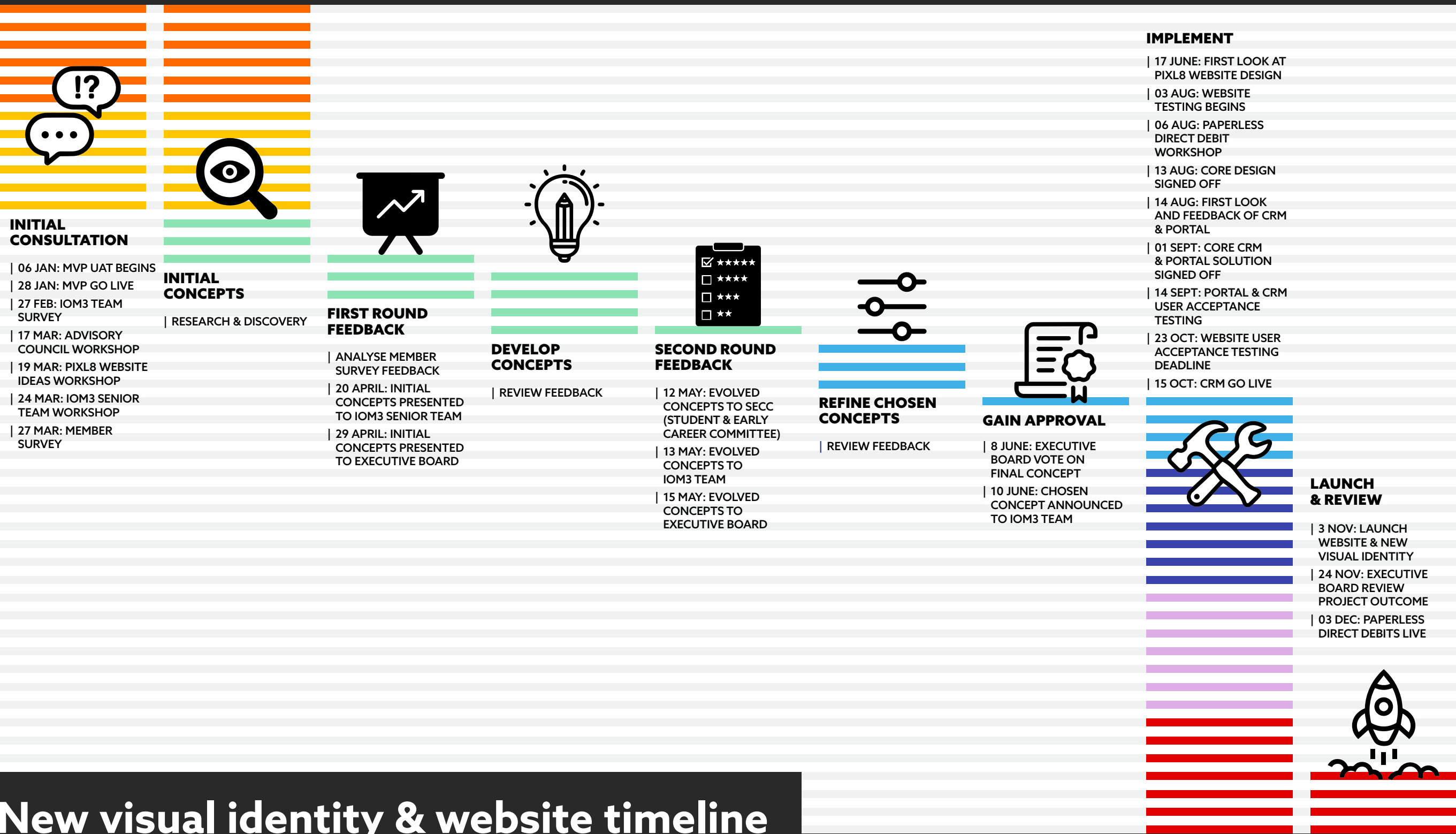
As always, the Institute relies on hundreds of volunteers in different roles, from assessors via board members to Trustees, to carry out its work on behalf of its members. On behalf of us all, thank you.

Finally, I'd like to express my pride in and gratitude to the fabulous team here at the Institute of Materials, Minerals & Mining for everything they have delivered for our members through all their hard work this year in trying circumstances.

**I·M3**

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# New visual identity & website timeline



# Membership

- 1,018 members were awarded or reinstated to MIMMM
- 202 members achieved CEng registration
- 30 members achieved CSci registration
- 403 members participated in 42 professional registration and Fellowship workshops
- 194 members were awarded or reinstated to FIMMM

# International & SECC

- The Committee reviewed its Terms of Reference and name to be fully include and address the needs of those members no longer defined by age limits. Following an internal process the shortlisted names were opened to the Institute's membership for consultation and the YMC was renamed to Student & Early Career Committee, a name that more adequately reflects the group of members we aim to represent.
- Our first event under the new name took place in July. Materially Challenged, a materials, minerals and mining quiz was held online via Zoom.
- The COVID-19 crisis has affected the entire world. Our Committee members, from PhD students, to furloughed industrial workers, to those who have remained in work throughout, came together and published and published a feature in *Materials World* detailing their own experience.
- For the first time this year, more than 120 attendees joined the remaining online regional finals in July and the YPLC UK on 23 September 2020. Seven competitors gave a lecture of 15 minutes on a topic related to materials, minerals, mining, packaging, clay technology and wood science and engineering.
- More than 80 people from 10 countries joined the Young Persons' World Lecture Competition final to see Morgan Lowther from the UK winning the first ever online final. Second place went to Bianca Gevers from South Africa and third to Anand Jyothi from Australia.
- In November, we held our third Road to Chartership event, where 45 young and early career members and non-members enjoyed talks by Dr Chris Melvin CEng CSci MIMMM from Tata Steel Strip Products UK, Dr Ian Mabbett CEng FIMMM of Swansea University and Mrs Sarah Boad, IOM3 Membership Development Manager on why they should aspire to becoming a chartered and how to apply

# Diversity & Inclusion

The changes that IOM3 have in the last 12 months to improve diversity and inclusion include:

- Making changes to the IOM3 codes of conduct. These changes affect both the team members internally and IOM3 members externally and cover areas, such as events and social media to provide a harassment-free environment for everyone
- Created a volunteer Inclusion, Diversity and Equality (IDE) committee to assess the internal structure of IOM3 e.g events, education, accreditation etc using the Royal Academy of Engineering/Science Council progression framework – this helped us identify what we are already doing and what we need to focus on in the future to improve IDE
- Made suggestions to the Engineering Council to make anti-harassment and safe guarding policies for universities mandatory
- Developed a diversity monitoring form, which will be used to collect relevant diversity data. Currently, IOM3 only holds data collected from events and information on race, sexual orientation and detailed gender identity is not present. The monitoring form will be extended to everyone, and the data collected will be a great starting point for measuring where improvements need to be made
- Developed two IOM3 Member Community groups – IOM3Pride and Ethnic Minorities in Materials Minerals and Mining (EMM3) with the aim of promoting and supporting diversity within IOM3
- Promoted and supported global diversity days using social media including pride month held in June 2020 and posting blogs and events relating to Black History Month (for example our Black History Month podcast with EMM3 members)
- Responded to the Black Lives Matter movement – releasing statements in support, writing educational blogs regarding race in the workplace and sharing these on social media

# Content & Magazines

- Profiling the contributions of our members and the STEM community in general during the pandemic, including insights on the impacts on higher education and industry in *Materials World*
- Enhanced social media profile of *Materials World* content through more frequent posting on Twitter, re-launch of the Instagram feed and contribution to the IOM3 LinkedIn feed.
- IOM3 introduced a new benefit to our members. ICON (IOM3 Catalogue Online – incorporating IMAGE). This contains information about our physical Library holdings, recently rehoused in the Boilerhouse, Grantham and is being added to all the time.
- Introduction of the COVID-19 hub to keep our members up to date with latest information on the pandemic



## Technical Communities

- Carried out a major review of our technical communities to ensure that their structure and operation reflect our members' interests now and for the future
- Several new chairs elected to their boards, which along with the review allows an opportunity for fresh thinking.
- Moved to virtual meetings, and this has proven to be a success and allowed a greater mix of people to take part
- Series of webinars based on Natural Materials from the Natural Materials Association
- Extensive web-based content linked to wood and involvement in Timber 2020
- Relaunch of the former Oil and Gas Division to become the Energy Transition Group, reflecting the shift in activity away from traditional fossil fuels towards new technologies including carbon capture and storage, and renewable energy sources

## Education, Events & Training

- Launched our first ever podcast series 'IOM3 investigates...' looking into issues of relevance to professionals working in materials, minerals and mining sectors
- Moved to online events hosting 30 online events across 8 months
- Made all of our school resources for 5-19 year olds freely available to all to try and support home learning
- Training activity went virtual and ran in excess of 30 technical and non-technical webinars to support the career development of members and non-members during a challenging time for UK industry
- We have continued to deliver End Point Assessment activity; we have conducted our first four end point assessments and our pool of assessors are waiting for more submissions in 2021

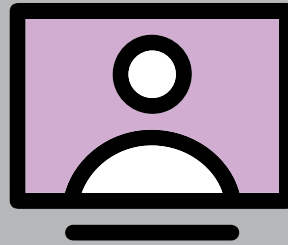
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2020  
MEMBERS



08 policy contributions & responses

71 countries attended a virtual event



> 250 registered attendees for the IOM3 softer skills webinars

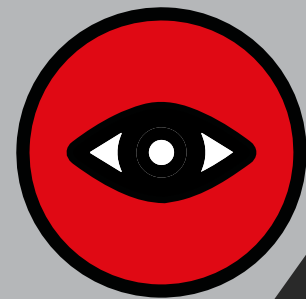
> 1,000 promoted or reinstated professional grades of membership

1,580 new members in 2020



> 3,603 attendees at 25 IOM3-hosted virtual events

> 20,000 *Materials World* & IOM3 Twitter followers



110,458 total page views of the new website in the first three weeks of launching

# Check out our new visual identity!

 : [iom3.org](https://iom3.org)

 : [@iom3](https://twitter.com/iom3)

 : [@iomthree](https://www.instagram.com/iomthree)

 : [@iom3globalnetwork](https://www.facebook.com/iom3globalnetwork)

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