



NEWS BULLETIN IN 2020

2020 offers engineers challenges and opportunities for innovation and improvement on many fronts. This change of decade marks changes in the IMechE Oceania Region.

The IMechE Oceania Region sees three significant structural changes in 2020:

- IMechE Oceania Region subsumes the Australian Branch to simplify administration.
- New Zealand Panel takes on its full role as an incorporated entity replacing its previous 'Corresponding Member' status.
- IMechE applies to be approve registration of professional engineers across Australia.

Participation in the latter is perhaps THE most significant issue for the IMechE Oceania Region.

Things are moving quickly. First off the rank is Queensland with its BPEQ, close behind are NSW and Victoria, with WA following but expected to complete its process before the end of 2020.

The application process is difficult and arduous. Other UK institutions fund the appointment of an administrator to create the documentation and guide the negotiations.

In this edition of the IMechE Oceania News Bulletin:

- Details of the upcoming SOFE World Final and ISB meeting in Abu Dhabi.;
- Part 2 of the interview with Carolyn Griffiths on women in engineering: where she shares her views of the what must be done by policy makers and the Professional Institutions to bring about necessary change;
- Paul Henderson prize and a review of the paper that won it;
- Chairperson's Update;
- Hon. Secretary's Report
- Oceania Panel Committee reports

News Bulletin Editor

Institution of
MECHANICAL
ENGINEERS

SOFE WORLD FINALS AND ISB MEETING ABU DHABI

The IMechE Young Members group responsible for planning and arranging the Speak Out For Engineering World Finals 2020 have confirmed the venue will be the Dusit Thani Abu Dhabi Hotel from the 31st March to 1st April 2020. The International Strategy Board (ISB) will meet at the same venue.

Currently, as New Bulletin goes to press, Visas are in application for SOFE contenders

The SOFE judging will be undertaken by members of the IMechE International Strategy Board.



Dusit Thani Hotel Abu Dhabi

ON THE INSIDE



SOFE World Finals & ISB in Abu Dhabi 31 March -3 April 2020
Carolyn Griffiths on Women in the Engineering Profession (part 2)
NZ Panel Incorporation and Mutual Recognition

Chairpersons Update
Hon. Secretary's reports
Paul Henderson Prize
Panel reports from NSW, VIC, QLD, WA and NZ

The ISB March 2020 meetings will be held at the same location as the SOFE meeting over the period 31st March to 3rd April 2020.

Currently, board members are awaiting the agenda.

CAROLYN GRIFFITHS ON WOMEN IN ENGINEERING (PART 2)

This is Part 2 of an interview of Carolyn Griffiths, President of the IMechE 2017-18 about Women in Engineering and the IMechE. The interview was undertaken by Dr Terence Love, Editor of the News Bulletin

Continued from News Bulletin 185.

Q. From your experiences, what do you see as the factors that encourage women to go into Engineering?

Carolyn: As I have already said I believe women are particularly drawn to engineering jobs that are creative (I have led setting up five new organisations or directorates and been involved in the construction of two new railways) or associated with improving lives (I had an early interest in bio-engineering and was drawn to the rail industry because of the positive impact it can have on communities).

Engineering offers opportunities to do so many different things in almost any location in the world. Engineering is all about understanding and resolving problems and finding new solutions. It is exciting and rewarding.

I have already talked about ensuring young people have a real understanding of what engineering is. I also referred to positive measures that might be necessary within the wider engineering workplace to encourage women to become engineers. I said that any workplace where there is a dominant group will at best be 'different'. At worst it will be difficult.



Carolyn Griffiths IMechE President 2017-18

So women making work choices in particular need a way of distinguishing the organisations which have positive cultures.

It is not always easy unless you know someone who works there, or unless that organisation overtly communicates and promotes its efforts. And here I think organisations could do more.

In the rail sector, organisations commonly use a safety management maturity 'tool' to assess the level of safety management in the organisation and identify to identify what more needs to be done.

Such tools also exist to measure and improve culture and diversity. We expect to be able to judge the quality of products and services by associated standards. Why not the quality of the workplace itself? Wouldn't it be great if organisations widely engaged in a similar diversity program and importantly it was possible to see this by some kind kite-mark visible to potential employees and young women considering entering the engineering workplace.

I believe the PEIs (Professional Engineering Institutions) have a collective responsibility to make this happen by persuading employers and persuading government. And the PEIs could play a vital role in supporting those employers.

Delivering learning and development opportunities is one of the Institution's key activities and at the heart of our purpose. We have experience and success in delivering training, seminars and lectures. So in the same way that we deliver learning and development in leadership skills, safety and finance why don't we put equal effort into supporting, developing and managing diversity in the workplace?

Q. Why do you feel it is important for more women to be involved in Engineering?

Carolyn: Nowadays it is a 'given' that 'a diverse workforce performs better'. World class organisations such as McKinseys and Forbes have researched this. The European Institute for Gender Equality predicts that closing the STEM gender gap will lead to an improvement in GDP in Europe of €610 - €820 billion by 2050.

Diverse workforces benefit from a greater range of skills, attitudes and insights. Good engineering is about looking at things differently. And a company that opens its doors wide to all minority groups will tap into a wider and therefore better talent pool. Why exclude brains and skills on irrelevant grounds?

I have had a fantastic time as an engineer; I am proud of the positive changes that I have either led or contributed to; I have travelled the world; I have met incredible people and I hope I have helped others along the way. Why would I not want others to have these opportunities?

Q. There have been significant resources invested

worldwide into attracting young women into Engineering via STEM and now STEAM initiatives. These have not been as successful as hoped. Have you any personal insights that might explain this?

Carolyn: Without some analysis of what has been invested versus what has been achieved it's difficult to comment. But I feel that until now a significant number of STEM/STEAM initiatives- many of which are extremely good - have largely been delivered by charities and in a largely unconnected way; and all limited by resources.

I do not have any recent data but the Perkins Report stated that in 2013 only 28% students (11- 14 years old) had any engagement with any kind of event relating to careers in STEM.

I am aware that most of the PEIs work hard in this area and some are now working with the Academy to achieve better co ordination. But if we really believe that diverse workforces are better and contribute more to society and our economy; then why are our legislators and governments not requiring and enabling more strident and comprehensive measures as I have discussed earlier?

Q. Do you have any personal examples, alongside your own experiences , of women developing successful careers in Engineering and contributing through that to the public good?

Carolyn: Only around 13% of professional engineers are women. Some sectors such as medical engineering have significantly more by proportion. Others such as my own sector, rail, have less. But there are undoubtedly many exceptional engineers who are women. I can only mention a few and the following link will give you more details about them and other leading and inspirational female engineers,

<https://www.raeng.org.uk/policy/diversity-in-engineering/diversity-and-inclusion-at-the-academy/celebrating-leading-women-in-engineering>

Dr Dame Sue Ion DBE FREng FRS is the Chair of the Nuclear Innovation Research Advisory Board and an internationally respected leader in her field. She has made it in her career to be a trusted advisor to Government on nuclear technology.

Pamela Liversidge OBE DL FREng is a highly successful industrial entrepreneur and currently a Director of Quest Investments. She has been the High Sheriff of South Yorkshire and was the first woman to be elected as President of the IMechE in 1997. She is committed to promoting the engineering profession and in particular to women.

And Rosie Goldrick , who I don't know personally, was awarded the Sir George Macfarlane Medal this year which recognises engineering excellence in the early stage of careers. She works for the MASS Design Group and has been Project Manager for a number

construction projects in Rwanda where she has led her team in the design of buildings which are seismically appropriate for the region. She is now contributing to research which will inform standards for adobe block (mud brick) construction, commonly used in rural areas.

Q. I have a female colleague providing support to a small NGO in India supplying technology to farmers for aquifer recharge by rain. The NGO is successful enough to win an Energy Globe award and are happy to encourage women to be managers. However, they find women avoid adopting management roles on the technical side (women are already successful managers on the micro-banking side). Do you have any thoughts or advice for them? India has a far greater percentage of women who study engineering at university than the UK; as is the case in many newer economies.

Carolyn: Your question is about women in engineering management. I can only guess at what are the issues as I don't have insight into this organisation . Will these women be expected to work out on site where they maybe the only woman and in remote locations? Also, I believe it is only in relatively recent years that women have chosen to work in technical fields in such numbers so this might mean that in general the women who are qualified to become managers might be at an early stage of their career; wanting or needing to accrue experience at the 'sharp end' before promotion and in some cases maybe struggling to see how promotion into management will fit with taking some time out for children.

Does micro banking offer a less challenging work place; in an office with teams and customers teams that are more diverse? Micro-banking is a service that in India is significantly helping women set up and sustain livelihoods. Therefore, is there a particular attraction in that sector for women to progress in helping women succeed in their own businesses?

Q. What suggestions do you have for changing things to encourage and support women in engineering?

Carolyn: I have referred to the organisational issues



Dame Sue Ion

that must change. But looking back over the 40 year span of my career the rate of increase in the number of women working in engineering has been painfully slow.

There are many good initiatives to encourage women into engineering and then to retain them but clearly this is not enough.

The 'mood' in the UK as in many countries seems to be changing. Politicians and many business leaders will now articulate that it is good to have a diverse workforce. There are for sure enlightened organisations who are positively seeking diversity (I am fortunate to have experience of this) but there are many more organisations where the culture and policies have yet still to change and, as I have explained, I believe that this deserves more than voluntary effort.

So, I am throwing down the gauntlet to the PEIs, the education policy makers and the parts of government who define the law on education, employment and parental leave.

If we are serious about changing the number of women in engineering then maybe more serious measures need to be taken.

Sometimes it takes strong measures to change attitudes: such as the introduction of standards, legislation and regulation. Car seat belt use and banning of smoking in public places are for example, now seen as common sense, a good thing and the 'norm'. I believe its time for the PEIs and the legislators to step up and act.

And of course there are, certainly here in the UK, issues that go wider than the engineering profession.

Despite the UK's equal rights and anti-discrimination legislation, the relatively recent changes in UK parental leave do not go far enough to 'level the employment playing field'. It allows for the father and mother to share parental leave but there has been limited uptake by the fathers. Our culture is strong. Men are reluctant to 'risk' disruption to their career by taking an extended break.

Yet there is a very different story in countries where parental leave policies are such that if fathers do not take 'their share' of the leave then the family loses that provision.

So, there is an economic and family reason for men to also take time out. Unsurprisingly in these countries men taking parental leave is becoming the norm; the pros and cons of employing a female or a male is becoming matched and there appears to be a correlation with more women in engineering.

To the women and girls who may be reading this I say this....I made it in the engineering world. Did I have more issues to fight; very likely; did I come across prejudice? Yes I did; but it has been exercised by a minority. Would I advocate engineering to women

without any hesitation.

Its an amazing profession. If you have natural curiosity concerning how things work, want to be part of creative solutions to problems and to improve lives through the 'made world' then an exciting career awaits you!

This was part 2 of an interview in 2019 with Carolyn Griffiths, IMechE President 2017-18 by Dr Terence Love Editor, News Bulletin (for part 1 see NB 185)

Institution of
MECHANICAL
ENGINEERS

OCEANIA REGIONAL SOFE FINALS

The IMechE Oceania Region SOFE finals were held in Melbourne 23 November 2019.

The four finalists are shown below with judges Darren Sharpe (NZ Panel Chair) and Raymond Hodgkinson (International Vice President).

All four presentations were of a high standard and very closely marked.

The winner was Geraldo Tegouch from Victoria and he will represent the Oceania Region in the SOFE world finals in Abu Dhabi in March.



NEW ENGINEERING REGISTRATION

Australia is implementing registration of professional engineers

As your Secretary has written much about the dissolution of the Australian branch, I will not repeat his good words. Suffice to say that I will be ensuring that it is Business as Usual for the Oceania Region with all prizes and privileges of the Australian Branch carried over to the Oceania Region.

With that addressed, I would like to turn our efforts to another initiative that will make the IMechE qualification more relevant on our shores. We are in the process of applying to the Board of Professional Engineers Queensland (BPEQ) for recognition and approval of our assessment methods for CEng MIMechE for the Registered Professional Engineer Queensland (RPEQ) qualification in Queensland.

Queensland is the only State so far to require professional engineers intending to practice in the state or those from interstate wanting to work on Queensland based projects to require a separate professional qualification for that privilege.

However, Victoria and NSW are not too far behind in requiring professional engineers to be registered on that State's register. Insider information, indicates that Western Australia will follow suit quickly and before the end of 2020. It is safe to assume that all states will eventually introduce some sort of legislation to require State based professional registration for practicing engineers.

While the usual route to gaining registration with the BPEQ is through assessment by Engineers Australia (EA), it is by no means the only method.

A potential candidate could have their qualification and experience assessed by other local professional bodies and via registration with the National Engineering Register (NER). There are a several locally represented UK Professional Engineering Institutions (PEIs) that have also been given approval to assess candidates for the RPEQ qualification.

We are therefore exploring the option of IMechE joining those locally represented UK PEIs to gain approval to assess for the RPEQ qualification. The approval by the BPEQ of the IMechE to independently assess for the RPEQ qualification would make the CEng MIMechE qualification very relevant and sought after in Queensland.

It is anticipated this approval could pave the way for the IMechE to be able to assess for other similar state based professional registration when they are eventually introduced.

As expected the application process is very comprehensive and requires much work to be able to present an acceptable application to the BPEQ. I will keep you updated on how we progress in this important initiative.



Les Yeow
Chairperson, IMechE Oceania Region

NZ IMECHE SIGNS MUTUAL RECOGNITION WITH ENZ

On 26th November 2019, Raymond Hodgkinson, International Vice President of IMechE and Chairman of the International Strategy Board signed the long awaited Mutual Recognition Agreement between the IMechE and Engineering New Zealand.

The signing was undertaken in conjunction with Brett Williams General Manager of Engineering New Zealand and CompEngNZ responsible for the practice areas, in the offices of Engineering New Zealand in Wellington.

At the signing ceremony, Raymond and Brett spent a significant time in a public discussion of the activities of the two bodies, identifying the potential for collaboration and likewise the common challenges including the time and physical differences between Wellington and London,

Rebecca Mather, the Engagement Manager of Engineering New Zealand was outstanding in hosting the session and outlining the role of ENZ and the structures of the TIG and SIG,

Raymond is one of the most influential trustees within IMechE. His role means that his closing remarks of having thoroughly enjoyed his time in NZ, and his intention to take back a deep understanding of how IMechE, ENZ and MEG are operating, were made from an informed position, and not just a pleasantries exchange.

This Mutual Recognition Agreement is the first step in cementing the relationship between ENZ and IMechE, following a number of years of informal agreements.

The Mutual Recognition Agreement also heralds a new era of compliance that should result in improved understanding of the relationships and support the operational aspirations of both Institutions and the related societies and groups.

The signing was the culmination of a hectic tour of



Brett Williams and Raymond Hodgkinson signing Mutual Recognition of IMechE and ENZ

Australia and New Zealand by Raymond, who whilst in New Zealand was able to meet local IMechE and MEG members, some Transpower Young Project Managers, attend an MEG national committee meeting and have two industrial visits, one to Callaghan Innovation where the future was on show, and the other to J & D McLennan, where Raymond's passion for all things welding and cutting was piqued.

Raymond revealed 2020 will see the next President of the Institution make the Oceania tour, probably around September.



Darren Sharpe
Chairperson, NZ Panel



CHAIRPERSON'S UPDATE

As the end of the year came around, we saw restaurants try to tempt you with their Christmas menus, some houses suddenly emit twinkly lights, Christmas Hams begin to appear in supermarkets and Michael Buble came out of his 11 month hibernation to terrorise us once again with his rendition of Christmas songs....

After the close of 2019, we look back at what has been a busy year for the Institution trying to address the issues that were found in 2018. Reviews were conducted on the Governance, Finance and Code of Conduct. Various new teams were installed at the Institution with Professor Joe McGeough talking the helm and guiding the Institution back into being the Institution that all of us believe in, respect and support.

On a local level, we won the inaugural World SOFE Final in India, we gained a new News Bulletin Editor, we witnessed the formation of the New Zealand Panel and we voted to dissolve the Australian Branch into the Oceania Region thus removing a redundant level of administration.

The result of the recently completed vote on the dissolution of the Australian Branch was

250 in favour

36 Not in favour

That is 87% for and 13% against (The "Ayes" have it).

As the target to be reached was 75% for the motion to be carried, we can say that we now have approval from the local membership to dissolve the

Australian Branch.

Although there is still work to be done to ensure the details are finalised for the official dissolution of the Australian Branch, we can now assume that it is dissolved. However, as we have been operating the Branch in a dormant mode for the best part of two years, it will be business as usual for the Oceania Region.

On behalf of the Oceania Region Team, we look forward to this coming year with great clarity. It is 2020 after all.



Leslie Yeow
Chair, Oceania Region



HON. SECRETARY REPORT

Some Hon Sec's are really on the ball. Always available, minutes done promptly and error free. Maybe such unicorns do exist – but when one has a day job too, and a family, there are occasions when the volunteer activities must take a back seat. That's not an apology – as I don't think there is anything to apologise for. It merely speaks to a simple truth.

Every volunteer has a limit to the time even the most committed can expend. So, I missed the great events in Melbourne, the WEC and the SOFE final discussed elsewhere in this bulletin, and I therefore missed the visit (return) of our friend Ray back here Oceania. Next time Ray!

I have however found time for many of my other duties. My mentees continue to challenge my 'old ways' whilst were discussing their development paths. All joking aside, mentoring really is a wonderful way to keep yourself fresh and challenged. I know F still equals ma, but there are lots of other things that have changed in engineering in only the 22 years since I graduated. Why not consider mentoring someone – you'll get as much from it as the mentee does (caveat - that will be true if you're doing it right).

Late in October, I was in the UK as an elected Fellow on Council for the Council meeting. How those 3 days trips in economy hurt!

The trip however, was far from wasted as again Les (your Chair) and my voice were heard in the various forums available – ensuring the views of our members here in Oceania contribute to the discussions.

Much progress is being made by our Institution in recovering financially, and improving the governance processes after the 'dark days' of the Special meeting.

The Council meeting proved a much better run affair when compared to those of a few years ago. There was healthy and respectful debate. I sensed people were listening to understand, rather than just to respond (or ridicule).

There was discussion of the Governance Review recommendation that the size of council (from its current 79 members) should be reduced. This was eventually rejected as a notion as the discussion led to the identification of something of a non-sequitur argument – the proposal that Council should be reduced because it hasn't been doing its role as described in the relevant Terms of Reference. Once the absence of a linkage between the Council doing its role, and the Council's size was explored – the issue simply became simpler to work through. So Council remains at 79 – and is to focus more closely on the stated role going forward.

During that debate, the presence of us 'blow ins' from the International Regions gave a bit of a reset to some. During discussion that everyone on Council should have a constituency to represent,

it was too good a opportunity to miss to point out that given that there are 27% of members outside the UK, that means the 7 International Chairs represent more than 1 in 4 members. There were some from the UK 'regions' who simply hadn't thought of it that way! But we engineers like facts, and figures: don't we!

I further sat down (after work!) with your Chairman Les for an evening of discussion as to state of play in terms of the progress to canvas our local members re: the dissolution of the Australian Branch. Again, I encourage members locally to understand that this is an unfortunately brutal phrase for what is actually nothing more sinister than trying to streamline what we do locally in the 'back office', with absolutely zero affect on the membership the active volunteers serve.

There will still be all the things you value – professional review interviews, learned society activities, social activities, networking events, and SOFE. What there hopefully won't be is 2 sets of Accounts to keep, 2 sets of Auditor invoices to pay, and fewer hats for the active volunteers to wear. Which brings us full circle. Fewer hats, means more done in the volunteer time available. How can anyone sensibly vote against that?

Any thoughts or reactions – I'd love to hear from you. ianmash@assuredrailprojects.com.au or look me up on LinkedIn.



Ian D Mash
Hon. Secretary Oceania Region

Institution of
MECHANICAL
ENGINEERS

PAUL HENDERSON PRIZE AWARDED TO DR MICHAEL RIESE

The IMechE Trustee Board Awards Committee has awarded the Paul Henderson Prize to Dr Michael Riese on the recommendation of the IMechE Oceania Region Committee.

The founder of the prize was Paul Henderson, Australian IMechE member. The award of the Paul Henderson Prize is on the advice of the Australian Panel – now subsumed into the Oceania Region. The Paul Henderson prize is awarded for a paper of appropriate quality in Mechanical Engineering published in either IMechE journals or equivalent publication.

Dr Riese was awarded the Paul Henderson prize based on a paper he submitted titled 'The Influence on Data Variation Versus Sampling Time in Achieving Accurate Representation of Refrigeration System Performance'. The paper was published in the Proceedings of the AIRAH Refrigeration 2019 Conference, Melbourne, March 25-26. Michael will receive a Certificate plus the sum of £275.

Michael's paper described a new way of addressing a challenging yet ubiquitous problem in large-scale refrigeration. It described experiments over 10 weeks on a large refrigeration installation undertaken by his employer Cold Logic.

The central problem is in measuring ongoing performance of large refrigeration installations to optimize operational settings to minimise energy use. This is difficult because of the huge amount of data potentially available to choose from, and because many environmental and operational factors affect both plant functioning and the measurements of that functioning. In addition are multiple feedback loops acting, at least in theory, to stabilize the refrigeration plant behaviours. However, many of the variables measured in these feedback loops have a significant lead or lag in their action. In fact, different parts of large



Refrigeration system by ColdLogic

refrigeration plants act semi-autonomously and can independently shape the behaviour of the whole plant (i.e., the tail wags the dog).

'One of the major challenges is to achieve a balance between the time spent from start to finish on collecting the data, the number of samples taken and the sampling interval. All of these will have a direct impact on the validity of the results and cannot be "topped up" at a later stage and as a result will have a direct impact to the cost of the study.'

Michael's analyses focused around Coefficient of Performance (CoP) as an overall measure of effectiveness of the system. Total refrigeration energy generated was calculated from the heat transfer to the secondary refrigerant in the plate heat exchanger with over 600,000 data points were collected over the 70-day period plus mapping the wet-bulb temperature for the period.

A key challenge was to identify outliers due to specific abnormal events (e.g. holiday breaks, weekends, extreme weather etc.). This latter is a fundamentally subjective rather than quantitatively justifiable task.

By subjectively choosing and removing outlier data, a clearer, evidence-based picture enabled understanding to the plant functioning and how to adjust it to improve operations.

Michael concluded, in line with the work of statistician W. Edwards Deming, that a statistical process control model seems the best approach for managing large industrial refrigeration plant and offers significant efficiencies in data collection, data analysis and control – as well as improved quality of output.



Dr Terence Love
News Bulletin Editor



TIME WAITS FOR NO ONE : A REVIEW OF 2019 BY THE HON. SECRETARY

They say time waits for no one – and that's true as I sit here writing this wearing my recently acquired reading glasses. The optician summed it up well when I was a little disappointed that I needed them. "Well what do you expect at your age?". Well, there you go. No response required.

But progress is good, and things can and must change (albeit better if the bedside manner is a little more subtle than that of my optician). I had written previ-

ously of the 'dissolution' of the Australian Branch and urged you all to ignore the unfortunately aggressive wording and to understand that the change was an efficiency and effectiveness driven one. Of which you, the members we aim to serve, would feel only gain and no pain. Well the numbers are in, and the results are 250 of our local members in favour, and 36 of our local members not in favour. The "Ayes" have it as the Speaker might say.

So after more than 3 years in the planning and implementation between HQ and the Region - that's where we are now. Not keeping 2 sets of books (going forward) and reducing bureaucracy whilst still doing the things that we have always done for the membership.

Good progress too across the Tasman in the last 12 months. The NZ Panel has been formed, populated, incorporated and even has a Bank Account. Now, our Kiwi-based members have equal standing to the rest of the region, rather than the quaint "Corresponding Member" status previously afford to NZ IMechE member representatives. This step also 'levelled off' access and representation of all Australian states and NZ as a membership group - each having similar numbers of members.

What does this change in practical terms for members in NZ? All IMechE members in NZ will still be allowed to be Mechanical Engineering Group (MEG) members (MEG being the ENGNZ Technical Interest Group).

The NZ Panel formation was achieved in February 2019, and has Quarterly meetings and an AGM scheduled, and reports quarterly activities back to IMechE through the Oceania Quarterly report, very much in line with all other Panels in Oceania. The NZ Panel chair sits on the Oceania Committee - in line with the other Oceania Panels – and removes the clunky co-opting process of years past.

What this change also means is the previously somewhat vaguely 'gifted' subvention payment to ENZ has morphed into a payment as part of the Memorandum of Recognition (MoR) between ENZ and IMechE, signed in November 2019 between both parties. This is now a service type fee and is not a gift, and as such provides a framework for MEG membership to continue, and not be withdrawn if the gift was discontinued. It is a better, clearer model (particularly where its members' money in play!).

The bank account is significant too. The Foreign Exchange aspects of funds flowing from the Oceania account into NZ attract commission and costs at sender and recipient level, so by reducing the transfers to regular 'tranche funding' of the NZ panel – there is an overall saving to the Institution (again saving your membership money!)

Incorporation of the NZ IMechE Panel was also driven by this thinking. As an unincorporated society - bank charges and tax implications come into play - and could also have implications for the payment of

expenses from such an account to refund members legitimate costs. However, as an incorporated society operating in a not for profit way, the bank charges can be zero, and the Society can be GST exempted. Again an efficient and effective way to run things.

The progress made represents the outcome of a clearly minuted agreement by the Oceania Regional Committee and the Governance structure in IMechE to proceed in that direction. Nearly a year later, these achievements are there to behold.

So much progress and change in the 'back office' and without negatively affecting operations in the front of house in any way. These are great outcomes for you – the membership. It means we've spent our time wisely in the last 12 months.

And for the first time in ages, thank to my new glasses, I've not got sore eyes sitting typing this too.



Ian D Mash
Hon. Secretary Oceania Region



YOUR IMECHE

'Your IMechE' is a new section in the IMechE Oceania News Bulletin about different parts of IMechE relevant to Oceania members.

International Strategy Board

The International Strategy Board (ISB) provides overall guidance for all IMechE activities relating to International members living in the seven international regions of the IMechE:

- Americas
- Europe
- Middle East and Africa
- North East Asia
- Oceania
- South East Asia
- Southern Asia

The ISB is the International equivalent of the Regional Strategy Board (RSB) responsible for activities relating to IMechE members in the UK.

The ISB is responsible for the approximately 27% of IMechE's membership compared to 73% in the UK managed by the RSB. ISB has 7 of the 74 members of IMechE Council and holds meetings that comprise:

- IMechE International Vice-President (Raymond Hodgkinson)

- ISB Vice Chair
- Chairperson of Americas
- Chairperson of Europe
- Chairperson of Middle East and Africa
- Chairperson of North East Asia
- Chairperson of Oceania (Les Yeow)
- Chairperson of South East Asia
- Chairperson of Southern Asia
- International Liaison for IMechE HQ taking minutes

Other participants are invited depending on the topics discussed. For example, IMechE Head of Membership (Nicole Rinaldi) may be invited if memberships issues are discussed and Kevin Manning from HQ may be invited if there are IT issues to be addressed.

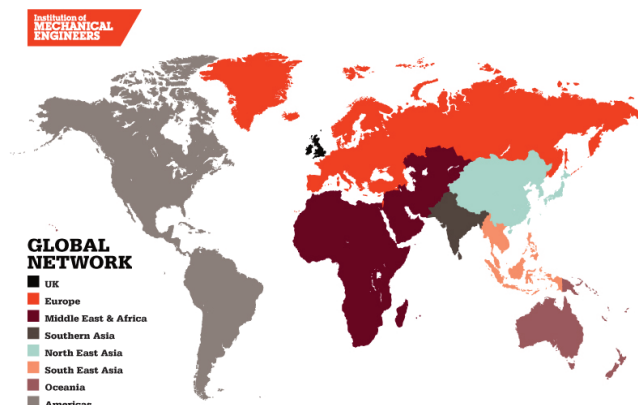
For the current meeting, one key issue relevant to Oceania IMechE members is obtaining from IMechE HQ the legal and administrative support to ensure IMechE has a role in approving professional engineers in the Australian States and Territories. It is expected States and Territories will implement such legislation this year. and legal and administrative support is needed to enable Australian Panels to address the significant amount of documentation involved.

Another key issue is the upgrade of Near You to a more user-friendly platform – hopefully with state-of-art management of member details, especially addresses.

The next International Strategy Board meeting will be held in Abu Dhabi 31 March to 3 April 2020 with the SOFE competition 31st March to 1st April.



Dr Terence Love
News Bulletin Editor



The 7 International Regions of IMechE

NSW PANEL REPORT

The IMechE NSW Panel is planning events for 2020 that will include regular socials, SOFE and an Industry Night which is usually the highlight of the calendar.

Regular panel meetings are ongoing and we are looking at kicking off the year with a summer social to get our members back together and share our plans for 2020.

Our SOFE event will be as usual around September / October 2020. We'll be reaching out to a few different universities this year to get a good number of competitors from a broad background.

We're looking to build on last year with more socials, combined technical events with EA and our usual highlights of SOFE and Industry Night.

We have not undertaken any Professional Registration Interviews (PRI) since the last News Bulletin. However, we are aware of submissions at the start of 2020 and are expecting a busy year of interviews ahead!



Neil Moriarty
NSW Panel Chairperson



QLD PANEL REPORT

The QLD Panel is looking to invite eligible IMechE members to gain their IMechE Fellowship. For those that need assistance or endorsement by a Fellow during their application, the Panel is more than happy to provide a resource to help.

The new committee is looking to run a "Learn to Weld with HDPE" event in February 2020 to kick off the new year. This will give attendees the chance to get hands on experience as well as hear from experts on the changes to the APGA Code of Practice.

The QLD Panel SOFE was a great success with a number of excellent students taking part. Congratulations to the winner Corneels de Waard and runner-up Kian Lim Low. Corneels also placed as runner-up in the Oceania SOFE Final.

The Panel is excited for 2020 and to run a number of CPD events through the new year. The committee is looking forward to the Presidents visit in September and holding the Oceania SOFE final in Brisbane in November 2020.

One professional interview (PRI) was completed in October and the applicant was successful. A further

PRI is scheduled currently in the new year.

Colin Sheldon (Chair) has recently been elected to the Mechanical College Board of Engineers Australia. Colin will be looking to build a strong relationship between EA's MCB and IMechE.



Colin Sheldon
Queensland Panel Chair



WA PANEL REPORT

The WA Panel is carefully watching the developments by the Queensland Panel in terms of State-based professional certification of engineers (BPEQ) and the role of IMechE in providing such certification alongside Engineers Australia. In WA, the shift to professional engineering registration is expected to occur quickly and may be completed within 2020.

The President of the IMechE is expected to visit WA in September 2020 and deliver the George Stephenson Lecture. Historically, these lectures have been presented at the Auditorium of Engineers Australia (EA) in Perth in collaboration with EA.

In recent years, changes in both EA and IMechE have resulted in a weakening of the relationship. Between them. The WA Panel will work to restore that relationship in time for the President's visit and George Stephenson lecture.

There is significant exploration of strategies to improve engagement with the WA universities with Engineering courses that satisfy the Washington accord. This has been found to be of importance for managing the SOFE competition and ensuring continuity of the IMechE Young Members organizations. In particular,



WA Panel Meeting

this is hoped to reduce the problem of starting from scratch each year in both these.

The final WA Panel meeting of 2019 was held 12 December at Fibber McGee's in Leederville and followed by dinner.



Ben Witton
Western Australian Panel Chair



VICTORIA PANEL REPORT

In November we visited the production line for the Melbourne's new High Capacity Metro Trains (HC-MT's) at Downer's Newport facility. This contract has been awarded to CRRC and Downer with a commitment that at least 50% should be Australian sourced.

The bodysells complete with glazing, some looming and a fully fitted out cab are delivered from China to Melbourne where locally assembled bogies, traction gear, HVAC and high voltage looming are installed along with all the interior fittings. The current order is for 65 trains in varying formations from the initial 7-car sets to run on the existing network to longer car sets to run through the Melbourne Metro Tunnel when it is completed.

It was a fascinating visit and we are grateful for Downer's hospitality and Andrew Lezala who arranged our visit. Immediately afterwards we retired to a local hostelry to undertake a mentoring evening.

The Australasian final of SOFE took place in Melbourne at the same time as the annual IMechE AGM. We are pleased to announce that our very own recently appointed Hon Secretary Geraldo Tegouch was declared the winner with his talk on Wave Power.



Oceania Region SOFE winner Geraldo Tegouch

Geraldo goes forward to the finals in Abu Dhabi in April. Good Luck Geraldo!!

In December, Andrew and Helen Lazala hosted a Christmas lunch at their apartment in Port Melbourne which was a delightful way to celebrate the festive season with IMechE colleagues - our thanks to them both. This was the occasion when I formally took over as the new Victorian Chair following on from Nisha Nijhar who recently moved to a job in Perth. We thank Nisha for all her contributions to the Victorian Panel and wish her the very best for her move to WA where no doubt the local panel will be in touch!

Going forward into 2020, I believe that collaboration with other UK Institutions is essential and have already started the ball rolling with the IET and ICE who appear to share similar opinions regarding the new Victorian Engineering Registration Act.

We have been approached by Bendigo Tramways as a possible recipient of the IMechE Heritage Award. I met with them and there seems to be justification to support their application from the living museum and tram service they created. We held our first 2020 committee meeting in January and have appointed Rob Stevens as our Hon Treasurer Well done Rob and welcome! We have a number of ideas for technical visits



Xmas Party at the Lezala's



Site visit to High Capacity Metro Train Production Facility in Melbourne



Poster in British Consulate Melbourne

and presentations to roll out over the this year

We have received one application for a professional interview. And Finally.....I attended an alumni event at the British Consulate in Melbourne where I was surprised and delighted to find the poster above promoting engineering!!



Paul Draper
Victorian Panel Chair



NZ PANEL REPORT

The New Zealand Panel was incorporated on 9th December, which allows a number of workstreams in the Oceania Region to be closed, with only a final review from London HQ outstanding.

A NZ Bank Account was set up (to allow NZ Panel to budget and self fund in the same way as the Australian State panels) early January, and the panel has applied for an IRD identifier to allow application for tax free status to be made.

Planning is underway for the next Oceania face to face meeting to be held in Wellington in May this year.

The format for the NZ SOFE will be a combined Wellington Auckland competition held in person and also on line to each centre, with a judge in each of the two centres and a third judge participating on line only. Scoring and decision making will remain as previous.

The New Zealand Panel AGM will be held within 4 weeks of 21st February 2020, and nominations for Treasurer, Secretary and 3 ordinary committee members to be forwarded to Darren Sharpe - darchemdaz@hotmail.com, who will collate the nominations, organise for a ballot and notify all members in NZ when the AGM date is confirmed.



Darren Sharpe
New Zealand Panel Chair



Next edition

The next edition of News Bulletin will include:

- The World SOFE winner
- Outcomes from the ISB meeting
- News on Engineers Registration
- Oceania Region Panel updates and
- Information about exciting technical innovations
- and more ...

News and Articles

Please send news items and articles you feel would be of interest to Oceania Region IMechE members to the News Bulletin editor, Dr. Terence Love, at:
oceanianews@imechenearyou.org

Executive Committee:

Leslie Yeow, Ian Mash,
Ken Tushingham,
Dr. Terence Love,
Elliot Powell

Websites:

IMechE: www.imeche.org
Young Members on social media
Twitter: @IMechE_OzYM
Facebook: IMechEAUstraliaYM

Enquiries and article submissions

Please address all News Bulletin correspondence to the editor:
oceanianews@imechenearyou.org