## **IPENZ** ENGINEERS NEW ZEALAND

# **Driving change** 2015–16 Annual Report



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## Stepping up: The year in review

Today's world is very different from when IPENZ began, more than a century ago. Rapid technological development is changing the face of our society and economy – with engineers at the forefront of that change – and our profession is adapting as a result. IPENZ's role is to support our members. So we're adapting, too.

Over the last year, we started to deliver on an ambitious programme to build an IPENZ fit for our new environment and the needs of our members. We made changes to how we do things internally - restructuring our business and reviewing our processes and systems to make things simpler. We're getting our name out there; making our voice heard and influencing public perception of IPENZ and engineering.

In June, we launched a bold new strategy with the vision of "engineering a better life for New Zealanders". We have a new mission – "to bring engineering to life". Our goal is to be unashamedly member-focused and our strategy provides the road map for how we'll get there.

We've already started along this path. We're developing a new simple, clear membership pathway, which will be launched in 2017. It supports the current Registration process. It provides a strong foundation for a future-looking IPENZ with professionalism at its core – one that's attractive to a highly diverse spectrum of engineering professionals from a wide range of disciplines and career stages.

It's an honour and a privilege to represent and support one of the very best professions in New Zealand. In recent months, our members stepped up in a massive collaborative response to last November's Kaikoura earthquake. As a profession we showed we learned the lessons of the Canterbury earthquakes. IPENZ was proud to take a leadership role, supporting engineers in the public arena.

IPENZ cares deeply about public trust and confidence in our engineers. After questions were raised about six buildings in Masterton, IPENZ alerted the Ministry of Business, Innovation and Employment (MBIE). This resulted in initial seismic assessments of these six buildings, followed by more detailed assessments. IPENZ has also commenced an Own-Motion Inquiry into the circumstances surrounding the engineering design and construction of these six buildings. We've worked closely with our technical groups, building a stronger voice through collaboration and cooperation. We're proud to lead the way as spokespeople on national engineering issues, and to build the body of expertise that helps demonstrate the value engineering provides to society.

We have strived to develop deeper connections with our equivalent engineering institutions overseas to share ideas and provide support to our members in other jurisdictions. IPENZ continues to serve the International Engineering Alliance in its role as Secretariat.

Raising the profile of the profession and seeking the engineers of the future across all disciplines is integral to our relevance. This year we launched Make the World, Engineering Education-to-Employment's nationwide awareness campaign. It aims to raise engineering's profile and get young people to take another look at the opportunities an engineering career can bring and the wide range of qualifications that provide a route in. The campaign features real stories and celebrates achievements that are not normally known as having engineering at their heart.

We're delighted to share the key highlights from 2015-16 with you in this annual report. There's still lots to do – and lots to look forward to. We move forward ready to face the challenges ahead and with the right strategy and structure in place to help us succeed.

Our work is reliant on volunteers. We're grateful to all those who have contributed their time and energy in supporting IPENZ - on committees, in our local Branches, on our Governing Board and beyond. Thank you for your ongoing support and commitment. We're excited to see how we can bring engineering to life together - strengthening our ability to shape our communities and contribute to greater economic and social prosperity.

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Elena Trout FIPENZ President

der Prespa

Susan Freeman-Greene Chief Executive

## Meet the Board

Our members elect our ten-strong Board to advocate on their behalf. Led by four senior office holders, Board members volunteer their time to oversee the organisation's governance and drive our strategic direction. The Board are actively involved, attending the President's Roadshow, various stakeholder events and meetings.



Elena Trout FIPENZ President



Craig Price FIPENZ Deputy President



Dean Kimpton FIPENZ Vice President



Andrew Read FIPENZ Immediate Past President



Aidan Cooper MIPENZ



Jan Evans-Freeman FIPENZ



Geoffrey Farquhar FIPENZ



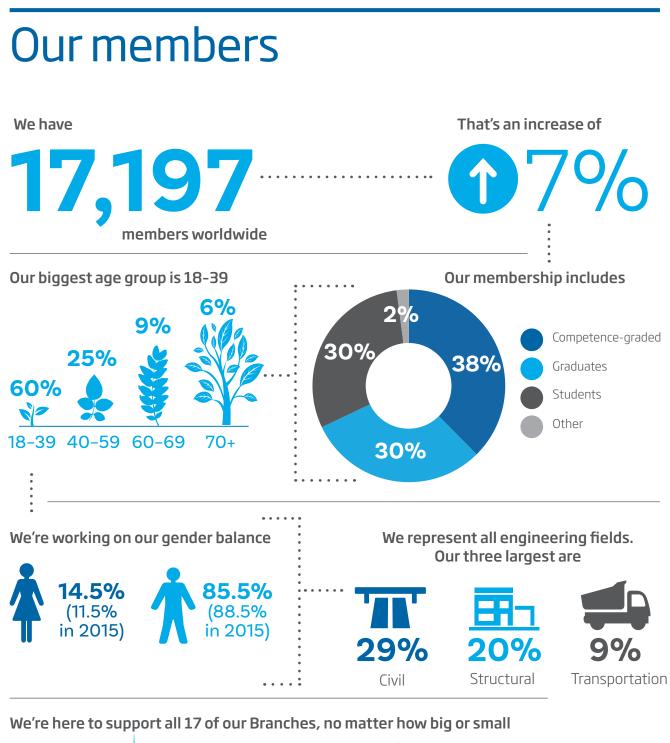
Ben Holland FIPENZ



Ron McDowall FIPENZ

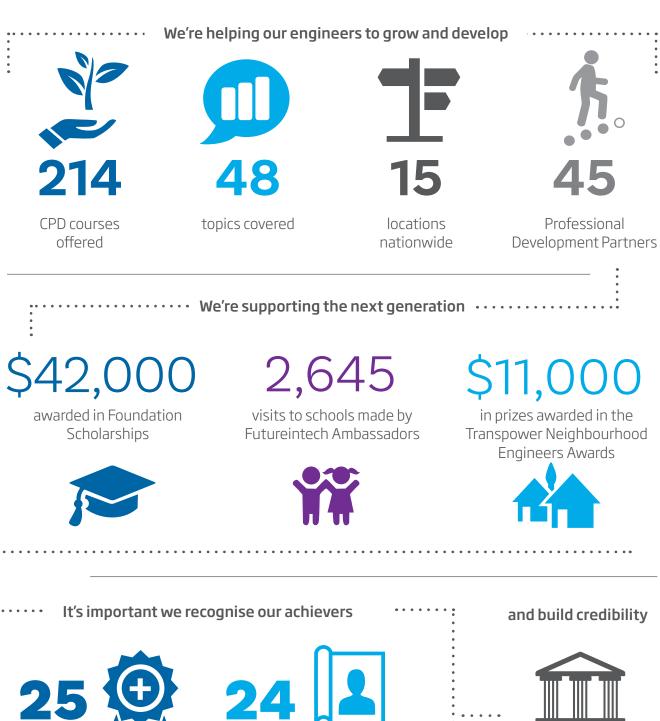


Glen Mitchell MIPENZ





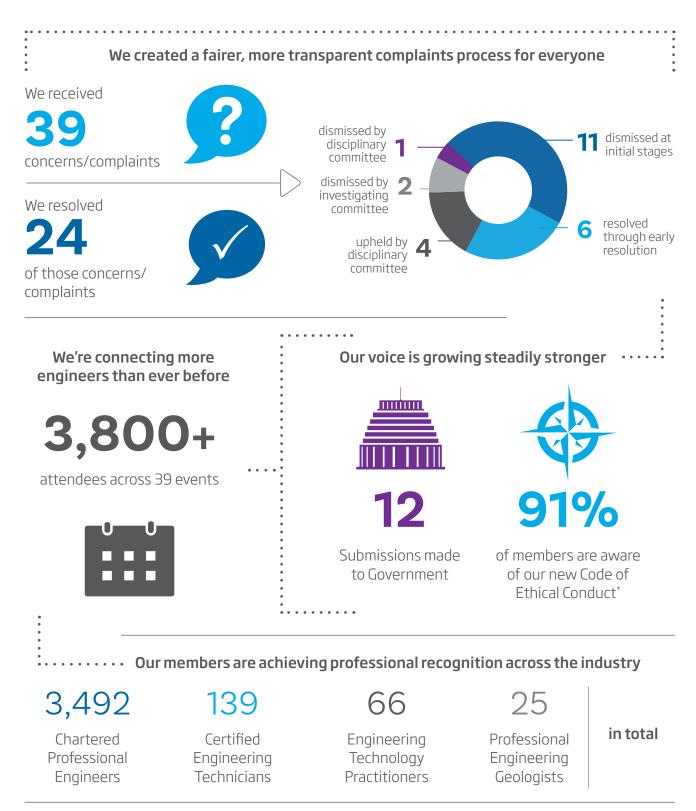
## The year in numbers



new Fellows and **Distinguished Fellows** 

engineers profiled in Engineering Insight magazine





\* Based on the results of the 2016 Remuneration Survey

## A year of transformation

Our focus for 2015–16 was on re-engineering IPENZ as a relevant and modern organisation. We started internally, building capability to better support our membership and the profession we serve. We looked to the future and developed a whole new strategy based on our members' needs and how they want to work, contribute and be seen.



#### **Upgrading our systems** October 2015

New this year: we launched our updated Membership database and My IPENZ.

#### Engineering Profession's Forum 17-19 March 2016

Keynote speakers Sir Gordon Tietjens, Melissa Clark-Reynolds and John Allen inspired us with tales of their achievements and career highlights.



Fellows' & Achievers' Dinner 18 March 2016

Our annual opportunity to celebrate our new Fellows and Award winners - the engineers that put magic to work for humanity.



#### Our new strategy May-June 2016

New this year: we agreed our Strategic Framework 2016-2020.



#### **Pickering Lecture** November-December 2015

Pickering Lecture series: Nanogirl and the Incredible World of Nanotechnology.

## ?

#### Updating our complaints process March - October 2016

Our new Complaints Process has a focus on educative outcomes and early resolution, where appropriate. It's more proportionate, fair and just for engineers and society.

## ((<sup>1</sup>1))

#### Make the World June 2016

Engineering Education-to-Employment's nationwide public awareness campaign rollled out.

The Institution of Professional Engineers New Zealand



## President's Roadshow June-July 2016

The President's Roadshow was a great opportunity to share our new strategy and Membership Pathway plans with our Branches.



#### **New Fellowships process** July 2016

Our Fellowship programme allows our profession to recognise its leaders. New guidelines and criteria makes this process more accessible, transparent, fair and consistent.

#### A new direction September 2016

New this year: we agreed a new direction for Engineering New Zealand.



#### **Code of Ethical Conduct** 1 July 2016

New Code of Ethical Conduct launched after a three-year development and consultation process. The Code is the foundation document through which engineers and IPENZ demonstrate their professionalism.

#### Week of Engineering 1-6 August

The first Week of Engineering was held in Wellington, supported by IPENZ and partnering consultancies.



#### INWES APNN 2016 and Diversity in Action Summit 18-19 August 2016

We hosted the 2016 meeting of the International Network of Women Engineers and Scientists Asia Pacific Nations Network (INWES APNN) and our inaugural Diversity in Action Summit.

Annual Report 2015-16

## What we achieved

### **Organisation-wide**

#### Our key priority:

Developing our new member strategy to ensure we're delivering what our members need and becoming the modern, member-focused organisation engineers want us to be.

#### This year we:

- developed our new vision, mission and strategic framework. We identified 17 priority programmes, including redeveloping our membership structure and creating a stronger brand, and put business plans in place to achieve them
- mapped out our new Membership Pathway. Our President Elena Trout FIPENZ, Deputy President Craig Price FIPENZ and Vice President Dean Kimpton FIPENZ visited our regional Branches to talk about the Pathway and what it means for members
- launched our new Code of Ethical Conduct in July. The Code puts more emphasis on professionalism and accountability and raises the bar across our membership
- revamped our Fellowship process to better recognise outstanding contributions to our profession
- introduced our new membership database and My IPENZ, which we're working hard to continuously improve.

### Membership

#### Our key priority:

Keeping our members informed and engaged through timely and relevant communications and events.

#### This year we:

- updated all our communications to members and the public and increased our media and social media engagement
- celebrated engineers' achievements at our best-ever Fellows' & Achievers' Dinner
- collaborated with industry partners to deliver the inaugural Week of Engineering in Wellington, promoting engineering careers to secondary school students
- completed the first phase of development on our new website
- started work on our new brand, including agreeing our new direction. All will be revealed in 2017
- held our inaugural Diversity in Action Summit in conjunction with hosting the 2016 International Network of Women Engineers and Scientists Asia Pacific Nations Network (INWES APNN) Conference. The success of the Summit has energised us in the pursuit of greater diversity and inclusion across all parts of our membership and the profession.





Violinist Elena sets the ambience for the 2016 Fellows' & Achievers' Awards.

## **Engineering Leadership**

#### Our key priority:

Making sure the voice of engineering is heard by strengthening our relationships with Government, technical groups and our key influencers.

#### This year we:

- launched our new Code of Ethical Conduct for IPENZ Members and Chartered Professional Engineers after a three-year development and consultation process
- produced 12 submissions on central and local government policy, including the Review of Vehicle Dimensions and Mass Rule, the Resource Legislation Amendment Bill, the Local Government 2002 Amendment Bill No. 2 and Health and Safety by Design
- published two Practice Notes: Version 4 of Practice Note 19: Seismic Resistance of Pressure Equipment in April 2016; and Version 1 of Practice Note 28: Screw Piles – Guidelines for Design, Construction and Installation in October 2015
- ran 214 CPD courses on topics including Retaining Wall Design Practice, NZS 3910 - Conditions of Contract and Liquefaction Assessment in the Engineering Practice (MBIE/NZGS Module 3 guidelines). We brought in revenue of \$1.32 million.
- welcomed two new Professional Development Partners to the programme: Calibre Consulting and Tonkin + Taylor. We completed scheduled PDP reviews with six more and will be looking to further strengthen the PDP programme in 2017.



The Resource Legislation Amendment Bill was one of 12 issues on which we produced policy submissions .

## **Professional Standards**

#### Our key priority:

Creating simple, fair and transparent processes and pathways for engineers that other regulators and the public can trust.

#### This year we:

- overhauled our Complaints process to make it more transparent, robust and proportionately responsive. We moved to a model focused on learning, quality improvement and appropriate accountability and introduced a process for early resolution, with a focus on educative outcomes
- appointed a General Counsel to oversee complaints, rules and other legal matters
- developed and launched new assessment guidance.
   We brought in new full-time Assessors and established a case management approach to assessments. As a result, we've improved our assessment timeframes from 180 days to 110, offering more help and support along the way
- accredited two Bachelor of Engineering programmes at the University of the South Pacific in Suva, Fiji
- extended our contract to provide Secretariat services to the International Engineering Alliance for another two years. We've worked hard to strengthen relationships with our friends overseas, including Engineers Australia, the World Federation of Engineering Organizations and the Federation of Engineering Institutions of Asia and the Pacific
- continued to provide Executive Officer/Secretariat services to the New Zealand Board of Engineering Diplomas (NZBED), supporting the ongoing development of the NZ Diploma in Engineering (NZDE) and NZ Diploma in Engineering Practice (NZDEP).
- have 3,612 IPENZ Practice College Members 69 Technical Members, 132 Associate Members and 3,411 Professional Members.

### Outreach

#### Our key priority:

Raising awareness of the variety of engineering careers available, especially among Māori, Pasifika and women through Futureintech, the Transpower Neighbourhood Engineers Awards and our Make the World campaign.

#### This year we:

- successfully launched the Make the World campaign to raise awareness of the value engineers add to society and how young people can join our lifechanging profession. This campaign was funded by the Engineering Education-to-Employment (Engineering E2E) programme, established by the Tertiary Education Commission (TEC) and BusinessNZ
- delivered the Transpower Neighbourhood Engineers Awards, which received 57 entries, the largest number in its history. Each team of students was mentored by an engineer, and worked on projects ranging from road safety to creative outdoor musical equipment. The Awards are an IPENZ initiative, giving school students a hands-on introduction to engineering
- reached nearly 45,000 students at schools in more parts of New Zealand than ever before through our Futureintech programme. Our almost 850 Ambassadors

   early career engineers, scientists, food technologists, software developers and more - made 2,645 visits to help students make the connection between maths, science and technology subjects and careers in technology, engineering and science-rich industries.
- used funding from the Ministry for Primary Industries to raise awareness in schools of the need for well qualified people in the agriculture, horticulture, forestry and fishing sectors. By the end of 2016 we had 156 Ambassadors who were able to talk about how they used technology, engineering and science skills to enhance the productivity of our economically important primary industries

- supported the Hello Café initiative a pilot programme of after school clubs that introduce 10- to 13-yearold girls from predominantly low-decile schools to engineering in humanitarian contexts. Over ten weeks the students learn about the engineering involved in sanitation, sustainable building, energy and emergency management through hands-on activities. Female Futureintech Ambassadors acted as mentors for workshops in South Auckland, Hamilton, Rotorua, New Plymouth, Palmerston North and Dunedin
- developed learning resources that involve a series of visits from Futureintech Ambassadors who guide students through hands-on activities using simple, 'real world' applications of technology, engineering and science to solve problems.
- said farewell to Futureintech's founder and long-time manager Angela Christie.



Site engineer Sapoa Rimoni was one of several engineers featured in the Make the World public awareness campaign.

# Our new strategy

## Our new strategy

Last year we embarked on a journey to better understand our members, what they really want from us and how we can help them be the best engineers they can be. Our members had been telling us for a long time that IPENZ needs to be more relevant, modern and appealing to the wide range of engineers who make up our industry today. Research backed up this view, confirming many members saw the Institution as old and out of date. The public also had an outdated view of what engineers do and the significant part they play in making our lives and communities better. In contrast, engineers see themselves as problem solvers for the good of society and they want others to recognise that.

IPENZ needs to champion the role of engineers. Our members want us to be the voice of the industry, to grow the status of engineers and to speak with authority on national matters. They also want us to provide a high standard of regulation and certification, to open doors for Kiwi engineers internationally and to represent New Zealand on the world stage. With these goals in mind, we developed a new strategic framework for IPENZ. It provides the road map for how we'll deliver on our vision to **engineer better lives for New Zealanders** and our mission to **bring engineering to life**. The framework has four key strands.

Each of these four strands includes multiple projects we believe are critical to delivering on our mission and illustrate how our members are constantly engineering better lives for New Zealanders.

Of the 17 projects identified, we have two key priorities for the coming year. These two foundational priorities will establish the platform for all subsequent success.

- A new Membership Pathway designed to raise the standard of professionalism across the board and to encourage a more diverse membership.
- A bold new brand for IPENZ that will help position us as the modern, relevant, open and accessible membership body our members need.

Other key projects include building a more vibrant Branch and group network. Bringing members together in regional



## Connection

Greater connection within the industry and across society, here and abroad.



Greater credibility so New Zealanders have confidence and trust in the work we do.

and technical groups sits at the heart of our organisation and is critical for greater connection, credibility and influence. Working more closely and effectively with our Branches and our technical groups will be key to building momentum and having our collective voice heard.

We'll also continue to work on streamlining the assessment process and strengthening our overhauled complaints process. These two areas are crucial for our profession's credibility. Creating simple, fair and transparent processes that ensure high standards of competence and professionalism help build confidence with both the public and the industry.

Diversity and inclusion is another key focus for the coming year. There are so many incredible initiatives already happening in this space. Rather than compete, we see our role as connector and facilitator – bringing together the best and brightest to share their successes and encourage behaviour change at all levels.

Taking a lead on important issues is also high on our list. A decisive and collaborative response to the Kaikoura earthquakes last year saw engineers at the fore of both media coverage and Ministerial advice. We'll continue working closely with our technical groups to make sure learnings are shared and acted on across the country. Similarly, we've launched an Own Motion Inquiry into the circumstances surrounding the engineering design and construction of six buildings in Masterton. This is a first for IPENZ as we continually seek to learn and improve standards. Our work to strengthen the relationship between IPENZ and the Ministry of Business, Innovation and Employment (MBIE) is paying off and we've been asked to provide input into the policy and implementation of the forthcoming occupational licensing regime. We'll keep our members' needs firmly at the fore of these discussions.

Finally, we must focus on tomorrow's engineers. How do we excite and inspire the next generation of Kiwi kids to dream of engineering? It's a priority for the whole profession and one we're keen to take a lead role in.

Our new strategy is our road map for creating a vibrant, modern organisation that will unite the profession and provide strong leadership on the issues that matter. We're determined to get engineers' voices heard and to win our members the recognition and respect they deserve.



Influence

Greater influence with government and industry to shape and inform the agenda.



## Recognition

Greater recognition publicly for the fundamental contribution engineers make to society.

# Our Branches and groups

## Branches

## Auckland

## 7,231

#### Chair: Tim Fisher MIPENZ

This year, the Auckland Branch continued to run a large and ambitious programme of work. The highlight was its flagship event, the Celebrate Auckland Engineering Awards Dinner in September. Other highlights included the Chairman's Reception, Board's Roadshow and Retired Engineers' Lunch.

The Branch's presentation series covered topics including health and safety, the new Code of Ethical Conduct, a talk on welding inspection and a Council presentation on building consents. There were also many opportunities for networking and the Branch organised a debate on engineering and architecture.

Site visits this year included tours to Auckland Harbour Bridge and the city's Navy Base, plus site visits to Warkworth Observatory, Mangere Wastewater Site and Waterview. The Branch also enjoyed a Ports of Auckland tour and made site visits to Kirkbride Road, Grafton Bridge and Auckland Transport Operations Centre.

The Branch committee's priority for next year is to plan for the Branch Centennial in 2018.

## **Canterbury** 3,405

#### Chair: Dave Brierley MIPENZ

This year, the Branch collaborated with the University of Canterbury on a mentoring trial. Another collaboration, with ICE, saw the Branch host ICE President Sir John Armitt. A panel of local VIPs, including Mayor Lianne Dalziel, discussed how lessons learned during the delivery of the London 2012 Summer Olympics could be used to help rebuild Christchurch. The Branch also held site visits to construction projects in the city.

The city's rebuild is the ongoing challenge for the region. This year, they're also dealing with damage caused by the Kaikoura earthquake.

Next year, the Branch committee will prioritise collaboration with associated professionals. They will act as a conduit between National Office and Branch members, and will encourage more local members to play an active role in Branch activities. And they will work with their local Engenerate branch to deliver seminars and workshops about the route to competence-assessed membership of IPENZ.



Canterbury Branch members on a site visit to the new ANZ centre in Christchurch. Photo: Dave Brierley MIPENZ.

## East Coast 28

#### Chair: Olivia Davidson GIPENZ

The East Coast Branch teamed up with Eastland Group this year and had a stall at the annual Careers Expo. They followed up with students who were interested in further information about engineering and careers in the industry.

Branch members have been involved with the Hello Café initiative, facilitating events in Gisborne. Hello Café is a series of weekly after-school workshops aimed at engaging 10 to 13-year-old girls in engineering by focusing on humanitarian projects through activities like designing drinking water filters, repurposing plastic rubbish and building temporary shelters.

A lack of Chartered Professional Engineers and the impact of their isolated geography on the cost of projects are challenges for this region. This year a particular challenge has been the involvement with the Te Tairāwhiti Science & Technology Fair; the Branch committee will prioritise maintaining their involvement next year.

### Hawke's Bay 196

#### Chair: Arthur Budvietas MIPENZ

The Branch has seen much better integration of Branch and Engenerate events this year. A highlight was the annual mid-winter dinner at the Mission Estate winery. The annual Quiz Night saw 11 teams participating. Winners of the Quiz this year were "Old and the Bold", consisting of long-time committee members John Geoghegan FIPENZ and Clive Squire FIPENZ and their partners.

Regional challenges include the Havelock North water supply contamination and Government Inquiry, to which a number of members have submitted information and offered assistance to the Hastings District Council. The Ruataniwha Dam is a significant engineering project for the region, which has many political proponents – for and against – among engineers and in the community.

Next year, the Branch will continue working closely with the local Engenerate group, creating a better network for young and senior engineers. They plan to help restore a local engineering heritage item during the summer.



East Coast Branch member Marlis Haertel GIPENZ helps out at Hello Café. Photo: Malcolm Davidson.

### Manawatu 252

#### Chair: Bruno Petrenas MIPENZ

The Branch's top event of 2016 was the presentation from Reiko Baugham on her secondment to Manila Water. The talk was fascinating, Reiko was an entertaining speaker and the event was very well attended.

Their challenge has been maintaining efficient and effective contact with all members and encouraging participation in Branch activities.

Next year, their priority is to arrange a successful Earle lecture. They are looking to get a scientific speaker from Palmerston North's potential new Sister City of Wageningen, in the Netherlands.

### **Nelson-Marlborough** 266

#### Chair: Avik Halder MIPENZ

This year's highlights included a visit to see construction of the new outdoor velodrome in Stoke, learning about the design and construction challenges. In Blenheim, members attended a tour of the Cuddon Freeze Dry workshop to hear about the drying process and see the units, which are exported globally. There was a chance to try some of the products, including freeze-dried ice cream and cheese.

As part of Civil Engineering Week, the Nelson Marlborough Institute of Technology (NMIT) hosted its inaugural Bridge Building Competition for local schools. Held on a Saturday at the Richmond Mall, the competition showcased engineering to a public audience. There were 16 competing teams testing their bridges to destruction. The Branch was proud to commission the trophy.

As the next generation of engineers enter the profession, the Branch Committee's priorities for next year are to continue strengthening links between members and to build connections with local schools.

## Northland 207

#### Chair: Simon Weston MIPENZ

Northland Branch had an active year with monthly events covering a wide range of engineering disciplines. Highlights include Pete Ibbotson of Marshall Day Acoustics presenting on acoustic engineering, a topic not widely understood. Ngawha Power Station opened its gates to show members the complexities of this uniquely Northland site.

The Branch helped a local tertiary education provider gain accreditation for their diploma courses and build their relationship with the University of Southern Queensland (USQ), providing students with a pathway to higher level qualifications.

They sponsored the Central and Far North science fairs. These were great opportunities to raise awareness among students of engineering as a career pathway.

The Branch committee's priority for next year is to attract members from throughout the region and they'll be holding events across the region to facilitate this. They plan to fundraise towards a study scholarship for a Northland student, in conjunction with the IPENZ Foundation.

## **Otago** 485

#### Chair: Natalie Veale GIPENZ

The Branch's key event this year was a talk by David Petley (University of East Anglia) on earthquakes triggering landslides. He discussed spatial patterns of landsliding for significant seismic events.

The challenge and priority for the next year is to build engagement with members. They want to see more members engaged with the Branch and to showcase their successes to the wider region. Their goal is to work with members' companies as well as them individually to see what the Branch can offer them.

## **South Canterbury** 69

#### Chair: Antoni Facey MIPENZ

Highlights from this year include a site visit to Timaru District Council's waste minimisation and waste transformation project at Redruth, a presentation from South Canterbury Local Authority Road Maintenance Contract Collaboration and a presentation from Jo Goodhew MP about political issues affecting engineers. The Branch also held their now traditional pizza nights in May and September.

For the first time, the Branch co-funded an annual scholarship of \$4,000 with the IPENZ Foundation. Jessica Gale, who is studying civil engineering at the University of Canterbury, received the first scholarship in what will be an ongoing initiative. The Branch thanks this year's generous sponsors, Fulton Hogan, Ward Consulting, Avanzar Consulting and Linear Design.

IPENZ brought industry seminars to Timaru as a result of the committee's work to make training available in local areas, reducing travel and inconvenience to local engineers. The Branch committee's aim is to arrange more in the coming year.



Taranaki Branch committee member Ama Wickramanayake GIPENZ with a World War 2 era Catalina PBY aircraft. Photo: Nick Ramsay GIPENZ.

## **Southland** 105

#### Chair: Malcolm Loan MIPENZ

The Branch had a full programme during the year, including social events, technical talks and site visits.

The highlight of the year was the Heritage weekend, which included cycling the Central Otago Rail Trail from Oturehua to Clyde. They visited the historic Hayes Engineering Works in Oturehua and stopped at some of the viaducts and tunnels along the trail. They visited the NIWA atmospheric observatory at Lauder, where they discussed the future impacts of climate change on New Zealand.

The Branch was grateful for the opportunity to attend Professional Development courses without the need to travel out of the province, with IPENZ presenting seven one-day courses in Invercargill. Their priority is to develop these opportunities further over the next year to maximise benefit for members.

## **Taranaki** 314

#### Chair: Nick Ramsay GIPENZ

Branch events this year have included several interesting presentations, ranging from the state of Taranaki water quality to the intricacies of managing an LNG mega-project, and events including beer tasting. The highlight of the year was the sold-out Annual Dinner, where Dr Michelle Dickinson entertained and educated 170 members and guests on the topic of nanotechnology.

The region faces the challenge of key industries' – dairy and oil and gas – struggle with low prices and capital input. The Branch committee's priority next year is to provide a steady supply of interesting and diverse events for the group and to collaborate more closely with technical groups in the province.

### **Tauranga** 406

#### Chair: Tim Haig MIPENZ

In their first collaboration event for the year, the Branch joined with the New Zealand Geotechnical Society for a site visit to the NZ Transport Agency Hairini Link project. They saw first-hand the sheet piling and earthworks around the Kaitemako Stream.

They collaborated with the Rivers Group and the Modelling and Stormwater Groups for a presentation from the Western Bay of Plenty District Council. The presentations by Coral-Lee Ertel GIPENZ and Kelvin Hill focused on challenges with stormwater drainage and flooding at Waihi Beach. This was a great example of how the Branch can broaden their network through collaboration with other groups.

The Branch awarded an IPENZ Foundation Scholarship to Devon Whitmore, who studies at the University of Auckland. The scholarship had a total value of \$5,000, with \$2,500 raised by the Tauranga Branch through local sponsorship from Higgins, Fulton Hogan, Beca, Vitruvius and Tauranga City Council, and collections from Branch events.

## **United Kingdom** 156

#### Chair: Jonathan Gammon FIPENZ

This year's Branch events included a technical talk on the earthquakes in Nepal, a tour of London featuring the diverse engineering works of Marc and Isambard Kingdom Brunel, the annual IPENZ barbecue at Henley-on-Thames, and a Graduates' Evening.

The Branch maintained close relations with Engineers Australia, the Hong Kong Institution of Engineers and Engineers Ireland, offering a larger number, and wider range of events to Branch members as a result.

The Branch also engaged with the New Zealand High Commission and the UK's Construction Industry Council (CIC) in an effort to ensure Brexit means New Zealand engineers have the same work opportunities in the UK as currently enjoyed only by those from European Union countries.

## Waikato-Bay of Plenty 1,010

#### Chair: Elizabeth Geddes GIPENZ

The Waikato-BoP Branch ran events covering a wide range of topics and disciplines, including tours of the New Zealand Timber Museum and the Good George Brewery, a presentation by Andrew Confait about the new Health and Safety Act and their annual dinner at the Classic Car museum with a presentation from Councillor and former policeman Leo Tooman.

The Branch continued to support science and engineering in the community, providing volunteer judges for regional competitions. They sponsored prizes at the Waikato Regional Science & Technology Fair and awarded the annual University of Waikato Final Year Engineering design project. The Branch also sponsored four prizes at the Wintec Design Show, as well as a prize for the Road Engineering Roadshow annual Young Presenter Award.

The Branch committee were encouraged by turnout at events in Rotorua and Taupo and plan to run more, in collaboration with the regional Engenerate group.

## Wanganui 43

#### Chair: Kritzo Venter MIPENZ

As the new Code of Ethical Conduct came into effect this year, the Branch held a mini Forum, hosting former IPENZ General Manager – Engineering Leadership Graham Dilks. Graham was the project manager for the review of the Code and joined them for a thought-provoking presentation and debate.

The Branch held two technical presentations in April about the Makatote Viaduct and wastewater modelling outcomes for Wanganui City.

They also held their annual IPENZ Golf Day in December. This joint event with the Manawatu and Hawke's Bay Branches is part of a long-standing tradition of more than 50 years.

The Branch held their 2016 AGM at the Waimarie Centre, Wanganui – a unique piece of engineering heritage in the region – to celebrate the region's recovery from the June 2015 flood, which had a large impact on the community.

## Wellington 1,778

#### Chair: David Callan GIPENZ

Highlights from this year include a Cycleway Presentation by Wellington City Council. The Branch heard from Principal Cycling Engineers about the Island Bay Cycleway, their insights of the project and next steps. They also had a presentation about the engineering challenges involved in the Mount Victoria Tunnel Refurbishment Project, from existing infrastructure to the live transport environment.

A Transpower presentation on bow tie risk analysis introduced a relatively new technique that provides a simple means of visualising causal paths and risk controls in a way that is engaging for a wide range of stakeholders. Transpower gave an overview of the bow tie methodology and early feedback about the benefits of this new approach.

Seismic resilience in Wellington and an ongoing shortage of engineers are challenges in the region. One of the Branch's priorities for next year is Resilient Wellington – a presentation on how the city is resilient.

### West Coast 27

#### Chair: Tate Bradley GIPENZ

Site visits to the Westland Petrol Colony and the Hokitika Industrial Heritage Park were a highlight this year. It was fascinating watching the Continuous Flight Auger (CFA) piling process at the new Greymouth Hospital construction site.

Securing a long awaited regional scholarship was a big achievement for the Branch and the West Coast collectively.

It's been a challenge for the West Coast Branch to find engaging engineering-based site visits and activities for members.

The priorities for next year are to award the first regional West Coast IPENZ Foundation Scholarship, to build students' exposure to engineering, and to continue to improve the quality of both engineering and non-engineering related Branch events.

## SENZ

We meet future engineers when they're students and start a lifelong relationship that helps raise the standard of young professionals in our industry. Student Engineers New Zealand (SENZ) helps students develop their skills and knowledge, grow their networks and start off on the right track to build better lives for New Zealanders.

#### Chair: Olly Ewert

SENZ representatives throughout the country run a mixture of social and professional events, which help IPENZ student members meet their peers and future employers.

Highlights from the year include a site visit to the Royal New Zealand Air Force (RNZAF), where students from Massey Albany saw what daily life is like for a Defence Force engineer. Industry members gave their views on the impacts and developments of sustainability considerations on the industry at a panel discussion at the University of Auckland. The University of Canterbury's Templin Scroll project and presentation competition encourages students to practise their presentation and writing skills. This year's winner was Madeline Wright GIPENZ.

Priorities for next year include collaboration between students studying at different tertiary institutions and promoting the role of IPENZ and the benefits of IPENZ Student Membership within the student engineering community.



Student Members check out fire appliance manufacturers Fraser Engineering in Wellington as part of the 2015 SENZ Forum.



SENZ Chair Olly Ewert at the 2016 Engineering Profession's Forum.

## Engenerate

Our Engenerate group helps prepare the engineering profession's future leaders. We provide support, education and networking opportunities, which help young professionals step up to lead in a fast-paced, ever-changing industry.

#### Chair: Lucy Abraham GIPENZ

The main Engenerate hubs continued their great work providing members with engaging events, including site visits, presentations and networking opportunities. Committees in smaller regions like Southland and Wanganui made plans for meet and greet events to draw in new members and build up a base of regular attendees.

All groups partnered with their regional IPENZ Branches to hold joint events and boost networking opportunities between young engineers and more experienced professionals. This was a great way to create a more cohesive engineering community. Highlights from the year included the joint health and safety series between Auckland Engenerate and the IPENZ Auckland Branch, which provided very valuable information to the industry on the new legislation and different organisations' responses. WAYD events in Auckland, Hawke's Bay and Canterbury promoted partnerships between young engineers and other young professionals, such as architects, planners, lawyers and surveyors.



## **IPENZ Foundation**

The IPENZ Foundation supports IPENZ members and future engineers through financial assistance for members suffering hardship and scholarships for students wanting to study engineering.

In 2016, the Foundation awarded eight \$4,000 scholarships to help students complete their undergraduate studies. Through the generosity of Dr Francis Small DistFIPENZ and the University of Canterbury, the Foundation was also able to award a \$10,000 scholarship for postgraduate study.

Sustaining income remains a challenge for the Foundation with low interest rates and stagnating market shares.

Craigs Investment Partners gave excellent guidance and the Foundation was able to preserve an investment income of around \$57,000 for the year. Income was boosted by significant bequests, which will be used for future scholarships.

This year also saw the Foundation welcome two new trustees, Leighton Duke GIPENZ and Will Chaney GIPENZ. This has provided a good transition period with the Chair, Peter Jackson DistFIPENZ, and Carol Caldwell FIPENZ retiring from the Board next year.

#### Summary financial results for the year ended 30 September 2016

The full financial statements were authorised by the IPENZ Foundation Trustees on 28 January 2017 and signed by two Foundation Trustees. They have been subject to audit and an unqualified audit report was issued on 28 January 2017. You can view and download the full financial statements at <u>ipe.nz/annual-report</u>

The financial year ended 30 September 2016 resulted in total operating revenue of \$530,161, including bequests of

\$468,221. The total operating expenditure was \$61,368. There was an unrealised gain on investments of \$82,925.

As a result, the year ended with a surplus of \$551,719. The figures below provide further detail of the main areas of revenue and expenditure.

The balance sheet remains healthy with net assets of \$1,520,584.

	2016	2015
	\$	\$
Income		
Dividends and Interest Received	63,615	53,366
Realised Investment Gains (Losses)	(1,917)	(5,828)
Donations and Sundry	468,463	16,457
Total Operating Income	530,161	63,995
Expenditure		
Scholarships and Branch Scholarships	42,000	24,000
Sponsorship	-	8,000
Sundry Expenses	19,368	21,931
Total Expenditure	61,368	53,931
Net Income before Unrealised Gains (Losses)	468,794	10,064
Unrealised Gains (Losses)	82,925	49,048
Net Surplus/Deficit	551,719	59,112

## **Interest Groups**

### **Civil Engineering Testing Association of New Zealand (CETANZ)** 138

## Chair: Danny Wyatt

Highlights from the year include the CETANZ Conference and AGM held at Trinity Wharf, Tauranga in August, and the South Island networking evening in October, hosted by Isaac Construction at Harewood Golf Course in Christchurch.

The Group says challenges in their field include tests that are accepted in industry but not easily replicated, as well as issues around Standards that require significant time and investment to update. The Group says they're seeing difficulties in attracting and retaining people to the National Technicians Qualification, while pay scales make it difficult to retain young talent.

Next year marks the 10th Anniversary of CETANZ and the Group is planning celebrations around the country. Other priorities include working with industry to help create smarter ways of materials testing for the civil discipline. The Group plans to provide technical assistance for standards' updates, and to promote the benefits of high quality independent materials testing services to the wider industry.

### **New Zealand Geotechnical Society** (NZGS) 1105

#### Chair: Charlie Price

The 11th Australia and New Zealand Young Geotechnical Professionals Conference (11 ANZ YGPC) was held in Queenstown in October. The New Zealand Geotechnical Society's Young Geotechnical Professionals Fellowship was awarded to Philippa Mills of Coffey Geotechnics and the Don Douglas Youth Fellowship Award went to Nigel Ruxton of Golder Associates, Brisbane.

During 2016 NZGS jointly released four earthquake engineering modules in conjunction with the Ministry of Business, Innovation and Employment (MBIE). These important industry guidance documents comprised information on liquefaction hazards, geotechnical investigations for earthquake engineering and earthquake resistant foundation design.

A geotechnical education programme is under development as a joint venture between NZGS, MBIE and IPENZ to support the release of each module in the earthquake engineering series. This programme is aimed at engineering graduates preparing for CPEng, experienced engineers needing to upskill, architects, developers, land planners, and building officials. Webinars will also be available on the NZGS and MBIE websites.



## **Mechanical Engineering Group (MEG)** 501

#### Chair: Darren Sharpe

Highlights for the Mechanical Engineering Group this year included a visit to the Auckland Transport rail car servicing depot, an inside track review of the grounding of the MV Rena and a visit to a commercial 3D titanium printing facility.

One of the challenges is the small number of mechanical engineers in each region and the geographical dispersion. MEG is collaborating with other engineering institutions, including the Institution of Mechanical Engineers (IMechE), the Institution of Engineering and Technology (IET), the Institution of Chemical Engineers (IChemE) and the Institute of Marine Engineering, Science & Technology (IMarEST) to develop interdisciplinary networks and events.

As the MEG/IMechE relationship grows, MEG members have acted as judges for a number of IMechE events across the year, including the Asia Pacific Design Competition and five "Speak out for Engineering" national and international finals. MEG also continues to sponsor Formula SAE and provide judges for final-year projects at the University of Auckland, as well as supporting the Formula SAE teams at the University of Waikato and the University of Canterbury.

### Maintenance Engineering Society of New Zealand (MESNZ) 334

#### Chair: Barry Robinson

The Society's highlights include a successful National Maintenance Engineering Conference and Exhibition in Hamilton. The Society also notes its growing series of networking evenings, which saw the first event in Taranaki this year. The Society launched its new national membership magazine, *Maintenance Torque*, which is growing in popularity. MESNZ also awarded the first Stuart Tolhurst Memorial Award for Apprentices.

MESNZ helped develop a response to a Government request for input on apprentice training, including contributions from Competenz. The Society continues to actively contribute to the Mechanical Engineering Qualification Sector Advisory Group.

MESNZ cites the challenge of counterfeit and poor-quality materials. The Society is very glad to see a slow but increasingly broader awareness of this after raising the issue over many years.

Priorities for next year include collaborating with other engineering representative organisations to petition government to help change focus towards engineering trades and technical training.



The University of Waikato's completed 2016 Formula SAE car.

### **New Zealand Institution of Gas Engineers (NZIGE)** 105

#### Chair: Bruce Monk

This year's highlight was the Emergency Response Workshop, held in Queenstown as part of the New Zealand Gas Forum. The workshop was presented and facilitated by the Institution of Gas Engineers and Managers (IGEM UK) with input from New Zealand Industry.

As a small organisation, the Group says its biggest challenge is to stay relevant to members and to maintain and grow its membership base.

Next year's top priorities include completing and delivering a training programme for members and those wanting to expand their engineering knowledge in reticulation (predominately gas), and continuing to grow their relationship with IGEM. As part of this relationship, the Group is promoting the IGEM Young Persons Paper Competition, which recognises young professionals and students who can demonstrate they have the potential to make a valuable and meaningful contribution to the gas industry. The Group will fund travel to and accommodation in the UK for the winning New Zealand entry.

### New Zealand Society for Earthquake Engineering (NZSEE) 738

#### Chair: Peter Smith FIPENZ

This year's NZSEE Annual Technical Conference was on the theme of Reducing Risk – Raising Resilience. International keynote speakers presented on community resilience and the built environment, performance-based seismic design of non-structural building components and characteristics and consequences of recent Italian earthquakes.

The draft *The Seismic Assessment of Existing Buildings: Technical Guidelines for Engineering Assessment* was published in June 2016 and NZSEE collaborated on producing a seminar series to introduce the technical guidelines.

Following an overseas earthquake, NZSEE may mobilise a small technical group – a Learning from Earthquake Mission (LFE) – to spend time in the damage zone to investigate the earthquake effects and the local management of the recovery process. In 2016, NZSEE supported LFE Missions to Taiwan and Japan.

The Third International Learning from Earthquakes Workshop was held in Christchurch in March. Experienced international practitioners explored how learning from earthquake response and recovery operations can inform future responses.



### New Zealand Society on Large Dams (NZSOLD)

### 193

#### Chair: Peter Lilley

This year's highlight was the ANCOLD/NZSOLD conference in Adelaide. Held every three years, the joint event helps build engagement between professionals in the dams industry on both sides of the Tasman. The conference theme was 'Dams: a lasting legacy'.

Progress on and resolution of the status of Dam Safety Legislation remains a significant issue for the Society. The group continues to work actively with Ministries and industry representatives to advance appropriate regulatory controls around dam safety.

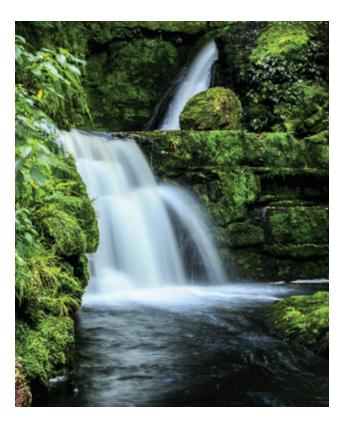
Next year's priorities include the Society's annual symposium and a significant workshop on risk-based decision making. The group will also begin planning to host the next joint NZSOLD/ANCOLD Symposium in 2019. The Society committee also plans to continue supporting the growth and activities of their young professionals group.

### New Zealand Society for Safety Engineering (NZSSE) 58

#### Chair: Joe Bain MIPENZ

A key focus for NZSSE has been to help the profession adjust to the new Health and Safety at Work Act. The group's main activities have been focused on providing information to engineers, through facilitating IPENZ CPD courses throughout the country on the new Act and on Safety in Design. NZSSE's active engagement with Worksafe has continued. A particular highlight was their input into the Worksafe position statement on Health and Safety by Design.

The Society's priorities for next year include: continuing their engagement with the Health and Safety Association of New Zealand (HASANZ) to make sure engineers are represented on the industry body for professionals working in health and safety; engaging with Worksafe on their work programme in the area of Health and Safety by Design; and working with engineering training establishments to facilitate the integration of safety by design best practice into engineering design training.



## **Rivers Group** 249

#### Chair: Kyle Christensen MIPENZ

This year, the Rivers group held a combined conference with the NZ Hydrological Society and Engineers Australia's National Committee in Queenstown on the topic of water engineering. It was a fantastic event and included some excellent papers from Rivers Group members. The Group also awarded their highest honour, the Arch Campbell Prize for outstanding achievement in the fields of hydrology and hydraulic engineering to David Leong from Tonkin + Taylor.

The Group supported river-related research and community projects to a value of \$12,000. The Group plan to continue making contributions towards knowledge and development with the New Zealand River community.

A big challenge for the Group is resolving the conflict between a national policy direction of flood hazard avoidance and application of engineering knowledge to mitigate and manage risks.

Next year's priorities include working towards national guidelines for the application of freeboard in hydraulic modelling and design.

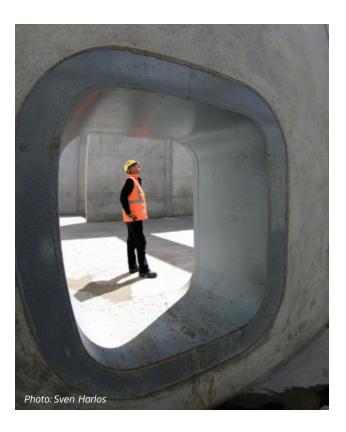
## Recreation Safety Engineering Group (RSE)

## 29

#### Chair: Stewart Gutsell MIPENZ

The Group's major event of the year was its annual conference, held in Christchurch. This event has become the amusement industry Forum and the RSE is pleased to play this role in coordinating safety efforts of operators, certifiers, local authorities and the regulator. The conference offered the opportunity to hear from operators in the Canterbury area and spend an informative day visiting devices of interest in and around Christchurch.

The RSE cites Certifier Liability as a key challenge. The Health and Safety at Work Act 2015 is now in effect and certifiers are working to understand what the consequences may be for amusement device certification work. In many instances, there is a conflict between the level of fee historically charged for certifying a small ride versus increased potential liability. The Group's priority is to ensure the safety of people via quality ride certifications while keeping these services economically viable for the certifier and ride owner.



## Structural Engineering Society New Zealand (SESOC)

## 1,678

#### President: Paul Campbell MIPENZ

The Society has been represented on regulatory committees for NZ Standards including NZS 3603 Timber Structures Standard, NZ3404 Steel Structures Standard and AS/NZS 2327 Composite Design Standard for Multi-storey Buildings.

SESOC assisted the New Zealand Society for Earthquake Engineering in preparing a new Guideline document, "The Seismic Assessment of Existing Buildings". This document will provide a technical basis for engineers to assess existing buildings within New Zealand. SESOC has assisted with seminars presenting the new Guidelines to engineers.

SESOC has continued to upgrade and develop software for the use of its members, including SESOC MemDes for structural steel design, SESOC GenCol for reinforced concrete column design and SESOC Soils for the design of foundations and retaining walls. This work continues next year.

The Society has also worked hard to progress professional relationships with international societies including the Institution of Structural Engineers (IStructE) and the Stuctural Engineers Association of California (SEAOC.)

Challenges for SESOC include working with building owners and territorial authorities to implement the new earthquakeprone building legislation, as well as enhancing professional practice standards.

SESOC's priorities for next year include hosting the SESOC Conference 2017 in November, on the theme of "Securing the Future". The Group also has a big role to play working on the effects of the Kaikoura earthquake. They also plan to develop a SESOC technical reference library.

### Society of Fire Protection Engineers (SFPE) - New Zealand Chapter 213

#### Chair: Geoffrey Merryweather MIPENZ

SFPE provided input to working groups for the MBIE Fire Review. The Review looked at some long-standing issues around roles and responsibilities in the New Zealand Building industry, particularly in post-consent stages like construction, passive fire protection and the Building Warrant of Fitness (BWOF) regime.

The Society had a highly successful workshop series around the country, run by John Klote, an international leader and author on smoke control. The workshops were on smoke control systems and stair pressurisation using NIST CONTAM and were held in Auckland, Wellington and Christchurch.

The Society was involved in a workshop on evacuation modelling and human behaviour as part of the Fire NZ Conference presented by Dr Michael Spearpoint.

### Special Interest Group for Immigrant Engineers (SIGIE) 76

#### Chair: Canute Chandrakumaran MIPENZ

This year's highlights include two full-day workshops with Auckland Regional Migrant Services (ARMS) on new immigrant engineers' job seeking, including developing a CV, transferable skills, interview skills and successful story sharing.

The Group says some immigrant engineers need to get a local certificate before entering the New Zealand market, which can take time. SIGIE play a support role, helping engineers to connect to the right resource. It can be a demoralising process and encouraging them is a big challenge for the Group.

The Group's key priorities for next year are to help their members grow their connections and networks and to promote SIGIE through different channels so they can reach and help more immigrant engineers.

## **The Sustainability Society (TSS)** 186

#### Chair: Caleb Clarke GIPENZ

Highlights from the year include a workshop with Auckland Council to explore their new strategy: Auckland Growing Greener. Council leaders presented on Healthy Waters, Restoring Nature, Zero Waste and Urban Transformation.

The Society ran its sustainability webinar series for the second year running. It was delivered by sustainability practitioners and researchers across the country and spanned an array of sustainability issues.

This year saw the establishment of a TSS student chapter at the University of Auckland. This student group, with the support of the TSS committee, aims to develop links with other students from the University and beyond who share an interest in sustainability. The group also supports the process of considering how sustainability principles are integrated into the curricula.

Challenges in the field include making a better business case for integrating sustainability measures into the built environment. The Society's priorities for next year include launching the updated Sustainability Practice Guidance for engineers.



### **Technology Education New Zealand** (TENZ) 374

#### Chair: Wendy Fox-Turnbull

TENZ have been gathering national statistics on how student teachers fare in the workforce. This data will help the Group identify specific development needs and deliver more accurate, relevant and targeted professional development opportunities for their members.

This year, TENZ trialled a Professional Learning Programme to meet teacher need. While successful in content delivery, it was difficult for some members to attend in person. The group is reviewing its offering to members for next year.

Challenges include teacher retention and training. Technology teachers are an ageing population. This is concerning as a vast skillset will be lost as these teachers reach retirement. The Group sees the need to retain this wealth of experience for future technology teachers.

Next year's priority is the TENZ Conference 2017. Planning has been underway for some time. The Conference will have an international flair and include research as well as workshops.



"Sunset Boulevard", the winning design in the 2016 ArchEngBuild Design Challenge.

### New Zealand Timber Design Society Inc. (TDS) 391

#### President: David Reid MIPENZ

This year's highlights include the Changing Perceptions of Engineered Timber for Construction 2016 Conference in Rotorua, which TDS supported. The Society's regional Roadshow took international keynote speaker Sukh Johal to Christchurch, Nelson, Wellington and Auckland. The Society also supported the Timber Design Awards, the ArchEngBuild Design Challenge and the World Conference in Timber Engineering in Vienna.

The Society's challenges include continuing to develop the designed use of timber, through raising awareness, education and supporting research. Priorities for next year are to continue to grow the designed use of timber, run a local conference and support the release of the new Timber Design Standard through participation on the Standards committee, running workshops and developing design tools.

### **IPENZ Transportation Group** 1,113

#### Chair: Pravin Dayaram MIPENZ

The Group's annual conference was held in March in Auckland. The conference was a great success with a great range of inspiring speakers and positive feedback from attendees. Tranportation Group Special Interest Groups – the NZ Modelling User Group (NZMugs) and the Trips Database Bureau (TDB) – held their annual conferences. The TDB has been in discussions to work closely with similar groups in Australia, the United Kingdom and the United States of America.

A key issue for the Group is encouraging a greater level of member participation in Group activities, especially among members who have recently joined.

The Group's priority for next year is to update its Strategic Plan. This includes reviewing the Group's rules and officer roles, changing the name of the group, undertaking a rebranding exercise, updating the website, raising the profile of the Group and exploring how to make the Group more relevant to members and the public.

## **Financial summary**

The full financial statements were authorised by the IPENZ Board on 12 December 2016, signed by the President and Chief Executive and have been subject to audit and an unqualified audit report was issued on 12 December 2016. You can view and download the full financial statements at <u>ipe.nz/annual-report</u>

The financial year ended 30 September 2016 resulted in total income of \$12.97 million and total expenditure

of \$12.76 million. As a result, the year ended with a surplus of \$0.21 million. This was in excess of that originally budgeted and is a pleasing result. The charts below provide a summarised picture of the main areas of income and expenditure. The balance sheet remains healthy with total assets of \$7.83 million and liabilities of \$1.79 million. This leaves net assets, represented by member funds, of \$6.04 million.

## \$12,973,000 total income

\$3,935,000 Member subscriptions

#### **\$3,443,000** Contract income eg NZBED, Futureintech

#### **\$2,642,000** Registry and assessment fees

**\$1,772,000** Other income eg CPD fees, advertising

> **\$983,000** Interest Groups

> > **\$198,000** Interest

## \$12,757,000 total expenditure

#### **\$5,543,000** Other expenses

**\$5,376,000** Staff costs **\$792,000** - Interest Groups

\$613,000 —

Consultancy competency assessments

\$433,000

Depreciation and amortisation

## Recognition

Each year, we have the privilege of recognising outstanding achievement in the engineering community. Congratulations to all our Fellows and award winners.

### Awards

#### Ray Meyer Medal for Excellence in Student Design

Final-year project: Service Cover Detection for Pavement Milling.

Mo Chalabi, Thomas Coughlan, Josh Heenan and Abel Leenders (University of Canterbury). Supervised by Dr Geoffrey Rodgers (University of Canterbury) and Ian Viney (Trimble)

#### Young Engineer of the Year

Career excellence, leadership qualities and community contribution.

#### Martin Peat GIPENZ

Finalists: Felicity Jensen GIPENZ, Jing Siong (John) Cheah GIPENZ and Liam Edwards MIPENZ

## Supreme Technical Awards for Engineering Achievers

Rabone Award - Information, Communication, Electrical and Electronic Technology Robin McNeill FIPENZ

**Dobson Award - Transportation Infrastructure** Dr David Hutchison FIPENZ

John Cranko Award - Mechanical and Manufacturing Michael Pervan FIPENZ

Furkert Award - Sustainability and Clean Technology Kēpa Morgan FIPENZ

#### **Turner Award for Professional Commitment**

An extraordinary volunteer in their commitment to IPENZ, the profession and their community.

William (Willie) Lloyd Mandeno FIPENZ

#### The President's Awards

#### Fulton-Downer Gold Medal

Awarded by the President for a member's outstanding achievement within the engineering profession.

Arthur Park FIPENZ

#### **Fulton-Downer Silver Medal**

Awarded by the President for a member's outstanding service within the engineering profession.

Chantelle Bailey MIPENZ

#### William Pickering Award for Engineering Leadership

Outstanding leadership and contribution to the engineering profession and the community.

Dr Robin Dunlop DistFIPENZ

#### **MacLean Citation**

Exceptional and distinguished service to the engineering profession. Andrew Hazelton

The Institution of Professional Engineers New Zealand

## **Fellowships and Companions**

#### Companion

Awarded to a person who has achieved a position of significant responsibility by interacting with the engineering profession but is not an engineer.

#### **Michele Boniface**

#### Fellow (FIPENZ)

Awarded to engineers who have made a significant contribution to the engineering profession or IPENZ.

Geoff Bird	Keith Paterson	
Jitendra Bothara	David Phillips	
Gemma Collins	John Richards	
John Crawford	Pratarp Singh	
Simonne Eldridge	Ashley Smith	
Samir Govind	Nicolas Smith	
Vince Hawksworth	Craig Stevenson	
Benjamin Holland	Geoffrey Thomas	
Robert Jones	Christopher Tolley	
Craig Lewis	Nicholas Traylen	
Simon Moutter	Shane Xie	
Richard Muggleston		

#### Honorary Fellow (HonIPENZ)

Awarded to an individual who may not have an engineering background or does not work in engineering in the traditional sense but has made a significant contribution to professional engineering or IPENZ.

Dr Paul Benjes

#### **Distinguished Fellows (DistFIPENZ)**

Awarded to Fellows of IPENZ who have made an eminent contribution to leadership in engineering, technology or science over an extended period.

James (Jim) Bradley Dr Bruce Harker



Martin Peat GIPENZ



Chantelle Bailey MIPENZ



Dr Robin Dunlop DistFIPENZ

# Thank you

## **Our volunteers**

Our volunteers are essential to the success of IPENZ. We're fortunate to enjoy such a high level of volunteer support and we're grateful for the countless hours contributed to IPENZ and the profession.

- IPENZ Governing Board
- Engineering Practice Advisory Committee
- Audit and Risk Committee
- Performance and Remuneration Committee
- Competence Assessment Board
- Standards and Accreditation Board
- IPENZ Foundation Board
- Heritage Board and Chapters
- Emerging Professionals Council
- Student Engineers Council
- Award committees
- Competency Assessors

- IEA review panels
- Standards Committee
- Practice note authors and reviewers
- The Code of Ethical Conduct Review Committee
- The Membership Pathway Working Group
- Investigating and disciplinary committee chairs and members
- Futureintech Ambassadors
- Transpower Neighbourhood engineers
- Branch committee members
- Technical and special interest group committee members
- Fellowship Review Committee

### **Our sponsors**

We rely heavily on ongoing support from our sponsors.

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- GHD

- MAS
- MWH now part of Stantec
- OPUS
- Pacific Steel
- RobLawMax Recruitment
- Transpower





**The Institution of Professional Engineers New Zealand Inc.** *Pūtahi Kaiwetepanga Ngaio o Aotearoa* 

PO Box 12 241 Wellington 6144 New Zealand **P** +64 4 473 9444

**E** ipenz@ipenz.org.nz

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www.ipenz.nz