

President's Message



Lower the bar?

The April Board meeting was the first for our newly-elected Board Members. As part of our induction session, our Chief Executive showed us a diagram depicting all of the operations and relationships over which the Board has oversight. These include, amongst many others, accreditation of tertiary programmes, quality assurance of the various Membership classes, public policy, assisting with the administration of Branches

and Technical Interest Groups, publications and communication to Members, the Endorsed Employer scheme, and participation in international agreements. Plus, of course, Futureintech and CPEng – two major activities which IPENZ is essentially carrying out on behalf of other parties. One of the new Board Members found it all a bit overwhelming and he wasn't the only one. Although it is barely possible to squeeze all the components onto one page, the diagram is a very useful summary of the numerous activities in which IPENZ is engaged, so we'll find a way to show it to you all during the year.

This meeting ran end-to-end with the annual Branch and Technical Group Forum, at which we discussed some of the issues I mentioned in last month's column. One is the perennial issue of how to grow our Membership. If you have seen the data you will know that over the last five years the total number of Professional Members and Fellows has remained fairly static, but Graduate Membership has increased by about half. The exit interviews which National Office has recently started to conduct show that generally Members are leaving because they are going overseas or because they're retiring from the profession. We also know that new Professional Members are just as likely to be immigrants who have undertaken equivalent competence assessment elsewhere, or expats returning home, as they are to be New Zealand-based Graduate Members.

Typically, about 150 Members are promoted from Graduate Membership each year. If the mean period as a Graduate Member was no more than eight years, we should expect 250 Graduate Members to undertake competence assessment annually. It could be that we are not providing enough tools and assistance to our Graduate Members to ensure they undertake competence assessment when they are ready – rather than lowering the hurdle, Graduate Members might wish to keep the standard the same but receive more assistance to meet it.

At the Forum, someone suggested that the paperwork and cost involved in going from Graduate to Professional Membership is actually too much of a hurdle and not worth the effort. This gave me pause for thought. Firstly, because this transition is a key one for our Institution, it seems to me that most GIPENZ ought to be able to qualify for MIPENZ, TIPENZ or AIPENZ, as appropriate, in the normal course of their careers. Secondly, I have joined three other professional bodies during my career and, as I recall, the paperwork required to achieve professional member status was indeed less than what we now require for MIPENZ.

As you know, we benchmark the entry standard for MIPENZ to the CPEng entry standard. We have been unequivocal that this is appropriate but the drawback

of this is that a person wanting only MIPENZ has to put in as much initial effort as those seeking CPEng. One consequence of simplifying the entry requirements for MIPENZ would be that MIPENZ would then have a lower standing than CPEng – something we have resisted to date. Some overseas professional bodies have chosen to relax the criteria for their quality mark of professional standing and retain the highest level of competence assessment only for chartered status. However, in those countries chartered status does not have the stringent requirement for reassessment every five years and can therefore be gained for life – this is not possible in New Zealand under our current legislation. The evidence suggests that institutions which have lowered the requirements to achieve professional membership have a static or declining membership. However, we could be the last bastion against a growing tide; are we perhaps trying too hard?

My career as an academic has persuaded me that New Zealanders tend to suffer from an intellectual cringe which causes us to set higher standards than are needed for international standing – perhaps this is another example. Are IPENZ Members who are also members of other professional engineering bodies able to directly compare what they had to demonstrate to qualify for membership in each case? I will be raising this issue in my Branch visits and would welcome any feedback you may have.

Another topic debated at the Forum was whether to charge students for Membership. At present we do not but it appears that free Membership does not result in a large uptake of Graduate Membership. Now, one school of thought says that you do not value what you do not pay for, so if we charged a small fee would the perceived value be higher? The extra income could be used to provide a much better service that is of real assistance to student engineers. This was firmly disputed by the student representatives and younger engineers who attended the Forum – they felt that the reason for the low uptake was that we are not being explicit enough about the benefits of Membership to young engineers, nor about the kind of professional experience and skills they should seek to develop once they start their professional careers. Sound familiar?

Peter Jackson

President

Growing the Membership

A number of marketing initiatives are currently underway to address Membership growth and retention.

This month, Student Members will be surveyed to get their views on possible Student Membership benefits. Student Members who completed their studies in 2005 will also be contacted and encouraged to apply for Graduate Membership. Graduate Membership days will be held in the main centres to enable graduates to learn more about IPENZ and apply for Graduate Membership. The first will be held at National Office in Wellington on 17 May.

We have continued to contact Graduate Members to review their progress and address any issues they may have using the online recording systems. The aim is to encourage Graduate Members to remain focused and achieve Professional Membership by increasing their contact with IPENZ and knowledge of Membership benefits.

Branch and Technical Group Forum 2006

Approximately 30 representatives from Branches, Technical and Special Interest Groups, and Collaborating Technical Societies descended on National Office on 7 and 8 April for the annual Branch and Technical Group Forum.

This year, Branches with accredited engineering education providers within their boundaries were invited to nominate a student representative to attend with their Branch representative. Armed with their Branches' responses to consultation documents sent out a month earlier, representatives had the chance to convey their ideas for the future of IPENZ to Board Members and senior staff through a variety of breakout groups.

The first sessions concentrated on the service relationships between National Office and the subsidiary organisations. We wanted to know how staff could better assist volunteers on Branch committees to make their jobs easier and increase benefits for Members. The general consensus was that service delivery is good most of the time but participants presented a range of ideas to make it even better. Participants also saw that it was important for Branches and Technical Groups to learn from each other and share experiences.

The second set of sessions concentrated on strategic issues and several themes emerged from the discussions:

- There was a strong commitment to invest in growing the Membership to improve the reach and impact of IPENZ as a national professional body.
- It was agreed that there needs to be better ways of assisting younger

engineers through career hurdles such as competence assessment.

- A defined programme to train and reward participating Members (volunteers) was widely favoured.
- There were some questions about the effectiveness of IPENZ's communications in spite of their high quality scores in the recent Membership survey – do enough of the Members have time to read them and, if not, how can they be made more accessible?

The last Forum sessions concentrated on identifying and prioritising the most important engineering practice issues. Participants broke into four groups according to their field of practice and each group brainstormed to determine the most beneficial activities that IPENZ could undertake. One particularly strong theme to emerge is the need for Technical Interest Groups and IPENZ as a whole to co-brand outputs to maximise their benefit.

In summing up, President Peter Jackson promised participants that their views would be taken on retreat by the Board in late May when it undertakes its major strategic planning activity for the year. He did not foresee any significant changes to the strategic plan, but rather a redirection of effort and resources between strategic goals to better address the key issues from the Forum.

Participants showed enthusiasm for a repeat Forum next year, and volunteered to increase its length by half a day.

IPENZ Deputy President Awarded Honorary Doctorate



Jeff Jones FIPENZ, IPENZ Deputy President and the former Chief Executive of Environment Bay of Plenty, was awarded an honorary doctorate by the University of Waikato in April. The award recognises Jeff's strong interest in the university and his outstanding service to the community through his commitment to environmental management.

Over several decades, through his role as Chief Engineer of the Bay of Plenty region and

subsequently as the first Chief Executive of Environment Bay of Plenty, Jeff oversaw the successful establishment of effective environmental management plans and protocols for the region.

Jeff encouraged collaboration between Environment Bay of Plenty and the University of Waikato in areas of shared research interest. Jeff was involved in developing the strategy for improving the Rotorua lakes from its inception and he fostered the establishment of the university's Chair in Lakes Management and Restoration three years ago. "This has allowed us to get usable, focused research to help us deal with our major lake issues. The outcome of such research is also extremely applicable to other lakes in New Zealand," says Jeff.

April Board Highlights

To maximise the time Board Members could spend listening to the views of participants at the Branch and Technical Group Forum, the Board meeting on 7 April was brief, with the following activities and outcomes:

- An induction session on the role of the Board was held to inform new Board Members and refresh returning Board Members.
- Progress towards developing regulations to govern competence-based registers for engineering technologists and technicians was reviewed – the project is on schedule for rollout of the new registers in 2007.
- A contract variation with the Ministry of Education for a further \$230,000 of work supporting technology teachers in schools was approved.
- Within the engineering practice programme, it was agreed that priority needs to be given to developing technical notes to guide engineers in

engineering practice fields with the greatest risk – the Chief Executive will use subscription funds to advance this matter.

- A draft policy regulating intellectual property created in Institution activities was reviewed. It was agreed that Branches, Technical and Special Interest Groups and the Membership at large should have the opportunity to comment on it prior to presentation for approval.
- Board Members made short presentations on the key strategic issues they wished to see the Board pursue this year.
- Membership statistics for the first half of the financial year showed the highest increase of any comparable period in the last eight years.
- The President informed the Board that he wished to make "young engineers" his major theme for the 2006/2007 Presidential year.

In early April, Futureintech, the Ministry of Research, Science and Technology, and the Royal Society of New Zealand hosted a careers forum for major employers in the science sector. The aim of the forum was to explore how to best promote careers in science.

The Minister of Research, Science and Technology, the Hon Steve Maharey, opened the forum by outlining the main issues to be addressed:

- Collaboration – how do we increase the level of collaboration throughout the sector? Many organisations have initiatives to attract new entrants to careers in science; will aligning these initiatives achieve better results?
- Co-operation – how do we create and maintain a greater shared sense of responsibility within the science community?
- Creativity – how can we re-think our approach to promoting science careers in New Zealand?

A range of issues emerged from the forum:

Need for quality information

There is a need for high quality, widely agreed-upon and easily accessible information on what a scientist does, what a career in science is, and what careers are available. All sectors of the community must be able to access information on science and science careers.

Career decision-making by secondary students

Parents and caregivers are the major influencers, but no one approach will encourage higher levels of participation in science – students are a diverse and diversely-motivated group.

Careers WITH science

There was strong consensus on the value of promoting the concept of “careers with science”. This involves encouraging people who have studied science to

develop other competencies through their careers, so that by mid-career their activities are informed by science, but not necessarily in science. Increased science literacy was seen as an important for all New Zealanders, and as an issue that could not only be addressed in schools, but through promotion in the media.

Accurate job market projections

Current and future projections of science recruitment needs in New Zealand and overseas must be informed and clear to ensure that career advice to students is accurate and appropriate.

The “brain drain”

Many New Zealand scientists seek employment overseas, and New Zealand relies on scientists from overseas. Participants saw this as the natural result of marketplace globalisation and a positive outcome for the science community and industries in New Zealand. International study and career opportunities in science should be promoted, not hidden.

Value and effectiveness of the forum

The overall focus of the forum was “communication, collaboration and creativity”. The forum itself was extremely valuable in developing a shared understanding between participants, and therefore the first of these aims was achieved.

Futureintech and the Royal Society of New Zealand are now discussing how to motivate further discussion, with the specific aim of collaborating to agree on and promote an “identity” for a science-based career. A follow-up meeting is planned for late May or early June to continue the dialogue.

For a complete summary of the forum’s emerging issues please contact Doug Buchanan, Futureintech Projects Officer, on 04 473 2023 or dbuchanan@futureintech.org.nz



You have to be in to Win!

Throughout the country, a number of fantastic engineering projects have recently been completed. It’s now time for engineers to “blow their own trumpet” and enter the New Zealand Engineering Excellence Awards.

There are five different individual awards up for grabs. Eight project awards will also be won and, as a bonus, the overall best project will be awarded the coveted Supreme Award for Engineering.

Individual Awards:

- Award for Excellence in Engineering Journalism 2006
- The William Pickering Award for Engineering Leadership 2006
- New Zealand Innovator of the Year 2006
- New Zealand Engineering Entrepreneur of the Year 2006
- Young Engineer of the Year 2006

Category Awards:

- Building, Construction and Amenities
- Utilities and Networks
- Roads and Transport
- Information and Communication Technology
- Mechanical and Manufacturing
- Food, Bioprocess and Chemical
- Electrical and Systems
- Sustainability and Clean Technology

The awards will be presented on 22 November at a gala dinner in Wellington. However, you need to be in to win, so jump onto www.nzeeawards.org.nz and download an entry form. Entries and supporting material must be received by 5.00pm on Monday 3 July 2006, so don’t wait too long!


John Perry Hollings FIPENZ

30 December 1926 – 21 March 2006

John Hollings, pioneer earthquake engineer and co-founder of Beca Carter Hollings and Ferner, died on 21 March 2006 aged 79.

John grew up mainly in Wellington's Lyall Bay and attended Rongotai College. He graduated with a Bachelor of Engineering (civil) from the University of Canterbury and then spent a postgraduate year at Imperial College London. This gave him the

opportunity to study the emerging field of reinforced concrete structures.

On his return to Wellington, he established a business partnership with Martin Ferner. In 1968, the firm merged with Gray Watts and Beca to become Beca Carter Hollings and Ferner, now New Zealand's largest consulting engineering company.

John was involved in many significant projects – bridges, multi-storey buildings, industrial plants and marinas – including Wellington's Chaffers Marina, the first floating type to be built in New Zealand. An early groundbreaking project was the Todd Motors warehouse at Wingate, where he used a grid of very thin reinforced concrete umbrellas rather than the conventional steel structure. John received an

IPENZ award for his design of the Hapuawhenua viaduct near Ohakune, for some time the longest viaduct in the southern hemisphere.

Throughout his career John worked towards a better understanding of the nature of earthquakes, the improvement of building methods and codes in New Zealand and overseas, and the study of actual events to further knowledge. He was ahead of his time in understanding and utilising the potential for computer analysis.

Despite his busy professional and family life he continued to write academic papers, which he said grew out of practical problems he was trying to solve. In 1969 he published what was considered a landmark article on reinforced concrete seismic design and the concept of "capacity design". The ideas were taken up by Professors Robert Park and Tom Paulay of the University of Canterbury, who developed them into a design method now taught around the world.

John was known as a highly innovative, meticulous man who encouraged talented younger staff members. Some of his peers considered him the most innovative Kiwi engineer of his generation and, although he was not one to boast of his achievements, in 1987 his work was recognised with an honorary doctorate from the University of Canterbury's College of Engineering – the first it had ever given out.

Thanks to *The Dominion Post*

New Sustainable Engineering Resource

Sustainability has major implications for society and engineers. The use of resources results in five major effects – contamination, degradation, dispersion, consumption and loss – and each effect poses a significant risk to the well-being of our environment, society and economy. To achieve sustainability our resource use needs to be significantly reduced.

Engineers are involved in all aspects of resource use; from resource extraction through to technology and product design, manufacture, operation, and even in the management of wasted resources and products. Reducing our resource use requires engineers to implement cleaner production cycles, recycling, servicing and most importantly, sustainable technology design.

To assist engineers, IPENZ's Presidential Task Committee on Sustainability has

developed a valuable resource document which raises the issues and offers practical guidelines for implementing sustainable practices. *Sustainability and Engineering in New Zealand* was written by Past President Gerry Te Kapa Coates, Dr Carol Boyle, Andrew Macbeth, Ian Shearer and Nadine Wakim. Dr Ir Ron McDowall was the editor.

Sustainability and Engineering in New Zealand addresses sustainability principles and practices, resources and production, buildings, energy, transportation, water and solid waste. It also includes a range of checklists for engineers to use when considering sustainability in their projects, products and processes.

This document will be available from the IPENZ website www.ipenz.org.nz in early May.

Membership Changes

The following is the full list of additions to and changes in the Membership classes for the period 1 January – 31 March 2006.

Elected to Graduate Member:

A Abul, SN Alam, BC Ang, LM Armstrong, TI Armstrong, EL Bould, RW Bouman, PC Bromley, MA Broughton, WR Brown, WRL Brown, KA Burns, BJJ Callaghan, J Calleja, HM Chan, GX Chen, TL Christensen, LJ Coe, TG Cripps, AP Crofts, V Dass, MP de Boer, MJ Devlin, SL Devoy, GE Dingle, K Dintwe, TE Domingo, DR Dryland, SD Dunckley, JM Earwaker, LD Gordon, AMJ Griffin, NA Gulley, DJ Hartman, DC Headridge-Goodfellow, MR Hook, AJ Howard, Y Hu, V Kameny, LJ Kendrick, GR Kennard, AD Kilby, RP Knowles, OL Kottege, BY Lau, YH Law, L Li, FXR Liu, F Lyttle, RS McDermott, CJ McGregor, SK Marsh, SA Mitchell, GD Nicoll, I Pak, RS Patil, TT Pau, CE Pawson, PC Perera, SC Pillai, AK Rajan, MA Rangji, JJ Rees, AL Ribeiro, EA Rivers, NG Rodger, V Roque, RK Roufail, PL Schischka, PP Scrimshaw, JP Shelley, J Sison, MR Smith, SA Stringfield, SR Thornton, JA Tindall, KJ Tirtawidjaja, TS Toh, TQ Tuyen, DJ Veale, WB Veale,

SR Viskovic, RW Wagener, J Wenceslao, GN Wood, DW Wrightson, CH Wu, F Yang, J Zhang, J Zoellner

Elected to Professional Member:

KASY Ali, AJ Black, FN Bryden, THR Chung, CM Davies, GM Davies, ML Fox, RM Jackson, SL Jackson, DA McDonald, RD Maharaj, RN Marr, D Mihic, PW Millais, P Mohanaraj, A Morley, MJ Muirson, R Porazinski, NA Praud, RA Reinen-Hamill, CG Stokes, RJ Weir, SA Whitehead, PD Wilson

Elected to Technical Member:

PD Burt, SA Robson, S Underwood

Elected to Associate Member:

SC James

Elected to Affiliate Member:

J Aliangan, TL Kay, O Olaniyan, ME Roseley, GDB Smith



Lawrence Zwimpfer MIPENZ was elected Chair of the Intergovernmental Council for UNESCO's Information for All Programme (IFAP) in March. Lawrence was chosen by the representatives of the Council's 26 member states.

IFAP is the only intergovernmental programme exclusively dedicated to promoting universal access to information and knowledge for development – a key plank in building knowledge societies. The uniqueness of this mandate and its intergovernmental nature gives the Council the authority to speak on strategic priorities and to lobby at the international level about issues relating to the use of information and ICT for development.

Lawrence's attendance at the IFAP session in Paris meant that he was unable to accept his IPENZ Supreme Technical Award for Engineering Achievers in person at the 2006 Fellows' and Achievers' Dinner. Lawrence was awarded the Rabone Award for Information and Communications Technology, recognising his demonstrated excellence and leadership in this area of engineering practice to the benefit of the engineering profession.



Paul Wilson FIPENZ, IPENZ Competence Assessment Board Chair, has been appointed Deputy CEO – Academic at Christchurch Polytechnic Institute of Technology (CPIT).

Paul began his career with the Royal New Zealand Navy, ending his service in 1993 as Lieutenant Commander and head of HMNZS WAIKATO's Weapons Engineering Department. Having gained a first class honours degree in electrical and electronic engineering, Paul was Senior Lecturer at Auckland Institute of Technology (now AUT) and participated in developing its four-year Bachelor of Engineering before joining CPIT in 1998.

In 2002, Paul was appointed Dean of CPIT's newly-created Faculty of Design and Engineering; in this position he led the development and successful accreditation of the Bachelor of Engineering Technology (electrotechnology). Paul says that the biggest challenge is for CPIT to be clear about what it is delivering. "As well as being academically sound, programmes and qualifications must meet the needs of industry and train students to be work-ready and able to contribute towards growing the social and economic well-being of our community."



Richard Donaldson FIPENZ was recently elected President of the New Zealand Computer Society. Richard has served on the society's council since 2001, including a two-year term as Deputy President.

Richard has more than 30 years' experience in the electricity and rail transportation industries as a professional electrical engineer, project manager, operations manager and business manager. He has been responsible for many large projects relating to the development of New Zealand's national electricity system, in particular hydro power station and high voltage line design and construction, and telecommunications and information systems projects. His recent work has involved managing IT projects within the electricity industry.

He is a co-founder of Electricity Transmission Heritage New Zealand Incorporated, an organisation concerned with the conservation of history associated with the evolution of New Zealand's electricity system. Richard is also a Member of the IPENZ Heritage Committee and was Executive Vice President of IPENZ from 1990 to 1992.



Terry Brown FIPENZ has been appointed as an Executive Director of engineering consultancy Resolve Group. He will be responsible for providing specialist strategic advice and support to clients involved in the development and implementation of infrastructure and transport-related projects.

Previously, Terry was with Transit New Zealand for 15 years, the past five years as Director of Strategy and Traffic for the Auckland region. He implemented many major projects including the integration of traffic management systems with motorway management systems across Auckland's four city-wide networks. He also negotiated the North Shore Busway Agreement with local authorities.

Terry has 40 years of commercial, engineering and management experience working with government organisations, local government, private enterprise and World Bank-funded international projects. Terry was instrumental in establishing INGENIUM and from 2000 to 2005 he represented New Zealand and Australia on the World Road Association (PIARC) Risk Management for Roads Committee.

Member Services

Employment Issues

IPENZ, through an experienced employment advisor, provides advice to Members on employment-related issues including contracts, dismissal and redundancy. The general guideline is that IPENZ pays for up to one hour's professional advice though Members may choose to purchase additional hours. Contact Michele Boniface for details on 04 474 8948 or email employment@ipenz.org.nz

JobHunt

The IPENZ JobHunt service (sponsored by Career Engineer) is the premier job search and recruitment site for engineers and technologists. It enables jobseekers to efficiently search for employment online by personalising their search criteria. Employers may also advertise a position using selective criteria. Visit the JobHunt website www.jobhunt.co.nz for more information and to browse the listings.

IPENZ Branches

On joining IPENZ, Members automatically become affiliated to their local IPENZ Branch. By attending Branch meetings you will have a unique opportunity to network, share information, and learn from your peers. Meetings are also a conduit for career development and engineering practice support, and provide opportunities for getting involved in your local community. Branch meetings generally involve a guest speaker or visit, followed by an informal gathering for networking and discussion.

IPENZ has Branches in the following regions: Northland, Auckland, Waikato, Tauranga, Taranaki, East Coast, Wanganui, Manawatu, Hawkes Bay, Wellington, Nelson/Marlborough, West Coast, Canterbury, South Canterbury, Otago and Southland.

Contact information for your local Branch is available at www.ipenz.org.nz/ipenz/who_we_are/organisation/Our_Branches.cfm or by phoning Branch Facilitator Kathryn McGavin on 04 474 8989.

Public Policy

IPENZ contributes to the public good by providing an engineering perspective on matters of national importance. This includes researching key issues, publishing papers and *Informatory Notes*, making submissions and generating public debate.

We provide up-to-date policy information to keep our Members informed and encourage their participation in the public policy process. To find out more about policy issues affecting the profession and our current public policy activities visit www.ipenz.org.nz/IPENZ/Media_Comm/PP_Intro.cfm



Sam Sheppard joins the Futureintech team as Writer/Researcher. Sam is responsible for Futureintech's publications, including the website, and will also try his hand at some marketing initiatives this year.

Sam was born in London and moved to New Zealand in 1986. After leaving school he joined the army and completed his officer training. He ended his army service with the rank of Lieutenant.

After leaving the army, Sam attended Victoria University of Wellington and studied film, theatre and English literature. He graduated with first class honours in film and a Bachelor of Arts in theatre and English. Sam has since worked on a number of films and mini series, the most enjoyable being *The Lost Children*, due for release later this year.

In his spare time Sam watches films, reads and exercises.



Verona-Meiana Putaranui is IPENZ's new Media Co-ordinator. She is responsible for providing media support to IPENZ and its Branches, keeping the public informed on engineering issues and demonstrating how the profession contributes to society. She organises media coverage for IPENZ events and ensures that IPENZ's voice is heard when an engineering perspective is needed on issues like sustainable energy.

Having grown up in Wellington and Tolaga Bay, Verona gained a degree and diploma in journalism and communications from Waikato Polytechnic. She then worked for Huia Communications as a consultant.

Verona plays indoor netball, goes to the gym and does yoga. She enjoys reading – David Gemmell and new Maori authors for pleasure, daily newspapers for work and Cosmo for fun. She's also working on her cooking – she says it was never really any good and Sky's Food TV is just too much fun to watch alone!



IPENZ also welcomes **Celeste Pollero**, our new Office Junior.

Celeste carries out a range of duties that include answering the IPENZ National Office main line, sending out Branch and Technical and Special Interest Group newsletters, organising meeting rooms and catering, and updating Members' details in the IPENZ Membership database. This is Celeste's first full-time job and she says, "It's good to be out in the real world!"

Celeste grew up in Wanganui and recently moved to Wellington after graduating with a Bachelor of Fashion Design from the School of Fashion at UCOL's Wanganui campus. As you might expect, in her spare time Celeste likes to work on her own clothing designs, patterns and garments. She is concentrating on women's streetwear, and is mostly designing for herself at the moment.

When she's not at work, Celeste also enjoys reading and shopping.

Heritage Walks – The Engineering Heritage of Auckland

While there is an abundance of heritage literature relating to Auckland's architectural history, to date there has been little on the enormous contribution engineers have made to the city's infrastructure and civic buildings. A booklet entitled *Heritage Walks – The Engineering Heritage of Auckland* fills the gap.

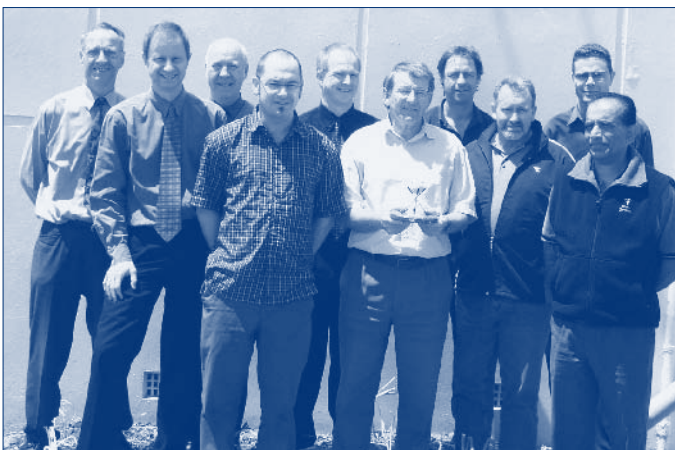
The booklet draws on a paper prepared for the Second Australasian Conference on Engineering Heritage by Elizabeth Aitken Rose from The University of Auckland's School of Architecture and Planning. A small subcommittee of the Auckland Engineering Heritage Committee, chaired by Sir John Ingram DistFIPENZ, edited and extended the engineering content, organised funding and collaborated with

Tourism Auckland to develop the booklet to enhance the public's understanding of the work of the city's early engineers.

Tourism Auckland provided most of the funding but the project was also supported by Heart of Auckland City and the Auckland City Council. Printing of a further 10,000 booklets has been funded by The New Zealand Lottery Grants Board and Fletcher Construction.

The Auckland Engineering Heritage Committee plans to expand on this initiative by publishing a book on engineering heritage in the greater Auckland region.

Wanganui's Golfing Triumph



Winning Wanganui Branch team

In November, Wanganui again emerged victorious on the 40th anniversary of the golf tournament contested by Wanganui, Manawatu and Hawkes Bay Branches.

The annual tournament – first held in 1965 – was initiated by Archie Ives of local consulting engineering firm Wall Bogle and Payne, now known as MWH. The trophy was designed by Peter Simons, who was the Rangitikei Catchment Board's Chief Engineer.

The 10-strong Wanganui team, drawn from the district council, MWH and Opus International Consultants, posted the highest Stableford points to claim the trophy for the second year running. Hawkes Bay was second and Manawatu third.

Spokesman David Boothway says the achievement was all the more notable considering Wanganui had only won the tournament six times previously. "Now we'll be looking for the hat trick next year."

Manawatu is the most successful of the teams, having won the trophy 20 times.

IPENZ Fellow Awarded James Cook Research Fellowship



Professor Wei Gao FIPENZ, from the Department of Chemical and Materials Engineering at The University of Auckland, has won a James Cook Research Fellowship in engineering sciences and technologies.

The prestigious James Cook Research Fellowships are awarded to forward-thinking researchers who will make a significant contribution to New Zealand's knowledge base. The fellowships allow them to concentrate on their chosen research for two years.

Wei will use the fellowship to continue his pioneering research into nano-structured materials. Nano-materials, with very large surface areas, high grain boundary density and strong interactions between particles, have applications

in photo-emission, catalysis, magnetic recording, energy storage, medicine and electronic devices. However, nano-materials are inherently unstable because of their very high surface energy.

Wei and his team have developed a new approach, based on the oxidation of solid-state materials, to growing nano-materials on a solid substrate, largely avoiding the problem of instability. In his research Wei aims to develop new techniques to produce nano-films with controlled porosity and characteristics.

Student Member Wins Achievement Scholarship



IPENZ Student Member Matthew Lory was the 2005 recipient of the GHD Achievement Scholarship.

Established in 2003, the GHD Achievement Scholarship is awarded to a third year university student completing a Bachelor of Engineering in civil and environmental engineering who has demonstrated academic excellence, an interest and aptitude in pursuing a career in professional services, and the potential to contribute to the professional services industry.

Barry Potter MIPENZ, GHD's New Zealand/Pacific Operating Centre Manager, said, "Matthew is an exceptional recipient. In 2000 he represented New Zealand at the Community Problem Solving World Championships in the USA, finishing second out of over 100 teams, and in his spare time he tutors high school students in maths and science."

As the recipient of the scholarship Matthew receives \$5,000 and summer work experience with GHD.

Farewell to Claire Auger



Last month, IPENZ farewelled staff member Claire Auger who retired after 14 years' service to the organisation. Many Members will have had contact with Claire over the years, most recently in her role as Membership Administrator. She was the primary point of contact for Membership and subscription enquiries and administered the IPENZ Benevolent Society before its dissolution.

At her lively farewell morning tea, Claire received impressive poetic tributes from colleague Bub Konia and Past President Bob Norman DistFIPENZ. Others who made a special effort to attend the farewell were Past President Rob Aspden DistFIPENZ, Willie Mandeno FIPENZ, and former IPENZ Deputy Chief Executive John Gardiner FIPENZ.

Claire will soon be enjoying her retirement in Townsville, Australia with her husband Lindsay. To help Claire along the way, IPENZ presented her with a luggage set and a special bikini "customised" for the tropics. We wish her all the best for her adventures ahead.

Member Services

Engineering Calendar

What's on? Visit www.ipenz.org.nz/ipenz/nzecal/default.cfm to find out. Members can access and/or place information about engineering events including courses, lectures, meetings, exhibitions, visits and other notices.

engineering treNz

IPENZ publishes peer reviewed technical papers in an online series called *engineering treNz* (Transactions of Engineers New Zealand). Publishing good quality, peer reviewed technical papers creates a valuable resource for the engineering community and reflects well on individuals, their employers and the profession as a whole.

Papers published in engineering treNz are freely available on the IPENZ website www.ipenz.org.nz/ipenz/publications/treNz.cfm and the keyword search can be used to search for papers from both *engineering treNz* and its predecessor *Transactions*.

For further information or to discuss or submit a paper, please contact the Editor of *engineering treNz* Lindsay Robertson at lindsay@tech-vantage.com or by phoning 021 240 6863.

Other Membership Benefits

As a fully financial Member you receive:

Special Membership rates for IPENZ Short Courses and Convention

Reduced rates for American Express Credit Cards and Income Protection Insurance

e.nz magazine – our flagship publication promoting New Zealand's engineering innovation, technology and achievements (past issues can be searched at <http://e.nz-magazine.co.nz/main.htm>)

engineering dimension – our monthly newsletter covering Institutional activities and information

engineering direct – our weekly electronic newsletter providing up-to-the-minute news across the range of Membership services

How to Join

IPENZ has a range of Membership classes and is open to those with training and competence in engineering as well as those with an interest, but not necessarily with training or qualifications, in engineering.

IPENZ also administers a number of competence registers for professional engineers. To become registered, applicants must apply and provide evidence that they meet the competence requirements for registration.

For more information visit <http://www.ipenz.org.nz/ipenz/join/> or phone Michele Boniface on 04 474 8948.

IPENZ Professional Development Short Courses

May – June 2006

IPENZ Mentoring Foundation Workshop

This one-day workshop is designed to develop mentoring and coaching skills and make mentors more effective in their interactions with mentees, team and project members, and clients.

Wellington 7 June

Environmental Legislation

This one-day course is designed to provide engineers with the tools and information they will need when applying for consents or acting on behalf of clients or employers at consent hearings or the Environment Court.

Nelson 26 June

Expert Witnessing for Engineers

This one-day course will give practising engineers the knowledge and skills to attend the Environment Court or the High Court as an expert witness with confidence.

Nelson 27 June

Leadership and Management Essentials

This one-day course covers the essentials for engineers and business managers to enhance their leadership and management practices. Participants will learn how to effectively handle their dual leader/manager role.

Wellington 15 May

Business Development and Professional Engineers

This one-day course outlines practical strategies for the complete cycle of effective business development – finding and keeping the right clients. It is based on the *IPENZ Practice Note No 6* "Developing and Maintaining Client Relationships".

Queenstown 16 May

Christchurch 17 May

Albany 13 June

Wellington 15 June

Getting the Best Out of Your People

Our people are our most important business asset. This one-day course covers the importance of "soft skills" and key techniques for managing relationships.

Wellington 19 May

Negotiation for Technical Professionals

This interactive, practical one-day workshop enables participants to identify their current strengths and build skills to improve their ability to negotiate successfully. These skills are applicable to technical, contract and conflict negotiations that many engineers are involved in.

Nelson 23 May

Auckland 20 June

Risk Management Techniques

This one-day workshop is specifically designed for engineers and business managers to cover the fundamentals of risk management in an engineering setting. Participants will learn tools and techniques of risk management and be shown how to apply these tools in their own business.

Taupo 24 May

Albany 25 May

Avoiding Ethical Dilemmas

This one-day course introduces participants to the ethical values that underpin their profession and the obligations that flow from them.

Queenstown 16 June

Taupo 27 June

Auckland 29 June

Places on these short courses are limited to 20 so register early to avoid disappointment.

Cost: One day \$495 incl GST – IPENZ Members
\$540 incl GST – non-members

Two days \$945 incl GST – IPENZ Members
\$1,035 incl GST – non-members

Participants may choose to do a work-based project after some short courses and submit it to the facilitator for feedback. If this assessment option is chosen, the additional cost is \$54.00 incl GST. All short courses may be tailored to suit the needs of organisations.

Registrations close one week before the start of the course or seminar in each location. Full details are available at www.ipenz.org.nz/ipenz/nzecal/ks.cfm or by emailing CPD@ipenz.org.nz or telephoning Josie Nolan on 04 474 8982.



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