

## President's Message



### Reality bites

Our recent Membership survey showed once again that the profile and status of engineers continues to concern us. This is the context in which we should see our public policy programme – public debates on issues related to engineering provide opportunities for us to have our say. Such issues are often contentious, making it difficult to frame statements which we can all support, but to my mind it is more important to say something in a

timely fashion than to stay silent until we all agree on what to say.

A good case in point is the current argument that Auckland is of such importance to our economy that its success should be regarded as a national priority. This is probably true but, given that its current woes have much to do with lack of foresight (read funding and planning), it is much less obvious to me what should change and who should pay. The city's growth has outstripped its infrastructure, and even though this seems to be widely acknowledged its growth goes on and on. But, never fear, we are not planning a policy document on this particular topic.

However, it does relate to our recently released energy policy document, and our earlier policy review on sustainability. These made the point, yet again, that the cost, risks and benefits of various energy initiatives are all strongly interrelated. We are not running out of potential energy sources, but our demand for electricity is outstripping our current capacity and all the options for increasing it are environmentally unfriendly and/or hugely unpopular.

The most sensible option is to try to make ourselves less unsustainable, but there seems to be little will to try even this. A good option would be to raise the standard of products and buildings so as to lower their overall life cost (and energy consumption) – which would actually be doing consumers a favour. But I cannot say that I have detected much of a swing toward more sustainable options, or to less consumption. Perhaps we'll only accept sustainability to the extent that we have to. Will it be forced upon us?

We have also seen such a long period of extracting maximum revenue from infrastructure, with low levels of reinvestment, that we have come to think it will all last forever. Of course it cannot – things wear out, corrode or break, accidents happen, natural events can be extreme and so on. We engineers can reduce these risks but we cannot eliminate them. Nor can we override the laws of nature, which tell us, for example, that we cannot ensure security of supply with wind power, nor can we run all of Christchurch on solar power without blanketing half our plains with solar cells.

There has been a certain amount of wishful thinking in all these matters, but reality is starting to bite – we'll get what we pay for, although there may be a risk even there...

**Peter Jackson**  
President

## Dublin Accord Provisional Membership

Chief Executive Dr Andrew Cleland and Basil Wakelin, Chair of the Standards and Accreditation Board, have just returned from Europe. Both spent a week in Dublin at the International Engineering Workshops associated with the Washington, Sydney and Dublin Accords, and the Engineers Mobility Forum and Engineering Technologist Mobility Forums. Prior to the workshops Andrew also visited nine United Kingdom engineering institutions.

The major outcome of the Dublin workshops – New Zealand's election to provisional membership of the Dublin Accord – was a surprise. Our Director Learning and Assessment, Brett Williams, had led the development of a draft proposal for IPENZ to apply for provisional membership of the Dublin Accord in June 2007. The draft was given to the Dublin Accord signatories for comment, but to our surprise they said it was perfect and convened a meeting to elect us to provisional membership immediately! Brett and the Standards and Accreditation Board will now get on with implementing our proposal which is based on a permanent subcommittee of the Standards and Accreditation Board which will monitor and report on national diplomas. There will be no mutual recognition benefit until we get full signatory status (which we can probably apply for in 2008, once our systems are up and running), but we have taken the first step. Brett will now be working hard with the various diploma consortia, polytechnics and ITOs to get robust systems in place. Congratulations to Brett and the other contributors.

As part of the workshops, there was a brief meeting of the Washington Accord to confirm Singapore as the tenth signatory. There are four other nations with provisional status working towards review visits to confirm they are ready to be signatories, and another four or five nations intending to apply in 2007 – so it will be a 20-member agreement within a decade.

The Dublin workshops involved about a dozen nations. The primary purpose was to develop improved procedures and proposals for approval at the June 2007 International Engineering Meetings. Andrew has led the development of a major revision of the rules and procedures to ensure that they are adequate to deal with signatories' increasing diversity. He has also been heavily involved in the development of the proposal for a permanent international secretariat. These two proposals seem likely to be approved with little controversy in June 2007. IPENZ may well bid to host the secretariat from 2007. In any case, we will need to pay a contribution to its total cost according to a formula developed and approved in Dublin (about \$15,000), but obviously if we won the contract to be the host this contribution would return home.

The major outcome of Andrew's visits to the United Kingdom institutions is that we are likely to develop a "standard" agreement for recognising New Zealand-based degrees and registration within the next year, to be administered by the Engineering Council UK. With one or two exceptions, this would then be routinely applied by all the institutions, which should reduce the level of inconsistent treatment some of our Members still experience. It will also reduce the cost of maintaining a large number of agreements.

The other benefit of the visits was to see what is happening strategically. Two or three institutions are still growing at 2–4% per year (the same as IPENZ) but some are declining as fast as 2% per year. The Irish institution, which has grown quickly

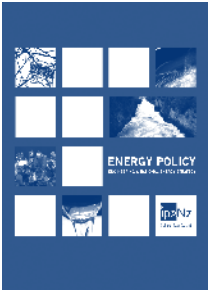
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over the last decade as Ireland has boomed, settled to almost zero growth last year. The most obvious common element amongst the institutions that are growing is retention of a stringent competence-graded membership structure, to which IPENZ remains committed.

Whilst Members will not immediately see the direct benefits of our involvement in the Dublin workshops and the meetings with United Kingdom institutions, we have made a number of advances that will assist New Zealand engineers travelling internationally in the future.

## IPENZ Speaks Out on Energy



IPENZ's energy policy document *Engineering a National Energy Strategy* was launched on 13 June at a breakfast event with guest speaker Jeanette Fitzsimons.

The document is IPENZ's proposal for developing a national energy strategy. It critically examines the unique energy problems New Zealand faces, and discusses how we might identify solutions to maintain an economically viable energy supply and improve sustainability. It also suggests policy

actions in the areas of transport fuels, heating and electricity, and identifies where the biggest gains can be achieved.

At the launch, Jeanette Fitzsimons, Green Party Co-leader and Energy Efficiency Spokesperson for the government, spoke in her personal capacity on the issues that have been considered in the document. Chief Executive Dr Andrew Cleland then presented the strategy to around 50 invited guests from government, its agencies and the private sector, as well as IPENZ Members.

On the day, feedback from IPENZ Members and guests on the document and its launch was positive. Media interest in the document also quickly became clear after the launch – of particular interest was the suggestion that New Zealanders should consider nuclear as an energy option. In the days following the launch, and in the wake of Auckland's power cut, Andrew was interviewed by Newstalk

ZB and Radio New Zealand. Articles also appeared on XtraMSN, in the *National Business Review* and on TVNZ's online news.

Copies of *Engineering a National Energy Strategy* have been distributed to all current MPs and relevant stakeholders. Members can access the full document under "Policy reviews" in the public policy section of the IPENZ website [http://www.ipenz.org.nz/IPENZ/Media\\_Comm/Additional\\_publications.cfm](http://www.ipenz.org.nz/IPENZ/Media_Comm/Additional_publications.cfm) Hard copies can be obtained by emailing [policy@ipenz.org.nz](mailto:policy@ipenz.org.nz)

IPENZ thanks the many Members who contributed to the document's development and review process.



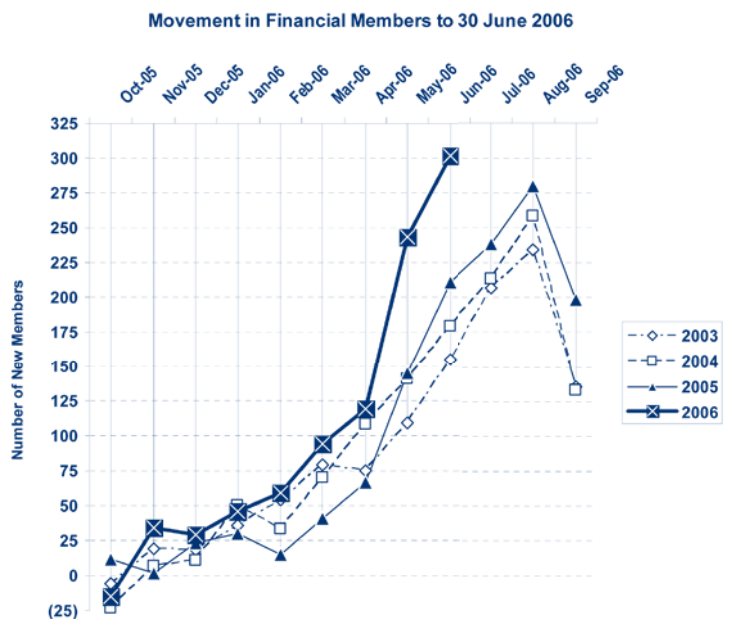
## Membership Summary

Membership statistics for each of the classes as at 30 June 2006 are shown in the table below.

The reduction in Student Members reflects the number of students who graduated and are therefore no longer eligible for Student Membership. However, the statistics indicate that the current drive to encourage graduates to apply for

Membership class	Number of Members			
	At 1/10/05	At 30/6/06	Change	% change
Dist. Fellow	33	36	3	8.3%
Honorary Fellow	14	16	2	12.5%
Fellow	667	681	14	2.1%
Professional	4,473	4,510	37	0.8%
Technical	117	123	6	2.6%
Associate	233	231	-2	-0.9%
Graduate	2,015	2,247	232	10.3%
Affiliate	131	137	6	4.4%
Companion	21	25	4	16.0%
<b>Total financial Members</b>	<b>7,704</b>	<b>8,006</b>	<b>302</b>	<b>3.8%</b>
Student	2,204	1,693	-511	-30.2%
<b>Total all Members</b>	<b>9,908</b>	<b>9,699</b>	<b>-209</b>	<b>-2.15%</b>

Graduate Membership is proving to be successful. The "financial" Member statistics are tracking well ahead when compared to previous years (see graph), and IPENZ is on target to meet the goal of 275 new Members by the end of the current financial year.



## IPENZ Active in DBH Developments

The Department of Building and Housing (DBH) is presently developing regulations as part of the implementation of the new Building Act, and IPENZ has been actively assisting in a number of areas of interest to professional engineers, including:

- licensed building practitioner (LBP)
- building consent authority accreditation
- recognised engineer (dam safety engineers)
- review of the Building Code

### Licensed building practitioner

In April, the Minister announced there would be 13 classes of LBP (to view the paper presented by the Minister to Cabinet visit [www.building.govt.nz/uploads/lbp-cab.pdf](http://www.building.govt.nz/uploads/lbp-cab.pdf)):

- Design LBP – levels one, two and three (corresponding to the three building categories)
- Site LBP – levels one, two and three
- three specialist licence classes (Concrete Structure, Steel Structure, and Building Services)
- four trades licence classes (Carpentry, External Plaster, Roofing, and Brick and Blocklaying)

DBH working groups are currently progressing the development of competence standards and assessment procedures for the Design, Site, and Carpentry classes, with work on the remaining LBP classes commencing later this year. The DBH aims to have a voluntary LBP licensing system in place by November 2007 with mandatory licensing taking effect in November 2009.

IPENZ has participated in both the Design and Site class working groups. The groups met on 31 May and 1 June to consider draft competence standards and assessment procedures, and the DBH is currently considering the feedback from these meetings. The first draft of regulations is expected to be released to the working groups soon.

Under the Act, there are provisions for automatic licensing of certain professions where a registration system is covered by other legislation, and the Minister's statement said that CPEng's will be made Design Level 3 LBPs under this provision. The Minister also stated that a Design Level 3 LBP would automatically be licensed for Design Levels 1 and 2.

Once the LBP system becomes mandatory (on 30 November 2009), projects involving "significant building work" will require a "Design Lead" and "Site Lead", and these roles will require an LBP holding the appropriate level of Design or Site licence. At this stage, the DBH is working on setting competency standards as the basis for assessing whether a designer meets the standards required to become an LBP. The DBH is also working through what will be required of both the Design and Site Leads in terms of overseeing the building process.

During July, the DBH will seek expressions of interest from industry organisations willing to become "assessment agents" to conduct assessments for the various LBP classes. IPENZ will indicate its intention to be an assessment agent for

Design LBPs. There will also be a complaints and disciplinary system underpinning the system and the DBH will soon be seeking reaction to its first draft proposals.

### Building consent authority accreditation

From 30 November 2007, only registered building consent authorities (BCAs) may perform consenting and inspection functions under the Building Act. Before an organisation can be registered as a BCA, it must first be accredited by an accreditation body. Accreditation is essentially a process whereby the organisation's competence as a building consent authority is tested. To become accredited, BCAs need to document processes underpinning consent application processing and ensure that personnel involved in the process are competent. For example, how do BCAs determine whether or not a Producer Statement author is competent to sign off the work covered by the statement? When consent processing work is contracted out, how do BCAs select consultants?

IPENZ, as the CPEng Registration Authority, made a submission in response to the DBH consultation paper on criteria and standards for building consent authority accreditation. IPENZ considers that BCAs should maximise use of the CPEng register to reduce compliance costs when addressing questions of competence of professional engineers, and establish internal systems that align with the national competence register.

Producer Statements will continue to be a part of the consenting process and the DBH has indicated that BCAs will need to document policies on their use as part of the BCA accreditation process. IPENZ has been working with affected parties (ACENZ and NZIA) on updating Producer Statement forms as well as providing advice to the DBH on how BCAs should make use of the documents.

### Recognised engineer

IPENZ and New Zealand Society on Large Dams (NZSOLD) Technical Interest Group have participated in a DBH advisory group assisting in the preparation of regulations covering dams safety. The DBH has recently released a consultation paper on the proposed regulations for implementing the dam safety scheme under the Building Act, and NZSOLD will prepare a submission to be submitted jointly with IPENZ.

### Review of the Building Code

IPENZ will be co-ordinating representatives of Technical Interest Groups and Kindred Bodies to make a submission on the review of the Building Code recently announced by the Minister for Building Issues. With a 31 August deadline for submissions, we intend having the IPENZ submission available for review by Members on 1 August. We also encourage individuals to respond to the DBH online at [www.dbh.govt.nz](http://www.dbh.govt.nz)

These various work streams being undertaken by the DBH are a reflection of changes introduced by the new Building Act, and have involved huge amounts of time from both IPENZ staff and volunteers.

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## First Joint Technical Society with Engineers Australia

In June, IPENZ and the Institution of Engineers Australia signed the heads of agreement to facilitate the formation of the Australasian Tunnelling Society (ATS) as a Joint Technical Society.

The ATS was formed in the early 1970s and until now was jointly sponsored by Engineers Australia and the Australasian Institute of Mining and Metallurgy. The ATS aims to promote and share knowledge, encourage underground construction research and development, provide networking opportunities, and establish communication and links with relevant national and international bodies.

The inclusion of IPENZ as the ATS's third sponsoring organisation creates

opportunities for New Zealand engineers to participate in all aspects of ATS operations. A New Zealand chapter will be formed by ATS to provide focus for its activities in New Zealand. The current New Zealand representative on the ATS Executive Committee is Evan Giles, phone 09 355 1393, email [evan\\_giles@urscorp.com](mailto:evan_giles@urscorp.com)

For more information about the Australasian Tunnelling Society visit <http://www.ats.org.au/> If you have any enquiries regarding membership of the ATS contact Sarah Zelig, phone +61 2 6270 6599, or email [szelig@engineersaustralia.org.au](mailto:szelig@engineersaustralia.org.au)

### Work experience

This July and August, secondary schools will release Year 12 students to pursue up to a week of work experience. This is a valuable chance for engineers to make an impact on the next generation and share their love of engineering.

The programme is designed to give students an opportunity to gain a realistic understanding of what to expect when they enter the workforce, as well as assist with their Year 13 study choices. As these choices will have significant implications for their futures, it is important that students have some idea of where their education is taking them and what qualifications and skills they will need in order to attain their desired career.

As a work experience provider, you can be as creative as you want with the student's time – how you approach the experience is up to you. You could take them through "an average day" to outline the realities of work in your field. You could schedule your weekly production checks for the days that the students visit to demonstrate what engineers do outside the office. You could treat them as your shadow, letting them follow in your footsteps and learn through observation; or you can put them to work on tasks that require enthusiasm but not a great deal of expertise. Just how much personal time you want to invest in the student is entirely up to you.

Students will be writing letters of introduction and approaching employers themselves, so expect to receive CVs with remarkably similar formatting in a few weeks' time (it's part of their life skills training). If you don't receive any, but would like to help an enthusiastic student find their passion for engineering, then contact a school or your local Futureintech Facilitator (listed at <http://www.futureintech.org.nz/facilitators.cfm>) to volunteer. Chances are you'll have a great time!

### Awards interest continues to grow

Thirty schools are now involved with the Transpower Neighbourhood Engineers



Futureintech Ambassador Kane Alward in action

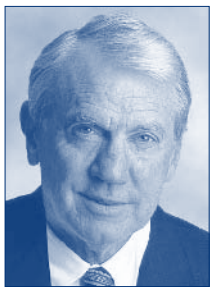
Awards and the number of schools registering interest in the programme continues to grow. Robertson Road School has even put a new spin on the concept by involving 11 classes in one project: building new playgrounds for the school.

The Transpower Neighbourhood Engineers Awards is a competition designed to promote engineering while improving the local community or school. Students, either in a class or separate group, work with their teacher and a local engineer to identify a need within their region and create a solution. While Robertson Road School chose to build better playgrounds for their school, Tamatea Intermediate designed a workstation specifically for their disabled students.

The programme fosters creativity and mechanical reasoning and the kids love it. If you'd like to supervise a project and better your local community contact Susan Weekes at [sweekes@futureintech.org.nz](mailto:sweekes@futureintech.org.nz), and she'll find you a community that would like your help.

## Engineers Awarded Honorary Doctorates

In April, the University of Canterbury recognised the achievements of two of its engineering alumni, **Gavin Cormack DistFIPENZ** and **Neil Scott**, with the award of honorary doctorates.



Gavin Cormack, Executive Chairman of engineering consultancy Beca Group Limited, was awarded an Honorary Doctor of Engineering in recognition of his work and achievements during his 30-year civil engineering career.

Gavin graduated from the University of Canterbury in 1962 with a Bachelor of Engineering and since 1969 has been employed by Beca, becoming its Executive Chairman in 2000.

Gavin has been involved in the design of major engineering projects around the world, including airport projects in Fiji, a 338 metre communication tower in Macau and long-span bridges in Malaysia. Within New Zealand, projects he has been involved with include the Otira Gorge Viaduct, the 4km-long potlines at the Bluff smelter, the Auckland casino project and the associated Sky Tower.

Gavin has also been Chair of Trade New Zealand and the Centre for Advanced Engineering, and President of the New Zealand Concrete Society.



Neil Scott's Honorary Doctor of Science was awarded in recognition of a career dedicated to improving the lives of disabled people.

After graduating from the University of Canterbury in 1970, Neil worked at the New Zealand Broadcasting Corporation and Wellington Polytechnic. In 1986 he headed to San Francisco where he worked on providing accessibility solutions to disabled individuals.

From 1992 to 2003 he was Director and Chief Engineer of the Archimedes Project at Stanford University. During this time he developed the Total Access System which provides universal access to computers and other electronic devices using technologies such as speech recognition, head tracking and eye tracking. Since 2003, Neil has been Director of the Archimedes Project at the University of Hawaii, a multidisciplinary project focusing on improving human/computer interaction strategies and technologies.

## IPENZ Foundation Scholarship Recipients



Claire Oliver



Ellie Seaver

To encourage New Zealand school leavers into tertiary education in the fields of engineering and technology, for the last three years the IPENZ Foundation, with support from IPENZ Branches, has offered two scholarships to school leavers enrolling in an engineering degree. The winners have been rewarded with \$5,000 towards their first year's tuition fees.

It seems that recent efforts to attract young talent into the engineering profession are starting to pay dividends. This year's applicants for the IPENZ Foundation Scholarship were of a very high calibre, with excellent academic records but also sporting, cultural and community achievements.

In the past, selecting the successful recipients has been fairly straightforward. This year, however, was dramatically different. The applications numbered over 40 and because of the calibre of candidates, the selection process had to move to a whole new level. The judges found it impossible to select just two winners as in previous years and after lengthy consultation with the Foundation Trustees, three additional "special" scholarships were awarded, each worth \$2,500.

This year's recipients were Claire Oliver from Auckland (IPENZ Foundation Manawatu Scholarship), Ellie Seaver from Hawera (IPENZ Foundation Taranaki Scholarship), Gareth Bayley from Hastings, Alicia Evans from Christchurch and Michael O'Malley from Dunedin (IPENZ Foundation Special Scholarships).

## Membership Changes

The following is the full list of changes in the classes of Membership for the period 1 April – 30 June 2006.

### Elected to Graduate Member:

MG Abrahams, SAS Alhassany, D Allison, MK Angell, H Arampamoorthy, KK Au, KMS Aziz, SN Bandebommasandra, LG Barsanti, JS Bason, MJ Beattie, CE Bell, LR Bennett, PA Bielawski, SK Bijai Nidval, RJC Bilkey, CD Blackburn, AJ Booth, JC Brien, JA Brooks, EJ Brouwers, MA Browne, CJ Burr, KJ Byrne, MN Cameron, GN Campbell, RD Cathcart, GF Chapman-Olla, SP Chen, OJ Chesterton, HB Chhima, YT Chiu, MA Chung, KH Clayton, WM Clifford, AL Clore, GL Cole, AC Colson, AP Cooper, MJ Cordell, SK Cotter-Tait, ER Cottrell, JBR Cox, HK Cressy, SR Cullen, BR Dare, TJ Day, HG Dobbie, A Doherty, MA Drummond, RW Dunn, MJ Egan, PMW Ensor, WRT Fairburn, I Ferreira, JP Ferreira, EF Ferrer, CJ Fisher, SMR Fong, HJ Foster, PA Fullerton-Smith, CHY Fung, KJ Gilbert, TY Gillham, SA Gillies, FJ Glenie, MJ Gnad, DN Gohil, JM Gordon, BZ Greer, T Ha, SK Handley, NR Harrison, MP Hatchman, SD Hayward, PAM Henderson, DK Heynen, AHC Ho, JOF Hodgkinson, JH Hogan, JJ Hogan, R Hoque, D Huang, HG Huang, LQ Huang, SB Keskar, SY Khambatta, M Kilduff, RJ Landon-Lane, RJ Lattimore, CJ Lavin, DJ Lee, MJ Levermore, LP Liaw, WS Liew, MG Lilley, MAL Lloyd, V Lobendahr, KML Loke, C Lornie, DJ Mackintosh, HF Mace, MA Maharej, MD Mann, LTC Marr, G Maruthayanar, SE Maynard, DW McCallum, KJ McCallum, AB McDonald, AD McGill, CJ McKenzie, CS McKinnel, JE Minchington, AP Moffat, PG Mohan, S Mudliar, JK Noble, PJ Nunweek, RAA Paddison, SSG Pang, HA Papps, SC Parkinson, L I Peh, JK Pettersson, PW Quilter, J A Raethel, AH Rahman, VK Reddy, PF Rivett, JM Robertson, M Robitzsch, S Sam, MR Sanders, M Saxena, RL Scott, KKP See, JA Shanahan, PR Sharpe, PL Sia, EJ Smith, LA Smith, GCJ Somerville, MP Spence, DJ Spurway, JM Steeghs, RD Steer, LS Stephenson, DM Stevens, SJ Stevenson, EK Teh, DCS Teoh, GS Thompson, JCW Toh, SL Tone, B Urbano, SMJ Vanderpump, BJM Vorster, TP Wallbank, XH Wang, JB Waters, WD Wickham, LS Wijanto, DI Witono, GEB Williams, DR Wilson, CL Wong, DHY Wong, PH Wong, O Wong Doe, LJ Woods, BJ Wrigley, KCK Yu, KS Yuen, JM Zame, H Zhang

### Elected to Professional Member:

S Banerjee, J Barnett, T Blanc, GM Bojanich, SD Clark, KA Cowie, GD Fyall, MB Gazzard, MR Green, M Gregory, M Groves, SA Hills, AG Hookings, D Hughes, MN James, AD Karstenser, CE MacArthur, CA Munro, H Ng, PD Norfolk, NJ Oliver, RJK Openshaw, CA O'Sullivan, RC Potter, RJ Potts, H Pretorius, SME Roberts, KJ Scott, RJ Stewart, TJ Surrey, MW Sylvester, AJ Taylor, ML Tibby, MJ Tucker, R Venables, PES Wiles, RM Wright

### Elected to Technical Member:

FJ Carosini, AH Knight, A Al Sakini

### Elected to Associate Member:

WWF Jayasuriya, I McSherry, LH Muslim

### Elected to Affiliate Member:

PW Affleck, W Huang, L Mufutau, JG Robertson, MJ Taylor

## Member Services

### Engineering Practice Support

IPENZ encourages Members to follow recognised professional practices in their day-to-day engineering activities. To assist Members in doing so IPENZ, together with ACENZ, has developed some standard contractual documents for use in selling consulting services. Documents include: short and long form contractual agreements, guidelines for consulting engineers and clients, PS1, PS2 and PS4 forms. These are available for free download from [www.ipenz.org.nz/ipenz/practicesupport/EndorsedInfo](http://www.ipenz.org.nz/ipenz/practicesupport/EndorsedInfo) or in hard copy for a small fee.

To discuss the use of these documents contact our Engineering Practice Manager Andrew Clark on 04 474 8986 or email [practicemanager@ipenz.org.nz](mailto:practicemanager@ipenz.org.nz)

### 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](http://www.ipenz.org.nz/ipenz/who_we_are/organisation/Our_Branches.cfm) or by phoning Branch Facilitator Kathryn McGavin on 04 474 8989.

### 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

## IPENZ Members Receive Queen's Birthday Honours

There are many IPENZ Members who should be thanked and recognised nationally for their work, and perhaps the highest tribute is a New Zealand Royal Honour. IPENZ congratulates three IPENZ Members whose distinguished contributions were recognised in The Queen's Birthday Honours for 2006.



**Richard Bentley DistFIPENZ** was made a Companion of the New Zealand Order of Merit for his services to business, education and the community. He has contributed to the engineering profession for more than 30 years, in particular to energy-related projects and infrastructure, education and the community.

Richard holds a number of directorships, including chairmanship of the Natural Gas Corporation and Canesis Networks Limited. He has been a Member of the IPENZ Board, and a member of advisory bodies to the Education Review Office and the New Zealand Qualifications Authority. He is a life member of the New Zealand Society for Earthquake Engineering and the Gas Association of New Zealand.



**Robin Odams FIPENZ** became a Member of the New Zealand Order of Merit in recognition of his services to roading.

For more than 40 years until 2005, Robin was associated with a number of roading projects in

Canterbury and the West Coast. These included the construction of the Hokitika road bridge, upgrade of the road south to Ross, improvements to State Highway 1 north of Christchurch, and planning and construction in Arthur's Pass National Park, including the Otira Viaduct which opened in 1999.

Robin was Regional Engineer with Transit New Zealand for 14 years until 2004, District Engineer in Christchurch and Wellington for 32 years, and was a consultant to the World Bank and International Road Federation on a number of occasions.



**Dr Robin Dunlop FIPENZ** became a Companion of The Queen's Service Order for Public Services. Robin has been Chief Executive of the Ministry of Transport and Secretary for Transport since 2004 and was previously Chief Executive of Transit New Zealand for 16 years.

Robin has advised extensively on transport strategy, was a member of the Road Advisory Group and the Ministerial Taskforce on Road Reform, and was a consultant on transport issues

to the World Bank and International Road Federation. He is a Fellow of Logistics Transport New Zealand, a member of the New Zealand Institute of Management board and was a member of the Road Engineering Association of Asia and Australasia. Robin received an IPENZ Supreme Technical Award for Engineering Achievers in 2006 – the Dobson Award for Transportation.

## IPENZ Staff



IPENZ welcomes **Susie McCutcheon** to the role of Director – Operations.

Susie is responsible for managing service relationships with IPENZ subsidiary organisations such as Technical Interest Groups. Susie and her team also keep IPENZ's operational and administrative systems ticking over, including Membership administration, and finance.

Susie has worked for many years in operations and much of her experience has involved the engineering, medical and legal professions. She has worked in a goldmine construction engineering environment in Papua New Guinea, was Regional Service Manager of General Electric's Diagnostic Imaging Division, and managed luxury yachts during the America's Cup.

Susie grew up on the family farm in Clevedon, outside Auckland, and is one of a family of five girls. She now lives with her husband Chris (and their parrot

Jimmy) in Korokoro, Lower Hutt, where they love to garden, cook and enjoy time with family and friends.

**Vicki Wright** joins IPENZ in the new position of Human Resources Advisor, responsible for IPENZ's human resources processes.

Vicki has a Master's degree in human resources from Sheffield Business School in the United



Kingdom and 10 years' experience in various organisations and industries. In the United Kingdom, she worked for the National Health Service and Institute of Chartered Accountants. Vicki has also worked in Australia, at a small oil company and a multinational information technology company. Prior to IPENZ, Vicki worked in the human resources department at Radio New Zealand.

Vicki enjoys movies, has a strong interest in sport, particularly rugby, athletics and trampolining, and plays touch rugby in the summer. Married with two children, Vicki is also involved with Parents Centre New Zealand and helps out with Little Wiggles – a baby music and movement session run by Kapiti Parents Centre.



A warm welcome is also extended to **Jonathan Allan** who joins the IPENZ team as our new Marketing Assistant.

Jonathan recently completed a Bachelor of Arts (honours) in media studies and political science at Victoria University of Wellington. While studying he spent his free hours driving Wellington's favourite tourist attraction, the cable car.

In the 1980s, Jonathan grew up on a dairy farm in rural TiriHonga before moving to Taupo at the age of four. In 2002 he moved to Wellington to begin his degree and new urban life.

When he's not at work Jonathan enjoys listening to music and taking a highly critical look at the corporate-owned media. He also likes to play basketball on his custom-built backyard court.



**Professor Peter Hunter**, founding Director of The University of Auckland's Bioengineering Institute, was elected a Fellow of the United Kingdom's Royal Society in May.

Peter was the only New Zealander among 44 scientists from the United Kingdom and the Commonwealth to be recognised by the Society this year. Fellows are elected for their contributions to science, both in fundamental research resulting in greater understanding, and also in leading and directing scientific and technological progress in industry and research establishments.

A Professor of Engineering Science at The University of Auckland since 1978, Peter pioneered mathematical modelling of the human body, most notably of the heart. His work focuses on creating workable computer models of human organs to solve medical problems. The models can be used to predict the effects of defined situations, from individual cell to complete organ level.

Only 40 New Zealanders have been elected Fellows of the Society. The most recent were Professor Peter Gluckman and Professor Paul Callaghan who were both elected Fellows in 2001.



**Phil Rielly MIPENZ**, CPEng has been appointed as a Director of engineering consultancy Truebridge Callender Beach.

Phil has been a Principal and shareholder of Truebridge Callender Beach for the last three years, and has been involved with land development projects in the Wellington, Hawkes Bay, South Island and central North Island regions.

Now residing in Taupo, Phil has managed the local office of Truebridge Callender Beach since its opening in February 2005. He will continue to lead projects relating to engineering, surveying and resource management services for clients in the central North and South Island regions.



**Chris Ivory MIPENZ**, CPEng has been promoted to the position of Technical Director at Beca. Chris leads the industrial structures section in Auckland and has been with Beca for two years.

Prior to joining Beca, Chris was involved in the first large combined-cycle power station in New Zealand (Stratford 400MW), detailed design of large hydraulic structures on the Nam Song diversion canal in Laos, and the power station structural engineering for the Bac Bin hydro station in Vietnam.

Since joining Beca Chris has been involved in projects for a range of clients such as New Zealand Steel, PT Inco and Transpower.



**Kathryn Ward MIPENZ** has also been promoted to the position of Technical Director at Beca, based in Christchurch. She has been with Beca in the specialist role of Senior Power Systems Protection Consultant for eight years.

With over 25 years' experience, some of Kathryn's projects have included: the Pole 2 HVDC upgrade at the Benmore terminal station to increase the capacity of the DC link; the Te Apiti Wind Farm which was the first direct connection of a wind farm to the national transmission grid in New Zealand; and the third 220kV Islington to Kikiwa circuit, increasing the amount of electricity that can be supplied to the Nelson and Marlborough regions.



Promoted to Project Director at Beca, **Peter McGregor MIPENZ** leads the Beca airport terminal planning team, and has been working on terminal planning and managing airport development projects for 16 years.

Based in Auckland, Peter is overall Project Manager for Auckland International Airport Limited's project to plan the expansion of the domestic and international terminals and all associated infrastructure, in order to meet the 2015 and 2025 forecast horizons.

Peter's previous work included assisting the Airport Authority of Trinidad and Tobago to complete the construction and commissioning of the new international terminal at Port of Spain.

## Member Services

### 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](http://www.ipenz.org.nz/IPENZ/Media_Comm/PP_Intro.cfm)

### 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](mailto:employment@ipenz.org.nz)

### 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 including the CPEng Register and the International Professional Engineers Register (which services the APEC Engineer and Engineers Mobility Forum Agreements).

For more information on Membership classes, competence registers and joining IPENZ visit <http://www.ipenz.org.nz/ipenz/join/> or phone Michele Boniface on 04 474 8948.

### JobHunt

The IPENZ JobHunt service (sponsored by Career Engineer) is the premier job finding 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](http://www.jobhunt.co.nz) for more information and to browse the listings.

### New Zealand Engineering Calendar

What's on? Visit [www.ipenz.org.nz/ipenz/nzecal/default.cfm](http://www.ipenz.org.nz/ipenz/nzecal/default.cfm) to find out.



## IPENZ Professional Development Short Courses

July – August 2006

The IPENZ Professional Development Programme is designed specifically to contribute to developing and maintaining Members' competencies as professional engineers, engineering technologists and engineering technicians. Register early for our popular short courses!

### 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.

Nelson 1 August

### Contract Management

This course introduces participants to the principles of establishing contractual relationships and managing these relationships in a project environment, to ensure successful delivery.

Wellington 14 July

Auckland 28 July

### Negotiation Skills 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.

Taupo 18 July

Wellington 3 August

### Avoiding Ethical Dilemmas

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

Christchurch 18 July

Nelson 20 July

### Incorporating Climate Change Predictions into Engineering Design

IPENZ, NIWA, Ministry for the Environment and Opus are offering this one-day seminar for engineers working in the fields of river, coastal, stormwater and water supply engineering, as they are increasingly being called upon to incorporate climate change predictions into their investigation, design planning and asset management.

Wellington 28 July

Queenstown 7 August

Christchurch 8 August

Taupo 14 August

Auckland 15 August

Albany 16 August

### Finance for Engineers and Technical Professionals

Every businessperson needs to understand the financial implications of their decision-making. This two-day course will assist you to know your numbers which will give you a competitive advantage regardless of your engineering discipline.

Albany 22–23 August

### Risk Management Techniques

This one-day workshop is specifically designed 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.

Wellington 29 August

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

### The Role of the Expert Witness

This four-hour seminar is designed to equip

professional engineers with the knowledge and skills to perform the role of "expert witness" in a confident and competent manner, understanding the legal and ethical requirements of the role.

Christchurch 23 August

Nelson 24 August

Wellington 30 August

Taupo 31 August

Cost:

Four hours \$315 incl GST – IPENZ Members

\$360 incl GST – non-members

### Writing Technical Specifications

This one-day specification writing course addresses in detail the conversion of individual requirements into effective requirements specifications.

Applicability includes physical items (and software items), from the largest to the smallest, in both procurement and engineering scenarios.

Auckland 28 August

Cost:

One day \$585 incl GST – IPENZ Members

\$630 incl GST – non-members

### Short Courses in Project Management

IPENZ is collaborating with ProjectPlus to offer a range of one- and two-day short courses for IPENZ Members suitable for experienced project managers and engineers new to project management.

Cost:

One day \$618.75 incl GST – IPENZ Members

Two days \$1,237.50 incl GST – IPENZ Members

Non-members must register directly with ProjectPlus.

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](http://www.ipenz.org.nz/ipenz/nzecal/ks.cfm) or by emailing [CPD@ipenz.org.nz](mailto:CPD@ipenz.org.nz) or telephoning Josie Nolan on 04 474 8982.



Engineers New Zealand

#### President

Peter Jackson  
[president@ipenz.org.nz](mailto:president@ipenz.org.nz)

#### Deputy President

Jeff Jones  
[deputy.president@ipenz.org.nz](mailto:deputy.president@ipenz.org.nz)

#### Managing Editor

Letticia Dodson 04 474 8943  
[ldodson@ipenz.org.nz](mailto:ldodson@ipenz.org.nz)

#### Desktop Publisher

Dionne Needham 04 474 8987  
[dneedham@ipenz.org.nz](mailto:dneedham@ipenz.org.nz)

#### Membership Enquiries

Michele Boniface 04 474 8948  
[mboniface@ipenz.org.nz](mailto:mboniface@ipenz.org.nz)

#### Chief Executive

Andrew Cleland 04 474 8935  
[acleland@ipenz.org.nz](mailto:acleland@ipenz.org.nz)

#### Director – Engineering

Charles Willmot 04 474 8932  
[cwillmot@ipenz.org.nz](mailto:cwillmot@ipenz.org.nz)

#### Director – Learning and Assessment

Brett Williams 04 474 8936  
[bwilliams@ipenz.org.nz](mailto:bwilliams@ipenz.org.nz)

#### Engineering Practice Manager

Andrew Clark 04 474 8986  
[aclark@ipenz.org.nz](mailto:aclark@ipenz.org.nz)

#### Registrar

Jeff Wastney 04 474 8983  
[jwastney@ipenz.org.nz](mailto:jwastney@ipenz.org.nz)

#### Knowledge Services Manager

Sharon Wagg 04 473 2022  
[swagg@ipenz.org.nz](mailto:swagg@ipenz.org.nz)

#### NATIONAL OFFICE

Engineers New Zealand  
Ground Floor  
158 The Terrace  
PO Box 12 241  
Wellington  
New Zealand

Tel: +64 4 473 9444

Fax: +64 4 474 8933

Email: [ipenz@ipenz.org.nz](mailto:ipenz@ipenz.org.nz)

[www.ipenz.org.nz](http://www.ipenz.org.nz)