


# Bill Building

The IPENZ Building Bill submission is now in the hands of the Government Administration Select Committee. Submissions are now in effect sub judice and should not be widely disseminated until tabled. However we can discuss the main concerns that informed our submission.

The proposed legislation will see the BIA changed from an independent entity to a Government Department.

The major concern that IPENZ has is in the area of consultation, and specifically matters the Chief Executive of the BIA is required to take into account. We would like to see a properly constituted advisory body established to provide formal advice to the Chief Executive; and in areas of high complexity we consider that the Chief Executive should be required to take specialist advice. We would also like to see the BIA able to fund research from Building Levy funds to inform the process of setting standards and codes, particularly where there is a clearly identifiable public good element.

IPENZ is also concerned about the conceptual model of the licensing regime outlined in the Bill, which suggests the creation of classes of licence, and lists of the kinds of work each class is permitted to supervise or perform. We doubt that this regime will create the kind of responsible behaviour desired, and would prefer a system where classes are designated only by broad titles, and those carrying out work must certify that they have assessed the nature of the work, state that they have the competence to perform it, and then have performed it to an acceptable standard. Such three-stage certification is considered more likely to encourage ongoing professional involvement than the regime proposed in the Bill.

We are also concerned that changes to the Chartered Professional Engineers Act proposed in the Bill may not be the best way to develop a cost effective and comprehensive registration/licensing system for engineers involved in construction. 

## President's Message



## Salt of the Earth

Probably one of the few things I have in common with Dr Don Brash, the new leader of the National Party, is having attended the same school – Christchurch Boys' High School. He was a year ahead of me, but we undoubtedly had some of the same teachers.

I recently had reason to cast my mind back to some of those teachers – particularly the men (at a single-sex school they were all men in those days) who taught me science and maths. It wasn't hard to remember them, or their names. Amongst others there were "Swannie" Dyer and Fred Wicks who taught me maths, and Archie Johnson, Jock Kidson and "Fong" Myers who taught me science in its various guises.

The reason I mention them is that I performed this feat of memory at an awards occasion at the Technology Education New Zealand conference in Hamilton in October. I wanted to say a few words to the delegates and recipients, as well as presenting the four awards (for outstanding teacher and contribution, and for leadership and best teacher educator). I wanted to tell them they were "the salt of the earth".

I wanted these amazingly dedicated teachers to hear that, many years later, the impact of a good teacher may persist strongly. I wanted them to feel proud of their calling, and the extra time they put in to being good technology educators. It is a tribute to them that a conference in their "holiday" time could attract more than 100 people. Good also to see that Maori and Pasifika teachers were well represented.

New Zealand is not alone in wondering why technology and some areas of science face an uphill battle in winning the hearts and minds of children and their parents in the future-proofing stakes. Other countries are also facing a decline in the number of children whose fascination with tinkering leads on to a training and career in science or technology – the progression is no longer inevitable.

For example in the UK in 1960 half of all A-level students took three sciences (including maths), and the other half took arts and the humanities. Now half of A-level students still do arts and humanities, but only 20% of the remainder now focus exclusively on the sciences, the rest choosing a broader mix of subjects. This means that students entering subjects allied to medicine, mathematics and informatics (including computing) and the creative arts (including multi-media studies) are rising. But the number and proportion of new student entrants in the physical sciences, engineering and technology is still falling.

Our government has just announced its HiGrowth project, designed to achieve the optimistic goal of growing 100 New Zealand information, communications and technology companies to a turnover of more than \$10 million over the next 10 years. This is a big ask, since at the moment such companies number only 16!

Within that overall programme, IPENZ has gained a valuable role through the Futureintech project (see pages 04 and 05). The project will see the government channelling \$5.6 million through IPENZ for technology teacher and educational support over the next four years. Angela Christie, who has been instrumental in obtaining the contract for IPENZ, will be the project director, and is currently appointing staff to deliver the activities. Under this project, teachers will be encouraged even more to look beyond their own schools for support and stimulation in their essential role.

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<<<President's Message continued

With Futureintech, the increase in IPENZ's non-subscription income has reached a point with growing annual surpluses – this year's projected to be around \$200,000 – and adequate Members' funds, where the Board feels confident to use some of this to fund an improved operational climate. We wanted to ensure we had good staff succession planning, to reduce organisational risk and loss of institutional knowledge and at the same time reduce the administrative burden on our present senior staff, allowing them to do more high-level work, such as stakeholder interaction.

Accordingly the Board authorised the Senior Office Bearers to increase by one the number of senior staff on the operations side. An additional director (Operations) will be added as soon as possible, and our senior staff lineup under the Chief Executive will now comprise John Gardiner, the Deputy Chief Executive, plus three directors (Operations, Learning and Assessment, and Futureintech). Virginia Burton has accepted the role of Director (Learning and Assessment).

It seems clear now that IPENZ has the confidence of the Government to deliver services to promote careers in technology, engineering and science, and I am confident that we also have the staff and organisational capability to do so.

**Gerry Te Kapa Coates**  
President

# Competence Standards for Technical Members and Associate Members under development

An IPENZ Consultation Group has been set up to further develop the draft Competence Standards for Technical Members (TIPENZ) and Associate Members (AIPENZ). The Group has met twice and hopes to have completed a final draft of the standards by mid-December 2003. The draft Standards will then be presented to the IPENZ Standards and Accreditation Board for consideration and approval at their February 2004 meeting.

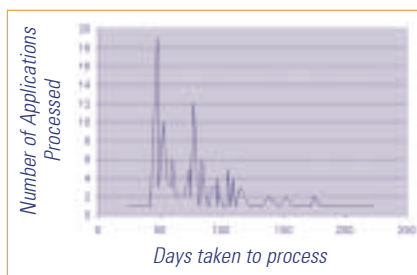
The AIPENZ and TIPENZ Competence Standards follow the same framework as the Competence Standard for Professional Engineers in that they consist of 12 elements, each with a range of performance indicators to clarify the meaning to the element. The differentiator for each competence standard is the kind of engineering functions (problems and activities) that frame each particular standard. The standards are written on the basis that Professional Members (MIPENZ) primarily undertake complex engineering functions, Technical Members (TIPENZ) primarily undertake broadly-defined engineering functions and Associate Members (AIPENZ) primarily undertake well-defined engineering functions. The definitions of the range of engineering functions (problems and activities) are therefore a significant part of each competence standard.

For further information contact Virginia Burton, email [vburton@ipenz.org.nz](mailto:vburton@ipenz.org.nz)

## Time to process CPEng applications

At the November Competence Assessment Board meeting 162 applications were presented for consideration – a record. An analysis of the time taken for processing these applications is potentially useful for applicants and for IPENZ. The processing times varied from 24 days to 233 days, with a median of 76 days and an average of 84 days.

The chart shows the distribution of times taken to process applications.



There are various reasons for very long processing times in a small number of cases. Generally, these applications were received during the period when

systems were being implemented, and now the processes are more refined. Other reasons include:

- incomplete documentation submitted with application
- insufficient payment
- late or inadequate referee reports (eg from sources not CPEng equivalent, or only one report submitted)
- assessors seeking additional information from applicant
- implementation of natural justice provisions when Assessment Panels recommend declining applications
- CAB deferring decisions or returning assessments to Assessment Panels for further information and/or review.

IPENZ's goal is to process desktop applications in 8 to 12 weeks and interactive assessments in 12 weeks. When applicants had been previously assessed within two years, the assessment process was expected to be completed using a minimal portfolio of evidence, and

more quickly than other applications. However assessors often have difficulty making an assessment from the limited evidence and so seek additional information from applicants, and this group is actually taking longer to process than the other types of assessment.

Type of assessment	Number of applications	Average time to process (days)
Assessed >2 years ago	101	83
Assessed 6–24 mths ago	15	96
Not assessed before	46	82

Generally, the time taken to process applications has been close to target. However, staff are constantly seeking ways to improve the turn-around time and are making incremental changes to procedures and systems to achieve a more timely outcome without compromising the quality of assessments.

# IPENZ Members scoop Standards New Zealand Awards

The Standards New Zealand Meritorious Awards were first introduced in 2001. SNZ committee members make nominations for the Meritorious Service Awards. IPENZ recognises the voluntary commitment involved in producing credible and sound Standards.

"Over 1500 New Zealanders contribute their time and effort to produce these documents, and what's more, they do so without payment. It is only fitting then, that they receive recognition for their outstanding efforts", says SNZ CEO Rob Steele.

## Tom Leong FIPENZ and Life Member.

Tom's peers describe him as someone who "does his homework". His hard work and professionalism have benefited Standards development in the electrical sector, in which he has been involved since 1968. He has been particularly concerned with promoting safety for the public and for electrical workers.



**Tony Hammond MIPENZ.** Tony has been a "great ambassador for the Standards development process" while working on Standards for the gas industry. He is a mechanical engineer and has worked in the gas industry for more than 30 years, in New Zealand and in the United Kingdom.



**Dr Eric Palmer FIPENZ.** Eric holds a PhD in engineering and has 40 years practical experience; his knowledge and expertise have been drawn upon for Standards for the gas industry, piping, plumbing systems and products, fire sprinklers and domestic water heating.



**Dr Bryan Walford FIPENZ.** Bryan has made an enormous contribution to the development of timber design Standards in New Zealand. A Senior Scientist at Forest Research in Rotorua, he has represented Forest Research officially on a number of Standards. It is said that his knowledge of the technical content of timber Standards is unsurpassed in New Zealand.



**Willie Mandeno FIPENZ.** Willie has had more than 17 years involvement in the development of engineering Standards and has actively promoted their use in his role as a lecturer in industry training programmes. "He is recognised as an industry expert and stands out as someone most deserving of recognition", his nominee said.



Thanks to Standards New Zealand for the material and photos for this article. ☺

## What's happening at National Office

- New staff – Media Manager, Graphic Designer plus the first Futureintech staff member, and the Project Administrator – appointed with November starting dates.
- Chief Executive represented IPENZ at a meeting of the Federation of Engineering Institutions of South East Asia and the Pacific in mid-October.
- Deputy Chief Executive visited major US and UK institutions in pursuit of improved access to engineering knowledge products for IPENZ Members, and represented IPENZ at General Assembly of the World Federation of Engineering Organisations in Tunisia.
- First planning meeting for Futureintech held (see pages 04 and 05).
- Neighbourhood Engineers Awards given to Mayfair School in Hastings, Tamatea Intermediate in Napier and Taranua College in Pahiataua.
- Processing of 2003/04 subscriptions continues.
- IPENZ Foundation Trustees met and made decisions on identity, business plan and scholarships.
- Ongoing campaign to seek the support for the dissolution of the IPENZ Benevolent Society.
- New Staff Assessor, Peter Johnstone, appointed to help process the large number of applications in the structural field of practice.
- Competence Assessment Board considered a record number of CPEng applications (162) at its November meeting. ☺

## Post-nominals for Professional Engineers

As Professional Members are gaining approval for entry on to the one or more of the IPENZ registers they are changing their business cards to show their new post-nominals. The IPENZ post-nominal guideline is as follows:

Henare Smith BE(Hons), MIPENZ(Chemical), CPEng, IntPE

Which means that Henare Smith:

- holds an honours engineering degree (our advice is not to show the discipline if it aligns with the practice field descriptor for the IPENZ Practice College)
- holds the quality mark of professionalism (MIPENZ)
- has a personal practice area that lies within the chemical field; Henare will be listed in the IPENZ Practice College under the "Chemical" practice field
- is currently competent to practice in NZ (CPEng)
- is currently competent in his practice area to the international competence standard (IntPE)

If Henare were also CPEng from Australia and CEng from the UK he would have to write:

Henare Smith BE, MIPENZ(Chemical), CPEng, IntPE, CPEng(Aust), CEng(UK)

Or, for a truly international business card, he might prefer to write:

Henare Smith BE, MIPENZ(Chemical), CPEng (NZ), IntPE, CPEng(Aust), CEng(UK) ☺

## Reminder

Please return outstanding Benevolent Society Dissolution forms as soon as possible.

Replacement documents can be obtained from Megan Rodden, ph 0-4 473 9444, email [mrodden@ipenz.org.nz](mailto:mrodden@ipenz.org.nz) or download a copy from the IPENZ website [www.ipenz.org.nz/dissolution](http://www.ipenz.org.nz/dissolution) ☺

## Need to register for the Member-only area?

Then we need your correct email address. Please update your details now – [bkonia@ipenz.org.nz](mailto:bkonia@ipenz.org.nz)

# Futureintech launched

Futureintech, a major initiative to promote careers in technology, engineering and science, has been launched by Information Technology and Communications Minister Paul Swain. Futureintech's ultimate goal is to help make sure there will be enough appropriately qualified New Zealand school-leavers to allow our technology, engineering and science-based industries to grow and prosper. Futureintech will work towards this goal from the bottom up, fostering technological and scientific awareness, knowledge and excitement at the school level. It is designed to do this by bringing students into contact with people involved in relevant industries, and giving them first-hand experience of work environments.

In designing Futureintech we recognised that students are quick to detect and discard marketing hype about careers. Research and experience in New Zealand and overseas clearly indicate the need for a more subtle and deeply embedded approach to the promotion of careers. It is vital to connect with students' personal interests and aspirations, and the best way of doing this is to give them personal contact with professionals who are engaged in and excited by what they do, and to offer opportunities to experience the kinds of activities such careers entail. It is also very important to engage teachers similarly, and to provide specific resources and support for their delivery of the science and technology curriculum.

Futureintech's work in schools will be done primarily by six full-time facilitators, who will work in primary, intermediate and secondary schools throughout New Zealand, providing direct support to classroom teachers in their curriculum delivery, and information to students and their caregivers. They will be supported by a range of other initiatives, including visits from industry professionals to tertiary institutions, and by career information for students, caregivers, teachers and careers advisers distributed through various media. The Futureintech website will be a vital source of information and resources for all involved.

## Futureintech Facilitators

The regional facilitators will begin work early next year in Auckland, Christchurch and Wellington. In the first year the team's goal will be to trial the programmes before full deployment in 2005, which will see three more facilitators assigned to other centres. Facilitator support will be offered to all primary, intermediate and secondary schools, with programmes providing first-hand experience of real work in technology, engineering and/or science.

Each regional facilitator will visit local technology, engineering and science-related businesses and industry to introduce the project and recruit volunteers

among local engineers and technologists. To develop their knowledge of the technology, engineering and science industries, and to help them find likely support people, facilitators will be hosted by an industry organisation in each region. They will work with mentors from the Information Technology Association of New Zealand (ITANZ), IPENZ, New Zealand Institute of Food Science and Technology (NZIFST) and/or the Royal Society of New Zealand (RSNZ) to develop their understanding of the industries, the initiatives already operating and the personnel available.

Facilitators will be responsible for developing and supporting links from business and industry to schools. Wherever possible they will use existing programmes with a proven record of supporting students' learning and innovation. They will help teachers initiate student projects, manage them to completion and review the value of the experience for students and the school. There will be opportunity for long-term planning and to develop links with enterprise for future activities. Facilitators will also provide teachers and students with opportunities to celebrate their achievements.

They will work with school principals to support technology education; with students to encourage them to initiate projects, progress them and reflect on them; with technologists and engineers to secure their support; and with parents and other staff to explore career opportunities. A presentation about Futureintech will be offered to Boards of Trustees, and the wider school community. Regional facilitators will visit local careers teachers to introduce the project and outline the support and resources available.

## Futureintech Ambassadors

Futureintech Ambassadors will play a vital role in the project by working alongside teachers and students on a voluntary basis to bring authenticity to classroom programmes. Ambassadors are people with science, technology, engineering and mathematics skills who are employed in various occupations at all levels. They may be specifically employed as technologists, scientists, engineers or mathematicians, or they may use those skills in other environments.

Ambassadors will build on existing initiatives to provide schools with access to specialised knowledge and expertise. Facilitators will work with Ambassadors to match them with particular schools.

The main qualities required of a potential Ambassador are enthusiasm, a passion for what they do and a commitment to inspiring young people. Ambassadors will be given support to help them understand the school environment and the kind of work they may

undertake, and to ensure that they have the skills necessary to communicate with young people.

## Visiting Industry Professionals Scheme

The Visiting Industry Professionals Scheme will have a slightly differently focus, directed towards universities rather than schools. It involves professionals from technology, engineering and science-based industries spending up to three weeks in a university. The idea is to provide university students and staff with up-to-date industry information, with the ultimate goal of encouraging ongoing partnerships between universities and industry.

## Support of current programmes in schools

Futureintech's primary role is not so much to develop new initiatives as to unify, co-ordinate, extend and facilitate the existing schools programmes offered by professional organisations. This, we feel, will address the issues more effectively, build on the very good work already done, and ensure that the nation's stakeholders continue to be involved and have control over the direction of education strategies and implementation.

A major focus of Futureintech will be to support and enhance various existing and successful curriculum-based programmes, and improve their uptake in primary and secondary schools. CREST and the Neighbourhood Engineers Award are two programmes that will be supported:

- CREST – an international awards scheme to encourage creative and practical student projects. The scheme emphasises creativity, perseverance and the purposeful application of knowledge. It provides a model for students working with people outside the school and supplies useful support material for students, teachers and industry mentors. CREST provides the "show me" generation with an opportunity to experience industry first-hand through a project of their choice.
- The IPENZ Neighbourhood Engineers Award, which was established to raise awareness of the engineering profession and encourage innovative thinking while meeting the objectives of the technology curriculum. It includes a high level of voluntary involvement by engineers and, like CREST, it provides students with the opportunity to work with professionals.

## Promotion and information

Information on technology and science-based careers and Futureintech initiatives will be made available through various media. There will be brochures and a regular newsletter, and frequent articles and ads in popular student publications such as *TEARAWAY* and *Jet*. Items in mainstream and community newspapers

will be designed to lift the profile of careers in technology, engineering and science. Futureintech publications will feature various kinds of information, including profiles of individuals and work environments, and detailed information on entry requirements into relevant courses at New Zealand tertiary education providers.

Futureintech's website – [www.futureintech.org.nz](http://www.futureintech.org.nz) (to be online by the end of the year) – will be central to its activities. It will have an area dedicated to students, to inform them of the opportunities available to them in the technology, engineering and science sectors, and will also provide valuable resources for those teaching and promoting technology, engineering and science. The site will include:

- profiles of individuals involved in technology, engineering and science careers, showing "a day in the life of" and giving information on projects they have been involved in
- advice on applying for tertiary courses offered by the various providers in New Zealand, and associated subject requirements
- links to relevant sites, such as those of the New Zealand Computer Society (NZCS), NZIFST, the National Network of Technological Societies (NNTS), and various training providers.

Another feature of the website will inform the people who influence students' career decisions, such as caregivers and teachers, about careers in technology, engineering and science. It will cover the kind of work involved, the type of people needed, the direction of employing industries, the necessary qualifications and possible remuneration levels.

Caregivers, teachers and older siblings are generally considered to be very influential in students' choice of career. A set of leaflets for caregivers will explain what technology, engineering and science are, what they entail at various levels of the curriculum and what the careers they can lead to might be like.

### Key players and stakeholders

Support for Futureintech has come from IPENZ Members, the Information Technology Association of New Zealand (ITANZ), the Zealand Computer Society (NZCS), the Royal Society of New Zealand (RSNZ), Technology Education New Zealand (TENZ), the New Zealand Association of Science Educators (NZASE), the New Zealand Institute of Food Science and Technology (NZIFST), the New Zealand Association of Radio Transmitters (NZART), and the National Network of Technological Societies (NNTS). Meetings to seek support for Futureintech will be held with stakeholder groups, including representatives of Maori and Pasifika communities, industry groups, professional bodies, and co-ordinators of possible programmes. Feedback from stakeholders will be used to inform Futureintech's subsequent development.

You are invited to become involved in Futureintech by:

- becoming an Ambassador or encouraging your staff to do so
- identifying the organisation you represent as a stakeholder
- including your science, maths or technology-based activity in the Futureintech portfolio so that our facilitators can promote it in schools
- offering to be profiled as a technologist, engineer or scientist
- offering your company for a case study
- registering to receive the Futureintech newsletter 

# Revising IPENZ's CPD policy

In the past IPENZ's CPD policy has been very liberal compared with those of many professional bodies in that it did not prescribe rigid criteria for "valid" CPD, but issued only general guidelines, recognising individual differences in professional development needs. But, like most such bodies, IPENZ did recommend a specified number of CPD hours per year.

This approach has increasingly failed to meet public expectations of assurances that professionals are currently competent – expectations addressed by the Chartered Professional Engineers Act 2002, which requires engineers to provide evidence to their peers that their knowledge and skills are current at regular intervals. The new Architects Bill and Building Bill reflect the same paradigm.

CPD participation records represent only a part of the evidence that is required to establish an engineer's current competence; but the quality of the CPD undertaken is crucial to its evidential value alongside the applicant's work history. CPD activities should ideally work in tandem with experience, ensuring that real learning takes place by encouraging engineers to reflect routinely and consciously upon their own practice and performance.

This way professional engineers can identify gaps in their knowledge or skills, and actively plan a CPD programme that helps to fill them, bearing in mind the relevant IPENZ competence standard. In this way Members should be able to demonstrate to their peers at assessment that they are taking active and appropriate measures to develop, maintain or enhance their current competence.

### Revision of policy

Accordingly, the IPENZ policy on CPD is being revised to reflect this changed paradigm of professional development. The new policy will be based on the following principles:

- Development should be continuous – professionals should always be seeking to improve their performance.
- Development should be owned and managed by the individual Member.
- Development should start from and build on the Member's current learning state.
- Development should respect the individual Member's understanding of his/her learning needs.
- Learning outcomes should be clear, even when complex, and linked to the relevant competence standard.
- Learning outcomes wherever possible should serve organisational as well as individual goals.
- Investment of time in learning should be regarded as equally important as other investments of resources.

The revised policy will give Members some guidance on putting together a valid professional development plan, combining experiential learning with professional development activities that are aimed at developing and maintaining specific competencies. Any recommendation of a certain annual total of CPD hours will be just that – a guideline, but not indicative in itself of maintained competence.

Members will have the opportunity to comment on the revised CPD policy as part of IPENZ's normal consultation process.

For further information please contact Virginia Burton, [vburton@ipenz.org.nz](mailto:vburton@ipenz.org.nz) 

**Anne Fitzgerald – Accounts Payable/Administration**



Anne has joined the Accounts team, and will also offer valuable support to Sharon Wagg, helping prepare her seminar programme.

Anne has a strong background in accounts payable and administration, having worked with a Chartered Accountant's office for a couple of years, and for many years in administration roles.

Whilst visiting Australia from Ireland with a holiday visa back in 1982, Anne was sent to NZ to apply for her working visa to allow her to seek work in Australia. She never made it back on the plane to Australia, instead falling in love with Wellington (or was that perhaps a Wellingtonian?). Anne is now settled in Wellington with her NZ husband, and has a 15-year-old daughter. They returned to Ireland in 1990 for seven years, but the pull back to NZ was too great. The Australian option was again discarded on the way.

In her spare time Anne is on the trail of spirituality and self-empowerment. She reads many books on the subject, and by all accounts has learned well to put their principles into practice. She enjoys reading, talking with friends and family (thanks to Telecom!), listening to music and learning about natural healing.

Anne has settled into the IPENZ environment and is making a valuable contribution to the team.

**Michelle Duffy – Media Manager**



Michelle joins us after five years at IRL as Journalist/ Internet Content Manager. Prior to that she was the Media Liaison Advisor at Victoria University of Wellington, and Senior Press Officer at Imperial College of Science, Technology and Medicine in London. She has been in the media/PR field since gaining a Diploma in Journalism in 1985.


Michelle's role at IPENZ is a new initiative to lift the profile of the profession, created as a result of feedback from the Member survey. Its primary purpose is to inform the public (through the media) on engineering-related matters of national and community issues, and to demonstrate how the engineering profession can contribute. She will be managing the delivery of programmes targeting public policy decision-makers at national and local levels, encouraging them to draw upon the knowledge of the engineering profession to make informed policy decisions

Michelle will also be developing a media release process and helping Members to maximise media opportunities by providing them with training.

As she is a journalist, it's appropriate that Michelle write a bit about herself:

"It's a good thing I'm starting work at IPENZ in summer. On paper I sound almost fit and energetic, with a well-rounded life from the months of November through to April. Besides being married with two girls, Eugenia aged 6, and Nina aged 9, which aren't seasonal occupations, I jog, gym, throw parties, go camping and swim at the beach.

I say lucky I started in summer, as in winter I admit to being a blob – it used to be called cocooning but basically it is watching telly and eating chocolate. I do go clubbing – book clubbing: my excuse to meet friends for a drink and a gossip. I also learnt to bake this year, but I think it may be a one-off as the girls can now tell the difference between burnt chocolate cake and melting moments – so that is one more childhood memory they will have to erase.

So summer is a great time for me to start at IPENZ and I am really looking forward to it. By winter I'll be bringing in homemade cakes for morning tea – the ones my children won't eat." 

URS New Zealand has announced the appointment of Tony Brown AIPENZ to the position of Human Resources Manager. Tony qualified as a chemical engineer in the UK, then sought a varied career that would make use of his engineering knowledge. Contact with a specialist engineering recruitment agency led him into recruiting and HR. He completed a post graduate diploma in Human Resources, and held various positions involving technical or specialist recruitment, including a two-year stint as HR Manager for an international engineering contractor in Saudi Arabia.



Upon arriving in New Zealand, Tony took up a role with CRS Recruitment, a technical specialist recruitment consultancy. He decided to pursue further study in the area of IT, with a particular focus to its HR applications. Working part-time at CRS and now at URS while he finishes his study, Tony will soon complete an Advanced Diploma in Business Systems. At URS he will focus on resourcing, recruitment and professional development. He will oversee initiatives to support URS as an IPENZ endorsed employer. 

# Wellington Watch

- Deputy President and Chief Executive represented IPENZ interests at an Infrastructure Forum held on 5 November by the Growth and Innovation Advisory Board.
- IPENZ submission on the Building Bill co-ordinated with 11 others from the engineering profession, to offer a co-ordinated perspective to the Government Administration Select Committee.
- Two meetings held with MPs regarding the Building Bill and the concerns of the engineering profession.
- Meeting held with principals of the Government's Hi-Growth Project – a response to the ICT Taskforce report to Government – to establish points of common interest with Futureintech
- Chief Executive contributed to MoRST's innovation advisory panel.
- President and Deputy Chief Executive attended Construction Industry Council annual president's meeting.



# Professional Development

## Learning Outcomes and Competence Standards

The Competence Standards for each membership class (MIPENZ, AIPENZ, TIPENZ) consist of a number of elements, which describe the knowledge and skills required for engineers to meet the standard of that membership class. IPENZ assesses an engineer's performance against the elements of the relevant Competence Standard to determine their eligibility for Professional Membership.

In the past Members have completed their Continuing Professional Development Records to show the courses, conferences, seminars, and in-house workshops they have participated in and reading they have done on technical matters related to their practice areas. It was not necessary to align these professional development activities with the elements of the relevant Competence Standard.

From 2003, engineers who wish to become Chartered Professional Engineers (CPEng) and gain membership to the IPENZ Practice College must provide evidence that they have taken reasonable steps to demonstrate their competence in their practice area. This portfolio of evidence will be submitted every five years to the Institution to demonstrate their current competence.

Professional development activities are one of the components providing evidence of initial or current competence. In CPEng portfolios of evidence, each activity must be linked to the appropriate element/s of the Competence Standard to demonstrate the relevant competencies. When IPENZ assessors review the portfolios, activities with defined learning outcomes

and/or an assessment component provide clear evidence of demonstrated competence. Activities which do not have defined outcomes and require participation only, such as conferences, seminars and reading, contribute to professional development. However it is more difficult to determine whether an engineer has enhanced or maintained competence as a result of such participation.

To help engineers provide evidence of demonstrated competence, IPENZ recognises the need to facilitate professional development opportunities with defined learning outcomes linked to the element/s of the relevant Competence Standard. Once engineers have completed a course facilitated by IPENZ, they will be able to show on their Professional Development Records that the course had relevant learning outcomes. This information will provide IPENZ assessors with evidence that engineers are taking reasonable steps to enhance and/or maintain their competence.

In the future, all courses offered through IPENZ will have learning outcomes linked to the appropriate element/s of the relevant Competence Standards. This information will appear when the course is promoted, on the IPENZ website, in *engineering direct* and *engineering dimension*.

In November IPENZ is offering a half-day course on the 1999 FIDIC International Conditions of Contract: Benefits and Pitfalls. For the first time we are listing learning outcomes linked to the relevant

Competence Standards, as detailed below.

By the end of this course, participants will have:

- an introduction to the 1999 FIDIC family of contracts for use in international projects, with particular reference to the Conditions of Contract for Construction
- an appreciation of the benefits of the 1999 Contracts as compared to previous contracts
- an understanding of the potential problems that may arise from the use of these contracts
- a review of the essential clauses related to the obligations of the Parties to the Contract
- an understanding of the project management procedures for the management of progress, costs, claims and disputes

These learning outcomes are linked to the following Competence Standards:

Competence Standard for Professional Engineers  
– Elements 2, 11

TIPENZ Competence Standard  
– Elements 3.3, 5.6

AIPENZ Competence Standard  
– Elements 1, 7.2, 7.3

Further information on the half-day course on the 1999 FIDIC International Conditions of Contract can be found on: <http://www.ipenz.org.nz/ipenz/nzecal/> or by contacting [CPD@ipenz.org.nz](mailto:CPD@ipenz.org.nz) 

## Convention 2004

Where engineering meets creative industries



### Project Showcase

#### A chance to share triumphs and trials

Convention 2004, to be held in Christchurch 24–26 March next year, is to include Project Showcase, a new and successful development in 2003. Each participant has a chance to "showcase" a noteworthy aspect of a recent project in a brief presentation (10 minutes with 5 minutes for discussion), accompanied where appropriate with hand-outs or a display.

Engineering is all about solving problems – and so is Project Showcase. We would like to hear from you if you have devised a solution that other members of the profession will find interesting. It may be a feature of design or implementation, or your project may have been unusual in its contractual or management arrangements, such as partnering or clustering. And it may be interesting for its success or its failure.

This is a chance to profile your work and your company, and to share your triumphs with your peers – or to give them the benefit of your failures and close calls! The knowledge base of professional engineering rests on lessons learnt from past mistakes, but by sharing them we can ensure that each mistake is only made once.

Interest in participating should be notified as soon as possible, with a synopsis of the proposed presentation and an indication of any support requirements. The only stipulation is that one member of each presenting party must pay a full Convention registration.

For further information contact Murray Isdale, [misdale@ipenz.org.nz](mailto:misdale@ipenz.org.nz)

## Membership Changes

The following is the full list of additions to and changes in the classes of membership for the period 1 August 2003 – 30 September 2003

### Elected to Graduate Member:

M R Arthur, A J Ball, S A Bhatti, IPR Black, B J Brown, S J Cain, G M Carey-Smith, S Chemmanikkara, VHY Cheung, B D Clare, B R Clough, R W Cottrell, B W Cuff, C L Diprose-Rea, G P Ellis, M K Fakir, W G Fletcher, B M Foster, M E Foster, K Freeman, J Gorgievska, H D Gray, J C Haines, H Hammad, E Hogenhout, L Y Huang, D Isaac, B P Johnston, T R Karombo, C Keepa, RTY Kim, V W Kong, C M Lehdorf, C Y Leung, X X Li, K Lober, ILC Loh, M D Mc Donald, M T McGechie, K M Mandeno, J G Mear, D L Miller, R R Mohun, GDJ Neal, G R Noble, KDS Ormandy, U K Pattinige,

A J Pontesta Gomez, V K Porumamilla, S R Pulla, R W Quinn, DRW Rae, J M Rooney, A T Ross, N A Shaw, G H Shearer, W B Soh, KK-H Sun, E M Sutton, H G Tait, R P Thekkekkara, G Thomas, H M Turnbull, B S Watchorn,

### Promoted from Graduate Member to Professional Member:

N P Ballard, D C Davidson, R J Henderson, D M McGuigan, D L McLellan, F J O'Riley, M V Reed, D B Roxborough, J R Sullivan, K E Taylor, B D Telfer, H R Trappitt, G M Whyte, A J Wilson

### Elected to Professional Member:

C Bedford, S Chamberlain, T A Diyagama,

T C Euinton, M Hasanbegovic, DFL Hettiarachchi, B R Howard, M J Lunnon, S M Miller, G Parker, J G Paxton, D W Penman, D A St George, G R Smith, A B Tyrie

### Promoted from Technical Member to Professional Member:

M D Haycock,

### Election to Companion Member:

N Beattie

### Election to Affiliate Member:

A R Brown, J Dong, M A Pohoryles, J X Rayappan, P B Williamson

## Coming Events

### The 1999 FIDIC International Conditions of Contract: Benefits and Pitfalls

Do you or your organisation work on projects nationally and internationally using the FIDIC family of contracts? IPENZ in association with ACENZ offers a half-day course to provide an introduction to the 1999 FIDIC family of contracts for use in projects, with particular reference to the Conditions of Contract for Construction.

**When:** 24 November 2003 – Wellington

**Cost:** \$180.00 plus GST – IPENZ Members  
\$216.00 plus GST – Non IPENZ Members

**Contact:** CPD@ipenz.org.nz

### Wellington Branch AGM

A short AGM will be held and then Guest Speaker, George Serrallach, will explain how the systematic approach of an engineer has enabled him to develop a five level system for analysing the performance of sports teams in games such as soccer and rugby.

**When:** 27 November 2003

**Where:** Ilott Theatre, Wellington Town Hall

**Contact:** a.s.clark@clear.net.nz

### Developing Persuasive Lobbying Skills and Effective Lobby Campaign Management

Whether a veteran or a novice, this seminar will help you to understand the principles of campaign management and to plan and implement an effective lobbying strategy.

**When:** 1–2 December 2003

**Where:** Stamford Plaza, Auckland

**Cost:** \$1650 plus GST

**Contact:** register@conferenz.co.nz

### Contract Management for Engineering Professionals

Essential skills for managing contracts from concept to completion. As an engineering professional, mastering the skills involved in managing and drafting contracts will enable you to run your department more effectively and with increased profitability.

**When:** 1–2 December

**Where:** The Duxton Hotel, Wellington

**Cost:** \$1595 plus GST

**Contact:** register@brightstar.co.nz

### Smart Materials and Smart Technologies Workshop

This workshop is designed to foster exchanges of ideas between industry, academia and Crown Research Institutes, and to build an awareness of the activities in these (sometimes diverse) sections.

**When:** 3–4 December 2003

**Where:** Rutherford Hotel, Nelson

**Cost:** \$250

**Contact:** r.blaikie@elec.canterbury.ac.nz

### Excelling as a First-Time Manager or Supervisor

Gain the essential skills and knowledge you need to become a great manager or supervisor.

**When:** 8 December – Auckland

9 December – Wellington

10 December – Christchurch

**Cost:** \$249 plus GST

**Contact:** enroll@skillpath.net

### IPENZ Meetings

IPENZ Board Meeting – 2 December 2003

Competence Assessment Board Meeting –

10 December 2003



Engineers New Zealand

**The Institution of Professional Engineers New Zealand**

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