

## President's Message

### Branded – and unashamed

I have always had some reservations about the move towards considering MIPENZ and CPEng as brands, as though they were just commodities in the commercial marketplace. Isn't professionalism about more than a recognisable handle on one's name?

On a recent trip to China I began to muse again on the question of brands and what they really mean. Branding can – or should – be a simple way for consumers to identify a good product, in terms of design, performance or reliability. Whether a brand lives up to its name, time and the experience of the user will tell.

This cachet, however, comes at a price – witness the overpriced athletic-gear name brands or the luxury goods with their own-name boutiques in the major cities of the world. But in China and many other places you can easily buy counterfeit branded items – Prada bags, Rolex watches. These may be indistinguishable, to the untrained eye, from the genuine article. So what then is the advantage of owning the real thing?

In engineering terms, we can't afford to have counterfeit brands available at all. Some terms have to mean what they say, and CPEng and MIPENZ are two of them. So the terms "chartered", "professional" and "registered" when associated with engineers now have specific meanings and cannot be loosely applied. The consumer now has to become educated to be aware that all "engineers" are not necessarily alike – that they are distinguishable from each other. And there are now some descriptors – or brands – that can guide them in their choice.

The other side of the coin is that a brand has a value, as demonstrated by the big commercial brands. We should not undersell our value, by competing on fees for example, when we know we have the quality that the market demands. If there is only one brand that can do the job, why would it be sold at a discount?

The recent International Engineering Meetings in Rotorua, attended by delegates from 22 countries, were efforts to make brands international, by trying to get substantial equivalence between accreditation systems, and thus transportability for engineering qualifications between member countries. They were the engineering equivalent of copyright piracy discussions.

Making engineering qualifications internationally acceptable to consumers can result in a certain blurring of boundaries, but quality must always be maintained. This particularly applies to the need for additional knowledge of local practices – for example, of the correct codes to apply in an earthquake-prone country. So to protect our titles, or brands, we need to make sure not only that the entry criteria are maintained, but that the more arcane local knowledge is also assured.

And in the end, if we want to be proud of our titles or brands, then we need to make sure that any counterfeiters are exposed for what they are – freeloaders on the coattails of their more professional peers. And being proud of one's engineering title might also lead you to apply to use the pre-nominal "Ingenieur" before your name. After all, why not proclaim what you do to the world, in all the ways available?

Gerry Te Kapa Coates  
President



## engineering treNz – a new vehicle for engineering knowledge

Members indicated in a recent survey that they want better access to engineering knowledge. The IPENZ Transactions had ceased to meet the needs of Members – papers had become very specialised and remote from current engineering practice. When no Transactions were published for a year there was no reaction from Members.


*engineering treNz* is a new publication vehicle for engineering knowledge that will directly help Members in their jobs, and will advance the profession of engineering in New Zealand. It will be entirely web-based, and the papers will be readily downloadable in printable form.

A focus of *engineering treNz* will be reviews of areas of contemporary New Zealand engineering practice. Each review should serve as a reference guide for an engineer operating in the relevant area of practice. The Engineering Practice Board will determine review topics, and approach lead authors to write the review. The first such review is of Biotechnology in New Zealand, now available in the publications area of the IPENZ website.

*engineering treNz* will also include reports recording significant engineering practice advances made in the context of particular projects or developments in this country. Reports will provide a means of recording the engineering story of milestone New Zealand projects – the special engineering features, innovative solutions applied, lessons that might assist others tackling similar engineering issues etc. Such papers may be submitted or solicited. It is hoped that companies involved in key innovative projects will support the recording of the engineering story in this way, and maybe even sponsor the development of a paper.

Finally, *engineering treNz* will publish Notes, which record advances in engineering knowledge of relevance to wide groups within the New Zealand engineering profession. This category is closest to a conventional academic paper.

There are two key criteria for papers of all three kinds: each paper must represent *an advance* – i.e. must contain knowledge not available elsewhere (in the case of reviews, this would consist of analysis of the material reviewed) – *for the profession*, which means the paper must be useful to a section of the New Zealand engineering profession. All content will be consistent with the values espoused in the IPENZ Code of Ethics, and papers will be peer-reviewed.

The editor of *engineering treNz* is Lindsay Robertson FIPENZ, a previous Chair of the Manawatu Branch, and a committed volunteer. Lindsay works with Murray Isdale, the Engineering Practice Manager, to solicit and review the technical copy. The production side is handled by Publications Manager Lorraine Brown. 

# Dissolution of the IPENZ Benevolent Society

Members will have received in their June issue of *engineering dimension* a Dissolution Document for the IPENZ Benevolent Society. This is an important legal document and should be read by all Members. The reasons for the proposed dissolution have been covered in earlier publications (see *engineering dimension* Issue 12, February 2003). In essence, the proposal is to transfer the role of the IPENZ Benevolent Society to the IPENZ Foundation. The Foundation has a more flexible legal and operational structure, which will allow it to more effectively meet the needs of the Members.

The Board of IPENZ **supports the dissolution** and therefore urges you to sign the document indicating "I consent to the dissolution of the Society".

Dissolution requires the support of **75%** of Members. This is a high threshold and we will be actively following up Members to ensure we get their responses. Members have two choices:

1. To support the dissolution by signing the document in the appropriate place.
2. To tick the box if they do not support dissolution. Members who tick the box will not be contacted when we send out follow-up reminders at the end of July.

The form is a "postage paid" document; so all you need to do is either sign if you support dissolution or tick the box if you do not, fill out your details on the reverse of the form, tape it up and post it to us.

If you have misplaced your Dissolution Document, a replacement can be obtained by phoning or e-mailing Megan Rodden at National Office, 0-4-473 9444 [mrodden@ipenz.org.nz](mailto:mrodden@ipenz.org.nz) or downloading a copy from the IPENZ website [www.ipenz.org.nz/dissolution](http://www.ipenz.org.nz/dissolution) ☺

# Auckland School of Engineering Reunion

The School of Engineering at The University of Auckland is to hold its first ever reunion for the "---3" year graduates – those who graduated at ceremonies in the years 1953, 63, 73 etc. The reunion will be held on the weekend of 12–14 September, 2003.

Celebrations will commence with the Dean's Welcome and a registration function on Friday evening. The annual Alumni Dinner will be held this year on Saturday night in the new atrium. It includes pre-dinner drinks and a three-course dinner, with guest speakers and entertainment.

The organisers suggest that past students of the School of Engineering start contacting others in NZ and overseas now. Get a group together and reserve your space at a table with fellow graduates of your decade.

Several optional events are planned. Among them is a customised VIP engineers' tour of the Sky Tower in conjunction with Vertigo Climb, conducted with senior staff from Beca Group. There will be a special emphasis on the engineering challenges and the construction of the landmark, as part of a thrilling climb of the mast ([www.4vertigo.com](http://www.4vertigo.com)). Space is limited, so please register your interest immediately by contacting organiser Linnie Osborne on 0-9-486 0205 Mobile 025 283 3265 or email [engineers@xtra.co.nz](mailto:engineers@xtra.co.nz).

The reunion weekend is an excellent opportunity to renew acquaintances, network and re-establish your connection with The University of Auckland. A book about the '---3 Reunion' is planned and profiles of those alumni attending will be needed – full details on our website [www.advancement.auckland.ac.nz](http://www.advancement.auckland.ac.nz) along with more about the reunion programme.

The Engineering School looks forward to welcoming graduates back on campus for what promises to be a highly enjoyable weekend at the "---3" Engineers Reunion. ☺

## IPENZ tunes the Strategic Plan

Between March and June each year the Board of IPENZ reviews the strategic plan to ensure that we are using resources in a way that meets the needs of Members. This year, there was consultation with representatives of Branches, Technical Interest Groups and Collaborating Technical Societies at the time of Convention 2003, a survey of Members (reported in the May issue of *engineering dimension*), and a staff and Board planning retreat in May.

It was generally agreed that the activities being undertaken mostly reflected what Members wanted, but there was room for fine-tuning. This led to some changes to the vision and the strategic goals of the Institution. The President and Chief Executive have drafted the proposed revisions, which are now available for comment before presentation to the Board meeting on 5 August for approval. Comments should reach the Chief Executive ([acleland@ipenz.org.nz](mailto:acleland@ipenz.org.nz)) by 24 July.

The key changes are:

- a revised vision statement – the previous version was seen as uninspiring
- renaming of the "professional and qualification recognition" strategic goal as "competence and qualification recognition" to make it clearer that competence is recognised for more Membership classes than that of Professional Member
- renaming of "career development support" as "personal development support" to recognise the increased commitment of the Institution to providing continuing professional development services as well as graduate development
- splitting "contributions to the wider community" into "leadership on public and community issues" and "renewal of the profession"
- replacing "contribution on public and community issues" with "leadership"
- recognising the specific need for renewal of the profession as a separate goal.

The budget of the Institution is allocated to projects, which are defined as the operational means of achieving the strategic goals. Staff will be preparing the 2003/2004 budget, using this outcomes-based

approach, for consideration at the August Board meeting. We will try to increase funding for leadership on public and community issues, and increase activity in personal development support. We also want to use the publications, which Members said are of excellent quality, to contribute more directly towards the strategic goals. New programmes ultimately need new income sources, but IPENZ is trying to avoid subscription increases or at worst keep them in line with inflation. In the last four years the MIPENZ subscription has risen by about 5%, well behind the rate of inflation.

We will publish the agreed budget and outcomes once they have been approved by the Board. The Board and the staff earnestly try to use precious resources to create the services most valued by as many Members as possible. We will be providing Members with a full outcomes-based annual report for 2002/2003 (the 2001/2002 report was partly outcomes-based) to ensure full accountability.

### Our vision

New Zealand and the global community benefit from the responsible leadership of the engineering profession in the uptake of technological advance; all people benefit from national prosperity, and live

# Kiwi duo wins science award


"Intelligent" road studs that can be used to warn drivers of hazards ahead have won a prestigious Australian award for two University of Auckland students.



Michael Nasa (left) and Sam Siddawi

Beating more than 25 entries from other universities, Sam Siddawi and Michael Nasa won the Siemens Prize for Innovation with an invention that allows road engineers to change the colour and intensity of the light emitted by individual road studs, remotely and independently. This was the first time the \$A25,000 award had been opened to entries from New Zealand.

The duo's invention builds on a revolutionary wireless power system developed at The University of Auckland, which allows power to be transmitted across an air gap. New Zealand company Harding Traffic Systems has pioneered its application to road studs. Now used in the Terrace tunnel in Wellington and in tunnels around the world, Harding's "Smart Studs" earned \$2 million in export revenue last year.

The winners' families came to New Zealand from Iraq and Jordan. "I know I wouldn't have had an opportunity like this if my family hadn't come to New Zealand," Michael says. "And I think it shows that at university level there is enough knowledge and talent in New Zealand to go out and take on the world." 

## Mentor Training Foundation Workshop

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

### Who Benefits?

Mentors, managers and project or team leaders with responsibility for developing and managing the performance of others. This workshop will improve your ability to understand and develop the potential and skills of others.

### Learning Outcomes

At the end of the workshop participants will have gained:

- familiarity with the competencies required of an effective mentor
- clarity on the role of mentors and IPENZ's expectations of them
- the ability to conduct structured mentoring sessions that achieve focused results
- improved listening and communication skills
- an understanding of effective feedback and endorsement
- practice in key elements of mentoring in a variety of formats

### Programme

This is an interactive foundation programme. Participants can directly apply what they learn, and learn from each other in a supportive environment, in individual, paired, group and round-robin exercises and discussions.

There will be subsequent briefer workshops for those wishing to develop their skills further.

### Presenter

Robyn Horsfall BCom, CA, Director Coaching For Success, is a professional coach working with individuals in transition, organisational coaches and mentors and high performers. Her training includes CoachU (the only New Zealand ICF accredited training organisation) and the Coachville Intensive Training Programme. She is also Treasurer and part of the Executive Committee of the International Coach Federation – Auckland Chapter. Robyn's background includes seven years with PricewaterhouseCoopers as a Human Resources Consultant, and seven years as a Chartered Accountant.

Please see the "Coming Events" section on page 8 of this publication for date and venue details. 

equitably and in harmony with the natural world.

### Our mission

To be the professional body for the engineering professions in New Zealand

- meeting the needs of the community by providing independent leadership and technological advice on issues affecting the well-being of all people
- maintaining and promoting internationally recognised standards in the professions of engineering
- meeting the existing and future needs of Members as they practise their profession.

### Our strategic goals

#### For our members and other stakeholders:

1. Leadership on Public and Community Issues: to speak out and apply the collective wisdom of the engineering professions to provide real long-term benefits to the wider community.
2. Competence and Qualification Recognition: to provide engineering professionals with access to relevant competence-based brands and other


means of recognition to help them

- market themselves (to future employers) as competent and ethical professionals
- transfer their skills internationally
- attract clients
- develop a sense of identity as part of a leading professional group.

3. Personal Development Support: to maximise the career opportunities of Members, by providing services to help them to gain and retain the competence brands, thus facilitating career development and lifelong access to learning opportunities for maintaining their competence
4. Engineering Practice Support: to facilitate Members' access to new engineering knowledge, and on their behalf lead the development and application of best practice in the engineering professions so that IPENZ Members are the preferred practitioners amongst purchasers of professional engineering services.
5. Renewal of the Profession: to educate and

enthuse young people so that New Zealanders are increasingly technologically literate and equipped to consider careers in engineering and technology.

#### For facilitating the above goals:

6. Membership and Income Development: to become increasingly representative of the engineering professions and engineering employment sectors in New Zealand, by offering flexible packages of services tailored to the increasingly various needs of the professions, thus lowering reliance on subscriptions and retaining Members when their needs change
7. Institutional Leadership: to anticipate issues and societal trends affecting the engineering professions, and respond by adapting the Institution's strategic and operating plans, rules and classes of Membership
8. Effective Support Systems: to use appropriate technologies and services to minimise baseline and compliance costs and maintain communication channels, thus freeing Member-derived income to provide better opportunities and services. 

# Structural Engineer

## Interim Report

This is the substance of a briefing paper for the Minister of Commerce, from the IPENZ CEO, Dr Andrew Cleland. It covers the interim findings of the Structural Engineering Practice Review Taskforce.

The Structural Engineering Practice Review taskforce has finished considering submissions and the matters raised in the recent open letter from Mr Scarry, and is formulating recommendations in a draft report for peer review within the profession. It concluded that unacceptably variable practice standards have resulted principally from systemic failures in the industry; and that engineering professionals have performed some work of an inadequate standard, particularly when engaged on projects in a limited role. There is a professional consensus that the kinds of failing alleged by Mr Scarry have generally been identified and corrected when professional engineers were engaged for whole projects. It was also concluded that some technologies, such as pre-cast hollow-core floor slabs and tilt slabs, require immediate review. Most of the recommendations relate to systemic reform in the regulatory environment for the building industry.

### The Taskforce

The Taskforce comprises seven structural engineers with widely varying experience and employment contexts. It has considered approximately 20 submissions, and held discussions with Mr Scarry, and Professor John Mander who is conducting research on hollow-core flooring. Their preliminary report is being prepared, and will be made available for peer review shortly.

Progress in key areas of the Terms of Reference (shown in italics) is outlined below.

### Variable standards of practice

*Identify any areas of Structural Engineering Practice in which there is variability in the standards of practice.*

The taskforce considers that there are indeed unacceptable variations in standards of practice, and that they are related to commercial arrangements regarding structural engineering work. Structural engineering design, like most professional engineering activities, is an iterative process. As the detail of a design is filled out, and sometimes also during the construction phase, issues that were insufficiently considered must be analysed and resolved. This often requires the reworking of concepts. Continuing professional involvement in a project is therefore necessary.

Those purchasing structural engineering services, and sometimes regulators, too often see structural design as a linear process, in which the client may sign off the structural engineer once the initial design is done. Decisions on variations to overcome issues that were not apparent at early stages are therefore often taken without proper advice. There has also been a tendency to engage the structural engineer for only the minimum level of service necessary to obtain consent, so problems are not always uncovered. The likelihood of problems thus increases as the fee paid for structural engineering services decreases.

Members of the profession involved in similar projects have given feedback regarding some of the examples raised by Mr Scarry. They reported that where structural engineers have continued to be involved rather than discharged after an initial design has been executed, most problems have been found and fixed. Nevertheless, the profession has done some work of inadequate standard, particularly when engaged for only a limited role within projects. Mr Scarry has raised some valid concerns. The taskforce concluded, however, that the extent and severity of problems were less than the wording his open letter may have suggested.

The root causes of much but not all of the variability are systemic: clients and/or regulators have not recognised the iterative nature of design, or the need for expert peer review of work entailing engineering judgements; clients and regulators have

# ing Practice Review

not recognised when unsuitably qualified engineers have been engaged (e.g. recent migrants or visiting engineers without knowledge of New Zealand's codes for seismic design); or the client has been prepared to engage an expert professional engineer for only limited service.

## Unacceptable practices

*Identify those Structural Engineering practices that are placing life or property at potentially unacceptable risk.*

There are concerns over two practices. Recent research at the Universities of Canterbury and Auckland raises issues about the performance of pre-cast hollow-core flooring. The research is incomplete, and results have not been evaluated. However, indications are that hollow-core pre-cast floor slabs may not perform as well as was previously thought.

The other area in which there is a lesser concern is the performance of pre-cast tilt slabs. Some consider that they are being made too thin, and there are some concerns about the means of attachment when the slabs are carrying significant loads.

In both instances, the evidence is incomplete and more research is needed urgently, with review of the results by the profession.

IPENZ has no mandate to identify specific buildings that may pose a significant and immediate risk. Problems in buildings may have arisen after professional engineering involvement was completed, (e.g. after consent and prior to construction), or the engineers concerned may not have been IPENZ Members. IPENZ has sought to ensure that Members have acted responsibly in respect of buildings known to them. Newsletters have reminded Members of their ethical responsibilities should they be aware of buildings that pose a significant and immediate risk. It is their ethical duty to inform the building owner if the risk is judged to be sufficient. We expect that Members will have acted on this advice, but they are not obliged to inform us if they have done so. We note that under the existing Building Act there is no legal obligation to inform the TLA, and this is a concern.

The Taskforce is not aware of any specific buildings that they regard as posing a significant and immediate risk.

## Recommendations

*Develop recommendations to overcome shortcomings and identify if possible ways to implement these.*

The Group's recommendations are as follows:

- Standards and Codes of Practice.** There is an urgent need to develop more comprehensive standards for practices that can be described in a prescriptive way (e.g. through Standards NZ processes) and codes of practice for practices requiring substantial professional judgement.
- Ongoing professional involvement.** There is a need to ensure that the effective sign-off of structural work post-construction (including all variations) is by a competent structural engineer.
- Systematic recognition of competent structural engineers.** There is a need to ensure that practitioners competent in simple structural design (normal loads), and those competent to design complex structures (considering the varying loads that occur in seismic events) are identified; and structural work should be limited to those with the appropriate competence for the particular design required. Competence assessments must be stringent.
- Technical leadership role for central regulator.** The central agency (currently the BIA) must take on a proactive leadership role so that problems are anticipated and assertive actions taken. This will help lift the game of TLAs and certifiers.
- Improved Consent and Audit Processes.** The variation in standards between TLAs, and the unacceptably low standards of some, must be eliminated. Consent approvals and code compliance certification must depend on high-quality evaluation processes, including peer review by expert structural engineers where buildings have non-standard structural features. TLAs must report engineers who

present sub-standard work so that they can be investigated by the registering authority.

- Responsibility of Building Owners.** Building owners must be required to employ or engage suitably qualified people.
- Evaluation of New Materials.** A process is needed to prevent new materials being allowed onto the market without proper evaluation of their properties and performance in the New Zealand context. Series 500E reinforcing steel is an example of a product introduced to the New Zealand market without proper evaluation.

## Feedback on Building Act

*Provide feedback to the BIA and MED on the current review of the Building Act.*

IPENZ made a detailed submission on the discussion paper issued by the MED, including the recommendations of the task force, and other suggestions. At the Select Committee stage submissions will be made on any matters that are not fully addressed in the draft Bill.

## Actions by IPENZ

*If appropriate propose a programme that IPENZ could implement to address the recommendations in section 3 above.*

IPENZ can take actions at two levels – as the registering authority under the CPEng Act, where it is responsible for ensuring that structural engineers meet the CPEng standard (already under way); and as an agency (in conjunction with the NZ Structural Engineering Society) resourced by the building levy to develop codes of practice for structural engineering work requiring substantial professional judgement. Government might give IPENZ further capability to recognise engineers capable of complex seismic design in its registration system.

IPENZ and the profession at large must also work to promote a professional culture of quality and self-regulation of acceptable standards rather than one of cost-reduction. ☺

# Remuneration Survey turns ten

IPENZ is currently running its remuneration survey for the 10th consecutive year. This means that we now have a significant collection of data for comparing salary trends. Some Members have expressed concerns about the way the survey "sizes" jobs; but the information on salary trends over a decade is likely to interest all Members.

It is crucial that a substantial number of IPENZ Members complete the current remuneration questionnaire. There was an increase of approximately 30% in responses last year, and we are aiming for a further 20% increase this year. Many Members are taking advantage of the fact that the survey can be completed on line at <http://www.ipenz.org.nz/ipenz/members/remunsvr/>. For those who would prefer hard copy, a form was included with the previous issue of *engineering dimension*. It's important that the "sizing" of each respondent's job is reviewed by someone else – this increases the validity of the results.

Once again there are prizes to be won by participating in the survey. The grand prize is two nights at the Grand Chateau Mount Ruapehu along with car hire from Budget Rental Cars. Second prize is two nights at a Heritage Hotel in the South Island, and there are also spot prizes from Placemakers and IPENZ.

At the end of the year access will be available to this year's remuneration survey results. By mid-2004 information will be made available covering the entire period from 1993 to 2003.

All good things must come to an end – we will be developing a new remuneration survey later this year. Input from Members will be sought during the consultation phase, and suggestions for improvements gratefully accepted!! ☺

## CPEng and International Professional Engineers Registrations

### Assessment applications

Numbers of applications for assessment for Professional Membership, CPEng and the International Professional Engineers Register (IPER) are shown below.



### Assessment outcomes

Applicants are assessed for all outcomes even if they did not apply for them. For instance many applicants do not apply for IPER because they do not know that they meet the requirements. By being proactive IPENZ in many cases is able to offer applicants a place on the IPER.

### IPENZ Practice College

All successful applicants for assessment who are IPENZ Members are automatically added to the Practice College, which opened on 1 April 2003, unless they request otherwise. Currently 848 Members are registered in the IPENZ Practice College.

### New Primary Practice Areas

Since the latest International meetings held in Rotorua in June, IPENZ is now able to offer four new primary practice areas to its Members – Fire engineering, Building services, Petroleum and Aerospace. These are available for identifying areas of current competency on the IPER and for use in applicants' post-nominals. ☺

## The Hume Fellowship

Civil engineering graduates looking to further their professional skills in New Zealand or overseas are invited to apply for the Hume Fellowship.

A 1988 bequest from Harry Hume FIPENZ and Henrietta Hume has so far given eight New Zealand civil engineers the chance to broaden their knowledge and experience in countries as diverse as the United States, Brazil, Europe, the UK and Argentina.

Harry and Henrietta Hume had distinguished careers in New Zealand, Harry with the Ministry of Works and Henrietta with the Department of Education.

Both were Harkness Fellows in the 1940s (the American equivalent of Rhodes Scholars). They benefited enormously from their international study and wanted to give young New Zealanders similar opportunities.

The Hume Fellowship is the one of the most substantial offered in New Zealand. The eight Fellowships awarded so far have totalled over \$233,000.

### Criteria

Applicants must be:

- civil engineering graduates
- New Zealand citizens
- preferably aged between 25 and 35

Hume Fellows are selected for their potential to advance the technical skills of the engineering profession in New Zealand. They need to demonstrate ability in their specialist field and be able to show how their study will advance the engineering profession in New Zealand.

Successful applicants are asked to work in New Zealand for at least two years after completing their Fellowship study programme.

### Some Former Hume Fellows:

#### Andrew Shilton MIPENZ

Andrew Shilton was awarded a Hume Fellowship in 1994. His study toward a PhD, over a four-year period, included attendance at a conference in Brazil; visiting experimental research stations in Brazil and Argentina; four months at the University of Leeds, UK; visiting installations in Israel; and four months at the University of California, working under a number of leading researchers to study water treatment mechanisms.

Back home in New Zealand, Andrew worked on wastewater treatment systems for MAF at Invermay in Dunedin. He is currently a Lecturer in the Department of Process and Environmental

Engineering at Massey University.

**Peter Bourne-Webb GIPENZ** studied geomechanics and **Richard Cowley GIPENZ** studied Geotechnical engineering at the Imperial College of Science, Technology and Medicine, London.

**Jenny Hart GIPENZ** studied port and coastal engineering at the Delft Institute of Hydraulic and Environmental Engineering, Netherlands.

**Robert Swears MIPENZ** studied transportation engineering at the University of New South Wales, Sydney.

The Fellowship is administered by three trustees: John La Roche FIPENZ, a professional engineer from Auckland; Hugh Sutherland, an accountant and financial advisor from Wellington; and the Public Trust is the managing trustee, because of their long experience with similar trusts.

Hume fellowship application enquiries should be addressed to:

The Dean of Engineering  
University of Canterbury  
Private Bag 4800  
CHRISTCHURCH



**Trish Virtue – Competence Assessment Administrator**

Meet Trish Virtue, our new Competence Assessment Administrator.

A born and bred Wellingtonian, Trish has spent many years overseas. She completed her university studies in Canada, and later spent some years living and working in Fiji. Her background is in research, and she more recently worked for the Otago Medical School in the Medical

Centre researching motor vehicle-related deaths.

With an adult family of three sons (one living in London) and one daughter, Trish now finds time to indulge her own interests. Living in Oriental Bay, when she's not saving

her seaside garden from the Wellington wind and salt, she can wander around to the nightlife of Wellington and see a new movie every week. She also meets regularly with a reading group.

Trish has also developed a passion for astronomy. She has spent much time at the Carter Observatory whenever she has visitors come to Wellington. Although she hasn't done any serious star-gazing yet, she's looking forward to the possibility of the Carter Observatory being moved from the Botanic Gardens to the waterfront, which would make it more accessible and safer to visit in the dark hours.

Trish's tasks at IPENZ are many and varied, from organising professional assessments through to managing membership promotions (for Member and Fellow classes). Many of our readers will have occasion to speak to Trish at some stage.

We welcome Trish to IPENZ, where she's making a valuable contribution. 

# International Engineering Meetings

A hundred and fifteen delegates from 23 countries attended the International Engineering Meetings in Rotorua from 8–15 June. They were most interested to learn about CPEng, and see it as a world-leading precedent. Outcomes-based competence standards have growing support worldwide, and the CPEng competence standard may form the basis for a proposed series of international competence profiles for use in multiple countries. IPENZ will meet its international colleagues in a year's time to further develop international competence and graduate profiles.

Germany, Singapore and Malaysia were admitted to the Washington Accord as provisional members. Their admission does not immediately widen mutual recognition of qualifications, but will do so when they progress to full membership. It was agreed that NZ's adherence to the Washington Accord would be reviewed in 2005.

The accreditation of three-year BEngTech degrees under the Sydney Accord is in its infancy. New Zealand should complete the start-up requirements later this year, securing mutual recognition of such degrees with five other countries, but not yet with Australia.

New Zealand signalled its intention to apply for membership of the Dublin Accord, for mutual recognition of two-year Diplomas in Engineering qualifications, but will not belong until at least 2005.

New Zealand also signed the Engineering

Technologist Mobility Forum Agreement. IPENZ must now submit its current competence assessment procedures for the Technical Membership grade, probably to the 2005 meeting in Hong Kong.

Under the APEC Engineer agreement, it was resolved that recording a practice area would be optional rather than compulsory. Four new practice areas were added – fire, building services, petroleum and aerospace. (Business engineering was not added, but recognition can continue in New Zealand.) This means that IPENZ will need to alter forms etc. for registration applications, which will take some time. We will continue to show practice areas on the NZ section of the IPER. Thailand joined the APEC Engineer agreement.


India and Bangladesh were admitted to the Engineers Mobility Forum as provisional members. There was much discussion of the rights of practice that IPER registrants enjoy in other countries. New Zealand proposed that each country should produce an explicit credit schedule, and the idea generally found favour.

The New Zealand delegation also proposed that IPER should incorporate a post-nominal or brand. Delegates accepted their argument that the mobility agreements should not only impart rights of practice (the original intention), but also function as an internationally-recognised quality mark of value at home as well as overseas. Delegates are to establish whether the post-nominal "IntPE" is

available in their own jurisdictions. If so, IPER registrants will be entitled to use IntPE to indicate competence registration to an internationally agreed standard.

This is technically a higher standard than CPEng – not all CPEng holders can meet IPER requirements. So in the future a currently competent Kiwi mechanical engineer, for example, might represent him or herself as "Jo/e Bloggs MIPENZ (Mech), CPEng, IntPE", once the post-nominal is approved for use by IPER registrants. The final lettering is not yet confirmed. IPENZ will take a relaxed attitude towards registrants who anticipate the approval when printing new business cards – at the risk of bearing the cost if the post-nominal has to be changed.

The EMF agreement also confirmed that for the international register a hard line on the need for an approved engineering qualification (usually a degree) was to be maintained. So while we can register (for example) NZCE holders on CPEng if they demonstrate that they have gained the necessary knowledge and skills by means other than formal education, we cannot register them on IPER.

IPENZ has undertaken to provide an international engineering website, so that full information on all mutual recognition agreements can be found in one place. Members will be paying for this, but also deriving significant benefit from it. 

The following is the full list of additions to and changes in the classes of membership for the period 1 April 2003 – 31 May 2003

**Elected to Graduate Member:**

PJB Armstrong, S M Bardarova, M A Bhana, S Blackford, D G Brannigan, C J Brown, A D Cook, RAC Cooper, G C Day, N R Dhavale, D S Dimitrov, L D Donald, B R Doran, C A Ellis, T D Fausett, R C Finley, C A Froude, B D Galloway, M Z Ghauri, V N Gin, G R Guitry, M Haag, C A Hardy, M R Henry, K Y Hew, A J Holland, S J Hooper Smith, T Humphries, S Johnson-Chung, J Kant, M Kayande, M D Kemsley, R Khire, N R Lange, J W Leek, W K Leong, P D McCallum, D J McMillan, K W Mayakaduwa, M D Mayhead, P J Mistry, S J Muir, N J Murray, K Narang, J H O'Sullivan, D N Ouwejan, J F Papesch, S Parash, A J Parker, T G Parsons, M D Patel, B J Phillips, R J Pitkethley, J K Poole, H L Ratsey, T K Reynard, J Rudnickis, R J Salter, B Simms, S Singh, N J Smyth, I D Steele, C P Steven, R G Stockley, K C Tang, M von Drehnen, K K Vangelov, B W Vincent, RBP Wall, M Wasley, D G Watts, J A Wilce, F P-H Wong, NAH Yaghobian, HMSH Yousef

**Promoted from Graduate Member to Technical Member:**

A C Earl

**Promoted from Graduate Member to Professional Member:**

H Anderson, F M Chandler, M E Chiles, NJG Milne, R C Perry, M D Smith, R Wilson

**Elected to Professional Member:**

P A Deane, E J Forrest, W J Goodsir, M O'Brien, F J Pistorius, E Rafferty, MWQ Yeoman

**Elected to Affiliate Member:**

B P Meikle, A Questin, J R Van Waard

**Promoted from Associate Member to Technical Member:**

M A Morrissey

**Coming Events**

**Mentor Training Foundation Workshop**

This one-day workshop is designed to develop mentoring and coaching skills and make mentors more effective.

**When:** Tuesday 29 July 2003

**Where:** Auckland Conference Centre, Institute of Chartered Accountants of New Zealand, Auckland

**Cost:** IPENZ Members \$250 plus GST, Non-Members \$350 plus GST

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

**Building Industry Summit**

This summit has been designed to bring people together to discuss both legislative and industry led changes in the building industry.

**When:** 30–31 July 2003

**Where:** Crowne Plaza, Auckland

**Cost:** \$1695

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

**IIR's 6th Annual Managing & Measuring Contractor Performance Conference**

This conference has been specifically designed to address the key issues affecting those dealing with the contracting process.

**When:** 30–31 July 2003

**Where:** Duxton Hotel, Wellington

**Cost:** \$1906.88

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

**Institution of Electrical Engineers Lecture**

"The Electronic Information Revolution – for people who are blind". In this illustrated lecture, Dr Russell Smith founder of Pulse Data International, formerly Wormald Sensory Aids Ltd, will review the leading technology developments in information access for the blind.

**When:** 12 August 2003

**Where:** Hutton Lecture Theatre, Otago Museum, Dunedin

**Contact:** Gary.w.schofield@mwhglobal.com

**The 2003 Power and Fuel Solutions Summit**

Reviewing fuel options and market structure to ensure the long term reliability of electricity supply.

**When:** 25–26 August 2003

**Where:** Wellington Town Hall

**Cost:** \$1996.88

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

**Project Management**

A two day course in Project Management focussing on the principles of project management.

**When:** 25 August 2003

**Where:** University of Canterbury

**Cost:** \$795

**Contact:** psc@canterbury.ac.nz

**Website:** www.cont.canterbury.ac.nz/short\_courses.html

**IPENZ Board Meeting**

The next meeting of the IPENZ Board will be on 4–5 August 2003



Engineers New Zealand

**The Institution of Professional Engineers New Zealand**

**President**

Gerry Coates  
president@ipenz.org.nz

**Deputy President**

Ian Parton  
deputy.president@ipenz.org.nz

**NATIONAL OFFICE**

Third Floor  
101 Molesworth St  
PO Box 12-241  
Wellington  
New Zealand

Tel: +64-4-473 9444  
Fax: +64-4-474 8933  
email: ipenz@ipenz.org.nz

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

**Publications Manager**

Lorraine Brown 0-4-474 8943  
lbrown@ipenz.org.nz

**Graphic Designer**

Richard Mills 0-4-474 8946  
rmills@ipenz.org.nz

**Desktop Publisher**

Susan Levick 0-4-474 8977  
slevick@ipenz.org.nz

**Subeditor**

Janet Hughes 0-4-474 8945  
jhughes@ipenz.org.nz

**Chief Executive**

Andrew Cleland 0-4-474 8935  
acleland@ipenz.org.nz

**Deputy Chief Executive**

John Gardiner 0-4-474 8932  
jgardiner@ipenz.org.nz

**Education and Career Development Manager**

Virginia Burton 0-4-474 8936  
vburton@ipenz.org.nz

**Registrar**

Jeff Wastney 0-4-474 8983  
jwastney@ipenz.org.nz

**Engineering Practice Manager**

Murray Isdale 0-4-474 8986  
misdale@ipenz.org.nz

**General and membership enquiries**

Bub Konia 0-4-474 8930  
Claire Auger 0-4-474 8948