

To be an “Ingenieur”?

The IPENZ Board made provision for the prenominal “Ir” (Ingenieur; pronounced “urn-gen-year”) to be reserved for use by IPENZ members by trademarking it in 1999. In 2001 it was decided that it should be made available to certain members on the launch date of CPEng, 1 January 2003. Deputy President Gerry Coates, who supported the initiative, explains the rationale for making Ir available.

Research has shown that New Zealand professional engineers seek recognition as a clearly identifiable group, distinct from the engineering trades. IPENZ was created by renaming the NZ Institution of Engineers in a way that emphasised that we were “Professional Engineers”. Now “professional” is increasingly used to designate people who are paid for services, e.g. professional rugby players, as distinct from amateurs. The word is still also used to refer to a person who abides by a code of ethics, but there is confusion.


Accordingly it was suggested that we should adopt an internationally recognised designation. In Europe such a distinct identity has been created by the use of the pre-nominal Ingenieur (abbreviated to Ir) to designate a person holding a degree in engineering.

“Ingenieur” is simply the French equivalent of “engineer”, both words deriving from the Latin *ingenium*, meaning intelligence. Despite their identical origins they have different overtones; the French word does not carry an association with trades, and it reflects the European respect for the learning underpinning professional engineering. *Ingenieur* also has growing international currency in Asian countries as well as Europe.

The Board has resolved to make the new designation available. It wants members to decide individually if they want to use it. If there is wide support, it will be actively promoted.

So from 1 January 2003 “Ir” may be used on the following conditions:

1. Use of the title as a trademark is controlled by The Institution of Professional Engineers New Zealand Incorporated who require that it be used as described below.
2. The title “Ingenieur” is a brand that identifies a professional engineer who is a current Professional Member (MIPENZ) or Fellow of IPENZ (FIPENZ or Dist.FIPENZ), obeying its code of ethics. As a statement of qualifications, experience and ethical behaviour, it does not require proof of current competence.
3. The title must follow the following protocols:
 - a. They must inform National Office of their intention to use the title, and receive verification that they are entitled to.
 - b. In written communication the title is represented by inserting the prenominal “Ir” in front of the recipient’s name.
 - c. The prenominal may be used on all written communication by the holder.
 - d. In verbal communication users of this title may describe themselves as an “Ingenieur”, pronounced “urn-gen-year”.

A survey of members will be conducted in the first half of 2003 to gauge their understanding of and support for the use and active promotion of the prenominal. 

President’s Message

Formal qualifications and CPEng



1 November 2002 was a critical date in the development of CPEng. IPENZ met its obligation to approve those Rules that are not Standards and provide those Rules that are Standards to the Chartered Professional Engineers Council by this date. Much work lies ahead before the Register can open as planned in January 2003. Apart from implementing and maintaining the Register effectively and efficiently, we must ensure that those who commission or rely upon the services of professional engineers understand the fundamental importance of registration as the most reliable hallmark of a committed, current and competent practitioner.

The extensive consultation just completed has helped to ensure that the Rules and the embedded Standards reflect the combined judgment of the profession as to what constitutes good current practice in the assessment of professional competence and standards of practice. While the debate has sometimes been passionate, most notably in relation to aspects of the code of ethical conduct that forms part of the Rules, it has also been highly professional, reflecting a determination to ensure that, so far as possible, we get the scheme right.

The debate has cast some interesting sidelights on our understanding of the way IPENZ membership operates. Individuals and groups have raised concerns which, while arguably misplaced, deserve a serious and considered response. One such concern, which surfaced late in the consultation process, relates to the absence from the proposed Standards of any direct reference to the formal academic qualifications that an applicant for registration must hold. For example, one member wrote:

I would like to support the submissions made by [. . . others] with respect to the need for qualifications required for entry onto the CPEng register. I firmly believe that a BE or recognised equivalent degree should be a clearly stated pre-requisite for all engineers wishing to attain CPEng status.

Our correspondent commented that university training is intensive, extensive and tested, and suggested that this was not usually true of workplace experience, even when it has been accumulated over extended periods. He considered that no amount of experience could enable an applicant to prove that they had met the intellectual standards required to obtain a BE.

At an early stage in the design of the CPEng Register, it was decided that the standards for entry should not be raised above those already required for admission by IPENZ to professional membership. That decision was based on a firm view that the real value added by the

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<<< President's Message continued

CPEng Register lay in the requirement that registrants prove their competence on a regular basis. Indeed, that point was made during the debate on the legislation, and it is unlikely that IPENZ could raise the standards unless we were able to demonstrate that they had fallen behind good international practice (which is certainly not the case at present).

So far as I can determine, major professional engineering associations around the world make provision in their rules for professional membership to be granted to persons without formal academic qualifications at the specified reference level (typically that of an accredited BE). IPENZ is no exception.

There is good reason for those provisions, which may account for between five and 15 per cent of the professional membership of an association. For example, quite a number of people graduate with qualifications clearly equivalent to a BE in their intellectual rigour, and usually classed as "engineering-related". Examples of such qualifications include a four-year degree programme in Metallurgy, or an honours programme in Physics, Electronics or Geology. When people with such qualifications can demonstrate that they have committed themselves to an engineering career, have gained appropriate design skills during a period of supervised practice, and can otherwise show that they meet the competence standards, they would normally be admitted to professional membership.

Similarly, a number of applicants each year offer a non-accredited BE from an overseas university followed by an ME from a NZ university. Of course, NZ students can also be admitted to ME (or even PhD) programmes without holding accredited BE qualifications. Engineering schools have the discretion to accept a small proportion of students into such programmes with lower qualifications than those specified as the benchmark, or even without any formal qualifications. Some of these students are very successful in their postgraduate work, and demonstrate intellectual skills of the highest order.

Not everybody with an ME, or even a PhD in engineering, would be accepted for professional membership, however. For example, consider an applicant with a BA in mathematics followed by a PhD in theoretical fluid dynamics, completed in an engineering school. The applicant might lack some key skills in design, creativity, risk assessment and communication, which would have been acquired in the course of an accredited BE. The exact nature of the postgraduate programme would thus be important, and the Dean concerned might well be asked about the range of engineering academic skills that the applicant had demonstrated.

Other qualifications or combinations of qualifications could not be recognised in any general sense as equivalent to an accredited BE, but may, in a particular case, show that the applicant has an appropriate academic background. Consider an applicant with a three-year Bachelor of Building Science, a Graduate Diploma in Computing and a Master of Project Management, who runs a successful consulting office focused on civil construction projects. Only an assessment panel could decide whether their application should be accepted; but would members, or the wider community, expect IPENZ to reject the candidate simply because they do not hold an accredited BE? However, if the application were accepted, the decision would relate only to the specific applicant – there would be no implication that this combination of qualifications had somehow become recognised as equivalent to an accredited BE.

Finally a very small number of applicants hold formal qualifications of a significantly lower academic standing than a BE, but have held senior and responsible engineering positions for an extended period (usually twenty years or more), and have come to be regarded by clients, colleagues and other professional engineers as appropriate candidates for consideration. They might, for example, hold an NZCE. This group of applicants has been the real concern of our few correspondents on this issue.

In one sense we have been chasing shadows in this debate. The Standards explicitly require that applicants be able to comprehend, and apply their knowledge of, accepted principles. The principles themselves comprise a set of theoretical and practical concepts, relationships and processes recognised by the profession as being sufficient in breadth and depth to serve as a basis for beginning professional practice in the relevant field of engineering, and the point of reference for demonstrating command of those principles will continue to be completion of an accredited BE.

The objective of accreditation is to ensure that graduates from degree programmes have acquired relevant knowledge and understanding; have developed a capacity to model, analyse and evaluate the performance of physical and biological systems; have gained skills in communication, research and design; have learned to work to deadlines, under constraints, and in collaboration with other professionals; and have started to exhibit professional attitudes and responses. This set of attributes cannot be equated to a neat package of knowledge, and it has become a commonplace observation that half the specific information acquired during an undergraduate engineering degree will typically have become out-of-date within three to five years. The

capacity to maintain and enhance knowledge and skills, and to comprehend and apply accepted principles can thus only be demonstrated after several years of appropriate experience.

The proposed standards for CPEng describe the cumulative competence that a BE graduate can reasonably be expected to hold after several years further development. In common with other major professional engineering associations, IPENZ is prepared to admit applicants with other qualifications who can demonstrate that they have acquired through other mechanisms the necessary engineering knowledge and understanding, skills and capacities. An assessment panel would also need to be satisfied that the applicants have demonstrated the other skills and professional attitudes listed above, over extended experience at an appropriate level, and earned the acceptance and respect of their professional colleagues.

This hurdle is a tough one, and in practice few applicants are sufficiently able or motivated to pursue such a pathway. Indeed, senior members have complained at times that assessment panels judge the credentials of such candidates too severely.

Admission of some such candidates to MIPENZ does not imply that an NZCE (or any other sub-degree qualification) is equivalent to a BE – only that the individual applicant has met the standards for admission to professional membership. Most people who begin their career with an NZCE (say), and aspire to be admitted to professional membership, recognise that it will be much easier and quicker to return to study and complete an accredited BE to acquire the appropriate knowledge and skills.

By contrast, we received positive feedback about the way the requirements for continuing professional development have been articulated in the proposed CPEng Standards, with the move away from quantitative participation measures. The CPD scheme previously used by IPENZ (equivalent schemes were introduced by professional engineering associations around the world at much the same time) used quantitative measures of participation in CPD because the profession was not ready to accept periodic practice reviews. Outcomes are easier to measure in the context of practice reviews. There should be an apparent progression in the way projects and programmes are handled, and the outcomes should be capable of being validated by clients, employers, and colleagues. Our correspondents felt that the previous scheme tended to work against leading edge practitioners, and that such practitioners should now find it easier to meet the requirements.

John Webster
President

Nominations are called for the following positions to take office on 31 March 2003:

President

(one-year term, must be a Fellow)

Deputy President

(one-year term, must be a Fellow)

Vice-President

(one-year term, must be a Fellow)

Three (3) Board members

(two-year term, members from any class eligible)

Nominations close on:

13 December 2002

with the Chief Executive

These roles represent a real opportunity to contribute to the profession, by guiding the strategy of the Institution. Board meetings are held six times per year, taking a little over one working day, and Board members deal with ongoing correspondence between meetings. Direct travel and other costs are reimbursed from subscription income.

Nominees for President must have served two years on the Board in the last five years, and all nominees must be fully financial. Nomination forms, and details of other requirements for nominees, such as total service limitations, are available from the Executive Assistant, Lorraine Biggs:

lbiggs@ipenz.org.nz

phone 0-4-474 8931, fax 0-4-474 8933

or by mail from:

IPENZ National Office, P O Box 12-241, Wellington.

Pilot geothermal power project in Nicaragua

Investors, operators, financiers and consultants from around the globe have teamed up to develop the San Jacinto-Tizate steamfield, the first geothermal power facility in Nicaragua to be fully developed by the private sector. Estimated total capital costs for the project excluding expenditures to date are approximately US\$140 million.


The international team is taking an innovative approach, first installing a 10MW pilot plant to generate immediate energy and revenue returns from existing wells, while developing the resource for a commercial-scale project of 66MW (net). The output of the pilot plant can subsequently be increased by adding binary-cycle turbogenerator units to take full advantage of the steam available from the existing wells.

"This is the first time that a progressive pilot installation of this type has been used to reduce the costs and lead time for a geothermal resource development, with the plant then being integrated into the permanent power plant," said Sinclair Knight Merz Project Director, Jim Lawless.

The geothermal field concession is controlled by a Nicaraguan subsidiary of Panama-based Polaris Energy Corporation, San Jacinto Power SA. New Zealand-based professionals from Sinclair Knight Merz have carried out feasibility studies, due diligence, resource assessment and preliminary design.

Nicaragua made virtually no investments in its energy sector from 1980 to 1994 and, as a result, now experiences the lowest per capita electricity consumption in Central America, and an energy shortage.

Up to 80% of Nicaragua's power is currently supplied by thermal (oil or gas fired) plants using imported fuels.

It is hoped that private-sector development of hydro and geothermal resources will not only solve the country's energy crisis, but make it a potential exporter of energy to the rest of Central America. Feasibility studies indicate that the field is likely to generate at least 75MW, and possibly up to 132MW. 

BoardMembers

President

Dr John Webster

Elected 2002/03

Deputy President

Gerry Coates

Elected 2002/03

Vice President

Ian Parton

Elected 2002/03

Immediate Past President

John W Cunningham

Elected 2002/03

Matthew Furness

Elected 2001-03

Sharyn Westlake

Elected 2002-04

Andrew Buchanan

Elected 2001-03

Kevin Johnson

Elected 2001-03

Deane McNulty

Appointed 2001-03

Richard Haverkamp

Elected 2002-04

Kelvin Walls

Elected 2002-04

Ralph Fouché

Appointed 2002-04

The IPENZ Benevolent Society

The IPENZ Benevolent Society exists for the "relief or maintenance" of members, their spouses, their children, or other dependants who are incapacitated by sickness, age, accident or other infirmity (whether bodily or mental) and who are unable to pay for their own care, OR for the "relief or maintenance" of any of the above-mentioned persons when in distressed circumstances.

If you feel that you may be eligible for some financial assistance, please apply in writing, giving full particulars, to:

The IPENZ Benevolent Society

P O Box 12 241

Wellington

The Institution of Professional Engineers New Zealand Incorporated

Notice of Special General Meeting

When: 4.45 pm Tuesday, 3 December 2002

Where: Lecture Theatre 1, Victoria University of Wellington Law School, Old Government House, Lambton Quay, Wellington
(Lecture Theatre 1 is in the Annexe to Government House and is most easily accessed via the Stout Street entrance)

Agenda:

1. Confirmation of Notice of Meeting
2. Apologies
3. The President shall put and the Deputy President shall second the motion that:

“The Rules of The Institution of Professional Engineers New Zealand Incorporated be repealed and replaced by the revised Rules located at http://www.ipenz.org.nz/ipenz/who_we_are/rules2002.pdf”.

A C Cleland
Chief Executive
1 November 2002

Members who are unable to access the website may request a copy of the proposed Rules from Lorraine Biggs (lbiggs@ipenz.org.nz, ph 04 474 8931).

The Board invites members attending the SGM to also attend the Institution's annual showcase function, at which we will launch Chartered Professional Engineer and profile the engineering profession to community leaders. This will be held in the Grand Hall of Parliament from 5.30 to 7.30 pm.

For security and logistical reasons it is necessary to issue tickets. Tickets can be ordered from Lorraine Biggs (lbiggs@ipenz.org.nz, ph 04 474 8931) prior to 25 November. It may be necessary to limit the number of tickets, in which case they will be available on a first-in basis. There is no charge and tickets will be distributed at the SGM. ☺

SGM Rule change rationale

After recent strategic changes in IPENZ a need has emerged to update the Rules of the Institution to better reflect our purposes. The Board has looked carefully at those Rules that have been modified several times, and decided that it would be simplest now to do a “Repeal and Replace” rather than a further set of changes. 95% of the content will be the same, but the changes will make the Rules a much more effective working document.

The major changes are as follows:

1. Regrouping into four major sections – Basic Tenets, Membership and Awards, Governance and Management, and Subsidiary Organisations. The rules at present place matters related to each of these four main themes in different places and this can be confusing.
2. Reworking of the Objects, removing the term “science of engineering” which is confusing; positioning technology in the sub-objectives rather than the main objective which relates to the profession of engineering; and giving some direction on ways to advance the profession.
3. Changing the names of some Membership classes as follows:

Member	to	Professional Member	MIPENZ
Engineering Technologist	to	Technical Member	TIPENZ
Engineering Associate	to	Associate Member	AIPENZ
Graduate, Graduate Engineering Technologist, Graduate Engineering Associate	to	Graduate Member	GIPENZ
Affiliate	to	Affiliate Member	
Student	to	Student Member	

This removes the distinction between “Members” and “members” of IPENZ, which is outdated and confusing. Technically, the rules now use the term “Member” for a person belonging to IPENZ itself whereas “member” designates a person belonging to a subsidiary organisation such as a Technical Group, who does not also belong to IPENZ.

4. Deleting of the Organisational member category, which has not been used.
5. Defining most Membership classes more simply by linking them to international standards for competence.
6. Clearly separating Membership *statuses* (e.g. life, retired, low income), from Membership *classes*.
7. Clearly specifying application processes for each class of Membership in a way that reflects actual current practice.
8. Removing very prescriptive details about Examinations, which we no longer use, but retaining an empowering clause in case they are ever needed.
9. Tidying up the removal and resignation processes for Membership, which were incompletely defined.
10. Updating the ways that fees are set, taking out very prescriptive requirements, allowing for rebates, and better recognising direct-debit payments.
11. Moving the rights of Membership, discipline etc, to sit alongside other Membership-related areas in Section II.
12. Minor tidying up around the operation of the Board (for example of the detail to be supplied with nominations to the Board; and a change from “immediate Past-President” to “the most recent Past-President willing and able to serve”).
13. Movement of Winding Up and Regulations rules to be placed with like Rules in Section III.
14. Stating in full Branch Rules and Technical Interest and Special Interest Group Rules according to the new models developed for these organisations.
15. An empowering clause to facilitate Memoranda of Understanding with Collaborating Technical Societies (those Technical Groups that are now separate legal entities).
16. A revised empowering rule for Practice Colleges, making them a grouping established by the Board.
17. A new Rule empowering the creation of competence registers, not specifically for CPEng, but more generally. ☺

Remuneration Survey results

Here is the first set of results from the IPENZ Remuneration Survey 2002. The most striking trend to emerge is the increase in remuneration and rewards for those in the most responsible or demanding jobs. The median total rewards package for jobs with a points score above 55 was \$190,000, compared with \$150,000 last year.

The complete results can be purchased on CD from early December by contacting IPENZ on sal.survey@ipenz.org.nz. The survey will cost between \$75 and \$250, depending on the size of the purchasing organisation. Individuals who are not IPENZ members can purchase, at a reduced price, segments of the survey relevant to their needs. As always, relevant parts of the survey will be available free of charge to members for their personal use in the member-only area of the IPENZ website from early December.

This year, almost half of all responses came via the Internet, and the number of responses was higher than it has been for several years. More than 25% of eligible members responded, from all over the country and all the industries, sectors, and jobs in which our members are employed. This makes our survey one of the most credible sources of salary information for engineers.

This year we are reporting on a wider range of industries and kinds of work, which was made possible by the larger sample.

Sample information from the 2002 Survey

The table below shows the results for all respondents employed full time (working more than 30 hours per week for an employer). Total salary packages of \$200,000 or more were recorded for 20 jobs.

Remuneration for all FT employees

Job points	Base salary			Sample size	Total Package			
	Lower quartile	Median	Upper quartile		Job points	Lower quartile	Median	Upper quartile
up to 15	\$35,000	\$37,500	\$39,250	31	up to 15	\$36,000	\$37,922	\$40,000
16 to 20	\$37,000	\$39,000	\$42,000	61	16 to 20	\$38,000	\$40,000	\$44,250
21 to 25	\$38,600	\$42,000	\$50,000	113	21 to 25	\$40,000	\$44,300	\$52,000
26 to 30	\$45,007	\$52,000	\$60,000	122	26 to 30	\$47,000	\$55,000	\$63,875
31 to 35	\$52,000	\$60,000	\$70,000	207	31 to 35	\$55,000	\$63,500	\$73,000
36 to 40	\$64,000	\$72,000	\$83,500	213	36 to 40	\$66,892	\$77,700	\$90,000
41 to 45	\$70,975	\$80,500	\$94,625	192	41 to 45	\$77,000	\$88,500	\$107,000
46 to 50	\$83,008	\$93,863	\$108,188	140	46 to 50	\$94,303	\$108,000	\$129,250
51 to 55	\$86,495	\$107,500	\$128,500	60	51 to 55	\$100,625	\$120,000	\$155,219
over 55	\$139,750	\$175,000	\$200,000	15	over 55	\$160,300	\$190,000	\$238,000
total sample	\$50,118	\$68,000	\$85,000	1154	total sample	\$54,000	\$72,750	\$95,338

A detailed breakdown of survey results will be published in the January/February issue of *e.nz*.

Thank you for your support, which has made this year's survey one of the most successful. ☺



Project Showcase

A chance to share triumphs and trials

Convention 2003, to be held in Hamilton 30 March – 1 April next year, is to include an entirely new feature called Project Showcase. 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 by late January, 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 or visit www.ipenz.org.nz/convention2003

CPEngProgress

October achievements

8 October: Submissions from consultation on Standards and Rules were presented to the IPENZ Board, with recommendations from the Standards Board. The amended Standards were approved and drafting instructions specified for updating the CPEng Standards. A Working Group was established to review the revised Rules.

11 October: Material including amended CPEng Standards in drafting instruction format was sent to the CPEng Council.

17 October: Review of the CPEng Rules was completed and drafting instructions prepared.

23 October: CPEng Standards (as Rules) in regulation format were forwarded to CPEng Council.

30 October: CPEng Council met to consider Standards for approval but declined to approve them. Detailed reasons are not yet available, but are understood to relate to IPENZ's ensuring that the standards are consistent with the purpose of the Act.

31 October: IPENZ Board approved the CPEng Rules (excluding the CPEng Standards), effective from 1 January 2003. These include all the procedural Rules concerning applications for registration, the fees, and the rules for handling complaints.

November issues

Two key issues need to be resolved. First, dialogue is needed with the CPEng Council to achieve approval of the Standards by late November, necessary because of the 28-day notification period required after publication in the Gazette of the full set of Rules including the Standards. We are dealing with this issue as a matter of urgency.

The other issue is the development of systems for assessing, appointing and training staff assessors, and of application documentation. These processes will be completed as quickly as the other issue allows. We will dedicate much of the December issue of *engineering dimension* to explaining application procedures and fees.



Movers & Shakers



Awarded – Professor Geoff Duffy

Professor Geoff Duffy of The University of Auckland's Department of Chemical and Materials Engineering has received the ESSO Award at the APCChE Congress/Chemeca 2002 held in Christchurch recently. The Award recognises significant ongoing contributions to Chemical Engineering through innovations or a series of related publications.

Professor Duffy has been involved in extensive innovative research into the fluid mechanics of wood pulp fibre suspensions for more than 30 years, and has published more than 250 papers and technical reports in the field. His contributions to engineering in New Zealand were

recognised by the University with a Personal Chair in 1988, the same year he earned the first Doctor of Engineering degree awarded in New Zealand.

Professor Duffy was the first chemical engineer to be elected a Fellow of the Royal Society of New Zealand and was honoured by the pulp and paper technical association as only the second Tappi Fellow in the southern hemisphere. He has also been awarded the E R Cooper Royal Society Medal and the Appita L R Benjamin Silver Medal for pioneering research.

Professor Duffy was also the 1995 Distinguished Teacher of Year in Engineering, the first full professor to win this University medal for teaching. He has also been a consultant to the industry in Europe, USA and Australasia. ☺

Warman winners

New Zealand students excel

IPENZ congratulates mechanical engineering students from Auckland and Canterbury Universities' Schools of Engineering for taking second and third places respectively in this year's Warman Competition.

The competition is held annually among third-year students representing engineering schools in Australia and New Zealand. The New Zealand teams are usually highly placed in the competition – it is rare that neither Auckland nor Canterbury feature in the top three.

Entrants in the competition are required to design and manufacture a device to a tight specification. Speed, load capacity and accuracy are usually the principal requirements for the particular device.

IPENZ sponsors the trans-Tasman travel component of the costs, and Warman International sponsors the competition itself. ☺

Life Members

IPENZ congratulates the following members on achieving life membership status:

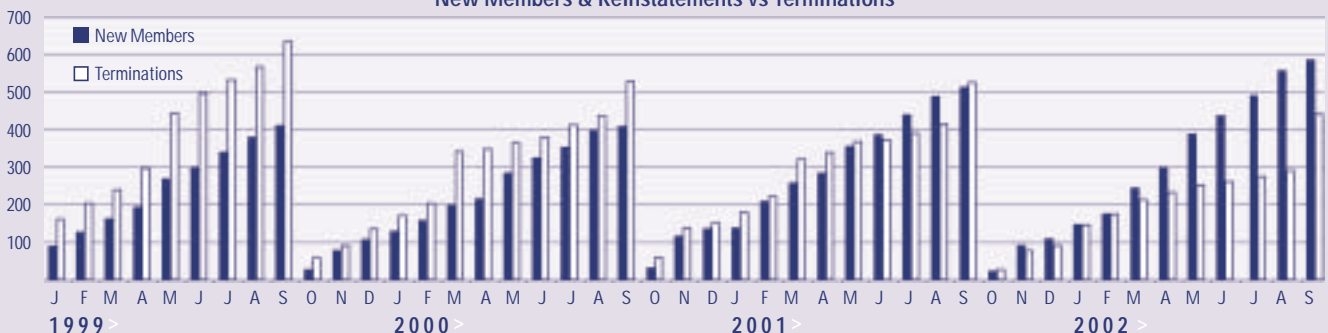
- George Bruce BURTON
- Peter Edington ELLEN
- Peter George GOLDSBRO'
- John Allan INCE
- Tom Kwok Hing LEONG
- Alan Leslie NAYLOR
- Erle John SHERRING
- Robert Aldred SINCLAIR
- Frederick Roland SMITH

Have you registered yet?

By registering on the IPENZ website, you can gain access to our member-only area, which provides specialised resources and an easy way to keep your membership up to date!

www.ipenz.org.nz/ipenz/newuser.cfm

New Members & Reinstatements vs Terminations





Roy Garrett 1910–2002

Roy Garrett was born and raised in Gisborne. He completed a BE (Civil) at Canterbury University College, where he also distinguished himself as a rower. During the depression years he worked as a fitter and draftsman for several firms around Gisborne, and on the construction of the East Coast railway line, where his duties included coping with the effects of the Napier earthquake.

As Assistant County Engineer for Cook County, he worked for several years on infrastructure projects, and supervised local relief work schemes for the unemployed.

Roy then joined Manukau County, again as Assistant County Engineer, and served with the County (apart from time out for war service 1941–46) until its dissolution in 1965, when he was appointed Deputy Manukau City Engineer, remaining in this role until he retired in 1972 for health reasons. Over 30-odd years he oversaw major infrastructural expansion, and for part of the period was also in charge of water supplies. He was a member of IPENZ for a significant part of his life.



Peter Yeoman FIPENZ 1937– 2002

As an engineer and a Director of Davis Ogilvie and Partners Ltd, Peter made a notable contributor to the Christchurch and Canterbury scene. He was actively involved in many significant local engineering projects, such as the Mount Hutt ski field, The Mount Cavendish Gondola, Lake Hood, and developments on the Port Hills.

Peter's expertise extended across multi-disciplinary engineering design, business administration, planning and analysis, project management, resource planning, and professional litigation and arbitration, with a particular interest in tourism and recreational facilities. He had a talent for bringing together lucidly the technical, commercial,

environmental and social issues related to a project in a way that was invaluable in consent hearing processes.

Peter contributed extensively outside his role with Davis Ogilvie. He served on the boards of Solid Energy New Zealand Ltd, the RNZAF Museum Wigram, New Zealand Tourist Industry Association, the Mount Hutt Ski and Alpine Tourist Company, and the Mount Cavendish Gondola Company, and on the Waitaki Development Board and the New Zealand Mountain Safety Council. He was also a member of the Canterbury Regional Council.

His services to tourism were recognised with the Sir Jack Newman Award in 1993. He had also been the Honorary Consul for Finland since 1990, and the Finnish Government honoured him with a Knighthood First Class of the Order of the Lion of Finland.

Peter will be missed by his many friends, colleagues, and clients for his infectious enthusiasm and good humour.


Francis Alexander (Alex) Howse FIPENZ 1924–2002

Born and educated in Napier, Alex took up an electrical apprenticeship with the Municipal Electricity department there when he left school, interrupted by war service with the RNZAF. Once it was completed he studied electrical engineering at the Canterbury University School of engineering, graduating BE in 1951.

Back in Napier, Alex spent nine years as the MED's Assistant Engineer. At the same time he taught mathematics and technical drawing to apprentices at his former school, Napier Boys High. In 1954 he married Molly, whom he had met while she was nursing at Napier Hospital.

In 1960 Alex managed the reticulation of the Coromandel Peninsula's difficult terrain for the Thames Valley Electric Power Board, then took over the area, including Whangamata, Waihi and the Hauraki Plains.

He was appointed Chief Engineer for the Central Hawkes's Bay Electric Power Board in 1969, serving 20 years in this role until his retirement.

Alex represented New Zealand Universities at rugby, cricket and swimming, and competed in surf-lifesaving. Voluntary work included Rotary and service on the J R McKenzie Trust Board. 

From the archives

Excerpt from a paper on "Killing Willows" by Mr W H Gavin, Member of the NZ Society of Civil Engineers, in 1915.

Many rivers in the Dominion are overgrown with willow trees – self sown often, from slips originally planted to save a caving bank, or to remind an old settler of Home. Miles and miles of their banks are lined with graceful leaning trees, dipping their long shoots in the water, falling in and forming islands, and generally doing their best, by decreasing the channel, to augment the height and duration of floods, and to obstruct navigation.

It has accordingly become necessary to devise a method of control; and this has been found more difficult than the mere axeman would suspect. The vitality of the willow is strong: any little stick will root and shoot and start to grow a tree.

Chopping a tree down usually means that it falls into the river and has to be pulled out, likely leaving a lot of small branches and shoots to float away, strand, or sink, and start innumerable new trees. Also a good live stump is left to sprout and start again.

The plan found successful is to poison the standing tree so that it is dead, root and branch, before the axe is laid to it. The method is to ring-bark for a height of 12 inches for small trees and 18 inches for larger ones, and paint the wound with poison. The lower edge of the ring-barking is cut so as to form a drain round the tree trunk which catches any over-plus of liquid.

The formula for the poison is as follows:

White Arsenic	2 ½ lbs
Caustic Soda	1 ½ lbs
Bluestone	2 ounces
Saltpetre	2 ounces
Water, up to	1 gallon

Dissolve the chemicals in hot water and make up to 1 gallon with cold water. Do NOT use salt in the solution, it induces cattle to lick the poison off the trees. Apply with a brush, and be careful not to get the poison on the hands or the caustic soda raises blisters into which the arsenic penetrates and causes sores.

One application is usually effective. 

Board Highlights

8 OCTOBER

- Submissions on CPEng standards were reviewed, together with recommendations from the Standards Board and a working group. The decision of the Standards Board to approve the competence standards for submission to the CPEng Council was ratified, and the ethical standard was approved for submission in modified form.
- Submissions on the Rules for CPEng were reviewed, and instructions for further refinement issued to staff, so that the final rules and standards can be approved by 1 November as required by the Act.
- New credit schedules were approved to make it easier for engineers who have passed overseas competence assessments to join IPENZ.
- Procedures and fees for the International Professional Engineer register were approved for the launch of the register on 1 January 2003.
- The revised Rules of the Institution were approved for submission in an SGM on 3 December, with minor corrections after scrutiny by our lawyers.
- Progress on developing the new membership record system was noted.
- The report of the Business Engineer taskforce was approved, and staff requested to include the outcomes in all future activities.
- Proposals for new actions by Waikato Branch and a private member were considered; although the recommendations will not be actioned, the Board recorded its pleasure at having ideas submitted.
- Protocols for the use of the pre-nominal "Ingenieur" or "Ir" were approved for use by members, effective from 1 January 2003 (see front page of this issue of *engineering dimension*).

Dr Nick Smith and Dr Ashraf Choudhary were welcomed during lunch for informal discussions with the Board. The other engineering MP, Mr Phil Heatley, had to tender his apologies. ☺

Coming Events

Promotional Strategies for Engineering in a Commercial Marketplace
Full-day workshop endorsed by IEAust, designed to help develop communication and promotional skills.

When: 19 November 2002
Where: Logan Park Hotel, Auckland
Cost: \$295+GST (IPENZ members) \$495+GST (non-members)
Contact: cdyet@ipenz.org.nz

Utilities Investment and Infrastructure Conference 2002

IPENZ-supported 2-day event
When: 19–20 November 2002
Where: James Cook Hotel Grand Chancellor, Wellington
Cost: \$2019.38 (GST incl)
Website: www.conferenz.co.nz
Contact: register@conferenz.co.nz

5th Implementing Electricity Industry Reform Conference

One-day conference on the impact of Commerce Commission decisions
When: 21 November 2002
Where: James Cook Hotel Grand Chancellor, Wellington
Cost: \$1193.33 (GST incl)
Contact: register@conferenz.co.nz

Practical Centrifugal Pumps

IPENZ Auckland and Wellington Branches interactive 2-day workshop on optimising pump performance
When: Auckland 25–26 November, Wellington 2–3 December 2002
Cost: \$1049
Website: www.idc-online.com
Contact: idc@idc-online.com

Talking the Walk – Filling footpaths and kerbing cars

EECA / IPENZ Wellington Branch lecture/meeting
When: 10.00am, 25 November 2002
Contact: rachael.dunn@eeca.govt.nz



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