

November 2006 • Issue 54

President's Message



Supply ≠ demand

IPENZ has developed a good working relationship with Engineers Australia and each year our President, Deputy President and Chief Executive meet with their IEAust equivalents to share ideas and talk through issues of common interest.

In early October we did just that in Sydney, where we also had the opportunity to visit the new branch office in New South Wales. One of the highlights

of our visit was meeting the National and NSW Presidents of Young Engineers Australia, who gave a presentation on their programme of events. As we will be announcing similar initiatives at our next Convention we invited them to join us there – if you'd like see the future of our profession, make sure you're at Convention 2007 as well.

During our visit to NSW, a newspaper article brought to mind my comments on water in the September issue of *engineering dimension*. The water shortage in rural areas of NSW has evidently created a market for irrigation water. Last year, farmers were paying \$70 (the unit volume wasn't specified) but this year they are already paying \$240. And while the winter months are normally the wettest, this year they all set new records for minimum rainfall.

But what I really wanted to talk about was a severe shortage of another kind – the under-supply of engineering graduates. In Australia the Government has a much stronger role in managing student numbers and agrees with each university how many students it will fund in each discipline. Here we have a much more market-driven approach, where the Government funds as many students as we can attract. However, neither method results in supply matching demand – a fact that is all too obvious in both countries.

The Australian Government recently responded to the clamour from engineering employers for more graduates by increasing the engineering student intake by 500. However, this has not been matched by prospective students willing to take up those places. In New Zealand we have an equally strong demand from employers, but we too are well short of filling all the places available at institutions offering engineering degrees.

The conventional market model does not work well in tertiary education because supply and demand are essentially disconnected. Prospective students tend not to be particularly interested in their long-term career prospects when they begin their studies. Of far more concern to them is the appeal of the subjects they will study in the first year or two – what this will mean for them even in their twenties is just too far away to worry about.

If students do seek advice they generally ask parents and friends rather than teachers and careers advisors. However, we already know that parents in general (that is, the public) do not have a good understanding of professional engineering, nor are they likely to be aware of the huge range of jobs and opportunities available in this field both currently and for the foreseeable future.

Students do figure out the best places to study, though, and these are the ones they apply to first, but even this is sometimes because they see it as a challenge and not necessarily because they are the best places for them.

In my day job I am regularly asked by employers why we don't simply take in more students to meet the demand. In addition to the above issues, I point out that there is strong demand in nearly all areas of the economy, so it is not simply a matter of moving resources from one area of teaching to another. We would have to make significant new investments, and the forecast return does not stack up to give us a good enough case. There are also many demands to use capital in other ways, including research equipment and compliance, so we can just keep doing what we already do.

But the real problem is simply lack of student demand – an issue which can't be tackled by just one person or organisation. So make sure you do your part – get out there and tell people what engineering is all about and why it's such a great career.

Peter Jackson

President

New Registers Complete Quality Mark Suite

As part of an ongoing commitment to a broadly-based Institution and self-regulation for the wider engineering profession, the IPENZ governing Board has endorsed the development of current competence registers aligned with our Membership classes for engineering technologists (TIPENZ) and engineering technicians (AIPENZ).

The new registers, which were first profiled for Members in the June issue of *engineering dimension*, are scheduled to launch in early 2007. Their creation will complete a full suite of quality marks of current competence and professional standing for the wider engineering profession that IPENZ represents (see the table overleaf for a summary).

This development will have significant benefits for the engineering profession. Industry sectors that support the initiative see the enhanced professional recognition and strengthened career pathways that will be created as an important step in encouraging people into their industries to address current workforce shortages.

The full suite of quality marks will also give all engineering practitioners the opportunity to gain professional recognition of their competence at the level that best aligns with their skills, knowledge and work role, rather than seeking recognition under the one current competence quality mark that is presently available (CPEng). A small percentage of technicians and technologists will continue to aspire to recognition as a professional engineer and may achieve CPEng through comprehensive professional development, but this is the exception not the norm.

At the technologist level, the register will align with the development of an International Engineering Technologists Register, which we expect to be formally

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established at the next round of International Engineering Meetings in June 2007.

Much of the development work to support this initiative is now complete.

Competence standards are already decided (based on internationally-benchmarked exemplars), regulations to support the new registers have been developed, and existing administrative procedures to support the assessment process will require only minor adaptation. While our initial intention was to seek trademark protection for the two registers, we now plan, at least initially, to rely on establishing prior usage and fair trading legislation to protect against misrepresentation of the register titles and postnominals.

Proposed titles and postnominals

After careful consideration, proposed titles and postnominals for the two registers have been developed and feedback from Members and key stakeholders is now being sought. A brief online survey has been developed and can be accessed on the IPENZ website by following the “Engineering Technicians and Engineering Technologists Register Survey” link. Please take the time to complete the survey and give us your views.

At technologist level, the title Engineering Technology Practitioners Register is proposed. Individual registrants would be referred to as Engineering Technology Practitioners, abbreviating to the postnominal EngTechPract.

Members may recognise that the proposed title varies from the previously suggested title of Registered Technical Engineer. A change of title was required after legal advice identified a conflict with Section 77 of the CPEng Act, which protects the term Registered Engineer (or similar). This legal advice indicated that

any title involving both “Registered” and “Engineer” or “Engineering” would be problematic, so retaining the term “Engineer” or “Engineering” in the title was seen as the priority.

A range of alternatives to “Registered” were considered as a register descriptor, including titles used internationally. None were considered to be entirely appropriate, as all failed to satisfy at least one of the following key measures:

- the titles will maximise differentiation from existing quality marks and between the two new register titles
- the general public will associate the titles with the engineering profession
- the titles will engender pride amongst registrants
- the titles will not overstate the value of the mark or imply a level of guarantee for consumers

The title Engineering Technology Practitioner is considered to reflect the more applied/hands-on nature of a typical engineering technologist’s work role compared to that of a professional engineer. The term practitioner has also recently been given meaning in New Zealand under the licensed building practitioner regime.

At technician level, the title of Certified Engineering Technician, abbreviating to the postnominal CertTech(Eng) is proposed. The proposed postnominal has been revised from CertEngTech to maximise differentiation between all register postnominals.

If you would like to find out more, please contact Brett Williams, Director – Learning and Assessment, email bwilliams@ipenz.org.nz or phone 04 474 8936.

Generic title	Exemplifying qualification	Membership class	Membership postnominal	National register title	Registrant title/postnominal	International register title	International register postnominal	Example
Professional Engineer	Four-year Bachelor of Engineering (BE)	Professional Member	MIPENZ	Chartered Professional Engineers Register	CPEng (Chartered Professional Engineer)	International Professional Engineers Register	IntPE(NZ)	Joe Bloggs MIPENZ, CPEng, IntPE(NZ)
Engineering Technologist	Three-year Bachelor of Engineering Technology (BEngTech)	Technical Member	TIPENZ	Engineering Technology Practitioners Register	EngTechPract (Engineering Technology Practitioner)	International Engineering Technologists Register	IntET(NZ)	Joe Bloggs TIPENZ, EngTechPract, IntET(NZ)
Engineering Technician	Two-year Diploma of Engineering (DipE)	Associate Member	AIPENZ	Certified Engineering Technicians Register	CertTech(Eng) (Certified Engineering Technician)	N/A	N/A	Joe Bloggs AIPENZ, CertTech(Eng)
Engineering Tradesperson	One or two-year certificate in an engineering trade	N/A	N/A	N/A	N/A	N/A	N/A	N/A

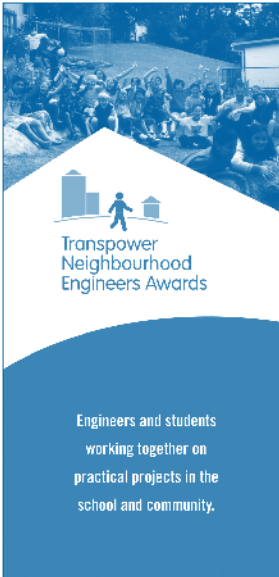
October Board Highlights

The IPENZ governing Board met on 3 October 2006, with the following activities and outcomes:

- A risk management framework to be operated by the Board was reviewed, and direction was given to support its completion.
- The Board reviewed the development of the current competence registers for engineering technologists and technicians, and agreed to consult widely on the titles and postnominal abbreviations to be applied.
- Katrina Bach, Chief Executive of the Department of Building and Housing, discussed with Board Members the Department’s work programmes and its relationship with IPENZ, both as a professional body and as the registration authority under the CPEng Act.

- The Board noted progress towards a young engineers initiative to run from March 2006 to March 2007, in particular the intention to survey Graduate Members to better ascertain their needs.
- It was noted that the total subscription-paying Membership has risen above 8,000 – a rise of about 1,000 over the last five years.
- Feedback from Branches, and Technical and Special Interest Groups on the way they are supported by IPENZ National Office was received, together with plans to improve that support.
- The Audit Committee reported the timetable for the 2005/2006 audit.
- The Board approved the proposed content of the annual report, which includes the accounts to be presented to Members prior to the AGM.

Transpower Neighbourhood Engineers Awards 2006



Every year the Transpower Neighbourhood Engineers Awards give cash prizes to the best and most innovative collaborations between students, teachers and volunteer engineers. Open to all primary and secondary schools in New Zealand, the awards are a practical way to enhance the technological curriculum.

The emphasis is on "neighbourhood" – practical, close-to-home projects that have a positive impact on the school or local community. Successful projects must demonstrate good technological practice – identifying a problem, assessing the options and making decisions that lead to a solution. The long-term aim is to excite and inspire more students to study for a career in technology, engineering and science.

This year's winner was Elm Park Primary School in Pakuranga, Auckland. A group of 10 Year 5 and 6 students identified a problematic dry garden entrance to their international school office. Their research led them to decide to create a water feature, which was established in its place. The process they followed was sound, well documented and a good example of teamwork.

The judges were impressed with the level of all projects submitted and felt that merit prizes should be awarded to three schools:

- Otatara School, Invercargill – a group of six Year 2 and 3 students researched,

designed and built an outdoor chess and checkers board to enhance their school's playground.

- St Oran's College, Lower Hutt – a Year 10 student identified a need for a scanner in the school library. She did the research, came up with a design and built a full-scale model.
- Diocesan School for Girls, Epsom, Auckland – a Year 13 student was asked to come up with a solution to the challenge of getting teenagers outdoors more often to enjoy their local beach environment. She researched, designed and built a go-cart to meet safety and budget requirements and appeal to the teenagers.

All of these projects were assisted by volunteer engineers who consistently commented on how rewarding and refreshing it is to be involved with students who are enthusiastic and innovative in their approach to the task at hand.

The winning school's new water feature.



INVESTING IN THE FUTURE VISION 2020

Convention 2007

21–23 March, Hyatt Regency Hotel, Auckland

The 2007 IPENZ Convention builds on the 2006 theme of "Vision 2020" with a special emphasis on investing in the future. With only 13 years before the year 2020, engineers need to start reflecting, challenging and planning to ensure that the future we envisage as a profession starts today.

The team has been working hard to ensure that next year's IPENZ Convention is stimulating, challenging and fun for all delegates. "Convention 2007 has something to appeal to all ages and all disciplines within IPENZ's broad Membership base," says Charles Willmot, IPENZ Director – Engineering.

Confirmed speakers include: Barry Blackett from BP Oil New Zealand Ltd who will talk about biofuels; Chris Bathurst and David Beach who will present on marine

turbines; Geoff Thomas who will put the heat on with his presentation on fire engineering; and Kepa Morgan from the University of Auckland who will share his experience and views on how to consult with iwi during engineering projects.

Next year's Convention is an ideal opportunity to network and catch up with peers in the profession. The great line-up of social events includes the informal Meet and Greet Dinner with inspirational speaker Tony Christiansen, the President's Reception, and the prestigious Fellows' and Achievers' Dinner.

A special rate and programme has been introduced to enable delegates' partners to share the Convention experience. And to encourage more of our younger Members to attend Convention 2007, a special rate is also available for Members under the age of 30.

For further details visit the Convention website www.ipenz.org.nz/convention

Hume Fellowship 2007

Applications are invited for the 2007 Hume Fellowship award. The Trust provides for Fellowships of up to a value of \$30,000 to be awarded when funds are available, or as the Trustees decide.

Applicants should be New Zealand citizens, preferably between the ages of 25 and 35, who have a degree in civil engineering. The applicant should have demonstrated his or her ability in their specialist field.

The subject, period and location of study should be detailed by the applicant. The

Fellowship is awarded on the basis of the programme of study submitted at the time of application.

Applications will close on Friday 16 February 2007, and can be submitted by email to dirops@ipenz.org.nz or by post to Hume Fellowship, IPENZ Engineers New Zealand, PO Box 12 241, Wellington 6144.

For further details please visit <http://www.humefellowship.org.nz>

Schools Update

The Schools team includes Futureintech, which is funded by New Zealand Trade and Enterprise and focused on increasing the numbers of science, engineering and technology graduates in New Zealand; and Techlink, a Ministry of Education-funded website collating information on good classroom practice.

Student presentations

Students from the four Wellington schools participating in the Beacon Practice project presented their work at Parliament Buildings on 31 October at an event hosted by the Hon Marian Hobbs MP. Wellington College, Queen Margaret College, Wellington High School and St Patrick's College were each represented by four students, who had the opportunity to discuss their experience of technology education.



The event was the first public demonstration of the impact of Beacon Practice, a Ministry of Education project which supports and promotes dynamic and effective technology teaching in schools.

Beacon Practice currently provides funding to 13 schools around the country that have exhibited best practice in technology teaching. The funding allows teachers to break free of the classroom and bring in creative input from outside the school. Nine further schools are in the process of being incorporated into the scheme. Case studies of the schools involved are regularly published on www.techlink.org.nz

VIPs 2007

The application period for next year's Visiting Industry Professionals (VIP) scheme closed at the end of October. Futureintech provides funding for senior professionals in science, technology and engineering to act as VIPs, spending up to three weeks working with tertiary-level students as an advisor, lecturer, mentor or teacher. The role is entirely flexible according to the needs of the institution and the expertise of the individual.

In previous years VIPs have been communications consultants, design specialists and civil engineers, and their input has ranged from providing advice on curriculum to giving guest presentations. The response from students, academic staff and participants has been extremely positive.



Thank you to hosts

Many thanks to Farra Technologies for hosting Futureintech's Otago Facilitator Bernadette Hannagan this year. Farra, along with our other host partners Blackbay (NZ) Ltd; Carter Holt Harvey Pulp and Paper, Kinleith; Fraser Thomas Engineering Consultants; Riley Consultants Ltd; and Traffic Design Group, Auckland provide an invaluable service by giving Facilitators firsthand experience of industry and career opportunities.

IPENZ Professional Development Programme Continues to Grow

IPENZ's programme of short courses grew significantly in its third year of operation – the number of courses held has nearly doubled (up from 42 to 79) and course participation rates have increased by nearly 100 per cent since 2005.

The primary goal of the programme is to provide Members with learning opportunities which may contribute to evidence of current competence. It is important to note that completing a course is not evidence in itself; when filling out CPD records Members must show how they have applied their course knowledge in the workplace.

The IPENZ Professional Development Programme has three main areas to cater for Members' different needs:

- Generic courses – cover topics such as ethics, report writing, mentoring, finance, leadership and management, negotiation and legislative updates.
- Tailored courses – generic courses can be tailored to specific organisations by including company information and examples. Course structures can also be adapted to suit workplace commitments.
- Technical seminars – IPENZ works with Technical Interest Groups, Collaborating Technical Societies and other professional associations to deliver technical seminars for Members and non-members. These are usually targeted at a specific practice field.

Generic courses have limited participant numbers which provides excellent opportunities for participants to interact one-on-one with the facilitator, apply knowledge in small work groups, and gain feedback. Technical seminars have high participation rates and are open to both Members and non-members.

IPENZ courses are not limited to the range of topics or locations listed in *engineering direct*, *engineering dimension* and Branch newsletters – several Branches have successfully approached National Office to hold courses in their region, and courses have been developed to meet Branches' and Members' specific requests.

IPENZ has developed partnerships with other providers to offer project management by education distance and as a series of one-day short courses.

In 2007, National Office will continue to offer generic courses and technical seminars at similar fee levels to 2006 where possible.

National Office is keen to continue growing the programme by broadening the range of courses and seminars. Planning is currently underway for 2007 so Members with a particular need or suggestions should contact Sharon Wagg, Knowledge Services Manager, on 04 473 2022 or swagg@ipenz.org.nz

Reminder – Nominations for IPENZ Board

Members are reminded that nominations are open for the IPENZ Board for 2007. Positions available are:

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 11 December 2006 and should be sent to IPENZ Chief Executive Andrew Cleland at acleland@ipenz.org.nz. For nomination forms and more information please contact Judie Evans at jevans@ipenz.org.nz or 04 474 8931.

Further details were included in the October issue of *engineering dimension*.

Movers and Shakers



Ernesto Henriod FIPENZ has been appointed to a three-year term on the board of Transit New Zealand.

After graduating from university in Peru, Ernesto worked with British consulting engineers and contractors in the United Kingdom and South America. In Peru he was the Resident Representative of Binnie and Partners and a number of British consulting firms. Major projects he and his staff tackled included the Poechos earthfill dam and irrigation scheme, and the diversion of part of the upper Amazon catchment for water supply and irrigation of the desert coast of Peru.

In 1976 Ernesto moved to New Zealand, where he joined Fletcher Development and Construction, first in Dunedin and later as the Regional General Manager in Christchurch. In 1980 he joined the World Bank in Washington DC, taking on a number of roles including Construction Industry Advisor; Procurement Advisor, East Asia/Pacific; and Director, Headquarters Construction Department.

Ernesto is now the Honorary Peruvian Consul in New Zealand, lectures on negotiation skills, and writes and edits for the Centre for Advanced Engineering. He is also an associate of the Arbitrators and Mediators Institute of New Zealand, a member of the Dispute Resolution Board Foundation and is on the international panel of the American Arbitration Association.

Current Transit New Zealand Chair David Stubbs FIPENZ has been appointed for a further two years.

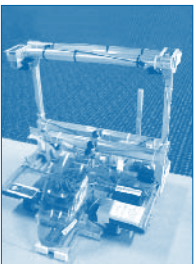


Jonnette Adams MIPENZ(Civil) CPEng IntPE(NZ) has won the New Zealand Institute of Management's Central Region Young Executive of the Year Award.

Jonnette is currently Project Manager for Transit New Zealand and has managed a number of significant projects, including the Kaitoke to Te Marua Realignment and Wellington Inner City Bypass projects. Before joining Transit in 2001, Jonnette worked for a number of roading and project management organisations including Works Consultancy Services, Opus International Consultants and the Hutt City Council.

November will be a busy month for Jonnette. Not only will she be a finalist at the NZIM/Eagle Technology Young Executive of the Year Awards on 23 November, she is also a finalist for the New Zealand Engineering Excellence Awards Young Engineer of the Year, to be presented on 22 November in Wellington.

University of Auckland Wins Australasian Design Competition



A seed-planting robot designed to beautify "Gondwanan" highways recently secured first place for the University of Auckland at the Warman Design and Build Competition held in September in Sydney. The competition challenges second-year mechanical engineering students to design and build a device to solve a practical problem set each year by the organisers, engineering firm Weir Warman.

The Auckland team beat 15 universities from around Australasia to claim the coveted prize. The Mechatronics team comprised students Anatoli Koudriachov, Nicholas Wong and Jonathon Platt from the Faculty of Engineering. Auckland now holds the record number of wins at the annual competition, having clocked up its fourth top placing since 1997.

This year's challenge was to design an autonomous device that would accurately and rapidly distribute wild flower seeds along the highways of fictitious planet Gondwana. The teams manufactured the prototype device using commonly available materials, components and methods. The devices competed on a model circuit in Sydney made up of roads, trees and fields. They were scored on speed, damage to the environment and ability to plant the fields.

Team Manager and Senior Lecturer in Mechanical Engineering Dr Simon Bickerton said this year's prototype used clever design techniques, setting it apart from the others. "Most of the devices were controlled by a programmable microchip, which ours had, but we also had infra-red sensors and a very reliable way of doing a 90-degree turn. The design was well thought-out and executed by some very bright students, who had the added incentive of really wanting to beat the Australians," said Dr Bickerton.

The trio acknowledged the support of IPENZ Auckland Branch, which funded two team members to travel to Australia. A third member was funded by the university.

Member Services

Engineering Practice Support

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

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

Other Membership Benefits

As a fully financial Member you receive:
special Membership rates for IPENZ Short Courses and Convention

reduced rates for American Express credit cards and income protection insurance

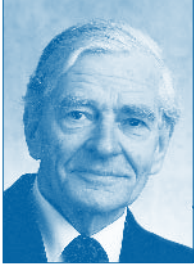
e.nz magazine – our flagship publication promoting New Zealand's engineering innovation, technology and achievements (past issues can be searched at <http://e.nz-magazine.co.nz/main.htm>)

engineering dimension – our monthly newsletter covering Institutional activities and information

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

Informatory Notes

IPENZ seeks to contribute on matters of national interest. One method of doing so is via *Informatory Notes* which give a learned view on important issues independently of any commercial interest. Such notes are not consensus papers of the Institution's Membership but rather an exploration of the issues and possible outcomes. There are 12 *Informatory Notes* currently available on a range of subjects including: economic growth; education; sustainability; climate change; innovation, research and development; and resource management. *Informatory Notes* are freely available from www.ipenz.org.nz/ipenz/media_comm/informnotes.cfm



David Leicester (Les) Steven FIPENZ

6 October 1924 – 14 July 2006

Leicester Steven, one of New Zealand's foremost public health and environmental engineers, died on 14 July 2006 aged 81.

Leicester was born in Christchurch and attended Christ's College before studying engineering at the University of Canterbury. Engineering was in his blood – his grandfather was a joint-founder of

Christchurch firm Steel Brothers. After interrupting university life at the age of 20 to serve in the navy, Leicester completed his studies and began work with Timaru City Council, gaining experience in the whole range of local body services.

In 1954 he undertook postgraduate study in the United States before joining the Christchurch Drainage Board, which sent him back to the United States to become Project Co-ordinator with the American firm designing the Bromley sewage treatment plant. Returning to Christchurch in 1957, Leicester was given responsibility for supervising the construction of the plant.

After completion of the project in 1962, he gave up his position as Deputy Chief Engineer to the Board and established a consultancy practice in the design of wastewater conveyance and treatment systems. The firm became Steven & Fitzmaurice with the addition of John Fitzmaurice as a partner, and later Steven, Fitzmaurice & Partners, ultimately merging with Beca (BCHF Ltd) in 1989.

Leicester was a member of the Earthquake Commission (EQC) board from 1982 to 1997. The EQC recognised his contribution by establishing the Leicester Steven Lectureship in Earthquake Engineering at the University of Canterbury in 1998. He was also a life member of the New Zealand Society for Earthquake Engineering.

He lectured, travelled widely to study wastewater treatment in other countries, carried out investigative studies overseas, and wrote several technical papers. He was active in professional associations in New Zealand, the United States and

Britain. In 1979 Leicester received the Institution's Furkert Award for his paper "City of Hamilton Water Pollution Control Plant".

As part of his wider business interests, Leicester was also a director and chairman of several media companies, including NZ Newspapers, which owned the *Christchurch Star*.

Thanks to Mike Crean and *The Press*, Christchurch



Emeritus Professor Robert (Roy) Geddes CompIPENZ

4 August 1940 – 25 August 2006

Roy Geddes, former Dean of the Faculty of Science and Engineering at Auckland University of Technology (AUT), died on 25 August 2006.

Roy retired from the university in 2005 and was appointed as AUT's first Emeritus Professor, a role in which he continued his contact with and interest in

the university. He had previously served as Associate Professor in Biochemistry at the University of Auckland and was Dean of Science there for eight years.

The promotion of science and technology was a strong area of interest for Roy. He chaired the Royal Society of New Zealand Standing Committee on Science and Technology Promotion, was a long-serving member of the Committee on Science and Technology Education, and a member of the Council of the Royal Society from 2002 to 2004. He was also a Trustee for Technology Education New Zealand, a Trustee of the New Zealand Science and Technology Summer School, and Chair of the board of management for the Genesis Science and Technology Summer Forum.

Roy was made a Companion of the New Zealand Order of Merit in 2002 for services to science and technology education, and a Companion of the Royal Society of New Zealand in 1999.

Roy's biochemical research area was glycogenolysis, for which he was awarded the New Zealand Sesquicentennial Medal in 1990 and a New Zealand Science and Technology Medal in 1999.

Thanks to the Royal Society of New Zealand

IPENZ Members Support Oxfam Water for Survival



IPENZ gives Members the opportunity to donate to the IPENZ Foundation and three other worthy charities when renewing their Membership subscriptions each year.

Contributions from IPENZ Members to the Oxfam Water for Survival (OWfS) programme have helped Oxfam bring safe water and sanitation to some of the world's poorest people. To date, Members have collectively donated \$19,584.

OWfS projects have dramatically improved the quality of life for more than

600,000 people since the programme began in 1988. Oxfam is currently working on long-term programmes in India, PNG, Vanuatu, Tanzania and Ghana, and also responds to emergencies such as the crisis in Sudan and cyclones in the Pacific.

This year's contributions from IPENZ Members (\$4,858 so far) will go towards Oxfam's Ghana water and sanitation programme. In Ghana access to water and sanitation is typically low. Data suggests 50 per cent of the rural population has limited or no access to safe, clean water and only 11 per cent have access to sanitation. Traditional sources of water in many parts of rural Ghana are small ponds and unprotected wells, both of which are prone to contamination, resulting in high incidences of disease. OWfS and community partner Rural Aid are working in the eastern region of Ghana providing hand-dug wells (an appropriate and cost-effective technology for community water supply in Ghana), pumps for use on hand-dug wells, and ventilated pit latrines or VIP toilets. These water and sanitation initiatives will be complemented with hygiene education activities to ensure that beneficiary communities maximise health benefits.

Oxfam says that financial support from IPENZ Members is vital to the construction of essential water access. Over the next year the programme aims to provide 47 hand-dug wells and one borehole serving up to 10,000 people, along with the construction of 1,030 latrines able to serve 3,600 people. This will be supplemented by 165 hygiene promotion sessions reaching 10,000 people.

For more information on OWfS or the Ghana programme please phone 09 355 6509 or email rebecca@oxfam.org.nz All donations over \$5 are tax deductible.

Engineering Awards on This Month

The country's premier engineering event is just around the corner. Yes, the New Zealand Engineering Excellence Awards will be held at TE PAPA in Wellington on Wednesday 22 November. This is your opportunity to be part of the excitement and celebrations as individuals and engineering projects are recognised for their innovation, creativity and contribution to society during a black tie dinner.

Individual awards will be made in four different categories. Eight project awards will also be won and, as a bonus, the overall best project will be awarded the coveted Supreme Award for Engineering.

Individual awards:

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

Category awards:

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

Last year's inaugural event was sold out. To secure your ticket visit www.nzeeawards.org.nz

IPENZ Staff



Rod Hare is Futureintech's new Facilitator, responsible for linking young graduates in technology, science and engineering with schools on the North Shore of Auckland. "My passion has always been to help young people succeed in life and learning and I believe Futureintech is the best place for me to achieve that," he says.

Rod graduated with honours from the University of Auckland with a Master of Science and spent a number of years working in the pharmaceutical industry before taking up science teaching. He has over 15 years' teaching experience at primary, intermediate and secondary levels.

Rod lives in Whangaparaoa and enjoys spending time with his wife and three daughters swimming at the many lovely beaches in the area. He has an almost complete radio control glider in his garage which he hopes to finish soon.

Emma Durham joins IPENZ in the role of Learning and Assessment Administrator.

Born and bred in Hawke's Bay, Emma moved to Rotorua once she had finished high school. While living in Rotorua, she completed a three-year Diploma in Hotel Management.

Emma then lived in Wellington for six years before heading to the United Kingdom for her two-year OE, where she worked for Swiss investment bank UBS. She's just arrived back in the country and has decided to make Wellington her home again.

When she's not at work Emma enjoys cooking, reading and being an armchair critic for most major sports. She describes herself as a "diehard Magpie fan".

And welcome to **Jessica Williamson**, IPENZ's new Office Junior. Jessica is responsible for assisting with reception duties and Membership database maintenance, organising rooms and catering for meetings, and sending out Branch and other newsletters.

Jessica finished Year 13 at Wellington Girls' College in 2005, where she was on the executive council (similar to a prefect). She then worked in hospitality and customer service roles before joining IPENZ.

In her spare time Jessica enjoys sewing her own clothes, crocheting, listening to music, reading, and spending time with family and friends.



Member Services

IPENZ Branches

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

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

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

Engineering Practice Support

IPENZ encourages Members to follow recognised professional practices in their day-to-day engineering activities. To assist Members in doing so IPENZ has developed a series of *Practice Notes* as a source of endorsed advice to engineers on practice-related issues. *Practice Notes* currently available include:

- Note 1 – Producer Statements
- Note 2 – Peer Review
- Note 3 – Media Tips
- Note 4 – Safety and Engineers
- Note 5 – Sustainability and Engineers
- Note 6 – Developing and Maintaining Client Relationships

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

Public Policy

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

We provide up-to-date policy information to keep our Members informed and encourage their participation in the public policy process.

To find out more visit www.ipenz.org.nz/IPENZ/Media_Comm/PP_Intro.cfm

New Zealand Honours – Nominations Open

There are many IPENZ Members who should be recognised nationally for a job well done, and perhaps the highest tribute is a New Zealand Honour. Nominations for the 2007 Queen's Birthday Honours are open until 1 February 2007.

There are two options for Members who wish to help submit a nomination. The first is for Members to suggest suitable nominees so that IPENZ can take the lead and make a nomination.

The second option is for Members to take the lead in the nomination process. As IPENZ would like to support nominations of professional engineers, Members may request that IPENZ provides a letter of support. To assist in this process we will need sufficient information to make a case.

Each nomination needs a covering letter outlining the grounds for recognition, plus a factual statement of the services and/or activities for which it is considered the nominee merits recognition. The statement should include details of any relevant positions held and dates of service.

If the services are voluntary this fact should also be noted. IPENZ can then support the nomination, preferably in conjunction with other organisations to add weight to the nomination. Please ensure the full name of the nominee and their current address is attached.

All nominations are confidential. For more information visit <http://www.dPMC.govt.nz/honours/index.htm>



The IPENZ Professional Development Programme is designed specifically to contribute to developing and maintaining Members' competencies as professional engineers, engineering technologists and engineering technicians.

Contract Management

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

Nelson 24 November 2006

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

Participants may choose to do a work-based project after some short courses and submit it to the facilitator for feedback. If this assessment option is chosen, the additional cost is \$54 incl GST. All short courses may be tailored to suit the needs of organisations.

IPENZ Professional Development Short Courses

November 2006

Timber Design Seminars

IPENZ is supporting the Timber Design Society to offer these seminars which promote the use of timber design and present current information relating to design options and NZ Standards.

Wellington 15 November 2006
Christchurch 16 November 2006

Cost: \$125 incl GST
\$25 incl GST – university students

Project Management Distance Learning Course

IPENZ and PPM Ltd are offering a distance-learning course in project management consisting of 125 hours of course study and assignment work. Full information is available at www.ipenz.org.nz/ipenz/nzecal/distance-learning.cfm

Short Courses in Project Management

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

Project Management Overview

Auckland 13 November 2006

Project Planning and Control

Auckland 14 November 2006
Wellington 20 November 2006

Project Risk Management

Auckland 15 November 2006
Wellington 21 November 2006

Project Cost Management

Auckland 16 November 2006
Wellington 22 November 2006

Cost: \$618.75 incl GST – IPENZ Members
Non-members must register directly with ProjectPlus.

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

Professional Development in 2007

Watch this space for short courses coming up next year. New courses are currently under development in both technical and management topics. If you or your organisation has a particular request for a short course, please contact Sharon Wagg, Knowledge Services Manager, email swagg@ipenz.org.nz



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engineering dimension is the official journal of The Institution of Professional Engineers New Zealand Inc
Pitahi Kaiwetepeanga Ngaio o Aotearoa