

## Maintaining Visibility in Wellington

In early August, the IPENZ governing Board and the New Zealand Council of Engineering Deans co-hosted a function in Wellington for key stakeholders.

Guests at the function included Cabinet Minister the Hon Clayton Cosgrove, one of the three engineering Members of Parliament Dr Ashraf Choudhary, and a range of senior staff from government departments and agencies. Also in attendance were a number of senior staff from private sector organisations.

From an IPENZ viewpoint, the purpose of such occasions is to lift our profile amongst New Zealand's key influencers and decision makers. With personal contact from IPENZ representatives, they are more likely to pick up the phone and listen to our views, and read the information that we produce.

The New Zealand Council of Engineering Deans comprises the individuals responsible for overseeing the four-year professional engineering degrees currently offered at New Zealand tertiary education organisations. The function was the first time that the Council has sought a public profile in this manner, and it was an opportunity for members to introduce themselves, and their role in seeking unified approaches on matters affecting engineering education.

IPENZ used the occasion for President Jeff Jones to publicly announce our recent successes in the international arena. These included:

- the renewal of IPENZ's status as signatory to the Washington Accord
- our success in passing our first review under the Engineers Mobility Forum (EMF) agreement which confirmed the international acceptance of the standard we have set for our International Professional Engineer (IntPE) register
- our appointment as secretariat for all the international engineering agreements
- the election of Basil Wakelin DistFIPENZ as Deputy Chair of the EMF agreement

The President also took the opportunity to emphasise the issue of engineering skill shortages in both the short and longer term.



Engineering MP Dr Ashraf Choudhary and Ian Maddox from Massey University

Since 2000, IPENZ has produced considerable evidence that the proportion of professional engineers amongst the tertiary-educated workforce is a critical success factor to resolving both economic and environmental issues.

The feedback received by Board Members and senior IPENZ staff at the function was that IPENZ is held in high regard, our views are considered worth listening to, and the way we present is seen as positive. IPENZ is not seen as a lobby group, but rather as an agency supporting the public good.



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# Reflections from the Big Smoke

Those who have heard me speak at Branch meetings around the country will recall that I showed the percentage of graduates from our universities who can be broadly described as “engineers”. Currently New Zealand’s percentage is about 5.8 – just behind the United States at 6.25, with Australia at 7.5, central European countries at 12.5–17.5 and Scandinavia at 22! My message is that we don’t rate. Indeed, if it wasn’t for Iceland, out of the 26 countries listed we would have the wooden spoon.

Last month, I visited my brother in Baltimore so I took the opportunity to arrange a visit to the ASCE (American Society of Civil Engineers). An email to ASCE’s President, Bill Marcuson, was all that was required to set up a very fruitful meeting at their headquarters in Reston, Virginia.

The half-day meeting was attended by Bill Marcuson, President Elect Dave Mongan and six senior ASCE staff. I quickly learnt they are not only painfully aware of the issues we are facing but they are actively addressing them. Last year, Dave Mongan chaired a summit on the future of civil engineering from which a vision for 2025 was established. The summit was attended by a select group of leading civil engineers, as well as engineers from other disciplines, architects, educators and other professional group leaders. Eight other countries, including Australia, were also represented at the summit.

The summit formulated a vision focusing on the role of civil engineers in 2025 as “master builders, environmental stewards, innovators and integrators, managers of risk and uncertainty, and leaders in shaping public policy”. Lest I be criticised for having a “civil” focus, I am sure that summits of other engineering disciplines would have formulated similar visions appropriate to their discipline but also concluding with the leadership role of engineers as professionals.

At my meeting, ASCE shared how it is addressing the barriers to achieving its 2025 vision. These issues were not new to me, and many are identical to those that we are grappling with as a profession in New Zealand – under-production of engineers being one of them. Encouraging young people, particularly young women, to choose engineering as a career at an early stage and ensuring that our engineers receive training that goes beyond technical competence are just two of the initiatives that ASCE is actively pursuing, spurred on by the findings of the summit. It has allocated considerable resources to the former and is more than happy to share its experiences with us.

I was able to collect resources and contacts, particularly for initiatives targeted at young people, in some cases as young as nine years old. Some of those resources are based on a reality TV programme called *Design Squad* which ASCE has assisted in producing. All are intended to “inspire a new generation of engineers”, representative of the communities they will serve and lead.

ASCE is also working on building the profile of professional engineers and doing what it can as a professional body to influence the direction of federal, state and local policies on relevant matters. One of these – infrastructure renewal – is a hot topic in United States, particularly after the Minnesota bridge collapse and the New Orleans disaster. In 2005, ASCE prepared a report card for the incoming Congress that gave the country’s infrastructure an overall average score of D – poor. ASCE advised Congress that, apart from necessary statutory fixes, some \$1.6 trillion in federal, state and local funds was required over the next five years to lift that overall average score to an acceptable level.

Fortunately, here in New Zealand the scale of our problems is not of that order, but neither do we have the same level of resources for creating solutions. Last month I touched on the flood mitigation problem. The impact of climate change will very likely focus our attention on renewing infrastructure associated with that mitigation. In other areas, our infrastructure may be a little younger or under less pressure than that in the United States. We would do well to learn from American experiences and not wait until we get to failure mode before we focus on solutions.

**Jeff Jones**  
President



# Futureintech's New Face

IPENZ's Schools Team has been working hard to promote its services with new cars, an updated website and a raft of new resources.

## Team transport

Futureintech's presence around New Zealand has become more prominent with the introduction of stencilled cars for the regionally-based Futureintech Facilitators. With the Futureintech logo, website and the individual region on permanent display, they give Futureintech a uniform, professional image. The new cars also take advantage of the fact that the Facilitators spend much of their time on the road by ensuring the initiative is promoted wherever they go.

## Living up online

Futureintech's online presence [www.futureintech.org.nz](http://www.futureintech.org.nz) has also been updated, and the newly revamped website has already received positive feedback. With a clean, uncluttered look and greater use of pictures, the new website reflects the progress Futureintech has made over the past four years in working with students, caregivers, teachers and industry.

The website provides hundreds of profiles of young people working in technology,

engineering and science, and profiles of the companies that employ them. Also featured is information on relevant courses and tertiary providers across the country, and regular updates on Futureintech's activity in schools.

## Focus on resources

Techlink and Futureintech's recent focus has been on publications, with new resources constantly in production for both initiatives.

As part of its ongoing mission to provide resources supporting the developing technology curriculum in schools, Techlink is delighted to launch its latest print publication *Technology Education: Celebrating the work of New Zealand students*. The new brochure celebrates the achievements of students across New Zealand who have taken advantage of the breadth of the technology curriculum. It offers schools an in-depth insight into how technology education can be made to work for them by showcasing a wide variety of design projects ranging from differential gauges to in-flight meals. The

projects demonstrate the diversity of possible options when the subject is approached imaginatively.

Meanwhile, Futureintech's range of materials for secondary students is expanding, with a series of brochures focusing on careers in specific sectors. The brochures are produced in collaboration with industry partners to ensure the accuracy of the information, and provide an overview of what the field involves and the different jobs that are available.

The first in the collection is a guide to careers in the food industry which was created with the assistance of the New Zealand Institute of Food Science and Technology. The Society of Chemical Engineers New Zealand has been involved in the development of a publication on chemical and process engineering which will soon be available, and brochures on biotechnology, electronics and ICT are also in the pipeline.



# IPENZ Fellowships and Awards 2008

Each year at the Fellows' and Achievers' Dinner held in March, IPENZ recognises leaders, contributors and achievers in a number of categories. Expressions of interest for the 2008 Fellowships and Awards are now open.



## Fellow

This category acknowledges a Member's contribution, recognised by peers, to the advancement of the profession, IPENZ or leadership in one or more of the following areas:

- creation of engineering knowledge by research
- development of improved engineering practices, codes or standards
- development and enhancement of IPENZ and/or its subsidiary organisations
- education that builds engineering and technology skills in New Zealand
- the raised profile and standing of engineering in the community
- an engineering innovation, creation or design with wide impact

## Supreme Technical Awards for Engineering Achievers

Sponsored by Opus International Consultants

The Supreme Technical Awards recognise technical expertise in engineering as exemplified by contributions to the advancement of engineering practice, innovation or technical breakthroughs. Evidence may include:

- technical papers advancing knowledge
- recognition by others (nationally or internationally) of leadership in a practice area
- a track record of creating new solutions to engineering problems
- major improvements in engineering practice through codification or standard development
- ingenious new artefacts, products, systems or services with enhanced properties

There are four categories available in 2008 and four available in 2009.

### 2008

#### Dobson Award

Transportation – the design, construction and operation of all forms of transportation, including road, rail, air and shipping

#### Rabone Award

Information and Communications Technology – the design and manufacture of technologies associated with generating and transmitting information, including telecommunication and radio engineering

#### John Cranko Award

Mechanical and Manufacturing – all forms of mechanical and manufacturing-based engineering such as the design, manufacture and operation of plant and equipment, both static and mobile

#### Furkert Award

Sustainability and Clean Technology – emerging technologies associated with the design and production of products and services to reduce and minimise the effect of human activities on the environment

## Distinguished Fellow

This category recognises an existing Fellow's eminent contribution over an extended period of time to leadership in engineering in a technical or wider context.

Distinguished Fellows are recognised for eminent achievements in one or more of the following areas:

- research
- engineering practice
- leadership
- contribution to the community
- innovation or invention
- fostering of engineering in business

## Honorary Fellow

This category recognises an eminent contribution to the advancement of engineering over an extended period.

An Honorary Fellow is a non-member of IPENZ who is a non-engineer or a person holding an engineering qualification but whose career has been outside engineering in a traditional sense.

Honorary Fellows are recognised for eminent achievements in one or more of the following areas:

- research
- engineering practice
- leadership
- contribution to the community
- innovation or invention
- fostering engineering in business

2009

#### Freyssinet Award

Building, Construction and Amenities – design and construction of buildings and structures, including any associated geotechnical, structural and building services engineering work

#### Angus Award

Utilities and Networks – design, construction and operation of all forms of infrastructure and utilities, including water, waste, energy and communication services, and the non-electrical elements of electricity generation and transmission

#### Skellerup Award

Food, Bioprocess and Chemical – design, construction and operation of plant utilising chemical and bioprocess-based technologies, including petrochemical, primary process, pulp and paper, and food industries

#### Evan Parry Award

Electrical and Systems – design, manufacture and operation of plant, equipment and systems using electrical engineering, including automation and control, and electrical generation, transmission and utilisation

### Turner Award for Professional Commitment

This award recognises a Member's demonstrated commitment to the ideals of a self-regulating profession as judged by some of the following criteria:

- actively upholding and promoting the ideals of a profession
- contributing to the processes of self-regulation – voluntary activities on committees, taskforces, panels etc
- willingly disseminating technical information to colleagues, as well as the wider community
- promoting engineering as a career to young people and/or mentoring young engineers
- consistently demonstrating and upholding the IPENZ Code of Ethics
- being actively involved in community affairs
- ongoing commitment to upskilling and maintaining their own knowledge and professional skills

- > Nomination and entry forms for all Fellowships and Awards are available at [www.ipenz.org.nz/IPENZ/who\\_we\\_are/honours\\_and\\_awards/Nom\\_app.com](http://www.ipenz.org.nz/IPENZ/who_we_are/honours_and_awards/Nom_app.com)
- > Expressions of interest close 1 October and nominations and entries close 31 October

## Ray Meyer Medal for Excellence in Student Design

This year the IPENZ Student Design Award was renamed the Ray Meyer Medal for Excellence in Student Design.



Professor Ray Meyer

**Professor Ray Meyer DistFIPENZ** was President of IPENZ in 1982–83 and Dean of the School of Engineering at the University of Auckland from 1971 to 1974 and again from 1978 until 1992. Throughout his career he was actively involved in the design and commercialisation of research. Professor Meyer has held and holds positions on the governing boards of a number of companies with excellence in engineering as an essential part of their business. He was made an Officer of the New Zealand Order of Merit for his contribution to engineering and education.

The award was renamed in recognition of Professor Meyer's achievements, with the aim of encouraging a new generation of innovative engineering designers. It is open to all fields of engineering in which IPENZ accredits qualifications. Design projects are not only undertaken in subjects labelled "design project" but may also be found in some final-year research projects where the objective is to design, build and demonstrate a new or improved device.

The Ray Meyer Medal will be awarded to the student or group of students presenting the best final-year design project as part of an IPENZ-accredited qualification. One of the key changes to the criteria is the way projects are submitted. Projects must now be nominated by engineering deans or programme leaders to be eligible.

Entries for the inaugural Ray Meyer Medal for Excellence in Student Design are now open and entry forms can be downloaded from the IPENZ website [www.ipenz.org.nz/IPENZ/who\\_we\\_are/honours\\_and\\_awards/awards\\_events/studentDesign.cfm](http://www.ipenz.org.nz/IPENZ/who_we_are/honours_and_awards/awards_events/studentDesign.cfm)

The Ray Meyer Medal will be presented for the first time at the Fellows' and Achievers' Dinner to be held in March 2008 in Christchurch.

# New Zealand Engineering Excellence Awards Judges

In this issue's volunteer profile, we meet the judges for the 2007 New Zealand Engineering Excellence Awards.



Steve Gentry

While the New Zealand Engineering Excellence Awards winners are announced in November each year, the task of judging the entries begins four months earlier. This year that job got even larger, with a record-breaking 76 entries to consider, 18 for the individual awards and 58 for the eight category awards which focus on projects.

There are two teams of judges – one allocated to the individual awards and one for the category awards. For each award, the judges independently assess each entry and allocate a score according to the judging criteria. Once that time-consuming task is complete, the judges get together to discuss their assessments and scores and come up with a shortlist of possible winners. Once the shortlist is established, the judges work together to reach a consensus on the winner for each award. There is an extra level of judging for the category awards. The judges compare the winners from all of the categories to choose the recipient



Warwick Bishop

of the Supreme Award for New Zealand Engineering Excellence – the project that has the “zing” factor and clearly stands out from the others in terms of its contribution and standing.

With such a diverse range of entries, the judges have a challenging role but, as in previous years, this year's judging panel has an impressive breadth and depth of experience to draw on.

#### Individual awards

**STEVE GENTRY DistFIPENZ** is a retired consulting engineer. He was New Zealand's first and only President of the International Federation of Consulting Engineers (FIDIC) – the international body representing the consulting engineering community.

Steve is a former Director of Energy Direct, ECNZ, Meridian Energy, Whispergen, Building Research and BRANZ Ltd. He is a member of the Chartered Professional Engineers Council, and a Trustee of



Gretchen Kivell

the IPENZ Foundation, the Red Cross Foundation and the Katherine Mansfield Fellowship Trust.

**WARWICK BISHOP FIPENZ** has a background in electrical (radio) engineering and extensive managerial and directorship experience on both sides of the Tasman, including positions as Chief Executive of IPENZ, the New Zealand Meat Producers Board, Works Corporation and AWA in both New Zealand and Australia. He has also worked as a technical management consultant in both countries.

Warwick maintains strong links to the engineering profession as the Executive Officer to the Chartered Professional Engineers Council, as a Trustee of the IPENZ Foundation and as the lead judge for the IPENZ Foundation scholarships. He is a past President of the Rotary Club of Nelson.

**GRETCHEN KIVELL DistFIPENZ** worked as a chemical engineer in New Zealand and England for 18 years before moving into senior management at UNITEC in Auckland. For the last 10 years she has been head of one of the University of Otago's residential colleges.

Gretchen was Chair of the Auckland Branch in 1984 and President of IPENZ in 1998. She has been a Director of Telarc/Accreditation NZ, Worley Consultants and the Land Transport Safety Authority.

Gretchen is proud of her role in chairing the IPENZ 1990 committee that put 82 plaques on engineering heritage sites around the country, and also her championing of women in the profession.



Laurence Zwimpfer



Venetia Sherson



David Elms

**LAURENCE ZWIMPFER FIPENZ** runs a private company in Wellington specialising in the use of information and communication technologies in education.

His engineering career commenced in the 1960s with the New Zealand Post Office and this was followed by a decade with Telecom New Zealand. He currently chairs e-Learnz, an incorporated society of tertiary institutions with an interest in e-learning. He is a Trustee of both the 2020 Communications Trust and the Computer Access New Zealand Trust.

Laurence is Deputy Chair of the National Commission for UNESCO in New Zealand and also chairs the Communications Sub Commission. At the international level he chairs the 26-country Intergovernmental Council for the UNESCO Information for All Programme.

In 2006, Laurence was awarded the Rabone Award – the IPENZ Supreme Technical Award for Engineering Achievers in ICT – and the



Allan Leahy



Paul Sampson

William Pickering Award for Engineering Leadership.

**VENETIA SHERSON** is the specialist judge for the Award for Excellence in Engineering Journalism. She has been a reporter, editor and freelance feature writer for more than 30 years.

From 1997–2003 she was Editor of the *Waikato Times*, twice winning the Qantas Award for Editorial Writer. In 2004, she was awarded the ONZM (Officer of the New Zealand Order of Merit) for services to journalism, the first female newspaper editor to receive the honour.

Venetia is now Editor-in-Residence at Waikato Institute of Technology in Hamilton, is a media trainer and conducts newsroom management training courses.

#### Category awards

**DAVID ELMS DistFIPENZ** is Emeritus Professor of Civil Engineering at the University of Canterbury and a Fellow of the Royal Society of New Zealand. He is currently a consultant, specialising in risk management and issues related to complex systems. This has involved him in such areas as lifelines, transportation, environmental impact and geotechnical engineering.

David has been involved in the Prime Minister’s Special Committee on the Safety of Nuclear Powered Ships, the Board of Inquiry into the Taranaki Combined Cycle Power Station and the team inquiring into the Police INCIS project.

David also has a background in structural and aeronautical engineering.

**PAUL SAMPSON MIPENZ CPEng IntPE(NZ)** recently retired after a career in local government as District Engineer for Rotorua District Council and County Engineer for Taupo County Council.



Peter Vernon

Paul has been an executive member of INGENIUM for many years and is a life member of that organisation. He has been involved in a number of advisory committees interacting with Transit New Zealand, Transfund and the Fire Services Commission. He was Chairman of the Fire and Rescue Services Industry Training Organisation.

Paul has an engineering background in roading and small wastewater tertiary treatment plants.

**PETER VERNON FIPENZ** has had a long career in the electricity industry, initially in the State Hydro-electric Department, but mainly with the Wellington City Council Municipal Electricity Department, where he was Chief Executive for 17 years.

Peter is a Past President of IPENZ, and spent nine years on the Engineers Registration Board, eight as chair. He was the Deputy Chair of the Centre for Advanced Engineering board and was for several years a member of the New Zealand Energy Research and Development Committee.

He has been consulting in the industry since his retirement.

**ALLAN LEAHY MIPENZ** is a civil engineer by qualification and stormwater manager by preference. He is a Director of Harrison Grierson Consultants Ltd and leads the company’s specialist stormwater team.

He has been involved for over 20 years in the stormwater industry in New Zealand and Australia, working for a range of client organisations, and has presented a number of conference papers in this field.

Allan is a founding committee member of the New Zealand Water and Wastes Association’s stormwater special interest group.

# Ethics Talk

This issue of *engineering dimension* introduces a new feature on ethics. IPENZ Manager – Ethics and Discipline **ANDREW CLARK** will be exploring the IPENZ Code of Ethics and relating its values, guidelines and minimum standards to everyday engineering situations.



As a Member of IPENZ you are obliged to comply with IPENZ's Code of Ethics. The Code of Ethics is written in three parts that outline values, guidelines and the minimum standards of acceptable ethical behaviour expected of IPENZ Members.

The values in the Code of Ethics describe the fundamentals of the professional behaviour expected of an IPENZ Member in the delivery of their engineering services to society.

The five values underpinning the IPENZ Code of Ethics are as follows:

### **Protection of Life and Safeguarding People**

Members shall recognise the need to protect life and to safeguard people, and in their engineering activities shall act to address this need.

### **Professionalism, Integrity and Competence**

Members shall undertake their engineering activities with professionalism and integrity and shall work within their levels of competence.

### **Commitment to Community Well-being**

Members shall recognise the responsibility of the profession to actively contribute to the well-being of society and, when involved in any engineering activity shall endeavour to identify, inform and consult affected parties.

### **Sustainable Management and Care for the Environment**

Members shall recognise and respect the need for sustainable management of the planet's resources and endeavour to minimise adverse environmental impacts of their engineering activities for both present and future generations.

### **Sustaining Engineering Knowledge**

Members shall seek to contribute to the development of their own and the engineering profession's knowledge, skill and expertise for the benefit of society.

Each of the values represents a cornerstone of the foundation of good engineering practice. By adhering to these values engineers will not only act in a professional manner but contribute to the engineering profession for the benefit of society. This isn't merely achieved through the work that is done by individual engineers but also through developing the engineering profession's knowledge and expertise gained from this work.

However, as with anything that is open to interpretation, the Code of Ethics can sometimes be misused. This can happen in situations where there is a dispute between two parties. When a client is unhappy with the work that has been performed by an engineer he or she may approach another engineer to finish the work. Is it unethical for the engineer to take on the work?

Applying ethical principles requires judgement. Is it ethical to design to a minimum standard when you know the minimum standard would not be adequate for the given situation? Is it ethical to change the parts specified for a project after the client has agreed to the design and costs? Is it ethical to not inform your client you will be charging separately for the issue of a producer statement? Are you in breach of the Code of Ethics if you hinder innovation either in private or in public?

Actual case studies will be used to discuss these dilemmas and the interpretation of the Code of Ethics in future issues of *engineering dimension*.



> You can read the full version of the IPENZ Code of Ethics on the IPENZ website

[www.ipenz.org.nz/ipenz/who\\_we\\_are/ethics\\_inc.com](http://www.ipenz.org.nz/ipenz/who_we_are/ethics_inc.com)

> *IPENZ Practice Note 08 "Engineers and Ethical Obligations"* also offers guidance to practising engineers and can be viewed in the Member Area of the IPENZ website

[www.ipenz.org.nz/ipenz/members/practice-notes/default.com](http://www.ipenz.org.nz/ipenz/members/practice-notes/default.com)

# Pioneering Engineer Dies

**SIR ANGUS TAIT HonFIPENZ**, well-known New Zealand business innovator and founder of Tait Electronics, died last month aged 88.

Sir Angus's interest in electronics began as a 13-year-old Waitaki Boys' High School student in Oamaru. His curiosity persisted and against his mother's advice he left school in 1936 (aged 17) without any formal qualifications to take a job at a local radio shop.

With a few trade exams under his belt he joined the Royal New Zealand Air Force four years later and served over England during World War II with the airborne radar.

After returning home to New Zealand, Sir Angus formed his first company A M Tait Ltd in 1948. After successfully selling his mobile radio systems to two taxi companies, he developed the AM T4 radio, which contributed much to his company's success. A M Tait Ltd employed 100 people at its height, but by 1967 the company declined into receivership.

Undaunted by his setback, Sir Angus mortgaged the family home in 1969 and founded his next venture – Tait Electronics. He never looked back.

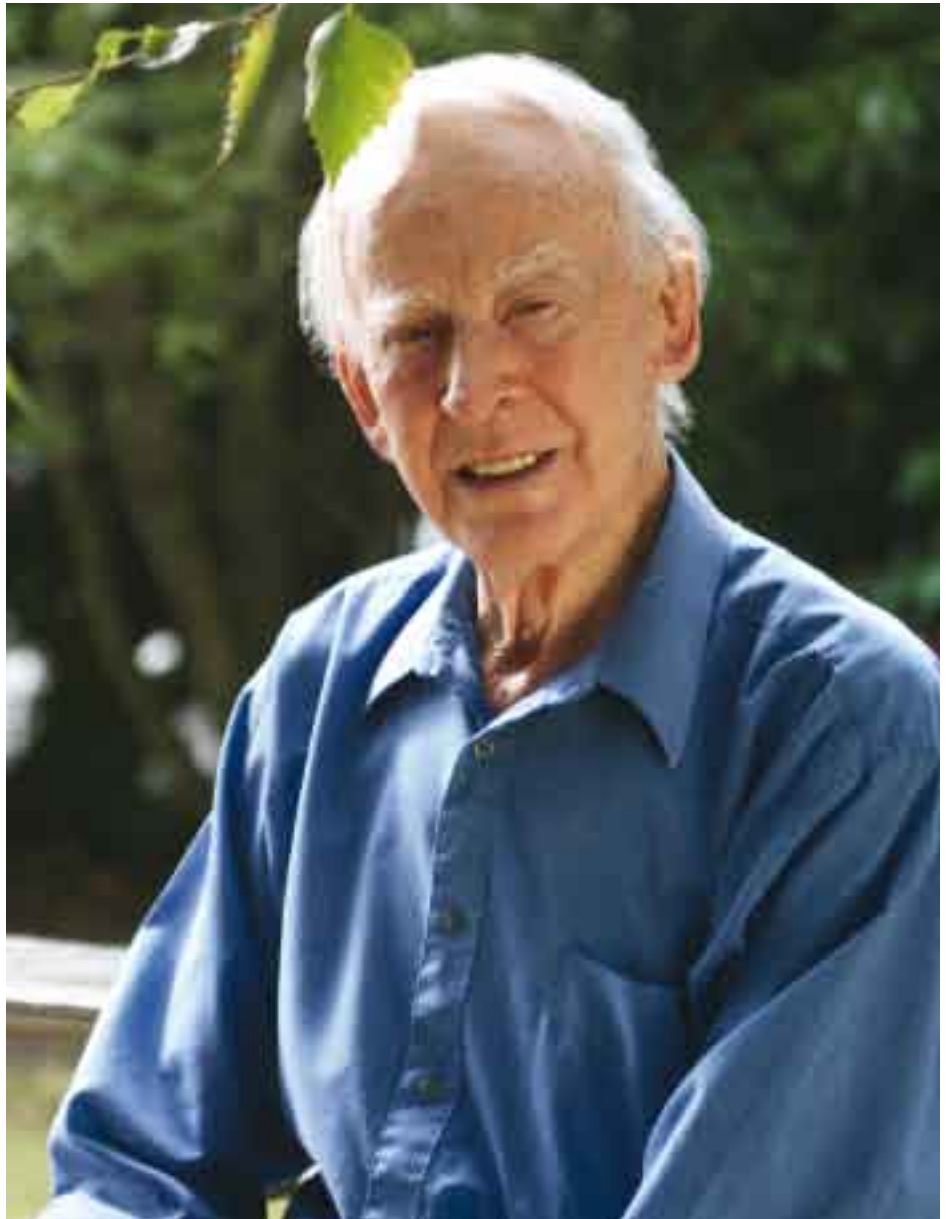
After early successes designing and manufacturing all-transistor mobile radio products in the 1970s, Sir Angus steadily expanded his business, buying premises in Christchurch and establishing subsidiary companies in Europe, Australia and the United States.

Today, Tait Electronics has two Exporter of the Year awards hanging on the wall, employs around 850 staff and has secured its position as a leading provider of radio communications solutions to public safety organisations, utilities and transport providers in over 140 countries worldwide.

Sir Angus's knack for business also inspired a positive culture and strong loyalty amongst his staff. He voluntarily provided benefits and encouraged in-house training programmes, and at age 75 he opted to place his Tait Electronics shares into a trust, sacrificing his personal wealth but ensuring manufacturing jobs will remain in New Zealand for some time.

In 1996, the University of Canterbury awarded him an honorary engineering doctorate, and he was made a Knight Companion of the New Zealand Order of Merit for services to technology, manufacturing and exporting three years later.

Michael Chick, Managing Director of Tait Electronics, says Sir Angus remained actively involved with his company right until his death. "He was an immensely determined yet compassionate man, a great innovator



Sir Angus Tait, 26 June 1919–7 August 2007

Photo by Guy Frederick

and mentor for so many. He was humble and curious, never seeking the limelight but never shy of making his voice heard if it would help business and education in New Zealand."

Sir Angus is survived by his wife Hazel, three children and a grandchild.

*IPENZ also notes with regret the passing of Life Members Wilfrid Hardman FIPENZ and Bernard Dowrick FIPENZ.*

> To find out more about Tait's key role in Emirates Team New Zealand's America's Cup campaign check out the September/October issue of e.nz magazine.

# Have You Joined the engeneration?

Earlier this year the launch of engenerate kicked off the Year of the Young Engineer. Since then, young engineers have been getting the President's Initiative off the ground all over the country.



With a pool of 25 young IPENZ Members in the region, there was a great turnout of 30 at the engenerate Southland launch, including six young engineers who were new to IPENZ. At the other end of the country, engenerate Auckland got off to a fine start in August despite the stormy weather, with close to 100 people attending its launch.

## engenerate crews

Along with social opportunities that allow the engeneration to network with fellow engineers, some serious learning is taking place. engenerate aims to aid young engineers as they prepare for competence assessment, and provide a facility for structured professional development. To that end the engenerate "crews" around the country have organised CPEng workshops, technical presentations, introduction to IPENZ sessions for recent graduates, and presentation competitions.

IPENZ National Office is doing its bit to help by holding MIPENZ and CPEng information sessions around the country with staff members available to answer those tricky questions. To help target learning, short course descriptions in *engineering direct* now indicate which competence standard elements align with each course. The engenerate logo also appears next to courses that help Members prepare for competence assessment.

If you think over-30s don't have a place in engeneration then think again – anyone willing to be a mentor or provide support can get involved. Visit the engenerate website to find your local contact.

engenerate also enjoys support from many companies, especially those who employ engenerate crew members and allow their employees to use their facilities for meetings and take time to arrange these wonderful events. engenerate has truly become a collaborative programme which we hope will enjoy even more success in the future.

Are you interested in finding out what's happening in your area? Visit [www.ipenz.org.nz/engenerate](http://www.ipenz.org.nz/engenerate) and take a look at what's on offer.

## engenerate Waikato-style

**BRIDGET BURDETT GIPENZ** reports on the events held in her area since the group's inception.

We kicked off engenerate Waikato in March with a visit from Jeff Wastney, IPENZ Registrar, who gave a presentation about IPENZ and the CPEng process. The presentation was targeted at those planning to apply for CPEng status soon.

In July, the engeneration visited the University of Waikato's state-of-the-art driving simulator, used to conduct road safety and driver behaviour research. Dr Samuel Charlton gave a presentation on human factors and engineering psychology, before showing us the simulator. Several of the engeneration tried out their driving skills – sadly many came to grief on the simulated State Highway 2 at virtual speeds of over 200km/h!

In August, we had a follow-up workshop to March's CPEng presentation, to allow Hamiltonians to meet and work on their CPEng applications together.

Looking forward, engenerate Waikato is gearing up for the Brian Perry Civil presentation evening on 19 September which has a good line-up of young speakers vying for cash prizes. In October, Jeff Wastney is returning, this time to give an introduction to IPENZ and the CPEng process to recent graduates who may not know what it's all about. These presentations will be held in Hamilton and Rotorua, with transport offered from other Waikato locations on request.

## Christchurch Engineer Wins Two National Awards

Beca structural engineer **SAMIR GOVIND MIPENZ CPEng** collected two national awards in August. He was named the Telecom/ACENZ Future Leader 2007, in recognition of his leadership within New Zealand's engineering industry, and the New Zealand Institute of Building *Progressive Building Magazine* Young Achiever of the Year.



Samir Govind

Samir moved to Christchurch from Auckland in 2004 to set up a new structural engineering practice in the South Island. Three years later, he is the Manager of Beca's Christchurch structural business unit, which includes a team of 13.

South Island Regional Manager, Craig Price MIPENZ CPEng, said Samir faced a number of challenges in moving to Christchurch, including limited market contacts and little knowledge of the city and region.

"In just three years, Samir has become a key player in the Canterbury consulting engineering community. He's had a hand in everything from the Christchurch Arts Festival to the new ICT Centre at the University of Canterbury, where he's Beca Job Manager. He's not afraid to lobby for what he believes in, and as a result he has helped Beca increase its involvement in a number of projects under way in the region."

Other major South Island projects Samir is involved with include the Wairau Hospital redevelopment in Blenheim, and the Christchurch South Police Station.

Samir has a Master of Engineering from the University of Auckland. He is currently on the southern chapter board for the New Zealand Institute of Building and provides industry mentoring support at the University of Canterbury for structural engineering students.

# Member Appointed to Economic Development Agency

Consulting Engineer **TAN PHAM MIPENZ CPEng IntPE(NZ)** has been appointed as a Director of Wellington's newly established Regional EDA (Economic Development Agency) Ltd.

REDA was set up to implement the economic development elements of the Wellington Regional Strategy. The Strategy was developed by greater Wellington's nine local authorities in tandem with the business, education, research and voluntary sectors, and central government.

Tan's appointment acknowledges the importance of the engineering profession in the region's economic development. A large number of engineers are employed in manufacturing, consulting and utilities businesses, and many of these firms are actively involved in exporting which contributes significantly to greater Wellington's economic growth.

Tan is currently Chief Executive of AC Consulting Group (ACCG), which he founded with three others in 1990. Currently, ACCG has offices in Auckland, Wellington, Christchurch and Melbourne,

and will soon open an office in Hanoi.

Tan started his career working on the engineering design and operation of thermal and hydro power stations. In the last 10 years, most of his work has been overseas in the areas of seismic engineering, rural water supply, electrification, and natural hazards such as earthquakes, floods and tsunami.

He initiated and first co-chaired the Natural Hazards Business Cluster to promote New Zealand services in natural hazards internationally. Tan is a Trustee of the Multicultural Learning and Support Services, and a member of the Asian Studies Institute Council.

Originally from Vietnam, Tan obtained his engineering degree from the University of Auckland, and finance and economics qualifications from Victoria and Massey Universities.



Tan Pham

## Highlights from August Board Meeting

The IPENZ governing Board met on 7 August 2007 with the following activities and outcomes.

- Minor changes to the strategic plan were approved. These changes delineate more explicitly the differences between our public policy programme (developing informed technical comment on issues of the day) and external communications.
- The Board approved small subscription increases for the next financial year. The subscription for a Professional Member will increase by \$12.50 + GST from 1 October 2007 – a rise of about three per cent. Other subscription rises will be of a similar size.
- Priorities for using any discretionary resources in the period 2008–2011 were established. Priority is being given to expanding IPENZ's capability to formulate and then represent the views of engineers on issues of the day, but it was noted that it will not be possible to commit those resources until the future funding available for the Techlink programme is confirmed.
- New Chairs for the Competence Assessment Board and Standards and Accreditation Board were confirmed to free Basil Wakelin for his international role as Deputy Chair of the Engineers Mobility Forum. Joanna Saywell will now chair the Competence Assessment Board and Paul Wilson will chair the Standards and Accreditation Board.
- A preliminary budget for 2007/2008 was reviewed. Turnover will again be over \$7 million, and again subscriptions will comprise only 35 per cent of turnover.
- Progress reports for the year to date were received. A Membership rise of almost five per cent looks likely and good progress is being made on most other work streams.
- Feedback was received from the Senior Office Holders on their meeting with counterparts from Engineers Australia. IPENZ is growing more rapidly than Engineers Australia, but they have some programmes that we can learn from, particularly in the areas of graduate development and working with young people.
- The Board received progress reports on visits to Branches by the Chief Executive and Board Members (in parallel with the President's visits). Feedback from the visits indicates a general level of satisfaction with the way resources are being applied.

## Auckland v Canterbury

In July, traditional engineering school rivals Auckland University Engineering Society (AUES) and the University of Canterbury's ENSOC competed for the Brockett Cup. The annual rugby match was played at the Auckland Domain and ENSOC pulled off a narrow win.

The AUES team, wearing its traditional hi-viz orange, started the game strongly, winning a tight head and scoring a try. ENSOC hit back with a try, but AUES still led at half-time.

With five minutes to go, AUES was up by 12 points thanks to two tries scored out wide. But as AUES contemplated victory and started to rest on its laurels, ENSOC twice scored under the posts in quick succession, making the final score 26–24 and breaking AUES hearts in the dying stages of the match.



# Wel Networks Appoints IPENZ Member

**JULIAN ELDER MIPENZ CPEng IntPE(NZ)** has taken over the reins as Chief Executive of Wel Networks, Waikato's electricity distributor.

He was previously Chief Engineer at Auckland-based Watercare Services, where he worked for more than two years.

After he gained a PhD in electrical engineering in 1984, Julian worked on a range of large-scale water engineering projects in Singapore, Australia and New Zealand, where he designed and managed hydro and other generation projects, including 110kV and other sub-transmission lines, and commercial and industrial installations.

He project managed the \$450 million upgrade of the Mangere wastewater treatment plant between 1998 and 2005 while working for Montgomery Watson, and was involved with the development of a \$2.4 billion wastewater treatment plant in Singapore.

Julian is also an enthusiastic glider pilot and was the 2006 national 18-metre glider champion.

Julian's predecessor Mike Underhill FIPENZ is now Chief Executive of the Energy Efficiency and Conservation Authority.



Julian Elder



## IPENZ Professional Development Short Courses

### Negotiation Skills for Technical Professionals

Christchurch 26 September  
Auckland 30 October

### Specification Practice

Auckland 28 September

### Effective Report Writing for Engineers

North Shore 3 October  
Taupo 19 October

### Business Development and Professional Engineers

Wellington 4 October

### The Resource Management Act and Professional Engineers

Auckland 10 October  
Christchurch 16 October

### Technical Expert Moving into Management

North Shore 29 October

### Contract Management for Engineers

Wellington 9 November  
Hamilton 23 November

### Cost:

One day  
\$495.00 incl GST - IPENZ Members  
\$540.00 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 \$54.00 including GST. All short courses may be tailored to suit the needs of organisations.

Registrations close one week before the start of the course or seminar in each location. All registrations can be made online at [www.ipenz.org.nz/ipenz/nzecal/ks.cfm](http://www.ipenz.org.nz/ipenz/nzecal/ks.cfm) For further information or enquiries email [CPD@ipenz.org.nz](mailto:CPD@ipenz.org.nz) or phone 04 474 8984.

### Other Courses:

#### Project Management Distance Learning Course

Full information is available at [www.ipenz.org.nz/ipenz/nzecal/distance-learning.cfm](http://www.ipenz.org.nz/ipenz/nzecal/distance-learning.cfm)

#### Short Courses in Project Management

These are presented by ProjectPlus with special rates for IPENZ Members. Full details are at [www.ipenz.org.nz/ipenz/nzecal/ks.cfm](http://www.ipenz.org.nz/ipenz/nzecal/ks.cfm)

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