

Employer Link

Ergo Consulting New Professional Development Partner



The generator hall and the tailrace into Lake Whakamarino. Ergo Consulting was involved in the design of the control system replacement at Tuai Power Station, from which water passes through and is discharged into the lake. Image courtesy of Ergo Consulting Ltd.

IPENZ is pleased to announce that the Standards and Accreditation Board accepted Ergo Consulting into the Professional Development Partner (PDP) scheme in November.

Ergo Consulting was established in November 2003 to service the high voltage power industry. In 2005 the company expanded to include a process section. It is a small consulting engineering company that operates out of one office in Newmarket in Auckland and is currently involved in projects throughout Australasia.

We would like to thank the staff involved in Ergo Consulting's submission and look forward to establishing a strong partnership with them in the future.

We are also pleased to announce we have received expressions of interest from five other organisations and we hope to welcome them into the partnership in the months to come.

All new PDPs will be invited to attend the annual Fellows' and Achievers' Dinner early next year where they will be recognised and handed a PDP certificate.

Professional Development Partner Update: Technicians and Technologists, Qualification and Professional Recognition

Last month IPENZ ran two successful Professional Development Partner (PDP) update sessions at Sinclair Knight Merz (SKM) and via webinar.

The sessions focused on engineering technicians and technologists, with presentations from Dr David Phillips MIPENZ on the New Zealand Diploma in Engineering and Metro Group's Bachelor of Engineering Technology, Bill Sole

on the New Zealand Diploma in Engineering Practice and Jim Muir on the Opus Cadetship model.

Slides for this session can be found in the PDP area of the [IPENZ website](#)

We would like to thank all the presenters and SKM for their efforts in making the update sessions successful. We look forward to seeing you at the next PDP update session.

IPENZ Remuneration Survey Shows Overall Pay Goes Up

In October 2011 IPENZ published the results of its 2011 Remuneration Survey. The survey is undertaken annually to assess the remuneration of New Zealand's engineers.

The 2011 Remuneration Survey showed that 90 per cent of the 2,040 respondents are in full time employment, with six per cent being self employed or sole practitioners and three per cent being in part time employment.

Of the respondents, 85 per cent had received a pay increase in the past 12 months, with just 12 per cent having had no change in remuneration and three per cent having had a salary decrease.

Engineers employed in the private sector received an increase in median base salary of seven per cent and those employed in the

public sector received an increase of five per cent. These rises in median base salary were well above the Consumer Price Index of three per cent.

The Remuneration Survey also showed clear career progression for recent graduates, with median base salaries rising with experience, as shown in Figure 1.

This trend tends to continue until engineers reach around 46 to 50 years of age when median base salaries plateau (see Figure 2).

Finally, the Remuneration Survey showed engineers in the field of education have the highest median base salary and median total package, followed by those in primary industry, production, extraction, processing and communications respectively.

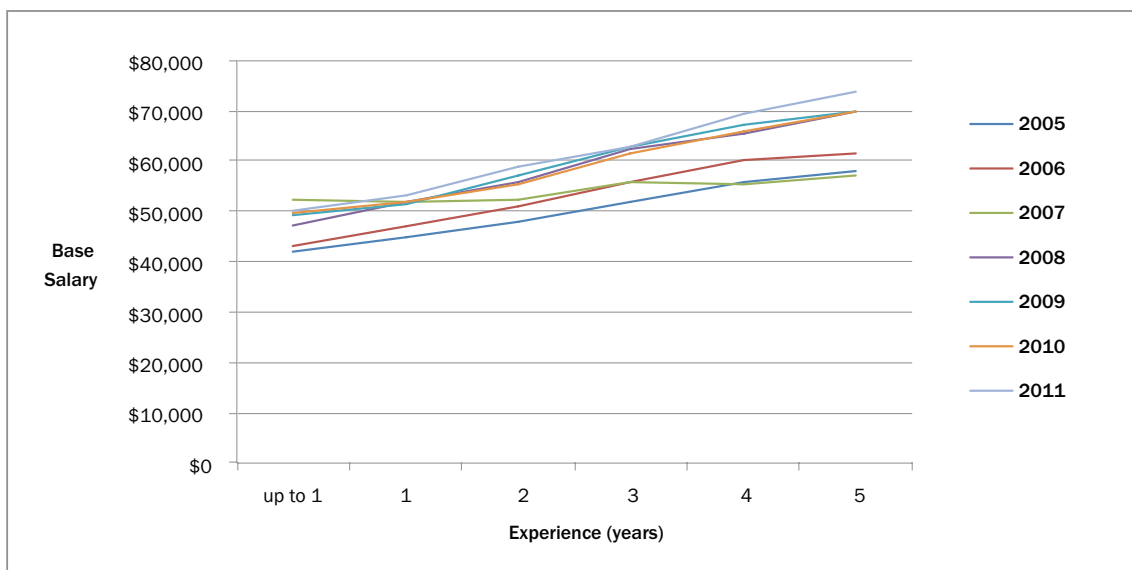


Figure 1: Median base salary of recent graduates relative to experience

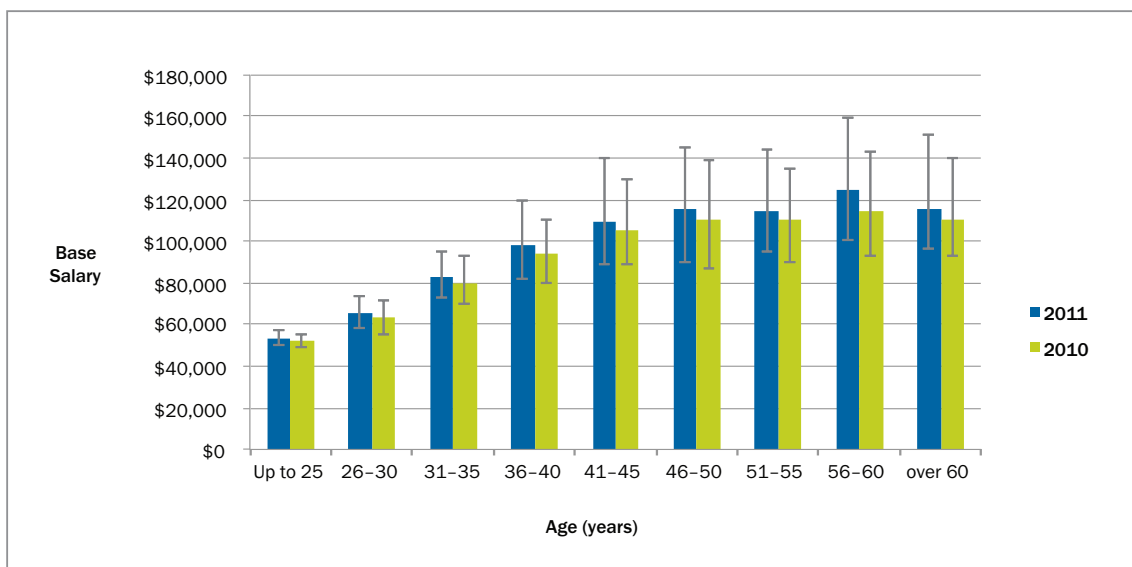


Figure 2: Median base salary of IPENZ Members relative to their age

Unlock Business Performance through Effective Leadership

Having technically proficient engineers on your team is a sure start to building a great business. However, many businesses find the opportunity to get the best out of their people remains unfulfilled because often their first and second level people managers have not been taught the leadership skills that help them get the most out of their team.

Many staff have risen to first and second level management positions because they have performed well in a technical capacity, but this does not necessarily make them a good leader. The good news is that leadership skills that come naturally to some can be easily learnt by the rest of us.

“We often overlook the first and second level managers in organisations for leadership training and leave it for the CEO and the management team,” Blair Stevenson, Managing Director of Brava (effective leadership experts), says. “Research shows, the most effective performance growth for an organisation lies in the untapped potential of the first and second level managers.”

By motivating and engaging staff on the frontline, a range of performance indicators positively change. Staff turnover drops and higher productivity is effected, resulting in higher client loyalty and profitability.

Traditionally, to access quality training your staff need to be out of the office and on a course either locally or in one of the main centres. But with changing technology the delivery of training can now be done equally well online, saving you a considerable amount of money by keeping your staff on the job.

Incorporating the best in effective leadership practices over the past 15 years, Brava has developed Strada7, an online leadership course specifically for first and second level people managers. Through online modules that combine e-learning and social networking tools, leaders learn at their own pace. Backed with an online tutor and a personal coach to develop their leadership skills, people managers apply their knowledge back into the workplace gradually.

Because it is a systematic and gradual approach backed with a coaching system, knowledge retention and behaviour change are very successful.

Leadership is a powerful tool to have in your business know-how box. Developing these skills amongst your next generation of leaders gives your company a performance edge. For more details contact the IPENZ Professional Development Advisor, Rachel Kenny, at profdevadvisor@ipenz.org.nz or phone (04) 474 8984.

CONNECT WOMEN IN ENGINEERING AND CONSTRUCTION

Celebrating 2011 and looking forward to 2012

It has been a fantastic year for Connect, an initiative of IPENZ, the Institution of Civil Engineers (ICE) and the National Association of Women in Construction (NAWIC). Connect activities aim to bring together women in engineering and construction by offering networking opportunities, low cost continuing professional development for attendees, and celebrating the success of women in the industry.

Events in 2011 have included guest speakers, hands-on workshops and technical talks on individual projects.

Thanks to the support of engineers, engineering employers and IPENZ Branches in Hamilton, Auckland and Christchurch, we have been able to offer events in these areas for the first time. The Wellington group is still going strong and the expansion of events into other areas is confirmation of the benefits and value people obtain from attending.

IPENZ greatly appreciates the support of ICE and NAWIC, and we hope to continue expanding the range of events and places that can host Connect activities over the next year. We would like to stress that anyone with an interest in engineering and construction is very welcome, and encouraged, to attend.

To find out more about Connect and the activities it offers please contact Rachel Kenny at profdevadvisor@ipenz.org.nz or phone (04) 474 8984.



British High Commissioner to New Zealand Vicki Treadell gave an engaging presentation at a Connect event in Wellington last month.

Changes to CPEng Assessment Process and Fees from 2012

Following extensive consultation, the IPENZ governing Board has approved amendments to the Chartered Professional Engineers of New Zealand Rules, which should further improve the rigour of the assessment process and introduce a greater degree of process flexibility. The Board has subsequently approved changes to the IPENZ Regulations covering other registers (IntPE(NZ), IntET(NZ), ETPract and CertETn) to mirror the CPEng Rule changes.

The Rule Amendments, which take effect from January 2012:

- Extend the maximum allowable term until next assessment from five to six years
- Enable IPENZ as the registration authority to publicly notify the names of candidates for assessment and reassessment and invite comments from the public
- Reinforce professional conversations between the assessment panel and candidate as the preferred means for gathering valid assessment evidence
- Enable the registration authority to simplify the process for applicants who have previously been CPEng or have CPEng equivalence
- Enable an alternative dispute resolution process to be used earlier in the complaints process
- Enable greater use of modern technology in assessments and reassessments
- Update application fees in line with inflation to better match the costs involved (application fees will increase by around 17.5 per cent from 1 January 2012)
- Change annual registration fees in line with inflation, thereby assisting to recover start-up costs that have been borne until now by IPENZ Members (annual registration fees will increase by around 19 per cent from 1 January 2013).

A total of 68 submissions were received as part of an extensive consultation process on draft proposals in July 2011, with many submitters registering their support for the proposed changes. Careful consideration of submissions identified the need to incorporate one change into the final Rule amendment and reinforced the need for clear policy and procedural guidelines to direct both assessors and candidates in several areas of change. The IPENZ Competency Assessment Board is overseeing the development of these policies and procedures and is working with staff to implement other procedural changes in the areas of moderation, assessor selection and assessor training.

The Rule amendments do not materially change the assessment process for candidates going through a competence assessment for the first time, but do change the process for re-assessments. Revised guidelines for CPEng registrants due for a continued registration assessment in 2012 will become available over the next couple of months.

Public notification of candidates

IPENZ will notify the names of CPEng applicants in association with the register for up to 21 days and the candidate will receive any public comments. The assessment panel will consider any public comments, along with candidates' responses, as part of the assessment.

Previously registered CPEng

Anyone previously registered on the CPEng Register applying for re-admission will be assessed as if the assessment were for continued registration. This change supports engineers returning to the workforce after a career break.

Professional conversation as key assessment tool

The review process identified solely desktop evaluations as less effective than professional conversations between panel and candidate for providing the most valid evidence for holistic assessments of competence.

The change will make professional conversations between panel and candidate the key tool for most assessments. Candidates for continued registration will be able to provide a reduced portfolio of written evidence in advance of a professional conversation with the panel that is likely to take place by teleconference or videoconference.

A key concern raised by submitters was around assessor workload, caused by assessors having to extract (rather than verify) evidence from candidates during professional conversations. The development of clear policy and guidelines in conjunction with assessors will address this concern.

Pathway for candidates on equivalent registers

Changes will enable the registration authority to give credit to engineers currently registered on an overseas register that is CPEng equivalent.

Applicants fully assessed overseas within the last six years will need only specifically demonstrate competence against one element: that they are competent in good professional engineering practice that is specific to New Zealand and is supported by relevant continued professional development. All other elements of the standard will be deemed to have been satisfied by their CPEng equivalent registration. This change will not reduce the level of assessment of a candidate's New Zealand-specific knowledge. For example, structural engineers arriving from overseas will still be required to demonstrate knowledge and application of New Zealand seismic codes and standards to gain CPEng.

Additional change to IPENZ Regulations

There was one change to the IPENZ Regulations that did not mirror the CPEng Rule changes. This change was included after obtaining legal advice and will only apply if an IntPE(NZ) registered engineer is disciplined under CPEng Rules and has CPEng registration suspended or removed. It is unacceptable for an engineer to have CPEng registration suspended or removed while IntPE(NZ) is current and the only option is to convene a second Disciplinary Panel, which is also unacceptable (double jeopardy).

Futureintech: School Visits Teach Graduates Better Communication Skills

The Futureintech project is now in its eighth year of bringing graduates into classrooms to act as Ambassadors for the technology, engineering and science industries. Not only do they showcase their rewarding and challenging careers, they also help engage students with maths and science lessons to encourage them to continue with these key subjects.

This year Futureintech facilitated nearly 2,000 Ambassador visits to schools, reaching almost 43,000 students. We also distributed thousands of career leaflets and posters, and developed material from the National Engineering Education Plan into a new section on our website. The new "Pathways to Careers" pages provide diagrams and information linking senior secondary school subjects to tertiary qualifications and career options. The pages also explain the different engineering diploma and degree options. Many Ambassadors also volunteered to be Neighbourhood Engineers – a record number of entries for the Transpower Neighbourhood Engineers Awards were submitted this year.

While it is difficult to quantify Futureintech's influence, the Ministry of Education's data shows that tertiary enrolments in science, maths, information technology and engineering and related technologies increased again in 2010. These statistics, along with the anecdotal evidence we receive from schools and industry leaders, indicate we are moving in the right direction.

We would like to thank all our Ambassadors and their employers for their support of Futureintech. We hope that working with our Facilitators has helped Ambassadors enhance their presentation skills, confidence and ability to communicate with different audiences.

Matt Ensor GIPENZ, General Manager of Beca Transportation, agrees that participation in Futureintech is good for his staff. "All our Ambassadors enjoy the experience of being able to give valuable information to students, and it's a great chance to spend time thinking about what we do and why we enjoy it," he says.



Water Resources Engineer Chris Maguire GIPENZ of MWH is even more emphatic in his belief that participation in community outreach programmes like Futureintech can address the personal, professional and social/environmental development needs of engineering graduates. Speaking at an INGENIUM conference earlier this year, Chris described how the modern young professional looks beyond internal training and uses a growing network of opportunities to meet their needs. "It's quite simple – engaged professionals are good for business," he says.

Advertising in *Student Direct*

Student Direct is an electronic newsletter which is distributed to all IPENZ Student Members. The newsletter is published five times a year and is a great opportunity to advertise your company to students undertaking a Bachelor of Engineering, a Bachelor of Engineering Technology, a Diploma in Engineering at undergraduate level or a course of engineering study at postgraduate level.

Advertising in *Student Direct* is exclusive to IPENZ Professional Development Partners.

If you are interested in advertising, please contact Kavita Kansara at marketing@ipenz.org.nz or phone (04) 474 8980.

Continuing Professional Development Courses 2012

One-day Courses from February – June 2012

Visit the IPENZ website for details of:

- Course outlines
- Presenter biographies
- Fees
- How to register via the new IPENZ registration portal.

COURSE	LOCATIONS	PRESENTER
February 2012		
Introduction to Fibre Optics	Auckland Wellington Christchurch Dunedin	Ross Finlay
Essentials of Risk Management	Auckland Taupo Dunedin	Geraint Birmingham
Risk Management – Intermediate	Auckland Taupo Dunedin	Geraint Birmingham
March 2012		
Effective Engineering Documentation	Auckland Wellington Christchurch Dunedin	Heather Silyn-Roberts
Risk Management – Advanced	Auckland Taupo Dunedin	Geraint Birmingham
NZS 3910 Conditions of Contract	Auckland Taupo Christchurch	Piet Beukman
Demystifying the Building Consent Process	Nationwide	Phil Roberts
April 2012		
Solid Waste Management and Resource Recovery	Auckland Wellington Christchurch Dunedin	John Cocks and Mark Milkie
Contract Management for Engineers	Auckland Christchurch	Piet Beukman
Project Closure and Termination	Auckland Christchurch Dunedin	Dirk Pons

COURSE	LOCATIONS	PRESENTER
May 2012		
Fire Design Using the New Verification Method	Nationwide	A joint course run by IPENZ and the Department of Building and Housing
Slope Engineering	Auckland Wellington Christchurch	John St George
Tender Practice and Evaluation	Auckland Christchurch	Piet Beukman
June 2012		
How to Write the Winning Tender Document	Nationwide	Piet Beukman
The Role of the Expert Witness	Auckland Christchurch	Alan Bickers

Webinars

Choose to attend a single session or enrol for a package of webinars on the following topics:

- Towards management
- Health and safety
- Keeping up-to-date with technology
- Computer skills
- Business fundamentals
- Business writing
- Law from an engineer's perspective.

For full information and registration details visit the IPENZ website.

Online

The first online training offered by IPENZ for 2012 is Strada7, an online Effective Leadership skills programme provided by Brava Ltd.

The training is offered at a reduced rate for IPENZ Members and is based around nine modules that look at:

- Motivation
- Behaviour
- Performance.

For full information and registration details visit the IPENZ website.

One-day courses coming up in the second half of 2012

Visit the IPENZ website to keep up-to-date with all courses for 2012.

Currently planned from mid 2012 are the following:

- Engineering, planning and design
- Designs of foundations on soils susceptible to liquefaction
- What you need to know about the building law amendments.

In-house

All our courses and webinars can be tailored to be delivered to your organisation. This is cost effective and convenient if you have a number of people who want to attend a course/webinar.

Contact us

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(04) 474 8984

2011 New Zealand Engineering Excellence Awards

The 2011 New Zealand Engineering Excellence Awards took place at the Amora Hotel in Wellington on November 30. A crowd of almost 400 people gathered to celebrate the most outstanding projects of the year, and to recognise individuals who made noteworthy contributions to professional engineering.

The guest of honour for the evening was Kiwibank New Zealander of the Year, Sir Paul Callaghan. Sir Paul made a keynote speech highlighting the difficult year the profession has faced but also emphasised the exciting role innovative engineering will play in increasing national prosperity.

The Supreme Award, chosen from amongst the winners of all the project categories, was presented to the Tauranga Harbour Link team, which included engineers from the NZ Transport Agency, Beca, URS New Zealand and the Fletcher Construction Company.

The Prestigious William Pickering Award for Engineering Leadership was presented to Neville Jordan, a successful hi-tech entrepreneur, pioneer of the venture capital sector and a well known-philanthropist.

For more information about the 2011 New Zealand Engineering Excellence Awards visit the [website](#)



Competence Assessment Rounds 2011

Are you or your staff currently working on professional development planning for 2012? If so it may be worthwhile looking at the new dates for the 2012 competence assessment rounds. These dates can be found on the IPENZ [website](#)

Engineers who are planning on submitting an application for admission should work towards one of the dates listed on the website to ensure they have clear targets and structure around preparing documentation and submitting.

The Learning and Assessment team at IPENZ National Office is happy to support Members with working towards getting the recognition they deserve. Feel free to contact the team at assessmentenquiries@ipenz.org.nz or phone (04) 473 9444.



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