



employer link

AN IPENZ NEWSLETTER FOR PROFESSIONAL DEVELOPMENT PARTNERS

DECEMBER 2010

Mighty River Power – Professional Development Partner



Mighty River Power is delighted to become a Professional Development Partner with IPENZ. We firmly believe in quality technical work being a bedrock competency to support our generating assets. For this reason, we place great importance on the ongoing professional development of our engineers at all levels of experience from graduate through to senior engineer.

Almost two years ago we initiated a review of our training for graduate engineers. The aim was to formalise our training programme to ensure we provide a consistent framework which will meet the needs of our engineers entering the electricity industry workforce, and also our needs as a technical service provider to our generation assets. In doing so, we developed an engineering training task book which includes tasks designed to expose graduate engineers to a broad range of activities during the two- to three-year programme. The task book works hand in hand with a rolling training and development programme we have in place for engineers and it can also be used by more experienced engineers who are new to the electricity industry.

We see our achievement of gaining Professional Development Partner status as formal recognition that we are on the right track towards supporting and developing our engineering staff. We look forward to working in partnership with IPENZ, supporting the wider engineering profession and continuously improving our professional development programme.

Graeme Hill

Generation Engineering Manager
Mighty River Power Limited

Competence Assessment Rounds 2011

Are you or your staff currently working on professional development planning for 2011? If so, it may be worthwhile looking at the new dates for the 2011 competence assessment rounds. These dates can found on the IPENZ website at www.ipenz.org.nz/ipenz/forms/pdfs/dates_for_assessment_rounds_2011.pdf

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

The Learning and Assessment team at IPENZ is happy to support Members in working towards getting the recognition they deserve, so feel free to contact the team on assessmentenquiries@ipenz.org.nz or call 04 473 9444.

Jacob Waitere

Competence Assessment Administrator

Seasons Greetings and a Period of Reflection!



This has been one of the most successful years in respect of the increasing number of engineers engaged with the Institution through the Professional Development Partner (PDP) scheme and by way of services offered via the IPENZ Centre for Professional Development (CPD).

Even with the merger of several of our existing PDPs through the formation of the Auckland super city, as well as other acquisitions, we have continued to demonstrate to the industry, the true value of the initiative.

The number of PDPs now stands at 35 with interest for the future still very high.

The CPD programme in 2010 was more innovative than ever and the results were impressive, with over 1,500 engineers attending in excess of 75 seminars and courses throughout the year. Looking forward, the CPD team will continue to develop its offerings in 2011, with over 13 new technical programmes being produced for the year ahead.

The team is also busy in areas of public policy, to ensure that revisions to key legislation and Standards are produced in seminar format to keep the profession abreast of the changes. In the coming year, NZS3910 *Conditions of Contract*, NZS3604 *Timber Framed Buildings*, the Resource Management Act and the Building Act are all expected to be reviewed.

Shannon Davidson, Professional Development Co-ordinator, and **Rachel Kenny**, Professional Development Advisor, have been working hard to ensure that the courses are delivered in an efficient and professional manner in line with IPENZ's very high standards. I know that many of you have seen first-hand how the efforts of the team have resulted in us being selected as a continuing professional development provider of choice for several organisations.

We have also welcomed **Jenna Panchal** to the team. Jenna has taken on the role of Learning

and Assessment Co-ordinator, responsible for stakeholder liaison, including our PDPs, and planning is now underway for PDP activities and communications for 2011.

Rachel and I, in our roles as Secretariat for the International Engineering Alliance have also been busy ensuring that IPENZ fulfils its obligations in providing quality secretariat services for the 23 countries involved. The Alliance aims to advance the benchmarking of educational standards and improve the mobility of engineers on the international market.

Finally, it is with some sadness that this article will be my final contribution to *Employer Link*, as I leave to take on the new and exciting lead role in learning and development with Aurecon New Zealand in the new year.

It is on that note that I pay you all a fond farewell and thank you for your part in making this partnership as successful as it has become. I have taken pride in working with you all over the last three years and knowing that I too have made a contribution to the success of the team and the initiative.

Please accept my best wishes for you and your families for the holiday season and I hope you have a prosperous new year.

Paul Gardner
Professional Development Manager

Fifteenth International Conference for Women Engineers and Scientists



IPENZ is an enthusiastic supporter of the 15th International Conference for Women Engineers and Scientists (ICWES) which will be held in Australia in July 2011.

When and Where: 19–22 July 2011
Adelaide Convention Centre
Adelaide
Australia

The 15th ICWES is jointly hosted by Engineers Australia National Committee for Women in Engineering and the International Network for Women Engineers and Scientists (INWES).

The ICWES has been held every three years since 1964 and provides an important forum for the exchange of information and ideas for women in

science, technology, engineering and mathematics.

IPENZ is committed to the renewal and retention of women in the profession and sees the conference as a way for New Zealand to share its knowledge with international representatives and industry partners.

Registrations

Registrations are open now with early-bird and multiple registration rates available.

As members of a supporting organisation, IPENZ Members are entitled to register for the conference at member rates. For more details on registrations, please visit the official ICWES 15 website at www.icwes15.org/register.asp

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Conference themes

Attracting, developing and retaining women engineers and scientists

Papers that highlight outstanding practices and initiatives to attract, develop, and retain women to science and engineering education and professions, including work-life balance, gender policy, education and management of cultural differences.

Outstanding practice models of industry commitment to diversity and equality in the workplace

Papers that outline initiatives, programmes and policies to encourage women into leadership and decision-making roles, women in business, entrepreneurship and issues relating to professional development.

Achievements, innovations and research in the various fields of engineering, science and technology

Papers that discuss the achievements, innovations and research for all fields of science, engineering, and technology.

New ideas and solutions to contemporary problems including climate change, water, energy and sustainability

Papers that consider a wide range of topics including the challenges of climate change, water management, renewable energy, sustainable practices, the ecology and the environment.

Connecting your staff

The conference provides a good opportunity for employers to bring employees of their Australian and New Zealand offices together for discussion and sharing of best practice.

Sponsors include large engineering firms such as:

[BHP Billiton](#)
[Leighton Holdings](#)
[Caltex Australia](#)
[Parsons Brinckerhoff](#)

To request information about sponsorship packages, which include exhibition space at the conference, visit www.icwes15.org/sponsor.asp

Keynote speakers

Dame Professor Jocelyn Bell Burnell DBE FRS FRSE is a distinguished astrophysicist, based in the United Kingdom (UK). As a postgraduate

student, Professor Burnell worked on the discovery of the first radio pulsars, but missed out on the Nobel Prize for Physics which was awarded to her supervisor. She is the current President of the Institute of Physics, UK – the first woman in this role.

Professor Burnell's considerable contributions to the field of astrophysics have resulted in a large number of awards and significant recognition. She was made a Commander of the British Empire (CBE) in 1999 and that year also won the Edinburgh Medal for services to science and society. She became a Fellow of the Royal Society (FRS) in 2003, and Fellow of the Royal Society Edinburgh (FRSE) in 2004, and was elected a Foreign Associate of the United States' National Academy of Sciences in 2005. In 2007 she was made a Dame Commander of the British Empire (DBE).

Professor Burnell is currently Visiting Professor of Astrophysics at the University of Oxford and a Professorial Fellow at Mansfield College, Oxford.

Dr María Jesús Prieto-Laffargue, a telecommunications engineer, is the first woman to be President of the World Federation of Engineering Organisations. She is a prominent figure in the international arena of communications technology and international business.

Dr Laffargue has served on several boards advising national and international companies and organisations in telecommunications, energy, aerospace and transportation. She has also collaborated with the Universities of Madrid, Barcelona and Navarra. She was Professor of Chamber of Commerce and Industry and author of numerous articles and is currently a member of the Spanish chapter of the prestigious Club of Rome think tank.

Dr Laffargue has been a delegate of the Spanish Government to several European and world organisations. She is currently active in a group of select experts preparing for the United Nations' work on the Summit on Sustainable Development. She is a member of the Council of World Meteorology Organization, the Executive Council of European Meteorology Satellite Organization (EUMESAT) and the Council of Union International Telecomm (ITU).

For a full list of keynote and invited speakers please visit the conference website at www.icwes15.org/highlights.asp

Employers Taking a “Steady As You Go” Approach to Hiring

While one in five New Zealand employers intended to increase their permanent headcount in the current quarter, the majority planned on keeping headcounts steady, according to the *Hudson Report Employment Expectations Survey*.

The report showed a net 19.8 per cent of businesses intended to increase their permanent headcount during October to December 2010, down 0.5 per cent points (pp) from the previous quarter.

“This slight dip is on the back of five quarters of growth in positive sentiment so we shouldn't be overly concerned by these results,” says **Marc Burrage**, Executive General Manager of Hudson New Zealand. “It's widely accepted that our road to economic recovery will be a slow and gradual affair, rather than a rapid rise to prosperity.”

The Hudson Report was undertaken before the Canterbury earthquake and Burrage says the ongoing impact of this event remains unclear. South Island employers' hiring expectations had softened before the earthquake hit, with employers reporting the first decline in sentiment in 18 months (down 12.1 pp to 22.4 per cent). This is likely to have been influenced by the collapse of South Canterbury Finance and a low in new manufacturing orders.

Sentiment in the lower North Island declined by 3.8 pp to 13.1 per cent, driven largely by continued restructuring within central government departments. Upper North Island employers reported an increase with a net 22.4 per cent, and intended to boost staff numbers in this quarter.

The previous quarter again saw strong employer intentions to increase the size of their contracting/temporary workforce, representing the strongest result in contracting hiring expectations since the second half of 2007.

Lyndsey Swan

Editor
Employment Today

National Diploma in Civil Engineering (Applied)



Scott Lamason (left) and John Tik MIPENZ (right) from Harrison Grierson Consultants.

Employer profile

John Tik, Harrison Grierson Consultants, Auckland

John Tik is a Director of Harrison Grierson and is responsible for the Land Development division. He manages a team of around 20 staff and oversees the professional development of engineering graduates within the division. He has recruited a number of Unitec degree and diploma graduates during the last 15 years.

John feels that the National Diploma in Civil Engineering (Applied) is an extremely worthwhile qualification for civil engineering technicians because it recognises practical, applied skills, which are essential in the workplace.

He says, "The National Diploma is well regarded by industry and provides an alternative qualification pathway for those who do not wish to, or need to, complete a university degree. However, it can also be used as a stepping stone into university, if required."

There are currently three engineering technicians in the Land Development division working towards the National Diploma in Civil Engineering (Applied). Each of the trainees is mentored by their project or reporting manager, who monitors their progress so that they gain experience in a wide range of areas.

John explains, "It is important to ensure each trainee is getting the range of experience they need to complete the National Diploma. Two of the technicians, for example, need to do survey work, so we'll arrange for them to spend time within our survey division. Another will need to do geotechnical work, so we'll arrange appropriate experience with one of our geotechnical support consultants."

"We have a number of highly skilled team members, ranging from CAD draughtspersons to project managers and experienced civil engineers. Working with these professionals allows our trainees to benefit from their expertise. It gives them an excellent grounding and prepares them well for their careers."

Harrison Grierson currently gives trainees up to one day off per week to study for qualifications. John says that this allows them to devote the necessary time to their studies, and benefits the company in the long run. "We believe we will recover the time investment with improved skills and productivity at a later date," he explains.

John continues, "Our aim is to develop civil engineering technicians with a well-balanced and wide range of knowledge. After four or five years with us, they will have a recognised qualification and be highly skilled. Then they can then either continue in a generalist civil engineering technician role or specialise in one particular area of civil engineering."

Harrison Grierson's Learning and Development Manager, Rona Simanu, believes development needs to be timely, relevant and effective. He adds, "The benefit of combining theoretical knowledge and practical skills is critical to converting learning to performance. The Applied Diploma ticks all of these boxes."

Candidate profile

Scott Lamason, Harrison Grierson Consultants, Auckland

Scott Lamason started his career as a Geotechnical Engineering Technician, but made the change to civil engineering when he joined Harrison Grierson Consultants three years ago.

Scott is employed in Harrison Grierson's Land Development division based in Auckland. This division covers a broad and varied range of civil engineering work. On a day-to-day basis, Scott can be involved in anything from designing car parks and subdivisions, to planning footpaths and pedestrian access, as well as detailed infrastructure design.

Harrison Grierson offers structured training programmes for all of their engineering graduates. The programmes include working towards qualifications and registration with IPENZ. Scott is currently working towards an InfraTrain National Diploma in Civil Engineering (Applied).

The National Diploma in Civil Engineering (Applied) has a prerequisite qualification which covers the theoretical knowledge required by civil engineering technicians. This is the New Zealand Diploma in Engineering (Civil), which Scott recently completed at Unitec.

Scott says, "I'm now working on the Applied Diploma. This is done through practical work and on-job learning, by collecting evidence of my skills and knowledge in a workbook. I only started the applied component recently, but I have several years of work experience so have already built up a lot of evidence which I can use towards it."

"The National Diploma in Civil Engineering (Applied) is well regarded by industry. Having it will benefit me in my career because it will show that I have a broad range of practical skills and knowledge. Once I've completed the National Diploma I'll be eligible for registration as an Associate Member of IPENZ."

"My long-term goals are to gain experience in as many areas of land development as possible, and to achieve a degree in civil engineering. I've already completed two papers towards the degree, so I'm well on track to achieving this."

New Online Work History Feedback – A New Tool Open to Graduate Members



IPENZ is committed to supporting Graduate Members gaining the recognition they deserve by undergoing competence-based assessment.

With the progressive online recording tools proving to be popular with Graduate Members, IPENZ has recently developed an online system whereby Graduate Members can periodically submit their online work history to one of our trained Work History Reviewers.

The Reviewers will look over the information candidates have recorded and then provide, via email, constructive feedback on record-keeping and steps forward towards competence assessment. The aim is to provide candidates with some clear feedback on what is required for a competence assessment submission.

When recording work history online, Graduate Members do not need to document specific details of work that is helping to develop competence against each element of the competence standard, as it is only examples of actual competence demonstration that are required as part of a competence assessment submission.

This new online feedback system will be particularly useful for those Graduate Members working for smaller organisations without immediate access to appropriate Mentors to assist them in their preparation for assessment.

A tutorial on the recording tools and how to lodge a request for work history feedback is available in the Members' Area of the IPENZ website, but for more information please contact a competence assessment administrator by emailing assessmentenquiries@ipenz.org.nz or calling 04 473 9444.

Jacob Waitere
Competence Assessment Administrator

Engineering Excellence Awards' Success

The 2010 New Zealand Engineering Excellence Awards were celebrated in Wellington on 24 November. The gala dinner was hosted by **Linda Clark** and attended by more than 350 people. The evening began with a moment of silence in recognition of the Pike River tragedy.

Initiated in 2005, the New Zealand Engineering Excellence Awards are the premier awards for engineering professionals in New Zealand. Awards are presented in two major areas: Awards Recognising People, recognising leadership, innovation, entrepreneurship, and young engineers; and Project and Product Awards, recognising achievement in the various industry areas. A Supreme Award winner is chosen from the best of the Project and Product winners.

The 2010 Supreme Award for Engineering Excellence was presented to the Coronet Peak Ski Area Snow-making Infrastructure and Reservoirs project by Hadley Consultants Ltd, NZSki Ltd and TechnoAlpin.

Air New Zealand Chief Executive **Rob Fyfe** took the premier individual title, The William Pickering Award for Engineering Leadership.

To read about the rest of the winners and to see the photos, please visit www.nzeeawards.org.nz

Launching the 2011 IPENZ Course Programme



The IPENZ Centre for Professional Development's success in 2010 highlights the Institution's status as a preferred provider of learning events for engineering professionals. IPENZ offers public short courses, distance learning opportunities and a range of other options to suit participants and employers – including tailored in-house course delivery.

Members can find an electronic version of the 2011 *Course Programme* on the IPENZ website at www.ipenz.org.nz/ipenz/education_career/cpd

The essential skills and technical courses featured in the 2011 programme are offered throughout New Zealand with dates, locations and how to register accessible from the Engineering Calendar on the IPENZ website.

Around 13 new courses will be introduced in 2011, the majority of them technical in nature. These include an exciting seminar series on Bridge Design and Slope Engineering.

Hard copies of the 2011 *Course Programme* were sent to Professional Development Partners and electronic versions were sent to key human resources contacts nationwide. So start planning your professional development goals for 2011 and visit the Engineering Calendar for full details of all IPENZ courses available.

For more information, contact the Centre for Professional Development on profdevadvisor@ipenz.org.nz or 04 474 8984.

Futureintech: Support for Continual Learning



Over the last seven years, Futureintech has worked to support maths, science and technology education and promote the wide range of rewarding careers related to these subjects. This includes a number of efforts to help with continual learning and professional development, for both the students we work with in the classroom and the professionals who volunteer with us.

Along with general careers promotion in technology, engineering and science, we've released brochures and online resources that encourage students to explore cadetships, graduate programmes, industry scholarships and other options for tertiary study. These programmes raise students' awareness of potential careers, emphasise specific educational pathways and allow students

to try out different roles until they find the one that's right for them.

Futureintech also encourages the professional development of our Ambassadors. By working directly with students, Ambassadors can provide invaluable support for students, teachers and careers advisors; but they also benefit from the opportunity to enhance their own communication, public speaking, and leadership skills.

In the past year we have made efforts to enhance this professional development opportunity. We developed an online *Ambassador Handbook* to provide them with advice and resources, and our Facilitators attended training sessions to learn how to coach the Ambassadors and provide feedback after each school visit. A number of industry leaders in technology, engineering and science recognise the value of this experience and urge their employees to become Ambassadors for this reason.

Overall, Futureintech supports educational pathways that lead to rewarding, versatile careers based on learning and exploration. We look forward to continuing our efforts in 2011.

You can find out more about the services we offer on our website at www.futureintech.org.nz

Reach Engineers through *engineering direct*

Advertising opportunities are available in *engineering direct*, the electronic newsletter for IPENZ Members. *engineering direct* is sent by email to more than 7,500 Members each Thursday with a short time-out over the Christmas and New Year break. *engineering direct* has a

notices section, an events section, and a very well-supported situations vacant section which is linked to the IPENZ jobhunt website. For more information please contact Chris Burr, phone 04 474 8947, fax 04 474 8933, or send an email to sales@ipenz.org.nz

Advertising in *student direct*

student direct is a electronic newsletter which is distributed to approximately 2,000 IPENZ Student Members and academics in New Zealand. The newsletter is published five times during the tertiary year. All student engineers studying engineering at degree or diploma level are eligible to apply for free IPENZ Student Membership.

Advertising in this publication is only available to IPENZ Professional Development Partners (PDPs) and is limited to 12 PDPs for 2011. If you wish to find out more about advertising in the 2011 issues, please contact Kavita Kansara on marketing@ipenz.org.nz or 04 474 8980. The latest copy of the publication is available at www.ipenz.org.nz/ipenz/publications/ezine/students/november-december%202010.pdf

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