

Engineer Your Career

Information from Industry for Student Engineers

Issue 7, Semester 2 2009

Same Values, New Look and Logo

Once a high-tech exporting success story of New Zealand, today Rakon is a global operation and is a world leader in its field.

Rakon's new look reflects this position as well as our company's culture: pioneering, innovative, dynamic and highly responsive. It is all about speed and innovation in an environment that is fast paced and dynamic, where next generation products are developed and available to the market quickly. This is backed with our reputation for quality, which has been established from a long history of delivering the most reliable products in the industry.

Rakon manufactures high performance crystal based oscillators for the GPS, mobile, telecommunications and aerospace industries and leads the way through continued development of new technologies and through the ability to adapt to these ever changing markets.

To do this we cover a wide range of engineering disciplines- mechanical, electrical, electronics and systems engineering to material science, thermodynamics and software- providing a centre for excellence in engineering and creative development. Engineers are involved in areas such as new product development, manufacturing processing, development of existing products and equipment design and build.

A Supportive Graduate Induction Programme

New graduates are given strong guidance. Our supportive programmes are designed to allow quick development, as graduates progress they are given autonomy and are delegated larger

and more complex issues to solve.

Rakon's culture of a good work-life balance ensures flexibility and that is key to retaining our valued staff. As Rakon continues to grow we can continue to offer more opportunities.

Graduate Profile:

Michael Allen, Mechanical Engineer
Graduated from the University of Auckland Degree: Bachelor of Engineering (Mechanical)
Employment: At Rakon since February 2005

"The autonomy at Rakon gives you a great sense of confidence and makes my job a lot of fun. I work on a lot of different tasks. Every day is different and I have my fingers in a lot of different pies. This diversity keeps me on my toes and keeps my interest and commitment high.

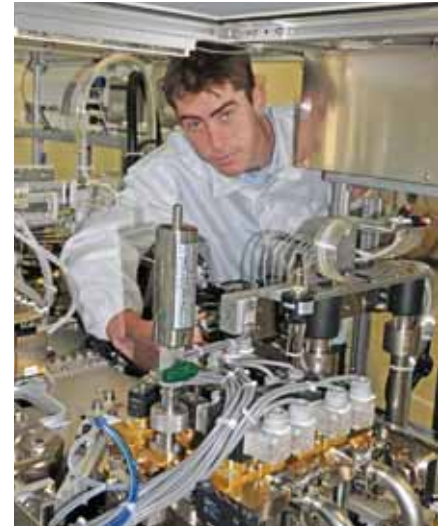
My biggest project to date has been as a Senior Project Engineer implementing a process line redeployment from Auckland to India. I have been highly involved in the project direction and it has involved overseas project work.

Rakon gave me the opportunity to take a six month sabbatical where I went mountain biking in Canada, watched the infamous Rugby World Cup in France and travelled around Europe and the UK.

During this time I got to work at our offices in France and the UK. A highlight for me while there was being involved in the product design of an upcoming product to the market. I developed the design of the ceramic carrier for the ASIC. It is a real buzz to feel a part of what is going on.

Even with the large growth that Rakon has experienced over the years and despite the fact we are a global leader in our industry, the

rakon



company still has that small tight knit feel. Everybody is a part of what is going on and everybody's input is welcomed."

For more information email:
graduate@rakon.com

Rakon Facts

Rakon has 800 staff and 5 manufacturing plants world-wide.

Rakon has scooped NZ's highest Export Awards including 'Supreme Exporter of the Year Award' in 2005.

Rakon supplies over 50% of the world market for high performance GPS TCXOs and has leading market positions in the supply of crystal oscillators to telecommunications network timing/synchronisation and aerospace markets.



To feature your company in Engineer Your Career contact Kevin Healey – k.healey@auckland.ac.nz

Engineer Your Career is sponsored by **rakon**



Growing talent within Works

At Downer EDI Works we are making a significant investment, in terms of both time and money, to grow our future leaders. Not only do we need to attract the right people to Works, but we need to nurture and develop our existing talent.

We have recently launched our Scholarship programme to ensure we have the right people coming on board at an early stage in their career. Our Annual Graduate and Cadet Conference ensures our current graduates and cadets continue to remain inspired and engaged at work. Through these two initiatives, we are attracting and retaining great, young talent.

The Downer EDI Works Scholarship and AF Downer Scholarship Programmes assist Engineering Undergraduates during the early stages of their studies by offering financial support towards University fees and other associated study costs. Under these scholarship programmes, undergraduates also undertake summer work and are assigned a mentor to help guide them through the early stages of their career through to chartered status. There

were six scholarship recipients this year and it is anticipated that the same number of scholarships will be awarded next year. Scholarship winners from Auckland and Canterbury Universities were recently notified of their place in the programme and were invited to attend the Annual Graduate and Cadet Conference alongside their future work colleagues at Downer EDI Works.

The Annual Cadet and Graduate Conference was held in Auckland this year for current Graduates and Cadets within Downer EDI Works. The two day conference is a major undertaking and involves flying attendees and key managers from all over the country. The purpose of the Conference is to enable attendees to network with their peers and senior managers, develop technical knowledge and inspire our young talent to set and attain rewarding career goals.

This year, members of the Executive team presented the strategic plan to conference goers, giving them an overview of the operational, financial and HR strategy of the business. In addition to a business overview the Executive members also spoke candidly of their own personal experiences and career highlights to give the attendees some ideas on shaping their own futures.

Other highlights of the Conference included site visits to two major projects in the Auckland area, a visit up the Sky Tower (a highlight for out-of-town guests), dinner and accommodation in the CBD (at Sky City) and a guest speaker from New York talking about the hallmarks of a successful international career in both military and business arenas.

At Downer EDI Works, it has been recognised that young talent enhances the workforce of a business by providing fresh thinking and leadership for the future. Through these two initiatives, young talent at Downer EDI Works gets every opportunity to grow their careers and develop both personally and professionally.





around the UK and Europe but also gain the knowledge required to complete my core role on a ship as a Marine Engineer Officer (MEO).

Since returning from England, I have been posted to ships travelling to Australia, China, Japan, Malaysia, India, Singapore and the Arabian Gulf. During this time I worked my way up from a Junior Engineering Officer to Deputy Head of Department. I've also been responsible for large maintenance packages and docking of the ship.

Currently, I work as the Deputy Technical Personnel Officer conducting projects and investigations involving HR management and training of naval technicians.

Profile 2

Lieutenant Warren McLuckie – Weapon and Electrical Engineering Officer

The most important part of the Navy is the people. Comradeship, whilst just a word on paper, means more than you can imagine when serving overseas on a ship. Having served almost 10 years my best mates are still the people I joined with.

Having completed my BE at Auckland University, I have since been a Deputy head of department on a frigate at sea, and instructor for new recruits, and an engineering project manager for multi-million dollar projects – that's variety! Although I am currently working in Wellington, my next job might be in Australia or Washington, the opportunities are endless.

For more information visit:
www.navyjobs.mil.nz

Did you know that over 90% of New Zealand's trade volume travels by sea through areas of substantial unrest? Today's Navy operates a modern and effective fleet to fulfil the government's maritime security roles. Being part of the Navy means being part of an innovative and technologically advanced team that actively contributes to the welfare of New Zealand.

As an Officer in the Navy you are a leader, and will be in a position of leadership or management for your entire Navy career. You can expect to have a varied and exciting career. As an Engineering Officer you will manage, operate, and maintain the engineering systems on board our fleet of thirteen ships. You will be responsible for either the "float and move" or the "fight" functions of a warship.

Profile 1

Lieutenant Letisha Fitchett – Marine Engineering Officer

After completing my BE in Mechatronics, I joined the Navy where I completed my Junior Officer Common Training and then spent time both at sea and working ashore at the Fleet Engineering Centre. During this time I gained an appreciation of naval engineering and culture before travelling to HMS SULTAN in England to enhance my degree in a naval context at the System Engineering Management Course (completing requirements toward Chartered Engineering status). The subjects included diesel and gas turbine theory, as well as auxiliary services and engineering management of personnel and maintenance of equipment. Ten months in the UK allowed me to not only travel



Traffic Design Group



Graduate Profile

Samantha Boone Transportation Engineer

I first encountered Traffic Design Group as a student at university, when I put my name down to be a traffic surveyor. I ended up supervising other surveyors for them, instead of counting the trucks myself, and helped to analyse the data back at the office. This gave me the opportunity to find out what Traffic Design Group is all about and I was later offered a position to join the firm. Before I even began work I was given the opportunity to learn new skills; while I was travelling in Europe after finishing my civil engineering degree, they offered me a place on a course to learn about microsimulation traffic modelling in Scotland.

Back in New Zealand, my first week at the office was all go: I was off to Queenstown for three days to gather data for the Queenstown model. Since then I have worked on other models, including the Christchurch Transport Model, which projects the future demands of different modes of transport for the greater Christchurch area up to 2041. Another large part of my work involves Transport Assessments, where we assess the transport related components of developments and their effects on the transport network. This has ranged from a motocross track and retirement homes to a large factory and shopping centres.

Flexibility has played a big part in my enjoyment of working at Traffic Design Group. Last year I decided it was time for a change; the company helped me to achieve this with a move from Christchurch to Auckland six months ago. The transition was easy because I had already met many of the Auckland staff at our annual company weekends. The move has provided me the opportunity to learn about a different transport network, and get involved with some larger projects and clients.

I also decided to join the Auckland engenerate committee to meet some new people. The firm has allowed me to undertake planning and communication for engenerate social events and site visits during working hours, and is very supportive of my involvement. This has



also helped me to gain more Continuing Professional Development (CPD) hours. Through engenerate, I have also been involved in a new Toastmasters club for engineers. This provides a friendly and relaxed environment in which to learn about and practise public speaking (not one of my fortes).

The thing that has kept me with Traffic Design Group for two and a half years is the social and family atmosphere. We have a lunch meeting each Monday so that we all keep up to date with projects going on within the office; and every Friday there are drinks and nibbles after work. Throughout the year we have a number of social and team building activities

including our office fishing trip and an annual weekend away, where all the staff and their families meet up for social activities and inter-office competitions and awards.