



## 1000<sup>TH</sup> ENGINEER COMMEMORATIVE ISSUE

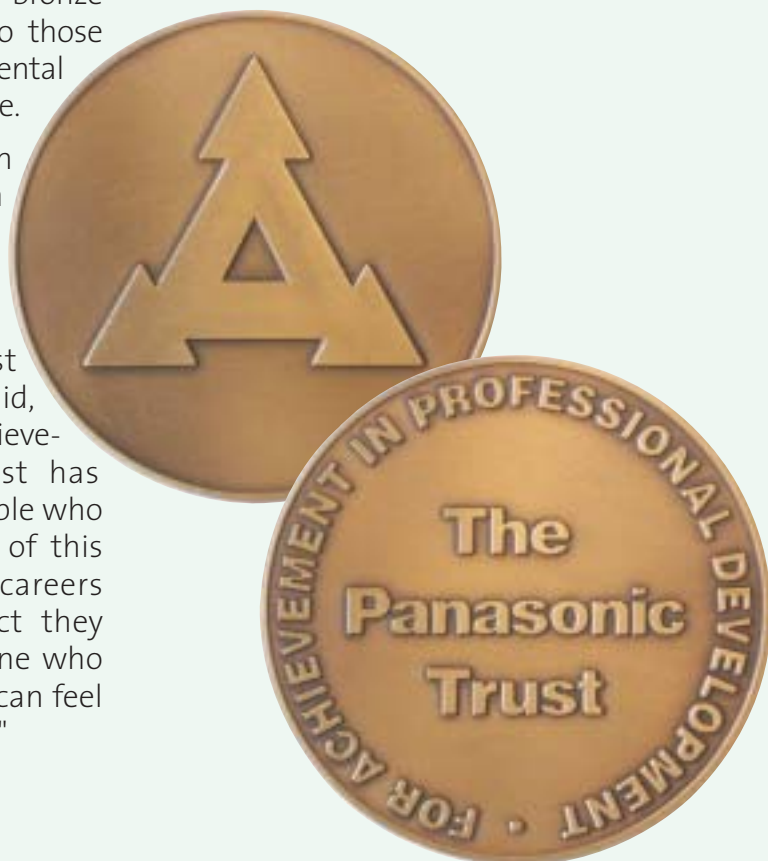
Welcome to our commemorative edition of Panasonic Trust News. This month the Trust celebrates supporting its 1000th engineer on a part-time course related to their continuing professional development.

To mark this achievement, the Trust has commissioned a commemorative bronze medal, which is to be awarded to those individuals who have been instrumental in the Trust achieving this milestone.

The celebrations will culminate on 10 June, when the 1000th awardee will be announced and presented with a commemorative medal and cheque for £500.

In announcing the news, Trust Chairman Robin Bond FREng said, "This is a truly remarkable achievement. Over the years the Trust has supported some of the finest people who make up the engineering talent of this country. We have seen their careers develop and the positive impact they have made on UK industry. Anyone who has been involved with the Trust can feel proud in what has been achieved."

This issue of Panasonic Trust News is dedicated to the 1000 engineers who have benefited from our support to study part-time. We wish them continuing success with their careers. As a snapshot of this success we are proud to feature three of the awardees in the issue.



## GEOLOGISTS AND ENGINEERS ARE COMING TOGETHER FOR THE 'BIGGER PICTURE'

**2001 Panasonic Trust Awardee, Dave Lerpiniere is a geologist by training and profession who works very closely with engineers in the firm Marcus Hodges Environment Ltd in Devon. This environmental consultancy of engineers, geologists and environmental management specialists carries a diverse workload, covering areas ranging from contaminated land assessment and remediation to environmental auditing and strategy work.**

How is it that a geologist came to belong to the family of Panasonic Trust's Awardees? Dave's first contact with the professional geological world came a few years ago through school work experience with the Exploration and Production arm of British Gas. The geologists and engineers there were very encouraging, supportive and, most importantly, according to Dave, enthusiastic about their work! "It gave me a great chance to see and understand what technical specialists in the geology and engineering fields actually did in the workplace," Dave says, so he returned there for temporary employment during the school holidays and very soon had started a degree in geology with plans to become a professional geologist.



After graduating with a degree in Earth Sciences from Oxford in 1997, Dave began his career working for Geraghty & Miller International in Cambridge. The work was exciting and provided a steep learning curve, but Dave noticed soon after starting there that many of his colleagues were qualified to MSc or PhD level. He realised that a post-graduate qualification was something that the environmental consultancy sector regarded as more of a requirement

than a bonus. Dave envisaged returning to further study once he obtained some experience in the work place and decided in which direction he wanted his career to go and in what technical discipline he wanted to specialise.

Dave's original plan was to return to full time education, but plans don't necessarily always work out the way we think. Dave realised that postgraduate funding was scarce and in the meantime, relocated to Devon and began working for Marcus Hodges Environment.

Dave considered studying for a postgraduate qualification part time or by distance learning. With support from his employer he researched various options. The Imperial College at Wye External Programme offered an MSc in Environmental Management with its focus on sustainable development. Funding now became the main challenge confronting Dave. Although he is fortunate to work for an employer that recognises the importance of staff development, Marcus Hodges Environment is a relatively small company and could only offer Dave limited financial support. Luckily, the Panasonic Trust generously came to the rescue providing the remaining funding.

The External Programme runs entirely distance learning based courses, which are taken by individuals across the globe. Dave began the course in February 2000, beginning with core

modules on management principles, environmental science and economics. He set himself the challenge of completing the course in two years and despite the almost daunting quantity of material and unfamiliarity of much of the subject matter he launched into the course with enthusiasm. As Dave says, he didn't need to move from his chair as the material could be worked through at his own pace. Each module contains files; texts, papers etc., which were provided replacing lectures and having to attend seminars.

"Part of the attraction of the course was its flexibility," Dave said. "I could take as many or as few modules in a year as I wanted and spend anywhere between 2 and 5 years to complete the course. Instead of just doing the diploma, I was motivated to complete the seven modules for the MSc so after the first year of the course I opted for modules on International Environmental Law, Valuing the Environment: A Sustainable Development Approach and to complete a dissertation on the economic cost of farming's environmental impact" he added. At the end of 2001, Dave successfully completed the MSc.

What does Dave see as the benefits of having taken this route? He found that his studying for this MSc and even after its completion has complemented his professional work as it has given him the benefit of being able to see the bigger picture. At the same time, his professional work helped his studies, providing examples and 'real life' experiences of the concepts and problems covered by the course. As a result, Dave believes this has greatly developed his skills and knowledge and he can now apply the principles of sustainable development to his work.

With the help of his firm and the Panasonic Trust Award Dave has been able to achieve part of his ambitions. Where to now? The environmental sector is developing so quickly at the moment, with new legislation and technical developments coming on an almost daily basis, that there is increasingly a need for geologists and engineers to consolidate their skills and become specialists while at the same time retaining at least some grasp of the 'bigger picture'. "Specifically", Dave notes, "I see myself continuing to develop my technical skills in environmental, health and safety risk assessment and contaminated land remediation. Along side this I plan to develop my managerial skills in my new role as manager of the Environmental Strategy and Risk team at Marcus Hodges Environment."

On a final note, what has the Panasonic Trust Award done for him? Dave recommends the Panasonic Trust Award to others. Without it's invaluable assistance, he says, he would not have been able to develop his skills and knowledge in his chosen area of work. Through the Trust's help, undertaking the MSc in Environmental Management has provided Dave with an excellent basis from which to develop his career. As the environmental sector develops, it is becoming increasingly necessary for practitioners to possess up-to-date skills and be well qualified.

Dave's ambition and determination along with enthusiasm from his work colleagues have supported Dave through his early career - notwithstanding a bit of financial help along the way! What would his advice be to others wanting to get into a similar field? "My advice to get out there, say through work experience, job shadowing or just talking to people and find out what's actually involved in the job. It gives you a great chance to decide where exactly you want to work, in what is a very diverse and increasingly technically specialised field - and you never know where it may lead."

# BEING THE GUARDIAN OF PUBLIC SAFETY

**Whether it's to further your skills, qualifications or keep ahead in the ever changing world of engineering, it's not easy when running your own business. Martyn Southall, a 2002 Panasonic Trust Awardee had many reasons to build on his education and qualifications. An Award was there to assist him in his drive to success.**



As a self-employed Building Designer and Chartered Surveyor with no BSc letters after his name, Martyn's primary objective was to seek enhanced qualifications with a high academic value. It was a fundamental requirement that no institutional body would have the power to reverse any such award in the event of a challenge to his professional competence or a change in fortune.

Martyn owns and runs, Applied Surveying and Design Group (ASD) in Worcester, which he started in 1988. He and his small team provide a professional design service for buildings and property. Martyn is responsible for project management, developing historic building skills and structural engineering services. He is

also responsible for the daily running of the firm and its overall management control.

Martyn was in the buildings and property business for many years before creating ASD. Prior to 1988, he worked in the private sector as a Building Surveyor responsible for normal duties pertaining to projects for insurance companies and the like dealing with a portfolio of property. He spent 9 years with local authorities as a Building Inspector responsible for checking designs and site construction for compliance with design standards. Before this, Martyn started as a trainee Estate Surveyor for Woolworth's before spending 5 years as an Architectural Technician for an industrial developer.

As Martyn notes, his career path was a natural progression from technician/surveyor to engineer: "I enjoyed mathematics and structural engineering involving calculations and conceptual design solutions. I was always interested in technical solutions and design of buildings. I enjoyed my time creating new building designs."

But experience is just part of the learning curve for Martyn. He claims that poor television programmes inevitably motivated him to seek a better way of using his leisure time in a productive way. He also could see where he could improve his skills and at the same time boost the qualities of his company. Martyn was particularly interested in engineering philosophy applicable to building construction. Enquiries at a local Continuing Professional Development (CPD) meeting led him to joining the MSc course at Nottingham Trent University in Building, Engineering, Construction, Design & Management.

Most professional institutions require members to undertake CPD and this course offered compliance with the rules of conduct and with Martyn's obligation to maintain a high level of training. Ultimately, it was the desire to learn more about structural and geotechnical engineering that prompted him to get involved. "It gave me greater insight and confidence in the way I do my business. I am now better placed to compete with other professional practices within the Worcester region." Martyn says.

Martyn could see that as new innovations and changes to legislation were under continual review and always developing, he had to broaden his technical knowledge and update his skills with current engineering methods. This course supported the type of work he undertook while ADS also benefited in the longer term.

Martyn definitely saw great personal reward in obtaining further education. He found the whole learning process to be a very enjoyable one, and as the course progressed, it boosted his confidence as his knowledge base widened. Martyn feels that he is now better equipped to approach engineering problems with better skills. Naturally as interactions with fellow engineers took place, new friendships were made and new business opportunities forged.

By updating and understanding engineering principles and by gaining a greater awareness of modern technology, materials used and methods involved Martyn sees himself as better equipped to resolve technical problems and provide his clients with a first class service. He has a distinct advantage in his chosen profession as a building designer with a specialisation in structural engineering. Since obtaining his MSc degree, he has successfully raised his education standards by becoming a Fellow of the CIOB and the RSH. In addition, as his dissertation focused on new technological development emphasizing the way construction professionals should repair historic buildings, Martyn has also gained valuable experience and a better understanding to solving managerial problems. "This innovative technology grabbed my imagination to the possible uses for new materials and the way they can be introduced to benefit our economy," he adds.

What then does the future hold for Martyn? His tutor asked whether he wanted to take his coursework further and make it the subject of a PhD. At the moment, Martyn will be looking at all the options. In the meantime, the engineering profession seeks high quality standards and Martyn feels he has personally achieved this objective. He has recently sat the Associate Member examination of the IStructE and ultimately, he would like a shot at the Chartered Engineer entry-level examination.

Martyn has no hesitation in recommending the Panasonic Trust Award. His own personal and business achievements are testaments to that fact.

Martyn has been in the engineering business for many years with strong drive, ambition and a belief that engineers must constantly enhance their skills. As Martyn puts it, "I believe that professional advisors who design buildings or structures must have a rudimentary understanding of how buildings stand up (or fall down). Engineers are the guardians of public safety without doubt."

## FLYING HIGH WITH A BOOST



**Geoff Douthwaite, a 2001 Panasonic Trust Awardee, is a mechanical engineer in the aerospace industry. For him, further studies meant an opportunity to become familiar with the latest practices used in the aerospace industry and to focus on the areas he considered important to his career development, while also gaining a recognised qualification.**

Geoff wanted to become an engineer at an early age. His father was a design engineer also

in the aerospace industry and their talks about his father's work led to Geoff being interested and pursuing a career in the field.

While working for Westland Helicopters, the company offered him the chance to study for an MSc in Aerospace Design, Manufacture and Management, under the Integrated Graduate Development Scheme (IGDS). The University of Bristol and University of the West of England, in partnership with industry, run the course. It comprises twelve residential modules and a project. Subject matter of the modules is diverse but all have either a managerial or technical bias. Tutors are from the universities and industry hence, the study

material is constantly updated. The IGDS also interacts with other organisations, such as the European Professional Aerospace Development Programme (Europads) who run some of the modules.

Westland sponsored Geoff for most of the modules but after leaving the company, he went on to finance himself to complete the course. With the welcome assistance of the Panasonic Trust Award and after a long haul, Geoff was awarded the MSc in December 2002.

The course gave Geoff a better understanding of many other facets of the aerospace industry and he was also able to 'compare notes' with his fellow students on their experiences in the field.

In terms of future aspirations, as Geoff puts it, he wants to stay employed! But he eventually would like to move into management.

According to Geoff, the Award was a "real life-line" and although the course was hard work, it was nevertheless rewarding and he's glad he stuck with it. Geoff has even recommended others to apply for the Panasonic Trust Award.

When asked what advice he would give to aspiring young engineers, Geoff strongly suggests that science and maths are key to an engineering future, and English shouldn't be left out of the equation. He does note however that it would be nice if the wider public appreciated the work of engineers more, but nevertheless, it is a rewarding career for those with an analytical mind with lots of ideas and naturally curious!

## THE PANASONIC TRUST FELLOWSHIP

**These prestigious awards are tenable on the following full-time Masters' courses during 2003:**

Multimedia Technology at the University of Bath

Manufacturing Systems Engineering at the University of Bradford

Cranfield Manufacturing Masters' Courses at Cranfield University

Environmental Sustainability at the University of Edinburgh

Geotechnical Engineering at Heriot-Watt University

Environmental Diagnosis at Imperial College

Renewable Energy Systems Technology at Loughborough University

Water and Environmental Management at the University of Newcastle Upon Tyne

Renewable Energy and the Environment at the University of Reading

Engineering for Development at the University of Southampton

Energy Systems and the Environment at the University of Strathclyde

Water and the Environment Engineering at the University of Surrey

Corrosion Science and Engineering at UMIST

Facilities Management at UWE Bristol

Virtual Manufacturing in Construction and Engineering at the University of Wolverhampton

## DO YOU RUN A TECHNOLOGY UPDATING COURSE?

The Panasonic Trust is always keen to expand the number of courses it supports with its awards. Suitable courses, either full or part-time, can cover any aspect of new technology. Applicants need not be graduates, but should have qualification in engineering or closely allied subject.

**Contact us now for further information on funding opportunities.**

## APPLICATION INFORMATION

**All enquiries about the Panasonic Trust and its activities should be made to:**

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