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# INNOVATION



## Editorial

### Innovation – A new magazine for an innovative institution.

Innovation is the cumulative effort of the DIT Industry Development team who are promoting DIT's interaction with industry in research, development, consultancy and training. Innovation will report on the developments taking place across the Institute and provide contact points for more in-depth information.

It is intended that our magazine Innovation will evolve as the type of activity within DIT develops. Articles from all staff are welcome within the fields mentioned. This magazine is produced in house and therefore lends itself to being tailor made to specific industries should a Faculty wish to extract all their publicised R&D, C & T activity for promotional purposes. As a vehicle of communication Innovation will be as successful as you make it, if you want more or less information on topics make it known. Articles may be submitted to Jean Cahill (or any of the IIS Offices) at any stage, as we will publish as the supply and demand for information permits. **BMCL.**



### The Knowledge Machine

..... driving innovation ....

### Staff Innovation Day - Friday 10th May 2002, DIT, Aungier Street

The Offices of Innovation and Industry Services have lined up an impressive panel of guest speakers to stimulate ideas and debate around the topic of "The Knowledge Machine". Coming from a range of industry sectors they have strong links with the academic world and exciting and valuable ideas to share. Dr Chris Coughlan (Compaq Computer International), Niall Connolly (Hewlett Packard) Dr Michael Murray (BTG plc) and Dr Robert Erickson (Neutek) will all make presentations.

A series of three parallel Case Studies will be presented by the CEO's of Identigen, New World IQ and Magnetic Solutions and group discussions on "Innovation in DIT" will be held. The main findings will be presented on the day at a plenary meeting.

Meanwhile an ongoing poll will take account of delegates views on "The importance of Innovation" and the results for this will also be available. Dr Patrick Fottrell, Chairman, DIT Governing Body, will open the conference which will be chaired by journalist and broadcaster David McWilliams. Dr Brendan Goldsmith will bring the day to a close when there will be plenty of time for innovative chat over a glass of wine or two! Places are limited so reserve your place on the conference website on the staff intranet at: <http://intranet.dit.ie/km>.

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# Increasing your prospects



*Do you have an idea that you are interested in commercialising? Are you interested in making money from your research but are not sure of the best approach to take?*

PROSPECT is a six-month training programme designed to help you evaluate the commercial potential of your own research project and develop the necessary business skills to fully explore your novel technology. Interactive workshops are held each month on Friday afternoons and Saturdays to accommodate your regular work schedule.

There are 10 DIT staff/researcher places available on this programme which also offers one-to-one business counselling, mentoring and technical consultancy and the next programme will commence in June.

The programme team, based in DIT's Project Development Centre, Docklands Innovation Park, has a wealth of experience in supporting the start-up and growth of Irish companies. Backed by a panel of commercially experienced business counsellors and trainers, the team has been successful in launching over 30 businesses annually and supports a network of about 300 companies. In addition it has its own Seed Fund which provides finance for early stage businesses.

For more details contact: Rosie Scott at: [rosie.scott@pdc.ie](mailto:rosie.scott@pdc.ie) tel: 240 1300.

## Centre Point

*Over the last ten years DIT has set up over 16 research, development and consultancy Centres. Most are advised by an Industry Board with representatives from the relevant sectors as well as DIT staff with the necessary expertise. In each issue of Innovation we will highlight one of the Centres and provide news snippets on the others (see next page) so you can keep up to date with what's going on.*

The first Centre we will look at is the **Tourism Research Centre** (TRC) managed by Liz Kennedy (see pic, right) and her staff of five. The Centre is based in Marlborough St just across the road from the Faculty of Tourism and Food.

As with most of the industry centres the manager and staff are on short-term contracts and aim to cover their salaries and the Centre's running costs while at the same time building a centre of excellence in their particular field.

The TRC's Mission is: *'to provide independent research and development services for the tourism and hospitality industry in Ireland'.*

The Centre is the only tourism research unit in the country and its staff and those from within the Faculty provide a range of services including:

- Market and trends analysis
- Customer surveys

- Employee satisfaction surveys
- Integrated regional development strategies
- Marketing plans
- Product evaluation
- Strategic planning
- Mystery Shop experience
- Staff development programmes
- Visitor Profiling and Customer satisfaction surveys

The areas of expertise within the Centre include: tourism development and marketing, leisure management, hotel and catering management, rural tourism, tourism and the environment, and technology and tourism.

The Centre is currently working on a number of research projects including an evaluation of visitor attitudes to Dublin, profiles and motivational factors influencing visitors to the Hugh Lane gallery and an analysis of Irish resident's perception of Lisbon as a holiday destination.

An extensive staff training programme for Irish Ferries which involves DIT lecturers spending three days at a time on board the MV Normandy is providing those involved with an interesting new teaching environment!

The Centre was involved in one of the Faculty's recent Strand III submissions and is currently looking at the possibility of applying for Interreg funding. Having managed and successfully completed a Hotel Management Skillnet project the TRC has now sourced funding to extend this into 2002.

For more information on TRC projects and contact details check out their website: <http://trc.dit.ie>



## News from the Centres

*The **Applied Optoelectronics Centre** exhibited at ICT Expo (the Information and Communications Technology event). The exhibition in the RDS ran from the 9th - 11th of April. At the exhibition the Centre launched its new training course 'An Introduction to Telecommunications' which received considerable interest. The Centre was able to showcase its Training portfolio and its design & consultancy services to its target audience.*

The **Distance Learning Unit** (DLU), working closely with the Faculty of Engineering, continues to expand its activities to assist manufacturing and mechanical engineering companies throughout Ireland in meeting new skills needs. The Centre is currently running eighteen separate in-house training programmes around the country for maintenance personnel who are working towards a Certificate in Maintenance Technology. In addition, the DLU has recently completed several customised courses for clients including a ten week part-time course on 'Introduction to Refrigeration' for employees of Glanbia Dairies in the Leinster region, and a three day intensive course on TIG Welding for toolmakers in Tyco Healthcare, Tullamore.

**The Centre for Social and Educational Research (CSER) has just been awarded funding to carry out an 'Inventory of Crime Prevention Measures' for the Department of Justice, Equality and Law Reform. In June of this year a Minister from the same Department will launch the findings of a major prison study carried out on behalf of the Mountjoy Visitors Centre and St Vincent de Paul. The CSER has three research units - Early Childhood Education, Residential Care and Juvenile Justice and Families - each relating to a specific area of research (and evaluation) expertise. In addition, projects dealing with transversal themes are also undertaken from time to time.**

In March the **National Institute for Transport and Logistics (NITL)** launched its Foundation Certificate Programme in Supply Chain Management, in Belfast, in association with Castlereagh College. NITL will shortly present this course to Symantec Ltd. The Centre recently presented a paper on eLogistics at a US-Ireland eLogistics Forum in Farmleigh House. NITL has been engaged by Enterprise Ireland to deliver mentoring and consulting support in SCM to 30 companies.

**Schering Plough has awarded the National Maintenance Centre (NMC) a contract to carry out a skills audit. The Centre has also scheduled a training programme for 2002/2003 with Yamanouchi Ireland.**

A student on placement from the Faculty of Business has been designing a new website for the **Food Product Development Centre**. It should go live within the next couple of weeks. Another student from the Faculty of Business' Links programme is now researching a food sector report.

**The Tourism Research Centre's 5th edition of Tourism Times is now on the staff intranet.**

The first national based survey of parents' needs was launched recently in government buildings by Minister for Social, Community and Family Affairs, Dermot Ahern T.D. Sinead Riordan of **Dublin Institute of Technology's Centre for Social and Educational Research (CSER)** compiled the report, entitled **Supporting Parenting: A study of parents' support needs.**

The **Media Production Unit** will be running a series of short intensive courses for audiovisual professionals this summer. Courses planned include: Radio production skills, Digital editing for audio/Radio and Adobe Photoshop.

## INTERREG IIIA

Interreg III is an EU funding initiative for the development of cross-border, trans-national and inter-regional co-operation. Interreg IIIA is the programme for co-operation between parts of Ireland and Wales. A total of €46m is available for eligible projects under this initiative (until the end of 2006). Up to 75% of project costs can be funded - the other 25% has to come from 'matched' funding (some of which can be 'in-kind'). The programme has just been launched so there is no firm date for receipt of applications for the first round of funding. However, it will probably be May 2002. There will be about three calls a year for funding applications once the programme is fully established.



One office, based in Cardiff, will deal with all applications and payments. Requests for payment will be accepted on a quarterly basis and payments will be made in euro to Irish partners and in sterling to Welsh partners. The Irish Interreg office is based in Wicklow.

Projects must take place within specified regions - in Ireland the eligible counties are: Meath, Kildare, Dublin, Wicklow, Wexford, Waterford, Carlow, Kilkenny, and South Tipperary. The project organisers, however, do not have to be based in those areas.

The programme has two main **priorities** which are divided up into a number of **measures**:

**Priority 1: To encourage the economic, social and technological development of the cross border area**

**Measures: Business and enterprise development, Rural development, Education and training, Information and communications technology**

**Priority 2: To achieve sustainable growth by enhancing the overall quality of the cross border**

**Measures: Marine and coastal environment, Culture, heritage and tourism**

The types of activity that can be funded include: network development, market research, technology transfer projects, feasibility studies, research into the enhancement and protection of natural resources, skills training, training needs analysis, ICT projects, environmental studies, and preparation of information on sustainable development.

Full information on Interreg IIIA is available on the following websites:

[www.wefo.wales.gov.uk](http://www.wefo.wales.gov.uk), [www.interreg.ie](http://www.interreg.ie)

Your local IIS office (see back of newsletter) or Research Strategist can also provide you with more information on this programme.

**€46m is available to fund projects over the next 5 years**

## May days

**May 4th** : Outline PRTL I proposals (4 pages) to Steve Jerrams

**May 9th**: DIT Showcase of Learning and Teaching Innovations

**May 10th**: DIT Staff Conference "The Knowledge Machine"

**May 15th**: SFI Investigator programme deadline.

**May 15th**: Date for submission of Interreg IIIa funding applications

**May 30th**: Closing date for submissions for Food Safety Promotion Board funding

**May 30th**: Closing date for CSET Campus-Industry partnerships.

The Research Support Unit, Directorate of External Affairs will offer advice and assistance in the preparation of submissions.



Deadline dates for your diary

## Strand III update

A total of 11 Strand III proposals were submitted to the Directorate of External Affairs. These were broken down as follows:

Applied Arts: 2 (1 from CSER)

Built Environment: 1

Built Environment and Engineering: 1

Business: 2 (1 from NITL)

Engineering: 1

Science: 2

Tourism and Food: 2

The DIT committee approved 7 of these, all of which will be presented to the HEA for approval in May.

The committee comprised:

Dr Declan Glynn, Director of External Affairs, Dr Steve Jerrams, Head of Research, Professor Stan Harvey (retired Dean of the School of Engineering, Coventry University) and Michael Wilson (Decision Support Systems Ltd).

The following projects (in no particular order) will be submitted to the HEA:

Time Compression techniques in concurrent engineering (Engineering)

Optical metrology and its application to anterior ocular abnormalities (Science)

A food research unit for the investigation of the safety and quality of innovative



minimal processing (Tourism & Food)

Sustainable tourism development (T&F)

Assembly and analysis of candidate materials for nanoelectronics capability at DIT (Science)

Youth crime research project (CSER)

Organisational transition process in an ICT enabled environment: an empirical investigation into the development of competitiveness among Irish organisations (Business).

## Research funding results

In April the National Research Support Fund Board (NRSFB) approved 24 Research Innovation Fund (RIF) projects out of a total of 54 applications. A total of €3.1m was recommended. DIT researchers submitted two projects but were not successful.

The following institutes received funding. The figures relate to number approved/number funded: DCU 2/8; DIT 0/2; GMIT 0/1.5; NMRC 3/5; NUI Cork 0/2.5; NUI Dublin 2/7; NUI Galway 1/5; NUI

Maynooth 1/4; RCSI 2/2; TCD 3.5/8.5; UL 2.5/8.5.

***On the same day the results of the Basic Research Grant scheme were announced by the NRSFB and the Irish Research Council for Science, Engineering and Technology (IRCSET). Funds received by Enterprise Ireland have been doubled by IRCSET to bring the total amount to €16,042,766.***

***A total of 119 proposals out of 569 applications was accepted. The number of applications from IT's (DIT, GMIT,***

***and IT Tallaght) represented 2.52% of the total.***

***Applications were received from DIT in Science (3) and Tourism and Food (2). One application from Science was accepted so congrats to Dr Tia Keyes whose project 'The role of Hydrogen Bonding in Mediating Electron Self Exchange in Solid Self Assembled Crystalline Structures' will be funded.***

## R&D News

***The National History Museum in London has invited proposals from researchers seeking access to the collections and facilities of its museum with the option of associated visits to the Linnean Society and / or the Royal Botanical Gardens, Kew. Visits of up to 60 days are allowed and funding is available to cover travel, accommodation, subsistence and research-related costs. The deadline is 31 May 2002. For further***

***information email: l.houseago@nhm.ac.uk***

The European Foundation for the Improvement of Living and Working Conditions has issued a tender for a project examining the social and economic inclusion of people with long-term physical or mental illness. The closing date for requesting tender documents is 26th April 2002. The deadline for submitting proposals is 30th April 2002. Further details are available from [imk@eurofound.eu.int](mailto:imk@eurofound.eu.int)

The EC has invited expressions of interest (EOIs) for topics that could be the subject of "integrated projects" or "networks of excellence" - the new instruments for the 6th Framework programme. The deadline is 7th June 2002. Further information is available at [www.cordis.lu/fp6/eoi-instruments](http://www.cordis.lu/fp6/eoi-instruments)  
***For all open calls for proposals and tenders check the Cordis website: <http://www.cordis.lu/en/home.html>***

## Science Foundation Ireland funding opportunities

In February Science Foundation Ireland (SFI) announced that it would fund research programmes focussing on building critical mass, a strong culture of science and engineering and an advanced knowledge-based economy. Specifically SFI will support individual scientists at all levels and will facilitate collaboration between the research, educational and industrial communities. The SFI will fund the following programmes:

**SFI Fellow Awards** : Replacing SFI Principal Investigator and Junior Fellow programmes the Fellow Awards will allow Irish research bodies and industry to attract world-class Irish and International scientists. Funding up to €1m per year for up to five years is available for researcher salaries, equipment and materials

**SFI Centres for Science, Engineering and Technology (CSET): Campus-Industry partnerships** : Grants from €1m to €5m available for programme support and matching funds for related new laboratories.

**SFI Investigator Programme Grants**: Funding available (from €100,000 to €250,000 per year for up to 4 years) to cover postdoctoral, postgraduate, and undergraduate students and equipment and materials.

**ETS Walton Visitor Awards**: Grants available for up to €200,000 per year to cover salary, laboratory and moving expenses for leading researchers to spend (usually) one academic year in Ireland.

**SFI Workshop and Conference Grants**: To facilitate internationally-focused workshops, symposia and conferences.

For more information and application forms see: [www.sfi.ie](http://www.sfi.ie)



## How to.. Set up a project code

A wide range of funding is currently available for research and development projects. If you have sourced research funding you must then set up a project code by registering it with the Research Department in the Finance Section, Pembroke St.

To do this simply fill out an R&D 1 form for the project and an R&D 2 form for any new research staff taken on (both forms are available on the staff intranet) (follow procedure R1). This should be done as soon as you get confirmation of funding. The R&D 1 form must be signed by the project director - the person in charge of the project who is responsible for the money and how it is spent; the relevant Head of School or Faculty Director (who agrees to make resources available where necessary); and the Head of Innovation and Industry Services for the Faculty.

The Research Department will assign a project code to the account to use every time you need to make a claim against it. All financial returns to external funding bodies must be channelled through the Research Department and signed off by the Finance Officer.

**Key contacts:**  
**Catherine McGarvey**  
**Tel 402 3331**  
**Elaine Hopkins**  
**Tel 402 3359**

## PEI Technologies seminars

PEI Technologies is one of seven Programmes in Advanced Technology (PATs) - partnerships between Enterprise Ireland, industry and third level colleges. They were established to meet a need for a strategic expertise base in certain key technologies. The programmes have been co-funded by the European Regional Development Fund.

PEI Technologies provide access to advanced technology in power electronics and as part of its service offers a series of public training seminars. Those planned for 2002 include:

Magnetic sensors, April, Dublin  
Embedded technologies, May, Limerick  
Electronic Product Reliability, June, Dublin  
Automotive Electronics, September, Limerick



Further details  
available from  
Margaret Halligan, PEI  
Technologies:

email:  
[halliganm@pei-tech.ie](mailto:halliganm@pei-tech.ie)

## Virtual reality

The Digital Media Centre (DMC), based in Aungier St and managed by Charlie Pritchard (402 3047) is an innovative workplace encouraging the development of new media, creating links between academia, industry and the public sector; cross-fertilising education and industry; supporting industry with academic skills and knowledge; supporting education with industry market intelligence and resources; and influencing public policy.

The DMC has recently completed an interactive 3D project (i3G) for the National Gallery of Ireland to recreate the atmosphere and content of the National Gallery online. The main benefits of the project are:

### To enhance the visitor experience

The experience of a visitor to the gallery benefits from the resource of a realistic visual guide to the gallery. As well as enabling visitors to explore the contents of galleries before or during a visit, the i3G displays collections of stored or touring art which would not otherwise be on show. Uniquely the i3G presents collections of painting with a feeling of relative scale which is never experienced with more traditional 2D publishing in journals, books and websites.

### As a research tool

The i3G allows the gallery to publish historical art content organised in themes around the individual galleries. This can be

designed for use by different classes of user, for instance the leaving certificate course in art history can be presented by the gallery, or the same collection of paintings can be presented with interpretation appropriate to a 3rd level art history course.

### As an exhibition design tool

The i3G can be used by the gallery curators as a tool for designing and evaluating new hangings of exhibitions and new colour schemes for the gallery walls and so on.

## R & D News

*The EU Minerva programme provides funding for the promotion of European co-operation in the field of Open and Distance Learning (ODL) and Information and Communication Technology (ICT) in education.*

*Minerva supports various projects including the development of educational resources and methods on the basis of innovative experiments. It also funds studies or comparative analysis of particular aspects of ODL and/or the use of new educational technologies at a European level as well as the setting up of information services.*

*For projects under Minerva, a partnership must include at least one eligible institution in each of at least three participating countries.*

*The project proposals are evaluated and selected centrally by the European Commission. See [www.hea.ie](http://www.hea.ie) for more details.*

**Europe's Virtual Institute for Chemometrics and Industrial Metrology (VICIM) has been established with €2.2m of EU 5th Framework funding. Following the initial 3 year funding phase, VICIM will become an independent research foundation. For more information see:**

**[www.quimica.urv.es/quimio/VICIM](http://www.quimica.urv.es/quimio/VICIM)**

Seven new European regions were recog-

nised at the 2002 Award of Excellence for Innovative Regions, held during the Third European Forum for innovative enterprises in Stockholm on April 8- Berlin, Copenhagen, Dublin, Edinburgh, Hamburg, Veneto and Vienna. The award scheme is part of the EC's PAXIS initiative which aims to develop and encourage best practice and knowledge sharing for the creation of innovative enterprises.

**The inaugural meeting of the Irish chapter of Women in Technology International was held earlier this month. It provides networking and mentoring opportunities for its members and plans to meet every month. More info from: [annette\\_condon@dell.com](mailto:annette_condon@dell.com)**



## Representing DIT

**TII** (Technology, Innovation Information) is the European organisation of technology transfer professionals comprising almost 300 organisations spanning 25 countries. About one third of members are from the Higher Education sector and the remainder from innovation support agencies, licensing companies etc. This year's annual conference was held in Turin, Italy on the 18<sup>th</sup> and 19<sup>th</sup> April.

The title of the conference was "Science, Society and the Mar-

ket – Meeting the Challenges". The first day of the conference, comprised mainly keynote speeches and some parallel sessions, whilst the second day was dedicated to the TII AGM and a number of interactive workshops. Copies of the conference papers are available at the Faculty of Engineering IIS office.

At the AGM, Margaret Whelan (Head of Innovation and Industry Services, Faculty of Engineering) was elected to the board of management of TII as the representative for Ireland. This provides

an opportunity to not only keep abreast of developments in the area, but also to promote DIT generally and to have greater interaction with and input into transnational projects.



Margaret Whelan elected to the board of TII as it's Irish representative.

## Prodi encourages entrepreneurship

Romano Prodi, President of the European Commission has called for Europe to capitalise on its strong academic and fundamental research by improving the cross-border diffusion of innovation.

He spoke of the 'rebirth of the entrepreneur', the barriers to entrepreneurship in the

**"All levels of education should give more importance to entrepreneurial values"**  
**Romano Prodi**

EU and the consequent lower level of entrepreneurship in the EU than in the US at a recent conferring on him of an MBA Honoris Causa.

Referring to the slow start-up rate of new businesses in the EU, Mr Prodi criticised government requirements which hamper the process. Citing a recent study he said that in many EU countries, an entrepreneur has to wait more than 50 days and pay more than €4,500 to ac-

quire all the necessary permits, whereas an entrepreneur in the US can complete the process in only 4 days paying about €229.

*"To make Europe more entrepreneurial, education should be used to teach values such as creativity, risk taking and responsibility",* said Mr Prodi.

## More on Funding

Following agreement with a group of its member organisations, the European Science Foundation has launched a first Call for Proposals (16/04/02) for research projects to be undertaken within the EURO-CORES programme on **Self-Organised Nano-Structures (SONS)**. The programme will run for five years and includes

national research funding and a European networking component. Proposals are sought for **Collaborative Research Projects**. The deadline for receipt of proposals is 31st May 2002. More details available at: [www.esf.org](http://www.esf.org)

*Skillnets has been approved for a further Training Networks Programme (2002 - 2005). Further in-*

*formation on this scheme is available on their website ([www.skillnets.com](http://www.skillnets.com)). The Tourism Research Centre and the Distance Learning Unit have both managed Skillnets projects.*

## Technology Implementation

Cordis is offering a new interactive feature to help project contractors submit details on the application and exploitation of their prospective results. Project partners need to deliver information on their foreseeable research results. The document known as the **Technology Implementation Plan (TIP)** is generally submitted at the

end of the project. Thanks to the new web-based feature, partners can proceed in multiple sessions to make all details and results from the project available for evaluation and publication. The new submission tool offers online guidance and eases faster dissemination of public results.

Non-confidential information will be passed to the CORDIS

service for publication.

Selected examples will be presented on the Marketplace website. Protected access and simplified updating procedures can be provided for project coordinators and partners.



## Working together

**The Centre for Industrial and Engineering Optics based in Kevin St specialises in optical techniques for industrial measurement and testing, and provides technical and R&D services to industry.**

In September last year the Centre began a collaborative surface measurement project with Barry Duignan and David Kennedy from Bolton St. Dr Suzanne Martin manager of the Centre tells us that they have already managed to get some interesting results

" The IEO centre had devel-

*oped a vision system that used a CCD camera and Infra red laser to map the displacements of surfaces to sub-micron accuracy" she says. "This system had applications in defect detection and Non Destructive Testing, however, as the camera framing rate was limited to 50 frames per second or less, vibrating or dynamic surfaces could not be studied. One of the aims of the new collaborative project is to develop the system to incorporate a high speed CCD camera and so extend the range of applications. The input from Engineering will be crucial to the success of the project. The project will run for 3 years and is*

*Strand III funded. As part of this work we have recently obtained our first results with the high-speed camera. Good fringe contrast (needed for reliable measurement) was achieved at framing rates up to 1000 per second. This is a very positive development as we are still limited by the amount of light in each frame at high rates. For these tests the object being studied was a simple disk rotating in-plane. The next phase will focus on the study of more complex objects as well as moving toward higher data acquisition speeds"*

## Academic research awards

Three DIT lecturers have made successful applications to the Irish Research Council for the Humanities and Social Sciences (IRCHSS), Government of Ireland Senior Academic Research Schemes 2002-03. Dr. John Gilmartin, School of Art, Design & Printing received a Senior Research Fellowship, while Carmel Gallagher and Máire Mhic Mhathúna, School of Social Science and Legal Studies were awarded Senior Research Scholarships

**All three received the academic awards based on the judgement of a Board of International Assessors. The judging process was extremely tough with each application also been reviewed by an academic expert outside the Republic of Ireland who was asked to furnish a written evaluation to the Board on each submission. According to Marc Caball Director IRCHSS: " The International Board of Assessors informed the Council that the overall standard of applications was very high and the consequent competition very keen."**

## EU Focus

**Marie Curie Fellowships in the 6<sup>th</sup> Framework Programme will be open to third country nationals and will not be subject to age restrictions. There will also be incentives to return to Europe from abroad.**

A NESIS (New economy statistical information systems) conference will take place in Olympia, Greece from June 10<sup>th</sup> to 14<sup>th</sup>. It will focus debate on key areas of benchmarking in the methodological and statistical issues. More information is available from

vassi.vanbemten@artemis.lu  
A workshop on photovoltaics will take place at the end of May in the headquarters of the Joint Research Centre in Ispra, Northern Italy. Starting on the 28<sup>th</sup> May it aims to identify non PV technologies which can help and give input into European photovoltaic research and the strengthening of the PV industry; common research issues among the different PV technologies; new projects in the short, mid and long term.

**An EU study involving 13 European countries has concluded that the technology for the construction and opera-**

**tion of offshore wind farms is ready for large scale application. Europe's largest offshore wind turbine park is based in Middelgrun off the coast of Copenhagen with a capacity of 40 megawatts. Experts predict that by the end of the decade, European offshore windparks with a total capacity of thousands of megawatts – enough to supply power to millions of homes – will be in operation. A final report on the project is available at ) [www.offshorewindenergy.org](http://www.offshorewindenergy.org)**

## Events

A study on "Anticipating requests for commercial introduction of new GMOs in an enlarged EU" has been requested by DG Agriculture with the aim of identifying GM products most likely to request marketing authorisations in the (enlarged) EU market within the next decade. A workshop has been organised by the Institute for Prospective Technological Studies in Seville, Spain (June 14<sup>th</sup> and 15<sup>th</sup>) to present the results of the

study to a panel of international experts for their analysis and expertise and for the identification and selection of a set of possible GMO case studies. The IPTS will then select 3 to 4 case studies for in-depth techno-economic analyses to be carried out by ESTO – European Science and Technology Observatory. More info from: [monique.libeaudulos@jrc.es](mailto:monique.libeaudulos@jrc.es)

**Three training courses on the analysis of food samples for the presence of GMO's are being organised jointly by**

**WHO and the Joint Research Centre (JRC) in September (23<sup>rd</sup> to 27<sup>th</sup>), October (21<sup>st</sup> to 25<sup>th</sup>) and November (18<sup>th</sup> to 22<sup>nd</sup>). Participants must cover their own travel and subsistence costs but there is no training cost. Courses take place in Ispra in Northern Italy. More info on the JRC website: [www.jrc.cec.eu.int](http://www.jrc.cec.eu.int).**

## Health news

Information from one of the world's most respected electronic health libraries is now available free of charge to anyone in Ireland with access to the Internet. The Coch-



rane library is the world's most authoritative source of information on the effectiveness of interventions for the prevention, treatment and rehabilitation of all health conditions. Cochrane reviews provide systematic, up-to-date summaries of the possible benefits and harms of health care, which help people make practical decisions about their care

and the care of others. Direct access to the library is at: [www.update-software.com/access/ireland](http://www.update-software.com/access/ireland).

# Innovation and Technology

The Association for Technology Implementation in Europe (TAFTIE) consists of 14 national technology and innovation support agencies from 13 countries. These agencies co-operate with and share best practice with each other. A TAFTIE search engine (see [www.taftie.org](http://www.taftie.org)) has been designed to help you find information on innovation and technology. The TAFTIE search engine has indexed virtually all of

the top European and International sites.

*The Enterprise and Information Society Commissioner opened a recent forum for innovative enterprises in Stockholm with a call for the development of 'a more complete view of innovation, one that stresses those special skills of organisation and entrepreneurship that are essential in order to innovate successfully'. The Commission will publish a Communication later this year on a*

*European innovation policy to foster entrepreneurial innovation. European entrepreneurship days will also be staged in co-operation with some of Europe's leading cities of innovation.*

*[www.cordis.lu/innovation-policy/studies](http://www.cordis.lu/innovation-policy/studies) gives you access to comparative studies and policy surveys on innovation in Europe.*

## Entrepreneur awards

As part of the official opening of the Project Development Centre's (PDC) new premises an Taoiseach Bertie Ahern presented awards to the top two entrepreneurs on the PDC's Prospect and Hothouse programmes.

The winner from the Prospect programme was Vivienne Williams, Celix, Trinity College Dublin. Celix has developed novel breakthrough technologies which mimic human capillaries providing an alternative to pre-clinical testing of drugs on animals. This enables acceleration of drug development

while simultaneously diffusing the aggression experienced by pharmaceutical companies by animal rights campaigners.

Dr John McKeown of Asthma Friendly Products Ltd won the Hothouse programme award. The company is an independent certification authority providing an environmental health standard which delivers a value added solution for consumers with asthma and allergic sensitivities (pic right shows the two winners)



## Biotechnology the new growth industry?

A new biotechnology based strategy for industrial development has been launched by the Tánaiste Mary Harney. A venture capital fund was also established to accelerate growth in this area. The aim is to develop 30 new biotechnology companies



within the next 5 years.

The Irish BioScience Centre Capital Fund was established to concentrate solely on biotechnology, pharmaceutical and medical projects. Apart from a direct financial involvement, Enterprise Ireland, in partnership with the Science Foundation of Ireland and the

IDA is expected to play a leading role in fostering the emergence of a strong bio-industry. The Tánaiste will target biotech start-ups for a whole range of supports, and advanced facilities will be created to attract entrepreneurs with international experience.

# Talking Research

*Successful research and innovation isn't only about technical competency, it's also about passion, determination and commitment and when talking to Bill Reddington recently, Margaret Whelan, Head of Innovation and Industry Services in the Faculty of Engineering, discovered he had all of these and more.*



**Bill Reddington**

Bill joined the Dublin Institute of Technology in 1986 and is based in the Department of Manufacturing Engineering. Prior to that he worked with the Jones Group as a design engineer and later with the RTC in Athlone. He is a recognised CAD/CAM systems expert and has worked with this technology since the 1980s. In his early days with DIT he convinced Air Motive to sponsor the Faculty's first ever PC with AutoCAD and from these humble beginnings the Faculty today has an extensive range of CAD/CAM resources and facilities.

Staff and students have progressed from the use of simple 2D drafting packages to advanced solid modelling systems with links to analysis and simulation software. It is now possible (within the college) to design complete solid model assemblies, carry out force and stress analysis on all components, generate simulation motion for interference, produce photo realistic images and animations, and then send all components to manufacturing software which will generate cutting paths.

Bill has been at the forefront of these developments and has also maintained close links with industry. He is currently supervising two post graduate students Alan McDonnell and Senan Moynihan (both graduate students from the college) under the Strand I initiative. The first project is being carried out with W&J Bolger, the largest manufacturer of Sash windows in Ireland. The goal of the project to develop an integrated manufacturing system which will allow automated design of customised sash windows, with full capacity planning, and inventory control. The company was unable to find a commercially available system that would meet its unique manufacturing requirements.

The second project, is concerned with the application of advanced modelling techniques to design precision air handling units. This project is in collaboration with Dannan Clean Air Services Ltd (based in Dublin). The goal of this project is to develop a fully customisable modelling system which will automatically design complex Air handling units.

But now Bill has discovered a new passion - GDL or Geometric Descriptive Language to the uninitiated! One of the shortcomings of existing CAD systems, he explained, centres on interoperability. This is the ability to exchange intelligent information (described as full 3D objects) reliably and consistently between dissimilar CAD and other discipline applications. GDL makes it possible to do just that, allowing developers to create objects (e.g. windows, doors, furniture) that are small enough in size and fully parametric. One GDL object (approximate size 20kb) can describe hundreds of product variations and generate product codes that can be sent back to the manufacturer.

Bill is hoping to set up a pilot scheme involving Architects and manufacturers. He expects that on completion of the pilot it will be possible for an architect or designer to create a full 3D model of a building, then:

- Log on* to different manufacturer's web sites and view interactive 3D models of their products (for example: windows, furniture, doors and roof trusses).
- Select* product variations such as changes in size, material types and accessories.
- Watch* the products change as soon as they make these changes.
- Drag* these objects into the 3D model of their building.
- Send* product specifications and orders to the manufacturers linking directly into their manufacturing and scheduling software.

It's an exciting prospect and after getting some insight into the determination and passion of Bill Reddington we look forward to seeing him succeed.

## R&D News

*Enterprise Ireland received a total of 125 research proposals from 18 research institutions for its Advanced Technology Programme. There was 1 proposal from DIT! Between them, the universities submitted 104 applications. ...*

**An Irish survey of the UK e-learning market revealed some interesting findings: UK e-learning expenditure is set to increase to €639m by 2004; European spending on**

**e-learning projects is at €367m – the UK comprises 50% of the market; 83% of UK companies are looking to increase or maintain training budgets; Only 3% of employees prefer traditional training methods to e-learning. For more information see the press release section on Enterprise Ireland’s website: [www.enterprise-ireland.com](http://www.enterprise-ireland.com)**

The Food Safety Authority of Ireland

has just launched “The labelling of Food in Ireland 2002”. It consolidates in one publication all laws and regulations governing food labelling. It can be downloaded from their website at: [www.fsai.ie](http://www.fsai.ie)



## Useful links

**The EUREKA website: [www.eureka.be](http://www.eureka.be) is a portal to Europe’s innovation contacts in 31 countries. Launched in 1985, EUREKA is a pan-European network for collaborative R&D, forging partnerships between industry, research institutes and universities. By logging onto the website you can check the approach and methodology of successful projects or can look for collaboration on individual project ideas. Enterprise Ireland (EI) provides funding and advice for EUREKA projects - there is a link**

**to the relevant section in EI from the EUREKA website.**

*A new version of the Technology Marketplace website is available on the Cordis website: [www.cordis.lu/marketplace](http://www.cordis.lu/marketplace). On this site you can browse technology transfer offers or can post your own project if you are looking for funding to take a project idea to market. The site provides links to Irish Innovation Relay Centres that provide advice and technical support.*

**While on the Cordis website, use the opportunity to register as an expert evaluator for the e-content programme ([www.cordis.lu/econtent/calls.htm](http://www.cordis.lu/econtent/calls.htm)) or**

**5th Framework programmes ([www.cordis.lu/expert-candidature](http://www.cordis.lu/expert-candidature)). Evaluating proposals provides a great opportunity to meet other EU researchers, to find out what type of research is going on in other institutes and to pick up valuable tips on writing successful proposals!**

**The UK Patent office website ([www.patent.gov.uk](http://www.patent.gov.uk)) has an IP guide for universities.**

**The BASIS website ([www.basis.ie](http://www.basis.ie)) is a single access point to Government information.**

## Events

The First International Conference on mobile e-business - M-Business 2002 - takes place from 8th to 9th July in Athens. It aims to identify and debate research challenges, evolution scenarios and innovative business models for m-business. M-Business 2002 is inviting submissions (deadline 5th May) for the four conference tracks: panels, workshops, demonstrations and keynote presentations. The conference hopes to provide an interdisciplinary forum for academics, managers, policymakers and technol-

ogy experts. More information from: [io-anna@aueb.gr](mailto:io-anna@aueb.gr)

**A Major conference to mark the launch of the EU’s Sixth Framework Programme for research (2002 to 2006) will take place in Brussels on the 11th and 13th of November. At a similar conference in 1999 over 5,000 people showed up so it’s probably a good idea to organise accommodation early! Full details of the programme are on the Cordis website: <http://europa.eu.int/comm/research/conferences/2002/>**

**[index\\_en.html](#)**

Two EU Growth programme conferences have been organised - the first addresses state of the art in Measurement and Testing and takes place in Warsaw (June 18th and 19th). The other ‘Surface Transport Technologies for Sustainable Development’ will look at challenges facing the transport sector. Info on both at: <http://europa.eu.int/research/growth/>

## International focus on material science

The 1st International Conference on Materials and Tribology will be held in Bolton St on September 12th and 13th 2002. Hosted by the Faculty of Engineering, the conference will draw together technologists from academia and industry to address the practical problems faced by industry in the area of material science and tribology and to develop new innovations in this field.

Material science is one of the fastest growing areas in technology and leads to the development of new and improved materials across a

wide range of sectors. Tribology - the science and technology of interacting surfaces in relative motion - is fundamental to producing increased capacities and efficiencies in these materials.

*“International surveys have shown that the loss to advanced industrial economies, through mechanical failure resulting from friction and wear, runs to billions of euros”* says Dr Steve Jerrams, DIT’s Head of Research and Chairman of the Organising Committee.

The conference will attract international experts in the field who will share their knowledge and expertise and address some of the

technological problems facing the industry. It will provide a forum through which collaboration between academics and industry can be fostered, leading to practical solutions and innovations in the area.

Enterprise Ireland, through Materials Ireland has provided sponsorship support for the conference in line with its objective to advance the development of strategic technologies to address future needs of industry. See: [www.dit.ie/mt2002/](http://www.dit.ie/mt2002/)



## Promoting Innovation

Showcase is a communication and information platform for all those interested in innovation—SMEs, technology transfer organisations, policy makers and so on (<http://innovation-showcase.net>).

The website has information on all of the Innovation Projects

and Accompanying Measures within the 5th Framework Programme ‘Innovation and participation of SMEs’ and includes the tools and methodologies they apply.

It also includes a list of events, case studies, progress reports and information on knowledge management. It contains useful links

and a video presentation on the ‘Components of Innovation’.



## Establishing links

In August last year Maria Ryan a lecturer in the Faculty of Tourism and Food visited Professor Peter Ivic, Director of the Department of Tourism Management Studies at the *Berufsakademie (BA) Breitenbrunn* in Germany. Her purpose was to establish a link between the Academy and DIT’s School of Hospitality Management and Tourism and

to initiate a programme of academic exchanges for lecturers and students of both institutes.

Prof Ivic expressed a keen interest in encouraging DIT staff members to visit his academy and at the end of April DIT’s Dr Pat Dargan will be the first to take up his offer when he visits the institute to conduct a series of lectures and workshops. Prof Ivic hopes to enrol a number of

his graduates on DIT’s MSc in Tourism Management in September 2002. He also wants to accommodate DIT undergraduates as part of a student exchange programme. For more details contact: Maria Ryan telephone: 402 7556 email: [maria.ryan@dit.ie](mailto:maria.ryan@dit.ie)

## R&D News

The European Commission has selected 15 new research projects for funding, all focussing on TSE's (transmissible spongiform encephalopathies). The move will provide an additional €21 million for research in this area and brings the total amount allocated to €85 million since its launch in 1996.

The Polish National Contact point (NCP) for the Marie Curie Fellowship programme has established a website to encourage researchers from abroad to go to Poland as Marie Curie fellows under the umbrella of the 6th Framework Programme (FP6). The website address is: [http://www.npk.gov.pl/prog\\_hor\\_3/stypendia-MC/Agric.htm](http://www.npk.gov.pl/prog_hor_3/stypendia-MC/Agric.htm).

*The National Committee for Engineering Sciences will award "The Royal Irish Academy Parsons Medal for Engineering Sciences" for an outstanding publication in engineering sciences. Applicants aged 40 years or less when the work was carried out are eligible to apply for the*

*award. It will recognise outstanding research carried out by persons actively engaged in research in Ireland and published in refereed international journals. It will primarily recognise work carried out in the past decade. Nominations should be made by two persons familiar with the work of the nominee. Closing date for nominations is 11th October 2002. Further information available from: [g.mclean@ria.ie](mailto:g.mclean@ria.ie)*

IRCSET, the Irish Research Council for Science, Engineering & Technology recently launched its "Embark Initiative", a major new international research funding programme which will provide a new €2.9 million Post Graduate Scholarship Research Scheme for researchers planning to complete either Masters or Doctorate level research in the sciences, engineering or technology. Further information under the Grant Schemes section on the IRCSET website: [www.ircset.ie](http://www.ircset.ie)

**The European Commission's Enterprise DG has published a call for tenders for a study of quality and security aspects of web-based services.**

The purpose of the call is the provision of an in depth study of the emerging web-based services market, and in particular the quality and security aspects of it. The study will identify the obstacles to the competitiveness and the cooperation between companies operating in this sector, analyse the quality and security aspects of the provision of IT services over the web and consider the possible needs for standardisation. The estimated budget for the study is 70,000 euro.

**The deadline for requesting tender documents is 31.05.2002. The deadline for submitting tender documents is 13.06.2002.**

The Commission has also issued a call for proposals for indirect research and training actions under Euratom (in the field of nuclear energy).

Proposals should address the following:

Research and Technological Development of a Generic Nature

Radiation protection and health

Indicative budget per activity: 2,5 million euro. Cut-off date July 3rd.

## And finally...innovation in drinks

In Austria, the Red Bull Company has launched LunAqua, a still water bottled "under the glare of the full moon", when the water reaches its "highest bioenergetic power".

Ingredients for regular energy drinks are becoming more adventurous for example, a new drink fortified with red and black Asian ants has just been



Coming to a shop near you.

launched in Britain! The ants are claimed to supply a direct source of energy to body cells, enhance the immune system and improve sexual function!

Meanwhile in Hong Kong YHS Foods has introduced a drink made with water chestnuts—described as a "crunchy water chestnut drink".

In China, a canned yoghurt mineral drink with calcium

lactate and other minerals has been launched

under the Snowdew brand.

In Germany, where functional foods are very popular, Brohler Mineral und Heilbrunnen has introduced Snack-Joghurt. This mineral water and yoghurt drink contains probiotic fibres. Finally, in South Korea football fans can look out for carrot cheese slices formulated with carrot juice and rich in calcium, vitamin D3 and carotene!



## Offices of Innovation and Industry Services

Heading up the new Industry Development Office is [Bernadette McLaughlin](#) who is based in Pembroke St (402 3309). She is responsible for each of the six Innovation and Industry Services Offices - one for each Faculty - and the Industry Centres associated with them.

The position of Head of Innovation and Industry Services has evolved from the old one of Industrial Liaison Officer. The title change is designed to reflect the changing responsibilities and roles of the job and its function within a responsive dynamic organisation.

These Heads of Innovation and Industry Services (IISO's) oversee the development of industry-funded research, development, consultancy and training activities in addition to interacting and supporting our Industry Centres, of which there are currently twelve across a range of disciplines.

Each IISO identifies and facilitates research, consultancy and development opportunities for his/her faculty. They also keep abreast of EU and national funding programmes that may provide opportunities for faculties to develop research activity.

The IISO's can also provide advice on technology transfer, intellectual property and the setting up of campus companies.

Working together as a team the IISO's have a number of projects in the pipeline including the Staff Open Day, a series of newsletters and a Guide to Funding.

Over the next few months they will conduct a marketing campaign to inform industry of the wide range of expertise available throughout DIT.



Margaret Whelan



Peter Kavanagh



Jean Cahill



Andy Maguire



David Kirk

### Research Support Unit

As part of the new development a Research Support Unit (RSU) is being established. The RSU will offer advice and assistance in completing funding submissions and has been set up primarily to make it easier to manage research projects and to provide support for research project managers locally through the Offices of Innovation and Industry Services.

### IIS Contact Details :

#### Engineering

[margaret.whelan@dit.ie](mailto:margaret.whelan@dit.ie)

tel: 402 3616

#### Science

[peter.kavanagh@dit.ie](mailto:peter.kavanagh@dit.ie)

Tel: 402 4583

#### Tourism and Food

[jean.cahill@dit.ie](mailto:jean.cahill@dit.ie)

#### Business

[andy.maguire@dit.ie](mailto:andy.maguire@dit.ie)

tel: 402 3009

#### Built Environment

[david.kirk@tdc.ie](mailto:david.kirk@tdc.ie)

tel: 8729020

(The IIS for Applied Arts is John O'Donovan who will start in the new position shortly).

### Newsletter items

If you have any items that you would like to include in forthcoming newsletters or if you have any comments on the content of this issue please forward to Jean Cahill, IISO, Cathal Brugha St, Dublin 1. Email [jean.cahill@dit.ie](mailto:jean.cahill@dit.ie) tel: 8146083