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Company Profile :

Based in Dublin city centre, the Food Product Development Centre is a leading provider of specialised training and consultancy to the food and drinks industry.

Our multidisciplinary team of full time technical staff and DIT experts in Product Development, Market Research, Sensory Analysis, Food Safety Management, Environmental Health, Culinary Arts, Food Science, and Business, can help your company in key business areas.



Services we provide:

- Product development
- Market research – gap analysis
- Consumer hall tests
- Expert taste panels
- Customised training programmes
- Nutritional analysis
- Labelling advice
- Shelf-life monitoring



Contact :

Fiona Walsh, Manager, Food Product Development Centre
Dublin Institute of Technology, Cathal Brugha Street, Dublin 1
Tel : +353 1 8146092 Fax : +353 1 8748572
e-mail: fpdc@dit.ie Web : www.fpdc.dit.ie

INNOVATION



Innovation in the Faculty of Tourism and Food

DIT News



RESEARCH & ENTERPRISE
volume 3 issue 1



Meet the Team

1. **Margaret Whelan**, Head of Industry Development, has overall responsibility for the area and manages the Industry Programme and DIT's interactions with the enterprise community. t: + 353 1 402 3309, e: margaret.whelan@dit.ie

2. **Peter Kavanagh** is Head of Innovation and Industry Services. His portfolio includes identification and protection of intellectual property along with particular responsibility for building industry links with the Faculty of Science. t: + 353 1 402 4583, e: peter.kavanagh@dit.ie

3. **Jean Cahill** is Head of Innovation and Industry Services. Her portfolio includes marketing and general business development along with particular responsibility for building industry links with the Faculty of Tourism & Food. t: + 353 1 814 6083, e: jean.cahill@dit.ie

4. **David Kirk** is Head of Innovation and Industry Services. His portfolio includes training and consultancy along with particular responsibility for building industry links with the Faculty of the Built Environment. t: + 353 1 872 9020, e: david.kirk@dit.ie

5. **Sandra Fisher**, Head of the Corporate Training Unit is responsible for marketing of DIT's extensive range of training programmes and promotes the development of new offerings to meet the demands of industry. t: + 353 1 402 3308, e: sandra.fisher@dit.ie

6. **Tom Flanagan** is Head of Innovation and Industry Services. His portfolio includes the commercialisation of intellectual property along with particular responsibility for building industry links with the Faculty of Engineering. t: + 353 1 402 3616, e: tom.flanagan@dit.ie

7. **Bernadette O'Reilly**, Manager of the Project Development Centre (PDC), oversees the delivery of the range of enterprise support services and incubation programmes available to entrepreneurs, new ventures and early-stage businesses. t: + 353 1 240 1309, e: bernadette.oreilly@pdc.ie

8. **Andy Maguire** is Head of Innovation and Industry Services. His portfolio includes marketing and general business development along with particular responsibility for building industry links with the Faculty of Business. t: + 353 1 402 3009, e: andy.maguire@dit.ie

9. **John Donovan** is Head of Innovation and Industry Services. His portfolio includes research management and administration along with particular responsibility for building industry links with the Faculty of Applied Arts. t: + 353 1 402 3476, e: john.donovan@dit.ie

CALL FOR PAPERS

The 2nd International Conference of Renewable Energy in Maritime Island Climates

26-28 April 2006, Dublin, Ireland

Ireland has agreed to limit the growth in greenhouse gas emissions by 13% above 1990 levels by 2030. It is projected that emissions would increase by 37.3% unless action is taken. The main greenhouse gas in Ireland is carbon dioxide, mainly arising from the burning of fossil fuel in transport, heating and electricity generation. This can be reduced by generating energy from renewable energy sources, reducing dependence on imported fossil fuels, bringing diversity and security of supply and helping to improve the environment and minimise the impact of climate change.

This conference concerns the application of renewable energy technologies in island and maritime climates, similar to Ireland. Papers on all aspects of renewable energy research and applications relevant to maritime climates and island communities will be considered. Leading researchers will give keynote lectures on relevant topics and best papers will be sent for review for a special edition of *Solar Energy*. The abstract must be text without figures or photos. The length of the abstract should be less than one A4 page and should include the purpose of the work, approach, innovation and relevance, results, conclusion and keywords. Authors are requested to classify their abstract according to the following categories:

- wind
- solar thermal and photovoltaics
- hydrogen and fuel cells
- energy conscious building design and materials
- biomass
- hydro, wave and tidal power
- heating and cooling applications
- economics, policy and commercialisation

Registration for the conference also includes a drinks reception at Jamesons Distillery and a banquet at the 17th Century Royal Hospital Kilmainham, home to the Irish Museum of Modern Art.

REMIC 2 is organised by the Solar Energy Society, the UK section of the International Solar Energy Society in association with the Solar Energy Group, Focas Institute, School of Physics, Dublin Institute of Technology and the Centre for Sustainable Technologies, School of Built Environment at the University of Ulster.

Abstracts with full name and contact details of principal corresponding author including telephone and fax numbers and e-mail address, should be submitted by 23rd September 2005. Authors will be notified of acceptance by 7th October. Authors of accepted abstracts will be requested to submit their papers by 9th December. Please submit abstracts electronically to info@uk-ises.org

REMIC 2



www.dit.ie/remic2



DIT Mission Statement

The Institute is a comprehensive higher education institution, fulfilling a national and international role in providing full-time and part-time programmes across the whole spectrum of higher education, supported by research and scholarship in areas reflective of the Institute's mission. It aims to achieve this in an innovative, responsive, caring and flexible learning environment with state-of-the-art facilities and the most advanced technology available. It is committed to providing access to higher education for students of different ages and backgrounds, and to achieving quality and excellence in all aspects of its work.

This commitment extends to the provision of teaching, research, development and consultancy services for industry and society, with due regard to the technological, commercial, social and cultural needs of the community it serves.

Editor

Jean Cahill

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Welcome to the latest edition of DIT's Innovation newsletter, published by it's Directorate of Research and Enterprise to highlight DIT's extensive industry programme. In this edition the research and scholarly activities of the Faculty of Tourism and Food are highlighted, starting on page 6. Also in this issue are details of recent events, funding opportunities for industry and news of collaborative projects taking place within DIT's 6 faculties and range of industry centres. If you would like to find out more contact any of the Industry team – their details are outlined opposite.

Jean Cahill, Editor

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Minister Hanafin is met at DIT Bolton Street by Professor Brian Norton, Sir David McMurtry, Mr John Lawlor and (shaking hands) Dr Mike Murphy, Director and Dean of Faculty of Engineering

New Metrology Lab for DIT

Ms Mary Hanafin, Minister for Education and Science, visited DIT Bolton Street in April this year to officially open a newly-equipped metrology laboratory. DIT received a generous donation towards — the laboratory from Renishaw Plc world leaders in metrology and manufacturing processes. The laboratory will be used by students studying Manufacturing Engineering and Product Design in DIT's Faculty of Engineering. It will be known as the Renishaw Metrology Centre and includes a range of state-of-the-art instruments such as touch-trigger and scanning probes for a Co-Ordinate Measuring

Machine, a Laser Calibration Machine and Machine Alignment instruments. Addressing the assembled guests in Bolton Street, Minister Hanafin acknowledged the very generous donation from the Renishaw Group, and thanked Sir David McMurtry, Chairman and CEO of Renishaw plc. She also complimented DIT on its record of constantly responding to the changing needs of society and not allowing itself to be cut off from the real world. The Minister said "I am looking forward to working with all the interested parties on the project that will ultimately bring the DIT's full range of disciplines

together on the 65 acre site at Grangeegorman. The collaboration that we are witnessing today between DIT and the Renishaw Group, who are both at the forefront of technology, is of great benefit to its students and Ireland as a whole. It is of vital importance that we mould and educate our young people by providing learning centres of excellence with up-to-date facilities."

Sir David McMurtry also attended the event with a number of his colleagues from Renishaw headquarters in Britain and from his manufacturing company based here in Swords. Sir David, who was born in Dublin in 1940, started his career as an apprentice machinist and fitter in Bristol Aero Engines and worked his way up through the ranks as a design engineer. In 1976 he started Renishaw with a partner, and together they have built a billion pound company with subsidiaries around the world.

Replying to the Minister, Sir David agreed with her views on the excellence of DIT students and apologised to her for having lured a number of graduates away from Ireland to work with his company. Speaking about his own career and the importance of innovation, he said he felt the time was now right for indigenous innovation in Ireland and he looked forward to seeing new business ideas coming forward in the near future. He also looked forward to further cooperation between DIT and Renishaw.

John Lawlor, Head of the School of Manufacturing Engineering, said the donation from Renishaw arose following contact made with the company by the School of Manufacturing Engineering. Making the point that Ireland produces 33 patents per million of population while the USA produces 300 per million, he emphasised that "It's vital for our students' future careers that we maintain close links with industry so that we can give them the most up-to-date skills and knowledge that they will require to change this. Sir David McMurtry understands that very well, having started in apprenticeship himself at the beginning of his very successful career. One of our own graduates, Brian O'Grady, is Engineering Manager with Renishaw in Ireland so they already know about the talent we're nurturing here!".

The Entrepreneurship

The second annual "Entrepreneurship — A Workshop for Wannabes" was held for budding entrepreneurs in DIT Cathal Brugha Street on April 13th. Dr Tom Cooney, Faculty of Business, kick-started an action packed morning with his lecture "Debunking the Myths of Entrepreneurship". This was followed by an interactive session hosted by Dr Cecelia Hegarty, DIT's first doctoral student and now teaching fellow with NICENT (Northern Ireland Centre for Entrepreneurship).

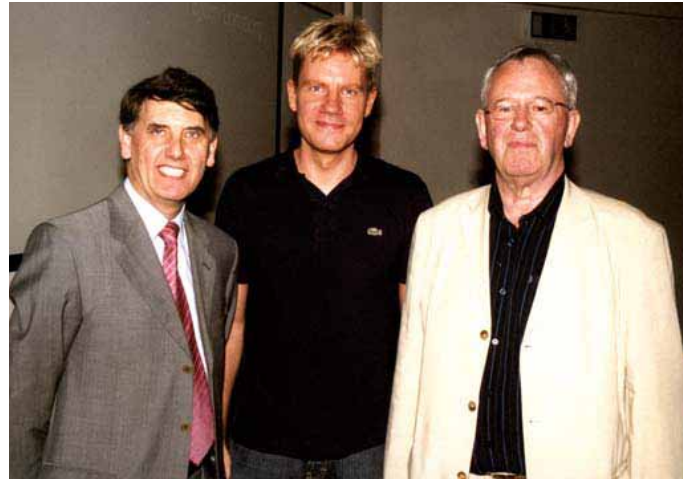
Five faculties were represented amongst the 17 student participants who completed group and individual exercises looking at skills, attributes, vision and creativity. Joanna Gardiner, (Ovelle Pharmaceuticals) and Brian Fallon, (Daft.ie) completed the line up with a very stimulating presentation on their own backgrounds and tips for those thinking of starting a business. Both were finalists in the Ernst & Young Entrepreneur of the Year Awards, 2004. Further information is available from jill.barrett@dit.ie or gillian.donovan@dit.ie.



Pictured at the Docklands Innovation Park Enterprise Awards are (from l to r) Rea O'Neill, DIT and Bolton Trust, John Cashell, Glantreo and Tony Killeen, TD, Minister for Labour Affairs.

Docklands Innovation Park Enterprise Awards

The 2005 Docklands Innovation Park Enterprise Awards were held on the 24th February this year. This competition is run jointly by the Bolton Trust and DIT's Project Development Centre (PDC) and is sponsored by the Sunday Business Post. The three finalists — John Cashell of Glantreo Ltd, Brian Kennedy of Discover Mobile and Philip de Chazal of BiancaMed Ltd are all participants on the PDC's Hothouse Programme. John Cashell won first prize and was presented with a cheque for €10,000 by Tony Killeen, TD Minister for Labour Affairs, Department of Enterprise, Trade and Employment. Three of the six highly commended entries also gave a short elevator pitch to the assembled guests who included representatives from the investment community, other state support agencies and the extended PDC network.



Pictured at the lecture were (l-r) Dr Brendan Goldsmith (DIT), Bjorn Lomborg and Dr Peter Kavanagh (DIT)

The Skeptical Environmentalist

On the occasion of the bicentenary of the birth of William Rowan Hamilton, the Irish Government has designated this year as "Hamilton Year 2005: Celebrating Irish Science and Technology". DIT's Hamilton year Celebrations kick started with a lecture by The Skeptical Environmentalist, Bjorn Lomborg on the 16 June 2005.

The aim of the celebration is to highlight and celebrate the successes of countless Irish people in all the diverse fields of the sciences and technology, to draw attention to Ireland's proud scientific heritage and to create awareness of the exciting world-class science that is being undertaken in Ireland today. The Royal Irish Academy, Ireland's academy for the sciences, humanities and social sciences, is coordinating the nation-wide celebration. DIT will be hosting a number of events throughout 2005.

Recently named one of Time magazine's 100 Most Influential Scientists & Thinkers, Professor Bjorn Lomborg is a leading figure in the environmental debate. An Associate Professor of Statistics in the Department of Political Science at the University of Aarhus, Lomborg is a former Greenpeace member, who now calls himself a "skeptical environmentalist".

In an age of mounting human consumption and depleting natural resources, it seems as though our responses to the impending environmental crisis are too little or too late. But is this picture of doom an accurate representation of reality? Lomborg has made international headlines with his views on environmental policy. His message is clear: the environmentalists are wrong. For further information DIT's role in celebrating Irish science and technology, please visit <http://hamilton.dit.ie>.

CTU Serves Breakfast Briefing

In April, DIT's Corporate Training Unit held a breakfast briefing for industry on e-learning and its potential as a delivery method for Continuing Professional Development (CPD) for professionals. Dr Ken Beattie, lecturer in DIT's Faculty of Engineering, who has developed a new online CPD programme in Simulation in Building Design, outlined the issues which arose during development and delivery of the programme.

The programme was developed because construction and engineering professionals need to know how to use computer simulation during the design process so they can significantly improve the energy performance of buildings. Commenting on the need for the programme, Dr Beattie, said: "It was developed in the context of the new Energy Performance Buildings Directive which became European Law in January 2003. When the Directive is fully implemented all new buildings and most existing buildings for sale or rent will have to be energy rated. Simulation is likely to be an important tool in complying and responding to the Directive".

Dr Kevin O'Rourke, Head of e-Learning Support at DIT said "the Faculty of Engineering recognised that due to busy work schedules many professionals find it difficult to continually update their knowledge and skills. E-Learning gives the professionals, many of whom are working on out of office projects, flexibility when they can access the programme". Dr Brian Bowe, DIT's Learning Development Officer said "as the programme is accredited by DIT's Quality Assurance Committee students are participating on a programme which places their learning needs and the meeting of standards at the centre of programme development and delivery".

If you would like more information on DIT's CPD services to industry or e-Learning contact either: **Sandra Fisher, Head of Corporate Training Unit, tel 01 402 3308, email Sandra.fisher@dit.ie** or **Dr Kevin O'Rourke, Head of e-Learning Support, tel 01 402 7860, email kevin.orourke@dit.ie**

European Patent Office at the DIT



Pictured at the EPO training session were (from l to r) Dr Peter Kavanagh, DIT, Lisa McDonald-Maier and Nigel Clarke, European Patent Office.

The development of patentable innovations is an important step in growing the knowledge economy. A patent is a legal title granting its holder the exclusive right to make use of an invention for a limited time by stopping others from making, using or selling it without authorisation. The three main criteria for patentability are that it is novel, there is an identifiable inventive step, and it has an industrial application. Along with giving the holder a commercial advantage, all patent applications are published. While helping to avoid costly duplicate research, it is also an easy-to-access source of technical, commercial, and legal information.

The European Patent Office (EPO)

The mission of Europe's patent granting authority,

Digital Seminars

Digital Dialogue is part of DIT's Industry and Innovation Services Programme. It is presented as a series of lunchtime events once a month. Each event focuses on cutting edge research being done in DIT's Digital Media Centre and aims to bring that research to the attention of the growing digital media sector in Ireland.

DMC has a number of active research programmes in the following areas

- ICT and Cultural Heritage
- Technology Enhanced Learning
- Spatial Information Technologies
- Enhanced Mobile Services
- Semantic Web Technologies

the EPO, is to support innovation, competitiveness and economic growth for the benefit of the citizens of Europe. It achieves this by granting European wide patents and providing information on grant applications (see www.epo.org).

The EPO has a one-stop portal enabling patent applicants, legal representatives and other users to conduct their applications electronically. (see: <http://my.epoline.org/portal/public>).

The second major electronic tool available to use, free of charge, is the espacenet database, which allows you to search the extensive EPO database for existing and applied for patents (see <http://ie.espacenet.com/>). The European Patent Office has also developed eLearning modules to help first time users. They are available on www.european-patent-office.org/wbt/espacenet/

In early Spring, the training room of the DIT Library in Aungier Street housed two 1-day sessions on the effective use of the EPO free-to-use databases. In the first session there was 24 DIT staff from across the faculties and centres. The second event also included participants from Patent Agent Offices. DIT's Offices of Innovation & Industry Services can assist companies to patent knowledge through the research capabilities of DIT academics. A range of initiatives and policies are in place allowing enterprises to develop patents effectively and to investigate their commercial applications. For details contact:

Dr Peter Kavanagh, tel 01 402 4583 or email peter.kavanagh@dit.ie

The next series of seminars starts in September. All seminars are delivered in DIT's Focas Institute, Camden Row, Dublin 8 (behind DIT, Kevin St) from 12.30 to 14.00. The following seminars are planned:

- 2nd September 2005, Charlie Pritchard: The DMC and Intelligent Content
- 7th October 2005 Eoin Kilfeather: Virtual Archaeology: Tower Houses, Ring Forts, and ICT
- 4th November 2005 James Carswell: Keeping Tabs: Mobile Environmental Monitoring Systems
- 2nd December 2005: Gearoid Mooney (Director of Informatics — Enterprise Ireland): What to do: Planning Informatics Research

For more details contact John Donovan, tel 01 402 3476, or email john.donovan@dit.ie.

Large Attendance at DIT/CIF Masterclass



Pictured at the Masterclass are: (l-r) Dr Don McLean (IES Ltd), Mr Jay Stuart (EcoCo), Mr Phil Murray (DIT), Mr Kevin O'Rourke (SEI)

The fourth DIT/CIF Masterclass of the current series entitled 'EU Energy Performance of Buildings Directive — Embracing the Challenge' was held on Friday 20th May 2005 in the Burlington Hotel, Dublin. Over 130 building professionals heard Mr Kevin O'Rourke of Sustainable Energy Ireland (SEI), Dr Don McLean, IES Ltd and Mr Jay Stuart, EcoCo provide information and insight into the new EU directive.

Mr Kevin O'Rourke of SEI, outlined the requirements, challenges and possible impacts of the Directive. In particular, he drew the audience's attention to the draft consultation document: "Action plan for the implementation of the EU Energy Performance of Buildings Directive in Ireland", which was recently published. Comments on this document are being sought from stakeholders and a series of workshops has been arranged by SEI to facilitate this.

Dr Don McLean of IES Ltd, provided an international view on the Directive drawing on his experience in the UK, Canada and the USA. Mr Jay Stuart of EcoCo, addressed design issues relating to improved energy performance and highlighted some practical methods of achieving improvements. The Masterclass was chaired by Mr Philip Murray, Head of School of Construction, DIT.

As there was considerable interest in the Master class, it will be held again. Enquires should be sent to jude.mccarthy@dit.ie

Brazilian Accolades for Engineering Research Team

The Non-Linear Materials Research Group (NLMRG) was ably represented by two DIT School of Manufacturing researchers at prestigious conferences in Brazil in April. John McNamara and Stephen Ronan, who both graduated from the Faculty of Engineering in DIT Bolton Street, each presented papers at the 10th International Seminar on Elastomers in Rio de Janeiro and the 10th International Macromolecular Colloquium in Gramado. Their respective specialist disciplines are localised stress softening in elastomers and long-term stress relaxation in rubber materials and their research was highly acclaimed at both events. So much so, that SENAI, a polymer research centre in the region of Rio Grande do Sul, invited them to present their work to scientists in the centre and they were also invited to visit and collaborate with researchers in Porto Alegre University, Brazil's second largest university.

Though John and Stephen are PhD students in NLMRG in the School of Manufacturing Engineering, they do the physical testing and analysis for their research in the Deutsches Institut für Kautschuktechnologie (DIK), Hanover, Germany. DIK is the premier institute for rubber research and consultancy in Europe and DIT has enjoyed a fruitful collaboration with them for over five years. John and Stephen are supervised in DIK by our partner and long-term co-supervisor Dr Thomas Alshuth, the Head of Physics in the non-profit government and industry funded research and consultancy centre. In Bolton Street, NLMRG is under the leadership of Niall Murphy and his team are carrying out cutting edge research into elastomeric fatigue, multi-axial stress softening and swelling phenomenon. John and Stephen have helped forge a key strategic link between the research in the two countries and it is anticipated that the partnership will have a challenging and exciting future. A description of the work of the NLMRG and recent publications will soon be found on the DIT website and will be accessed from the Research webpage.

ARTI — A Radio Telescope for Ireland

Dr Kevin Berwick, in the Department of Electronic and Communications Engineering in DIT Kevin Street, is the DIT representative on a Consortium of Universities and Institutes of Technology called ARTI — A Radio Telescope for Ireland. ARTI is a project to construct and operate a state-of-the-art 32m diameter radio telescope at a site at Birr Castle in County Offaly. Birr is an important site in astronomical history since it is the home of a 72 inch reflecting telescope built by the Earl of Rosse in the 1840s and the largest in the world at that time. Ireland's geographical location at the Northwestern edge of Europe means that ARTI would be uniquely positioned to enhance the resolution and quality of radio images obtained via interferometry as a part of MERLIN, the Multi-Element Radio Linked Interferometer Network in the UK and eVLBI, the European Very Long Baseline Interferometry Network. The telescope will provide world-class, hands-on training for young scientists, not only in radio astronomy and physics, but also in electrical engineering, microwave technology and information and communication technology. More information can be found on the ARTI website www.arti.ie

Faculty of Tourism and Food

A Long History of Links to Industry

The Faculty of Tourism and Food has been providing the hospitality and tourism industries with top quality graduates for many decades and since the 1970's has been educating students in food technology and environmental health as well. More recently courses in pharmaceutical technology and pharmaceutical processing have led to collaboration with Ireland's vibrant pharmaceutical sector.

There are three Schools within the Faculty: Food Science and Environmental Health, Culinary Arts and Food Technology and Hospitality Management and Tourism and each of these Schools works closely with its relevant industry sector to ensure the courses are relevant and up to date and our graduates are prepared for a career in their chosen field. The next few pages provide an overview of the Faculty's programmes and industry activities such as customised training, food and tourism research activity, internship and events and conferences. There are two industry centres within the Faculty with dedicated staff and facilities. Supported by faculty experts, the centres provide the food and tourism industries with a comprehensive range of expert services built on many decades of expertise and industry experience.

We offer students an opportunity to study a wide variety of full- and part-time courses from Certificate to Masters level and to register for postgraduate research degrees leading to an MPhil, MSc or PhD. We also have postgraduate research opportunities for those who would like to continue working in industry but who would like to register the R&D work that they are doing for a postgraduate award. Our part-time programmes offer industry personnel an opportunity to study and work at the same time while our flexible delivery methods give companies an opportunity for on-site delivery of individual modules.

The faculty has recently been awarded funding for a pilot Community Learning Programme initiative. Mr Noel Aherne TD (pictured right) launched the programme in the summer and the project is now ready to move into the next stage of development. This is a welcome addition to the range of activities already taking place and we look forward to the establishment of volunteering as a learning tool in the faculty and eventually throughout DIT.

Our move to the new campus in Grangegorman will give us more space to develop even more innovative programmes and to provide students with the highest quality research and learning facilities available. We will also have extensive industry-friendly space and facilities to maintain our relevance to the food, pharmaceutical, tourism and hospitality sectors. If you have any suggestions for new facilities or resources please email me, (michael.mulvey@dit.ie) and I will consider including them in the final faculty plan for the new campus.

Dr Michael Mulvey, Dean and Director, Faculty of Tourism and Food.

Working for Industry

As Head of Innovation and Industry Services in the Faculty of Tourism and Food I am responsible for implementing DIT's industry programme within the faculty and developing and strengthening business links with Irish enterprise.

There are many ways that Ireland's enterprise sector can benefit from working with DIT's Faculty of Tourism and Food. For example, our culinary arts degree students spend 2 years working on the development of new food products taking the whole process from idea generation to prototype development following the stage-gate process. They are always looking for ideas to work with and have produced some excellent products that could be taken to market by food manufacturing companies. These students have a unique combination of technical and culinary skills and are sought after by companies to work in new product development, food writing, marketing, sales and so on, as part of their internship placement.

Undergraduates on all courses need ideas for their project work, assignments and dissertations so companies from the food, pharmaceutical, tourism and hospitality sectors can always suggest topics for study and if possible these can be taken on board and the student can provide you with valuable information.

You can read about the School of Hospitality Management and Tourism's Magic Touch initiative on page 18. This is a unique partnership opportunity between industry and the hospitality and tourism industries.

There is a wealth of food safety expertise within the Faculty which is the only centre of education of Environmental Health Officers in the Republic. Many of the lecturers have worked as EHO's before coming to DIT and can provide companies with invaluable expertise concerning their food safety practices, risk management and current legislation.

Industry personnel are always welcome in Cathal Brugha St, whether to talk about research and development opportunities, continuing professional development or access to resources. Alternatively I am happy to come and visit you to give you an update on the range of industry-relevant activities taking place throughout the faculty. If you want to find out more contact me: **Jean Cahill, tel 01 8146083, or email jean.cahill@dit.ie.**



Careers Fair

The Annual Careers Fair for Hospitality and Tourism students of the Faculty of Tourism and Food was held in the Pillar Room, Rotunda Hospital on March 15th last. A total of 30 exhibitors played host to over 200 students and staff who visited the event. Employers were extremely impressed with the calibre of student that met with many commenting that, even since the previous Fair, they noticed a heightened awareness amongst students of the importance of career planning. In addition they said, they were very competent in articulating their skills and future plans and had very well prepared CVs. Pictured left was Jill Barrett, Careers Advisor for the Faculty of Tourism and Food, speaking at the Careers fair. If you would like to be invited to participate in future careers events please contact: **Careers Team**, tel 01 402 3441. or careers@dit.ie

Government Funds Innovative Learning Programme



Pictured at the launch of the Community Learning Programme are Noel Ahern TD, Minister of State, Department of the Environment, Heritage and Local Government and Dr Michael Mulvey Dean and Director, Faculty of Tourism and Food.

The Community Learning Programme (CLP), a teaching initiative of the School of Hospitality Management and Tourism, has been identified as an example of best practice in higher education and has been awarded government funding of €330,000 for a three-year pilot project. Minister of State, Department of the

Environment, Heritage and Local Government Noel Ahern TD, launched the project in DIT in June. He had already announced that the Community Learning Programme (CLP) will receive €110,000 per annum over a three-year period as part of a package of supports aimed at developing a volunteering infrastructure in Ireland. Making the announcement, Minister Ahern said The DIT Community Learning Programme is an example of a new teaching method called service-learning, which works by integrating classroom learning in any subject with suitable volunteering activity. His Department will support the Programme as a pilot project to be assessed as a possible model for Irish third level education.

The CLP programme has been in development since 2001. At the start 12 students took part, but now 65 students are involved, carrying out a wide variety of volunteering projects. The programme enhances the teaching of any subject by building relevant volunteering activity into the teaching method. The integration of the theory and the practical volunteering significantly improves the quality of student learning of any subject. The government proposes to support the growth of the CLP in DIT in Stage 1 of the project, and in Stage 2 it will assess CLP as a possible role model for the Irish third level sector.

Dr Michael Mulvey, Director of the Faculty of Tourism and Food said that the Minister's decision will place the programme on a sustainable footing for the coming three years, funding a development officer and an evaluator for the further development of the programme. He congratulated colleagues in the School of Hospitality Management and Tourism, who have been involved in a number of innovative teaching developments.

School of Food Science and Environmental Health



DIT students sweep the boards

The FSAI held its annual competition for best food safety related project in Irish colleges on 17th June last. The competition proved to be successful again this year with six students competing in the final. The winning student was Amanda O'Connor, BSc Environmental Health, Dublin Institute of Technology, Cathal Brugha Street. Amanda's project was entitled 'An investigation into the food safety implications of online grocery shopping'. This study examined the entire process of online grocery shopping, documenting the procedures involved and identifying the food safety concerns. The award was presented to Amanda by Alan Reilly, Deputy Chief Executive, FSAI. Deborah Dunnion, BSc Human Nutrition and Dietetics, DIT, Kevin Street came in second place for her project, entitled 'Growth and diarrhoeal enterotoxin production by *Bacillus cereus* in a variety of feeds used in Irish hospitals and healthcare environments', and Jia Fang, BSc Environmental Health, DIT, Cathal Brugha Street was third for her project 'Food safety management in the Chinese food sector in Ireland'.



Postgraduate researches legume processing

Aoife Gowen, a PhD student under the supervision of Dr Nissreen Abu-Ghannam and Dr Jesus Frias (School of Food Science and Environmental Health) is researching the feasibility of producing chilled minimally processed legume products. She presented some of her findings recently at the European Conference on Food Innovations for Expanding Europe. The conference was held in Warsaw and was organised by the European Federation of Food Science and Technology. The title of her paper was 'Modelling microwave-hot air combination drying of cooked legumes'. For more information contact: Nissreen or Jesus at nissreen.abughannam@dit.ie or jesus.frias@dit.ie.

Environmental Health Conference

In June 2006, Trinity College Dublin will be the venue for the 9th World Congress on Environmental Health. The International Faculty Forum runs in parallel with the World Congress and is attended by academics who are involved in the delivery of (mainly third level) environmental health education programmes. The

forum seeks to explore issues of relevance to academics in this field, to share ideas and to build links between environmental health academics. In 2006, the Forum will take place on Sunday 18th June in the Dublin Institute of Technology (DIT), Cathal Brugha St, which is the national centre for professional environmental health education in the Republic of Ireland. Details at www.ifeh2006.org/

Checking out the Chillers



The Food Safety Promotions Board has recently awarded a research grant of €120,000 to Dr Nissreen Abu-Ghannam and Dr Jesus Frias of the School of Food Science and Environmental Health. Funding is being used to carry out an evaluation of time-temperature profiles and related practices in retail outlets where chilled food is being handled. Researchers will also conduct a national survey of up to 100 food premises. The survey will consider issues to do with the control and abuse of refrigeration and freezing in retail premises. It will assess suitability of storage equipment; equipment defects; maintenance and cleaning programmes; temperature monitoring; loading and stock rotation;

staff responsibilities; training and so on. At the end of the project a risk assessment document on the safety of operational practices relating to chilled foods will be produced. A postgraduate research student studying for an MPhil is also working on the project.

Researching tuberculosis drug resistance

Tuberculosis is caused by an infection of the bacteria called *Mycobacterium tuberculosis*. However, new strains of tuberculosis that are resistant to traditional medicines have developed. Mycothiol is an anti-oxidant compound produced by the tuberculosis bacterium to protect it from reactive oxygen species. Without mycothiol, the tuberculosis bacterium is more susceptible to drugs and other stress factors. MshB — one of the enzymes in the mycothiol biosynthetic pathway, has recently been identified by collaborators in the European Molecular Biology Laboratory, Grenoble, France. If this enzyme could be inhibited mycothiol wouldn't be produced. Dr Julie Dunne and Aoife Smith from the School of Food Science and Environmental Health are developing new compounds that can inhibit the synthesis of mycothiol in order to evaluate their potential as anti-tuberculosis compounds.

Part-time Masters Programmes

The School of Food Science and Environmental Health offers a choice of 3 part-time Masters programmes:

- MSc Environmental Health and Safety Management
- MSc Health Care Risk Management
- MSc Food Safety Management

The central feature of the first two programmes is that they offer a practical, vocational and professional integrated approach to the identification and control of risk. This approach requires a holistic and global view of risk in both Clinical and Environmental Health areas. This in turn necessitates an evaluation of the confluence of natural science, human behaviour and the management of organisations. The programmes have a challenging curriculum which offers candidates an opportunity to interact with experts in the area, academics, and peers from within the candidate cohort body. There is an emphasis on integration and a practical vocational and professional approach to the identification and control of risk. The course outline is as follows:

- Risk Assessment
- Risk Management
- Business Management
- Environmental Health and Safety
- Occupational Safety and Health
- Fire Safety
- Food Safety
- Environmental Management
- Building Assessment
- Clinical Risk
- Dissertation

The School also delivers a 6-week short course on Clinical Risk for industry. For more information on any of these courses contact **Victor Hrymak** at 01 402 4355 or email vhrymak@dit.ie.

The MSc (Food Safety Management) interdisciplinary course is for graduates who are seeking to update their current knowledge and skills and enhance career opportunities in all aspects of Food Safety Management. The central feature of the course is that it offers a comprehensive, integrated approach to Food Safety Management. A balance of scientific principles, food processing technology, management techniques, law and consumer affairs are offered. It focuses on producing a graduate capable of responding to the food safety environment of the future. There are six stages to the programme including an integrated case study and a dissertation. The four taught sections are:

- The underlying scientific principles of food safety management
- An overview of food production technology and its attendant risks
- The consumer and the regulatory environment
- The management of food safety

For more information contact: **Gary Henehan**, tel 01 402 4408 or email gary.henehan@dit.ie.

Extending the shelf-life of mushrooms

The cultivation of mushrooms is the largest horticultural activity in Ireland — over 90,000 tons were produced in 2004 (with a value of €137 million) and the sector is enjoying exponential growth. The Irish mushroom industry needs to produce high quality mushrooms in greater numbers to acquire a percentage of any increases in the export markets.

Mushrooms are a valuable healthy food, low in calories, high in vegetable proteins, iron, zinc, vitamins and minerals. They have recently been reported to be a good source of nutraceutical substances (a food or part of a food that provides medical or health benefits, including the prevention and treatment of disease). However, mushrooms are highly perishable and variable in quality making it difficult to maintain consistently high standards.

Dr Jesus Frias and his postgraduate student Leixuri Aguirre are studying the shelf life of mushrooms and evaluating the effect that product variability has on the management of the shelf life. The project is funded by Science Foundation Ireland and the DIT team is working in collaboration with Prof Fernanda Oliveira and Dr Debabandya Mohapatra in UCC and Dr Jim Grant in Teagasc.

The project studies the influence of storage temperature and relative humidity on the quality and metabolism of mushrooms, taking into account natural product variability.

It aims to find the best storage conditions for mushrooms in order to extend shelf-life and maintain product quality for longer periods.



For more information on this project please contact: **Jesus Frias, tel 01 402 4459 or email jesus.frias@dit.ie**

Novel Metal Complexes

The Inorganic Pharmaceutical and Biomimetic Research Group in the School of Food Science and Environmental Health is led by Dr Michael Devereux. The group is engaged in research into the synthesis, characterisation and pharmaceutical applications of novel complexes of a range of transition metals. The work involves a number of collaborations with other universities/institutions in Ireland and around the world. The research has focused mainly on the synthesis of novel dicarboxylate systems.

Up until the mid 1990's the majority of metal-dicarboxylate complexes had limited chemical and biological applications. The group and its collaborators have since shown that it is possible to generate a range of novel transition metal-dicarboxylate complexes. Further interest is derived from this and allied classes of compounds as a large number of the complexes generated during the study have been shown to

possess excellent catalytic/biomimetic, antimicrobial and anti-cancer activity. The research group comprises: Dr Michael Devereux, Head of the group; Dr Denis O'Shea who participates in the synthesis and evaluation of compounds for anti-candida activity; Dr Rita Dempsey who participates in the microbiological activity evaluation of anti-candida agents; and postgraduate students, Vidya Dixit, Mark O'Connor and Andrew Kellett.

Safety and Quality of Processed Vegetables

Chlorinated water is usually used to clean and decontaminate minimally processed vegetable products (cut salads, ready-to-eat vegetable preparations and so on). The washing and decontamination process is critical for the production of dirt-free, clean, safe, ready-to-use products. There have been health concerns over the use of chlorine on these products and new EU legislation is expected to restrict its use. Researchers in the School of Food Science and Environmental Health are working on a three-year

research project (funded under the HEA, PRLTI Strand III programme) which aims to develop novel decontamination processes for minimally processed vegetables as alternatives to chlorine decontamination. A multidisciplinary research team of microbiologists, biochemists and food technologists are working together on the project. The research project has already benchmarked a series of decontamination processes from the microbiological safety and product quality points of view.

The research team is as follows: Dr Catherine Barry-Ryan is the project manager, responsible for the physiological aspects of the research, as is Dr Gary Henehan who co-ordinates the project, Jemina Mulcahy, Jesus Frias, Dr Ana Belen, Martin Diana, and postgrad student, Daniel Rico. Dr Rosaleen Coen, Dr Nisreen Abu-Ghannam, and Dr Paula Bourke, with postgrad student Christina Busquets, are responsible for the microbiological research. For more information contact **Dr Gary Henehan, tel 01 402 4408 or email gary.henehan@dit.ie**

Food Product Development Centre

Services to the Food Industry



Examples of Sensory Techniques the Centre offers

- Quantitative descriptive analysis
- Difference testing
- Consumer preference
- Consumer behaviour analysis

Expert panels

The FPDC currently runs a 20 member Expert Taste Panel. This panel can objectively evaluate sensory characteristics of food and beverages in terms of appearance, aroma, taste and texture. Our experts have tested a wide range of products including: pizza, juices, ice-cream, breads, meat, cheese, crisps, snack foods, poultry products, breakfast cereals, alcoholic beverages, sports drinks and potato products. Data from expert panels is statistically analysed and may be mapped with consumer research data to explore Key Drivers of preference. Clients using this service include: Batchelors, Bulmers, Bord Bia, Diageo, Glanbia and Cadbury's Ireland.

Research and Development

The Food Product Development Centre is dedicated to developing innovative new product introductions for the Irish food and drinks industry. The centre provides a confidential service to clients, utilising highly skilled multidisciplinary teams from the Dublin Institute of Technology. The centre can provide a unique combination of technical expertise and creative culinary skills to help formulate new product ideas and develop innovative ways to market current product lines. Services within research and development include: initial market research, concept and prototype development, ingredient sourcing and testing, nutritional declaration and labelling, idea generation, competitor analysis and sensory assessment. The Centre's research and development facilities include development kitchens, bakery, sensory analysis laboratory and cooking instruction validation unit.

For more details on the FPDC's services to industry please contact the Manager, **Fiona Walsh**, tel **01 8146084** or email **Fiona.walsh@dit.ie**.

One of the Faculty of Tourism and Food's dedicated industry centres is the Food Product Development Centre which provides a comprehensive range of confidential, professional and innovative services to support the Irish food industry. The unique combination of creative, technical and professional expertise available in the centre through its links with Dublin Institute of Technology can be used to provide practical advice to industry clients.

Consultancy services include

- Competitor Analysis
- Food Safety management
- Food Labelling
- Nutritional Analysis
- Culinary expertise
- HACCP Development & Audit
- Shelf Life Monitor
- Sensory Analysis & Consumer research.

Consumer Research and Taste Testing

The Food Product Development Centre is the Food industry's first port of call for sensory evaluation and applied consumer research. Sensory analysis can provide answers to questions about product quality, for new, existing and competitor products. It can bridge the gap between product development, marketing and the consumer.

The FPDC provides a comprehensive range of consumer research methodologies and evaluation techniques. The Centre's sensory evaluation unit is based in the heart of Dublin city centre facilitating the recruitment of large numbers of consumers of all ages and profiles for hall tests. Our research team can also organise trials on a nationwide basis as well as in-home product placement tests. We have particular expertise in the recruitment of children and young adults.

Training Schedule October — December 2005

The Dublin Institute of Technology's Food Product Development Centre is a leading provider of training for the food and drinks industry. These training programmes are run throughout the year and can be customised to client requirements. With access to over 800 Dublin Institute of Technology lecturing staff, the Centre can provide training in many subject areas.

PRODUCT DEVELOPMENT AND INNOVATION

Fundamentals of Sensory Analysis (Principles & Practices)	€895	5th Oct
Sensory Analysis 'Train the Trainer'	€895	27th — 28th Oct
Sensory Profiling (Beginners)	€895	1st Nov
Sensory Profiling — Fingerprinting Your Brand (In-house only)	Variable	In house
Statistical Analysis Made Easy for Sensory	€750	15th Nov
Product Styling and Design	€495	10th Nov
Product Development — Principles and Practices	€795	24th Nov
Introduction to Marketing & Branding	€795	1st Dec
Nutrition for Non-Nutritionists	€495	15th Dec
Environmental Legislation	€495	22nd Nov
Predicting & Controlling Shelf-life of Foods	€550	17th Nov
New — Marketing for Non- Marketers	€895	on request
New — Marketing strategy: Revisiting the concepts	€895	on request

FOOD SAFETY AND HYGIENE

Food Labeling Legislation Guide	€550	9th Dec
Food Labeling — Advanced	€850	16th Dec
Food Hygiene Train the Trainer	€635	Monthly
Writing a HACCP Plan	€495	Monthly
Basic Food Hygiene	€100	Ongoing
Food Microbiology for Non-Microbiologists	€495	13th Dec
Key Pathogens — the ones to watch	€395	16th Nov
Knife Training & Butchery Skills	€400	Ongoing
Food Safety Auditing (In-house only)	Variable	Customized

CULINARY SKILLS

Simply Sauces	€395	13th Oct
A Taste of the Mediterranean	€395	14th Oct
Vegetarian Options made Simple	€395	20th Oct
Flavours from the Far East	€395	20th Oct

CUSTOMISED COURSES

Utilising the DIT's multidisciplinary team, the Food Product Development Centre can combine modules in many subject areas to create a course specific to your needs.

To book a course please contact:

Food Product Development Centre, Dublin Institute of Technology, Cathal Brugha Street, Dublin 1.

tel +353 1 814 6092 fax +353 1 874 8572 email fpdc@dit.ie web www.fpdc.dit.ie

Basis Food Hygiene at the Food Product Development Centre

Food safety training is the key to food safety. Training is only effective when the training standards are being demonstrated in the food operation. The FPDC offers training in the principles of basic food hygiene. Attendees are also briefly introduced to the concept of HACCP and how it should be applied. This course is suitable for newcomers to the food service industry but will also benefit those requiring a refresher course. The material is at an introductory level and is ideal for those working in food preparation/serving/cleaning/or working as a kitchen hand where there are supervisors present at all times.

When the course has been completed the participants will

- Know their legal responsibility in ensuring safe food for the consumer
- Recognise how food can be put at risk by chemical, physical & biological hazards
- Understand the meaning of cross contamination and the hygiene practices necessary to prevent it
- Know the importance of personal hygiene
- Know the difference between high and low risk activities
- Know why to avoid unnecessary handling of food, food utensils and food surfaces
- Know why it is important to record the temperatures of food
- Take action when aware of unhygienic practices that may put the safety of food at risk
- Know how to check deliveries
- Be introduced to the concept of HACCP

The FPDC has designed a course which is practical, relevant and which encourages maximum participation. The training is interactive and includes quizzes, discussions, case studies and video presentation as well as the more traditional teaching methods. Participants will receive a certificate of attendance from the Food Product Development Centre after successful completion of the course. For more information contact **Fiona Walsh, tel 01 8146084, fiona.walsh@dit.ie.**

Marketing for Non-Marketers

This new 2-day course is designed for those with little or no marketing training. If you are thinking of starting your own business and need to develop a marketing plan or if you want to improve your basic understanding of marketing this course will be invaluable. It is highly interactive and uses case study workshops to place key marketing concepts in a real life setting.

Key sections of the course include the following

- What is marketing?
- Understanding customers and their needs
- Market segmentation, targeting and positioning
- The power of branding
- Managing products and the new product development process
- Marketing communications
- Marketing strategy

The FPDC designs and delivers customised training for food businesses across the country (two examples are given below). Many of these are accredited by DIT and successful graduates are awarded ECTS credits and Certificates in Continuing Professional Development.

Agribusiness Diversification Training programme

In collaboration with the Meath LEADER, the FPDC, designed and developed a training programme to enhance skills in Business Expansion and Diversification within Irish agribusiness. The 9-week course enabled participants to assess their current business prospects and identify new and existing opportunities for them and their businesses. Participants developed their own business plan throughout the course.

Course Content

- Idea Generation-Creative Thinking - From Concept to Launch
- Business and Finance Plan Development
- Innovation Support and Funding
- Complying with Health & Safety Requirement
- Fundamentals of Branding and Marketing
- Business Plan Review
- Food Producers Innovation Day

Louth Leader and Kildare Leader

To promote and encourage the development of local food enterprises and the establishment of new ones,

the FPDC and Louth and Kildare LEADER organised a workshop to encourage development of the speciality food sector in the region.

Topics covered included

- Brainstorming & new product development
- Business development – making a profit
- Competing with big budget brands
- Marketing of speciality foods
- The distribution chain & retail management
- Food product manufacturing start up plan & food safety requirements
- Food labelling & legislation
- LEADER - funding opportunities

Nutrition for the Non-Nutritionists

In today's society the consumer's interest in healthy foods has risen to a point where they are opting for more 'healthy', 'low-fat' foods. However, there are opportunities for food manufacturers to develop new products to meet the growing demand. A basic knowledge of nutrition and health issues has therefore become important prerequisites for personnel working in the food industry. The aim of this course from the Food Product Development Centre is to provide non-nutritionists with the basic knowledge of nutrition and health topics which will assist them with the nutrition related aspects of their jobs.

Topics covered include

- Why is nutrition so important
- Food pyramids and portion sizes
- Healthy eating guidelines
- Recommended daily allowances
- Body mass Index (BMI) and Waist to hip ratio (WHR)
- Sources of Macronutrients (Protein, Fats, Carbohydrates), Micronutrients (Vitamins and Minerals) and fluid.
- Biological functions of Macro and Micro Nutrients
- Glycemic Index
- Food labelling — Understanding Food Labelling
- Chronic degenerative diseases, Celiac disease, Diabetes, Coronary heart disease, stroke, and hypertension.

For more information contact:

Food Product Development Centre
tel 01 814 6086, email fpdc@dit.ie

School of Hospitality Management and Tourism



The School of Hospitality Management and Tourism has a well-established reputation of excellence in hospitality management and tourism education. In fact the School pioneered undergraduate tourism and hospitality management education in Ireland. Through the 1980's and 1990's it consistently developed and improved its curricula in line with world-wide developments in tourism and hospitality management education. The School has created, developed and delivered a wide range of programmes designed to meet the needs of the individual student whilst contributing significantly to the tourism, hospitality, and event and leisure sectors.

There are two departments in the School — the Department of Hospitality Management and the Department of Tourism. These deliver the following range of programmes:

- BA (Ordinary) in Hotel and Restaurant Management (Full-time or Part-time)**
- BA (Ordinary) in Tourism**
- BA (Ordinary) in Leisure Management**
- BSc (Hons) in Hospitality Management**
- BSc (Hons) in Tourism Marketing**

- BSc (Hons) in Leisure Management**
- BSc (Hons) in Tourism Management**
- BSc (Hons) Event Management**
- MSc in Hospitality Management**
- MSc in Tourism Management**
- Certificate in Hospitality Services Management**

The MSc in Tourism Management and BSc in Tourism Marketing degree programmes are accredited by the World Tourism Organisation (WTO).

As the leading School of Hospitality Management and Tourism in Ireland, our goal is to enable students to contribute to the development, management and marketing of the industry in the 21st century. Our programmes provide students with a sound academic understanding of the tourism, hospitality, leisure and events industry together with the appropriate practical experience required for a rewarding career.

The tourism industry is recognised as one of the most exciting and fastest growing industries in the world. It contributes significantly to the well being and development of numerous global destinations. A well

educated workforce with appropriate management and leadership skills is essential in order to meet the challenges of this rapidly changing industry. The industry needs highly skilled graduates with a sound knowledge of destination management, marketing, consumer relationships and e-commerce. The ability to apply these business skills in the tourism industry is critical for a sustainable future.

The School recognises the contribution that research makes to the quality and success of its curricula and its research agenda focuses on national needs, core strengths and unique knowledge domains within the School and Faculty. Academic staff within the School have a maintained a strong research base and provide research and development services to industry through the dedicated Tourism Research Centre.

Staff research interests include the development of co-operative marketing networks; tourism clustering; city branding and urban identity; the development of environmental carrying capacity indicators; and an in-depth study of the short break tourist market.

While acknowledging the importance of teaching and research, the School also recognises the importance of strategic industry involvement in School activities. In May 2005, the School launched a new a new branding initiative — The MagicTouch. This is a partnership between the School of Hospitality Management and Tourism and organisations within the hospitality, tourism, leisure and events industries. Within the next twelve months, through the MagicTouch partner's model, the school will include industry partners in a wider range of in-school activities including student recruitment, induction, awards and graduation. They will also have more input into the development of course content and structure to anticipate and match evolving industry trends and practices.

These important elements of the MagicTouch initiative will be achieved by developing innovative partnerships with industry players whose philosophy and practices reflect the school values of hospitality, fraternity, growth, respect and independence.

Cultural Diversity Research

Cultural diversity is the acceptance and promotion of a variety of human cultures and their different value systems in a given society. Its promotion and social acceptance of differences is also known as multiculturalism. It recognises the importance of native languages, dress, traditions, and beliefs that govern self-identity. There is a compelling business case for achieving and managing diversity in the workplace. It can help organisations:

- Identify and capitalise on opportunities to improve products and services
- Attract, retain, motivate and utilise human resources effectively
- Improve the quality of decision-making at all organisational levels
- Reap the benefits from being perceived as a socially conscious and progressive organisation.

Diversity must be achieved and managed effectively if its benefits are to be realised. This requires leadership commitment; the establishment of priorities and realistic objectives; the assessment

and development of procedures to meet the particular diversity needs of the organisations; and the provision of management and employee training and support processes. The rapid globalisation of business and the changing demographic characteristics of the population suggest that the pursuit of diversity in the workplace should be the concern of everyone, now! The Tourism Research Centre has been researching cultural diversity in the Irish hospitality industry. The project was led by Detta Melia, Management Lecturer in the School of Hospitality Management and Tourism. The research was supported by Skillnets.

The objectives of the research project were to

- identify culturally diverse issues in Irish hotel operations
- assess the challenges that management is facing in managing a culturally diverse workforce
- conduct research to highlight the gaps
- analyse training needs within cultural diversity employment
- make recommendations in relation to training for



An awareness session was held during the first quarter of 2005 to help develop the concept. The research led to the development of best practice case studies, and the results of these and a quantitative survey are in the final report which is available from the: **Tourism Research Centre, tel 01 814 6087 or email tourism@dit.ie.**

Research Institute for Culture and Heritage

A new institute dedicated to the study of Culture and Heritage (RICH) was established in DIT in January 2005. Funded by DIT's Team Research Funding scheme, RICH aims to provide a centralised network for co-ordinating, encouraging and facilitating research activities in culture and heritage related areas. Currently, researchers associated with RICH are based in three faculties in DIT: Applied Arts, the Built Environment, and Tourism and Food. Three DIT research centres are also collaborating with the institute: the Digital

Media Centre, Tourism Research Centre (TRC) and the Futures Academy (FA). RICH will foster the development of high quality research by leveraging the combined expertise of DIT's research community. Specifically, it will:

- develop research outputs in culture and heritage
- be an information resource for the culture and heritage industry in Ireland
- collaborate and build research partnerships with institutions & agencies nationally and internationally
- Establish RICH as a key research and training provider in the area of culture and heritage in Ireland.

The RICH research team is currently talking to key stakeholders to identify issues, address knowledge deficits, and explore research project ideas. It is collaborating with a number of agencies and institutions on several research projects and is actively pursuing other research opportunities. It is also exploring ways of transferring information to key interests so it can function as an information resource for the culture and heritage sector in Ireland.

For further information please contact the RICH Team Leader, **Dr Bernadette Quinn, on tel 01 402 7557 or email bernadette.quinn@dit.ie.**

ATLAS Conference for DIT in December

The Association for Tourism and Leisure Education (ATLAS) was established in 1991 to develop transnational educational initiatives in tourism and leisure. ATLAS provides a forum to promote staff and student exchange, trans-national research and to facilitate curriculum and professional development. It currently has members in more than 70 countries.

The Business Tourism Special Interest Group within ATLAS is holding its second Business Tourism conference in DIT's School of Hospitality Management and Tourism, on December 5th and 6th next. The conference is a significant opportunity for the School to showcase its work in fostering education for this booming sector within tourism.

The School is introducing a new BSc (Hons) Event Management degree which will have a particular relevance for business tourism. It has also been delivering electives in business tourism for a number of years. The recently established Business Tourism Forum reflects tourism policy to develop the sector's potential. The ATLAS conference will have a number of international speakers and academic proceedings will be published. If you are interested in attending or submitting a paper for the conference please contact the conference Chairperson, **Lucy Horan, tel 402 4498 or email lucy.horan@dit.ie**

Business Improvement Districts (BIDS)

The Tourism Research Centre, in collaboration with the School of Hospitality Management and Tourism and the Faculty of the Built Environment was funded by DIT's Research and Enterprise TERS funding initiative to research the BIDS concept in an Irish context. Carlow was chosen for a pilot study and the concept was introduced to a range of key stakeholders in Dublin and Carlow via in-depth workshops. Business Improvement Districts (BIDS) is a system where owners of one or more businesses get together to share common problems and identify shared objectives. BIDS are

authorised by governments through legislation. They are run by NGOs (non-government organisations), but include businesses and local government. BIDS is essentially an economic development tool, intended to improve business. It assists in enhancing property values, increasing business profitability and encouraging more visitors to the area. For more information on this project contact **Elizabeth Kennedy, tel 01 814 6091 or email elizabeth.kennedy@dit.ie**.

TTRA Conference

The Travel and Tourism Research Association's (TTRA) 37th Annual Conference called "Bridging New Global Frontiers in Tourism" will be held in Dublin in June 2006. Dr Sheila Flanagan, Head of School, Hospitality Management and Tourism, is President of TTRA-Europe and will be helping to organise the key event in the TTRA's calendar.

TTRA is a leading international network of over 800 professionals in tourism and travel research and marketing. Founded in 1959, the organisation and its members have been to the forefront of the development and application of travel and tourism related marketing information and research. TTRA's membership in over 20 countries worldwide includes both practitioners and educators offering unique networking opportunities. For more information contact: **email sheila.flanagan@dit.ie**.

Having a Ball

The School of Hospitality Management and Tourism, DIT Cathal Brugha Street, has announced preliminary details of its Inaugural Alumni Ball, to take place on Friday, November 25th in the Westin Hotel, Dublin. Speaking at the launch, committee member Lucy Horan said, "we are issuing a call for graduates over the past 30 years to gather to renew acquaintances and share their memories of their student days. Our alumni is spread throughout the world and we expect a strong representation on the night from overseas."

More information is available from the **School Office, tel 01 402 4352 or email martina.mctigue@dit.ie**.

Cert in Hospitality Services Management

This two-year part-time course is aimed at front line managers and supervisors in the hotel and catering industry as well as those aspiring to these positions. Graduates of the course will have a strong foundation in current management practices and skills. The breadth of the programme content offers participants the opportunity to gain employment in a number of diverse operations within the hospitality industry. The programme delivery is flexible, and student-centred. DIT staff and guest lecturers use a combination of lectures, seminars, workshops, case studies and on-line learning. Subjects taught include: Communications, Computer Applications, Business Studies, Human Resource Management and Marketing for the Hospitality Industry. More details are available from the **School Secretary, tel 01 402 4352**.

Class of 1992 — The Reunion

The Green Room restaurant, DIT Cathal Brugha Street, hosted 21 graduates of the Degree in Hotel and Catering Management Class of 1992 on March 10th last. Of those who attended approximately one third are still directly employed in the hotel or catering sectors with another quarter indirectly involved as suppliers to the industry, educators or consultants. Further information is available from graduate **Jill Barrett, DIT Careers Service via careers@dit.ie or tel 01 402 3441**.

Links with St Lucia

The Prime Minister of St Lucia, Hon Dr Kenny D Anthony, visited DIT Cathal Brugha St earlier this year to explore co-operative opportunities with the Faculty in relation to programme provision, staff exchanges and research.

Short Courses with Credits

The School of Hospitality Management and Tourism offers a range of short courses which are usually delivered one night a week (normally Tuesdays or Thursdays) over a period of 12 weeks. They typically start in late September or early February.

The courses were designed by the School's lecturers — all of whom have extensive industry experience — in consultation with key personnel in the hospitality and tourism sector. Each course reflects current industry trends so content will be relevant and appropriate for participants. The School can also deliver the programmes as a series of workshops or in a block over a number of evenings at various times of the year. Each participant is awarded a DIT Short Course Certificate when they have successfully completed the course. The award also carries transferable ECTS credits which can be used to progress towards higher level qualifications.

Courses currently on offer include:

- Becoming a more Effective Manager
- Communications and Customer Excellence
- Computer Applications
- Effective Communication (NEW)
- Financial Awareness (NEW)
- Hygiene and Safety
- Leading for Results (NEW)
- Management Challenge (NEW)
- Management Principles
- Managing Customer Care (NEW)
- Managing Human Resources (NEW)
- Managing International Workers through Training (NEW)
- Managing Teamwork (NEW)
- Managing Training (NEW)
- Marketing — an Introduction
- Marketing and Sales (NEW)
- Performance Management Skills
- Planning and Organising (NEW)
- Problem Solving (NEW)
- Revenue Management
- Strategic Thinking (NEW)

It is also possible to register for single modules of the Masters degree part-time taught programmes. The modules are held over the course of a 12 week semester on one day a week and are each accredited for ECTS credits. Each course or modules costs around €275, but more details can be obtained from the **School Secretary, tel 01 402 4352**.



Explaining Tourism Success

Theresa Ryan is a postgraduate student in the School of Hospitality Management and Tourism. The focus of her PhD project is to identify the key factors underlying the successful development of tourism areas.

The overall aim of her research is to study tourism development and to determine why certain areas have performed better than others. A cross-disciplinary approach to her work takes into account a broad range of factors that influence tourism development.

She uses cross-national comparative case studies to document the process of tourism development, to determine the consistency of the process and to identify the influencing factors in the study areas.

She has completed her primary research in Killarney (the first case study) and has collated her findings in a written report. While in Killarney she conducted surveys and interviews with key people and completed archival work. She is now focusing on Bowness, in the Lake District in the UK as her second study area.

For more information on this project please contact:
Theresa Ryan, tel 01 814 6067
or email theresa.ryan@dit.ie.

MagicTouch

The School of Hospitality Management and Tourism and a group of industry partners launched a new innovative brand concept in industry/education partnership at an event in the Gravity Bar, Guinness Storehouse in May.



Pictured above are Alex Gibson, Head of Tourism and Tara Flanagan, Brendan Tours and right, the MagicTouch partners pictured at the launch.

Called MagicTouch Partners, the new brand was developed by the School and sixteen founding companies and organisations. The brand will act as a focus to channel greater collaboration between the School and industry in a number of areas including: student internships; student mentoring; careers development; sponsorship; and course design.

Speaking ahead of the launch, the Head of School, Dr Sheila Flanagan said "MagicTouch is a partnership between the School and organisations working in hospitality, tourism, leisure and the events industries. These companies and ourselves have a similarly identified value set reflected in the concepts of fraternity, community, respect, independence, hospitality, capability and forthrightness".

The partnership has the unique relationship between visitor and host at heart and recognises that a career in the broad tourism and hospitality industry can be especially demanding, challenging and rewarding, and requires a person to learn a wide range of skills in addition to developing their own individual strengths. Nurturing and developing these talents is very much at the heart of this partnership.

The partnership focuses on providing a student with the best preparation possible for a career in the tourism sector. It broadly seeks to maximise the opportunities for the student to experience ongoing training in a working environment, to benefit from the experience and perspective of those engaged in the sector and to profit from a fruitful dialogue and relationship between educators and those working in the sectors for which they are being prepared.

These important elements of the MagicTouch initiative will be achieved by developing innovative partnerships with individual industry players whose philosophy and practices reflect the school values of hospitality, fraternity, growth, respect & independence.

In addition to the School of Hospitality Management and Tourism at DIT, the founding MagicTouch Partners are: Abbey Tours, Aer Lingus, Brendan Tours, Choice Hotels Ireland, Dublin Airport Authority, Dublin Convention Bureau, Fáilte Ireland, Guinness Storehouse, Hilton Hotels, Holohan Leisure Group, IHCI, Jurys Doyle Group, Ovation Group, Stena Line, Tourism Ireland and Westin Hotels. For more information about MagicTouch Partners, contact **Alex Gibson, Head of Department of Tourism, tel 01 402 4461, or email alex.gibson@dit.ie.**

HSMIA Awards 2005 Entry Call



Alex Gibson, Head of Department of Tourism, is completing his third year as President of the Ireland Chapter of the Hospitality Sales and Marketing Association International (HSMIA). The association has over 7000 members worldwide and is dedicated to fostering professional development among sales and marketing executives in the tourism and hospitality sectors. In the past year the HSMIA has worked closely with the Faculty of Tourism and Food. Along with the Travel and Tourism Research Association it helped organise a Fast Conference on CRM (see page 21). It has also established a student chapter within the Faculty. The student members will have an opportunity to visit other international chapters and benefit from international internship opportunities.

One of the key events in the HSMIA calendar is the annual HSMIA Awards. This is the 9th year of the awards which cover a wide spectrum of marketing and sales categories. Alex would like to encourage nominations from the hospitality industry for this year's Awards which take place on October 25th in the Burlington Hotel, Dublin. More information from:

Alex, tel 01 402 4461 or alex.gibson@dit.ie.



At the HSAI 2004 awards were from (l-r) Minister for Arts, Sport & Tourism, John O'Donoghue T.D., Catherine Bodley, Ovation Group, (winner), Dr Sheila Flanagan, DIT (Category Sponsor) and Yvonne Boyle (HSAI Awards Chairperson).

IT Research Project

Most Discrete Event Systems (DES) e.g. service systems, business processes, manufacturing systems, logistics systems etc. are complex and difficult to understand and operate efficiently all of the time.

One of the most commonly used approaches for the analysis of such systems is Operations Research (OR). In theory OR has great potential to assist in the understanding and efficient operation of these systems, however it has not achieved the penetration that was predicted in the 1980's.

Many reasons have been put forward for this such as, poor salesmanship, poor education and time commitments within an organisation. However another reason may be the heavy burden placed on the person carrying out an OR project. Dr John Ryan's research project is concerned with the development of a process modelling technique to aid an operations researcher or process model developer during the requirements gathering and conceptual modelling phases of any operations improvement project.

The work is aimed at providing a process modelling technique specifically developed with a view to helping facilitate understanding, communication and knowledge acquisition among all persons involved in an operations improvement project.

The objectives of the research include the development of a technique that

- Is capable of capturing a detailed description of any Discrete Event System.
- Has a low modelling burden and therefore be capable of being used by non specialists.
- Presents modelling information at a high level so that personnel can rationalise with it.
- Has a good visualisation capability, such as animation.

The technique is called Simulation Activity Diagrams (SADs), it is supported by a prototype process modelling tool, Process Modelling for Simulation (PMS). The technique and software tool have been tested to date on a number of systems. The software tool is currently undergoing further development and will continue to be tested on an ongoing basis. For further information please contact:

Dr John Ryan, tel 01 402 7562 or email john.ryan@dit.ie

SMILE 2005 Conference



Pictured (l-r) at the SMILE 2005 Conference were Cyril McAree, Hotel and Restaurant Times, John Shaw and Kevin McGuigan, Quadriga Worldwide (Sponsors) and Alex Gibson, Head of Tourism Department, DIT (Conference Chairman).

Alex Gibson, Head of Department of Tourism chaired the inaugural Smile conference earlier this year. In this summary report he highlights the key points raised by each of the speakers. They came in their droves. Pilgrims on the road to marketing inspiration. Hoping to interact with a veritable conclave of hospitality marketing messiahs at the inaugural SMILE 2005 Conference held in April at the McEniff Grand Hotel in Dublin. The conference, which was sponsored by Quadriga Worldwide and Tourism Ireland, drew a large audience of sales and marketing professionals, offering them an array of speakers that covered all the key marketing bases in one easily digestible day.

The conference kicked off with a fascinating case study in practical collaboration in marketing by Des Donnelly and Edel O'Connell, representing the Cork UnCorked group. Both speakers gave powerful testimonials on the value of putting aside local rivalries for the greater good of marketing effectiveness. The

group has been active in a number of key domestic markets with its roadshow and has organised familiarisation trips for key buyers. What was most compelling about their story was the way that the building of trust among partners has been the critical element to the success of such initiatives. Certainly they have created a model that is sure to foster wider interest.

Gerard Tannam's (Islandbridge) presentation on branding emphasised the critical need for brands to effectively influence individual choices. He stressed the need for companies to constantly examine the nature of the relationship that people had with brands. Brand communicators need to give clear messages to their audiences and, instead of focussing on what he termed "fat", or overused and meaningless, words to describe their products, companies should adopt a "storytelling" approach.

Delegates were taken out of their comfort zone by Paul

Lanigan of Sandler Sales Institute who, in a number of role playing exercises, challenged the audience to see the sales negotiation process in a way that sought to get to the kernel of issues concerning the buyer. Paul stressed the need to identify the level of "fit" that exists between seller and buyer as early as possible in the negotiation process. Often, it may make more sense to recognise that the best move may be to withdraw from the process rather than try to wear down a reluctant buyer.

Martin Halpin, Area Director of Revenue Management at Hilton UK and Ireland, began his presentation with an assertion that Revenue Management was intrinsically a marketing activity and he explored why there was a historical conflict between revenue managers and marketers.

He urged hoteliers to value their revenue managers, pointing out that they make numerous decisions daily on business costing thousands of euros. Halpin warned the audience against third party retailers undercutting their own rates. He concluded by urging delegates not to ignore and mismanage their yield/forecast models by switching it off and stating it does not work.

Quadriga Corporate Development Director, David McNally, spoke next. In a wide-ranging address he brought the audience up to speed on the latest trends in in-room digital delivery of entertainment and information systems. McNally indicated precisely how the digital future would benefit hotel customers through greater personalisation, control and depth of conference.

Overall, he said, we would witness a huge degree of convergence in services delivered through the TV set in rooms with interoperability of services being greatly facilitated by the growth in VOIP — Voice over Internet Protocol. McNally presented several scenarios where the TV set could be used to build brand values, communicate in a personalised fashion with guests and act as a promotional channel for revenue building purposes.

Fast Event in Cathal Brugha Street

Peter Sherrard, Ryanair's Communications Director, began the afternoon session with a predictably upbeat assessment of the airline's contribution to tourism development in Ireland and its ambitious expansion plans which envisages over 100m customers by 2015. He was however very candid in his assessment of the roles that various marketing methods have in getting their message across. There was a lot of discussion on the airline's many cost-effective and often controversial methods to garner publicity.

Steve Potts, of SHM, gave one of the most fascinating presentations of the day, centred on research his company have conducted into hotel guest motivations. Using a series of focus groups, his company has developed a different perspective on ways to segment the hospitality market – one that recognises that the same guest may have different motivational states when staying in hotels on different occasions. He ended his presentation with a practical insight into how these guest profiles would be used in developing products and advertising campaigns.

Finally Kieran O'Hea, Tourism Ireland's Internet Manager spoke of the challenges in moving to an e-marketing environment. While stressing that Tourism Ireland itself was not an e-commerce site, he was able to offer the delegates an insight into the role of Tourism Ireland's site in acting as a showcase for Irish tourism. The site is heading for over 5m visitors in 2005 and on a quarterly basis is directing up to 250,000 click through to industry sites, (mainly accommodation, carriers and tour operators). Overall, the SMILE format offered delegates a good opportunity to get some practical tips for managing some of the key marketing challenges today as well as an all too infrequent chance to network with their peers.



The first in a series of "Fast" Conferences was held in May in DIT, Cathal Brugha St. The evening event "Customer Relationship Management for the Tourism Industry" was organised by DIT, supported by Tourism Ireland and was a joint HSMIA Europe and TTRA seminar, followed by an opportunity to network and dinner.

Professor David Gilbert from the University of Surrey discussed the "Principles of Customer Interaction Management". David is Professor of Marketing at the School of Management, University of Surrey. He has written many articles and two leading books: one on retail marketing management & the other on the marketing of tourism. He is currently working with Professor Merlin Stone on a textbook for CRM. David is a moderator for the Chartered Institute of Marketing and is sought after for his expertise in Services marketing. He has a doctorate in consumer behaviour from the University of Surrey.

Thomas Wandahl, Vice President and Head of SAS EuroBonus Frequent Flyer Program delivered his talk on "How to maximise the value of a loyalty program". Thomas Wandahl is Danish but is living in Stockholm since 1998. He began working for SAS in 1994 starting as a trainee. Before EuroBonus he was responsible for SAS Distribution Strategy and in charge of the radical change in the Scandinavian Distribution landscape in 2003. He also previously worked at Spainair at Palma De Mallorca as a Management Consultant and was heavily involved in setting up a low cost carrier. He has a Masters in International Business Economics.

Arild Horsberg, CEO talk2me described "The Customer from Hell", a story about today's consumer and how to meet his needs and maintain profits, through 1 to 1 communication. Arild Horsberg is managing director of talk2me, Norway's largest company in the business of customer communication, systems and methods. Arild is a well-known and popular speaker in Scandinavia, often mixing interesting real life case studies, with humour and deep understanding of the subject.

Tourism Research Centre

Tourism Research Centre



The Tourism Research Centre was established in 1996 to develop greater linkages between industry and education. The Centre provides customised training and applied research to the tourism and hospitality industry within Ireland. It was built upon the five decades of tourism expertise available at DIT. It has a staff of full-time researchers, project managers and support staff. The staff have several years of practical research experience and primary and masters degrees in hospitality management and or tourism. For each project a team of experts within DIT is identified to act as advisors to the project or to carry out the research and deliver training programmes.

The Centre has access to DIT's extensive resources and teaching and learning facilities. The centre has expertise in a number of areas such as customer research, strategic planning, audits and evaluations, regional development, employee satisfaction surveys and customer profiling. For more details, contact: **Elizabeth Kennedy, tel 01 814 6091 or email elizabeth.kennedy@dit.ie**

North Tipperary Marketing Plan

In 2004, North Tipperary Tourism Co Ltd (NTTCL) commissioned the Tourism Research Centre in Dublin Institute of Technology to prepare a Tourism Marketing Action Plan for North Tipperary. The report was funded by Tipperary LEADER Group, which is funded by the Irish Government and part-financed by the National Development Plan 2000 — 2006, and North Tipperary County Council.

The study focused on:

- Auditing and assessing the North Tipperary's tourism resource base and development potential
- Reviewing all North Tipperary tourism information/literature
- Reviewing national and regional websites and suggested requirements for promoting North Tipperary
- Analysing the current and emerging market trends
- Identifying potential tourism opportunities for the county
- Recommending an organisational framework for its implementation
- Preparing a one-year action plan.

For more information on the methods used in this research project or to discuss similar project ideas contact: **Elizabeth Kennedy, tel 01 814 6091 or email elizabeth.kennedy@dit.ie**.

Justifying investment in training

The availability of €13.6 million in State and EU funds provided the incentive for the Skillnets Training Network Programme, operated through the Department of Enterprise, Trade and Employment. It has been very successful in the development of an enterprise-led approach to up-skilling the workforce and has spread its benefits across many different sectors.

The Tourism Research Centre and the Irish Hospitality Institute (IHI) manage one of these initiatives called 'Hospitality Management Skillnet'. It is an industry-led training network funded by the Skillnets Training Networks Fund and participating member companies. The training programme is based on the outputs of two years extensive research into the core competencies required by managers in the hospitality industry. This research was also funded by Skillnets and carried out by DIT's Tourism Research Centre.

One of the most challenging issues facing Irish companies is to justify their investment in training and development. The Kirkpatrick and Philips Evaluation models provide a method for this. Three members of the Hospitality Management Skillnet (Choice Hotels, Masterchefs and the Hilton Hotel, Dublin) were chosen to apply and test these models. They were also asked to evaluate their usefulness and applicability. The companies received 4 days advanced training in evaluation methods for one senior staff member and 3 — 4 days on-site consultancy to help them conduct at least one evaluation process. The companies also learned key skills and became part of a unique nationwide network.

Training programmes

In 2003 and 2004 the members of Hospitality Management Skillnet completed an intensive training programme. A further analysis of training needs led to the development of courses in finance and sales and marketing — with a strong emphasis on selling at Fáilte Ireland's Travel Trade Workshops, which take place in May each year. The Tourism Research Centre and the IHI have now been awarded funding to deliver a series of courses that have been accredited by DIT through the Faculty of Tourism and Food's School of Hospitality Management and Tourism. These courses will be delivered from September to November 2005 to suit the hospitality industry's schedule.

For further details on the Hospitality Management Skillnet contact: **Elizabeth Kennedy, Manager, Tourism Research Centre, tel 01 8146 091 or email elizabeth.kennedy@dit.ie or Eilish Kealy, Irish Hospitality Institute (IHI), tel 01 298 8850 or email young@ihci.ie**.



Sectoral Analysis



The Centre has evaluated a wide range of tourism products, providing key clients with detailed analyses and making recommendations for the development of strategic plans.

Genealogy sector

The TRC reviewed the operational structures of the Irish Genealogy Research Centres for Irish Genealogy Limited (IGL). Using its research findings, it made recommendations for a future operational structure. The methods used to carry out the work included a literature review, questionnaire survey of Centre Managers, in-depth face-to-face interviews with four selected Centre Managers and consultations with relevant organisations

and individuals. The research identified the main sources of funding for operating and staffing the Centres as well as for the running costs associated with centres. The centre recommended a number of strategies designed to achieve long term sustainability and business growth.

Limerick Genealogy Centre

The Tourism Research Centre did an in-depth analysis of Limerick Genealogy Centre (LGC) for IGL and Shannon Development and proposed a business model for the future development of the centre. The ultimate objective was to re-open the centre to the public and allow it to operate on a viable basis and develop as an important visitor resource.

The Centre

- assessed historical financial data for Limerick Genealogy Centre.
- recommended a new model Business Plan
- identified potential sources of local funding and suggested possible matching funding opportunities.
- identified the appropriate skills for supporting the centre's business development

In-depth consultations with librarians in the LGC and a secondary research review of a model business plan developed by the Tourism Research Centre underpinned the research.

Inland cruising

The Tourism Research Centre conducted a study for Fáilte Ireland, focusing on the overseas holiday market for Inland Cruising. The research included:

- Interviews with a representative sample of overseas holiday visitors who were cruising on inland waterways and rivers while in Ireland.
- In-depth interviews with selected tour operators

in the main overseas markets offering inland cruising holidays.

The Centre provided Fáilte Ireland with a full analysis that was used to feed into its marketing strategy for that sector.

Waterways Corridor Corridor Study

The Heritage Council also commissioned a Waterways Study to establish ways to realise the inherent potential of the waterways as a heritage, amenity and tourism resource. The study covered the Upper Shannon Navigation between Lanesboro and Rooskey, and the Royal Canal between Clondra and Thomastown including the Longford Branch. The study was led by CSR (land planning and design), in collaboration with RDS (cultural, historical and archaeological specialists), WYG (ecological and hydrological specialists), the TRC at DIT and Brendan Kearney (rural/agricultural development economist).

The report

- Identified ways to manage the waterways corridor environment to the benefit of all, ie heritage, land and water-based users.
- Improved the understanding of an area, and by this understanding, ensured retention of the distinctiveness of a place, while allowing for development and evolution of use for the future.

A two-pronged approach was adopted, involving a physical survey of the study area along with desk research and consultation with the appropriate parties. More information on this type of research is available from: **Elizabeth Kennedy, manager, tel 01 814 6091 or email elizabeth.kennedy@dit.ie**

Developing Partnerships and Networking in Tourism



At the launch of the ParNetourism project in Trinity College, Carmarthen are (l-r) Catherine Gorman, (DIT), Evelyn Quinn, (DIT), Rhodri Walters (Trinity College), (seated) Dr Medwin Hughes (Trinity College) and Elizabeth Kennedy (Tourism Research Centre), Craig Thomas (Carmarthenshire Tourism Association), Nia Siggins (Trinity College), Dr Louise Emmanuel (Trinity College) Dr Glenda Tinney, (Trinity College).

DIT and Trinity College, Carmarthen, Wales are researching partnerships and networks in the tourism industry in the counties of Wexford and Carlow, in Ireland and Pembrokeshire and Carmarthen in Wales. The project called ParNetourism is funded under the Interreg IIIa programme and by the South East Regional Tourism Authority, (South East Tourism), Wexford Tourism and Carlow Tourism. The research findings and recommendations will be used to develop a best practice manual and training pack for the establishment and sustainability of effective networks in the

Mystery Shopping

Mystery Shopper is a quality management tool created by the TRC to monitor customer service. Entitled 'Hospitality Service Investigations' the tool is specifically for the tourism and hospitality industries in Ireland. The service is developed in consultation with the client who outlines exactly what they need to investigate. Mystery shoppers then visit businesses posing as a typical customer and evaluate the service they receive. The benefits of Mystery Shopping include quality improvement, profit increase, understanding customer needs, regular objective feedback, identification and rewarding outstanding employees and building customer awareness. For more information contact: **Elizabeth Kennedy, tel 01 814 6091 or email elizabeth.kennedy@dit.ie**.

tourism sector in Ireland and Wales. The partners will disseminate their research findings and train product providers in the regions on how to establish strong, effective and sustainable networks. This will in turn help them to increase visitor numbers to their region. The Irish side of the project was launched in October last year at Dunbrody (Emigrant Famine Ship) in New Ross, Co Wexford. The launch was attended by members of Carlow and Wexford Tourism and the South East Regional Tourism Authority. The main objectives of the research are to:

- Identify networks, co-operatives and partnerships which are at different stages of tourism development and critically analyse their structures, organisation and viability
- Identify successful partnerships within or outside the tourism sector and identify their critical success factors.
- Consult widely with the tourism and community related sectors in these regions to identify issues for more in-depth analysis. Researchers will use a combination of qualitative (focus groups, facilitated workshops and face to face interviews), and quantitative (postal survey) research.
- Develop a series of recommendations for the development of effective and sustainable networks for SME's in the tourism sector.
- Design and develop innovative training packs for the dissemination of best practice to the tourism and education sector.
- Present a series of training workshops to product providers in the four regions.
- Disseminate information on the project to product providers and community related groups in the four regions through a newsletter and dedicated website.
- Establish a pilot network in Ireland and Wales
- Establish a research partnership between Dublin Institute of Technology and Trinity College, Carmarthen.
- Develop and enhance relationship/partnership between educational institutions and the tourism related sectors.

For more information on this project please contact: **Evelyn Quinn, tel 01 814 6095 or email evelyn.quinn@dit.ie**.

Castlecomer Workshop

The Tourism Research Centre at the Dublin Institute of Technology was invited to conduct a series of workshops for the Castlecomer area in order to identify tourism development opportunities for the Castlecomer area. Participants included representation from a broad section of the community, who had an interest in the development of Castlecomer and its environs. The information derived from these workshops was used to produce a Tourism Action Plan for the Castlecomer area, setting the future development of tourism in the area



Customer Profiling

By finding out as much as you can about your clients and their needs you can plan much more effective targeted marketing campaigns. The TRC recently surveyed over 300 companies for the Learning Centre — the meeting and conference facility at the Guinness Storehouse. Their researchers conducted a tele-survey of potential new clients and were able to provide the Guinness Storehouse with the following information:

- names of key decision makers in each organisation
- hospitality requirements of potential clients
- conferencing and meeting patterns (eg type of facilities required, frequency of booking, premises currently used and rates being paid)
- level of awareness of Guinness Storehouse and Learning Centre
- perception of the Learning Centre as a venue
- their level of interest in using Guinness Storehouse and receiving more information on their facilities

The Centre has conducted similar research for a number of hotels and visitor attractions. For more information on customer profiling services contact:

Elizabeth Kennedy, tel 01 814 6091 or email elizabeth.kennedy@dit.ie.

Dublin City Hall Visitor Survey

The Tourism Research Centre has conducted face-to-face surveys amongst visitors to Dublin City Hall. The research team interviewed a representative sample of visitors to the venue, over the high, shoulder and low tourism seasons and on different weekdays. They also surveyed visitors at other locations to find out why they had not visited City Hall and they identified what would entice them to visit it in the future.

The project:

- profiled visitors to Dublin City Hall.
- determined what motivated visitors to go to the attraction.
- provided information for future planning.

The researchers gathered information on key visitor types; socio-demographic profiles, information about their visits to other attractions visited and where they had been on previous visits. To find out more about this type of research project contact:

Evelyn Quinn, tel 01 814 6095 or email evelyn.quinn@dit.ie.



TRC Chairman



Lewis Clohessy was appointed Chairman of the TRC's Industry Advisory Board after Ollie McMahon (AIB) retired from the position after providing his advice and expertise to the Board for many years. Lewis is an electrical engineer by profession and spent the earlier part of his career in the manufacturing industry but, in more recent years, he has been associated with a range of organisations in the environmental and cultural fields.

His environmental experience has included periods in the late 70s and early 80s as Chief Executive of the Heritage Trust and of An Taisce – The National Trust for Ireland.

He has been involved in many cultural activities:

In 1991, he was Director of Dublin's year as European City of Culture. He was Festival Director of the Dublin Theatre Festival for a 5-year period (1984-1989) and he served

a 5-year term as Chairperson of the National Concert Hall in Dublin (1986-1991). Other organisations of which he has been Chairperson include the "Pipeworks" Organ and Choral Festival, the Dublin Film Festival, the National Entertainment Awards and Music Network. He is also a Board member of the Dance Theatre of Ireland.

He is Co-editor (with Professor Kevin B Nowlan) of the Irish Historic Properties Committee report: "Safeguarding Historic Houses. As a partner in the consultancy group Local Development Services, he has carried out, with Dr Sheila Flanagan, a number of tourism development and project feasibility studies for local communities throughout Ireland.

The other industry representatives on the board are: Paul Carty (Guinness Storehouse), Teddy Daly (Irish Ferries), Brian Maher (Failte Ireland), Joe Palmer (South East Tourism Authority), Brian Fahey (Action Recruitment), Cormac O'Connell (Dublin Airport Authority), Peter McCann (Merriion hotel).

DUBLIN VISITOR SURVEY



Since 1999, DIT and the Tourism Research Centre have conducted the annual Dublin Visitor Study. The study investigates visitor experiences of, and attitudes to Dublin using a structured visitor survey questionnaire. The study is part of a pan-European research project taking place in four cities and will eventually provide a comparative analysis of visitor opinion across a range of European cities.

The Dublin study is managed by the Tourism Research Centre. One thousand visitors to Dublin are interviewed annually at a number of locations in the capital: the Guinness Storehouse, Book of Kells, Dublin Writers Museum, Temple Bar and St Patrick's Cathedral. The comprehensive survey asks questions such as:

- Where do they come from?
- What are their attitudes and concerns?
- What activities do they engage in while in Dublin?
- Do they feel safe in Dublin?
- Will they come back?

Each year the study includes a group of new topics such as: value for money, short-break holidays in the capital and, transport issues.

Findings

This 2004 survey was a joint research initiative by the Faculty of Tourism and Food, the Tourism Research Centre, and Fáilte Ireland. It includes an in-depth analysis of transport to and around the city. The key objectives of the survey are to improve the quality of urban tourism information within Dublin city and to provide managers of tourism activities in Dublin city with key information to make strategic decisions. Only visitors from outside the Republic of Ireland are interviewed.

The main findings were

- The UK Market remains the biggest single market for Dublin (55%) followed by Mainland European (24%) and North America (15%).
- Just under a third (26%) of overseas visitors to Dublin city could be described as white collar/public service employees while the second most significant groupings are students (16%).
- Just over a third (36%) of those visiting Dublin City are with a partner, 26% are with a group of friends, 16% are families, 10% are alone and 8% are with a group

The majority surveyed (78%) were in Dublin on holiday. Most were staying up to 4 nights in Dublin and the majority chose 3 Star hotel accommodation. Eighty-five percent of overseas visitors to Dublin city arrive by air. This is directly comparable with the 2003 survey period. Of these 59% percent booked through the internet. Overall, visitors to Dublin feel that the people are friendly and hospitable, that Dublin is a safe city, there is a good supply of visitor attractions and restaurants and it has a rich cultural life.

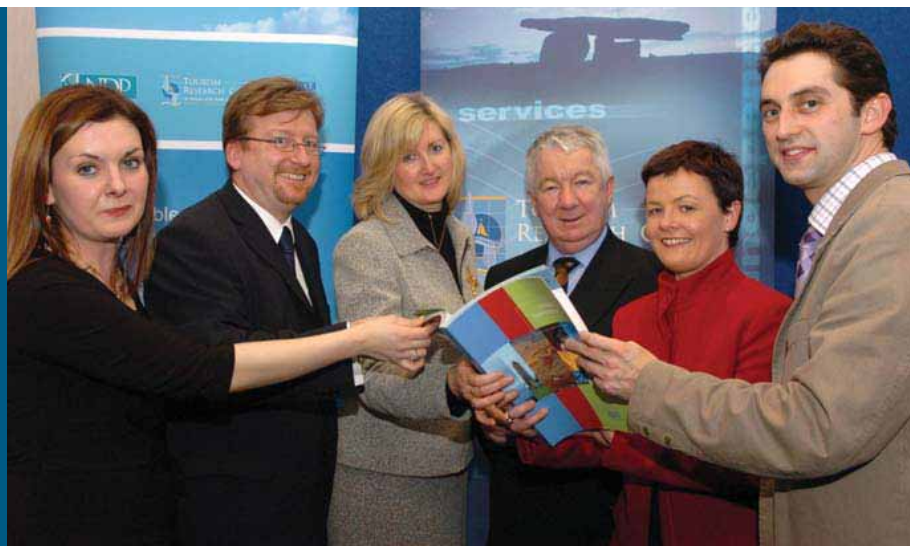
The top three most important activities considered by visitors when deciding to visit Dublin were, sights/attractions (31%), going out in the evening to pub/bar (18%) and culture/history (14%). Dublin received an average overall satisfaction rating of 8.3 out of a possible 10 which compares to 8.4 in 2003.

For more information on the findings and information about accessing the results of this year's survey contact:

**Evelyn Quinn, tel 01 814 6095
or email evelyn.quinn@dit.ie.**

Developing a Model for Sustainable Tourism

Photographed at the launch are (l-r) Dr Ruth Kelly, Faculty of the Built Environment, DIT, Professor Brian Norton, President, DIT, Dr Sheila Flanagan, Head of School of Hospitality Management and Tourism, DIT, Donal Guilfoyle, Fáilte Ireland, Elizabeth Kennedy, Tourism Research Centre, DIT, Dr Shane Colgan, Environmental Protection Agency.



DIT has launched a major research project aimed at reducing negative impacts on tourism destinations. The Environmental Protection Agency has awarded the research team €320,000 to carry out the project over two years. The two-year research programme aims to develop effective techniques to protect and enhance a destination's tourism 'capital' and thus minimise the danger of damage that tourism itself may cause.

The study area chosen — Tipperary Lakeside, Lough Derg — is an identifiable tourism area, which capitalises upon its tourism assets by creating its own identity based on its particular tourism product. The project is led by the School of Hospitality Management and Tourism at DIT which is collaborating with DIT's Faculty of the Built Environment and Tourism Research Centre. The research steering committee also includes expert representatives from the University of Surrey, Department of Arts, Sport and Tourism, The Environmental Institute, University College Dublin, Fáilte Ireland and the EPA.

The capacity of an area to absorb visitors is becoming more significant. Beyond a certain point the number of tourists arriving into it can have negative consequences for the region. The development of techniques to implement carrying capacity indicators will benefit government agencies and tourist interests and will help them determine the potential and sustainability of an area. With better information, visitor and area management can be more proactive and capacity issues can be anticipated and responded to. This carrying capacity framework will lead to the evolution of an environmentally integrated tourism destination management model as well as an integrated management-training module. Launching the project

in DIT Cathal Brugha Street in February, Professor Brian Norton, President of DIT, said it was an extremely important research project and one to which DIT was very well-suited, given its range of disciplines. "Colleagues drawn from two faculties, and including environmental planners, geographers, marketers, economists, cultural experts and tourism specialists will work together on something that is extremely important to the Irish economy. We are all familiar with the potential for tourism to change the very things we like most about the destination we have chosen, and it is often too late to reverse that damage. This research aims to provide tourism managers with the tools to alleviate such dangers and make tourism sustainable in the long-term."

Dr Sheila Flanagan of DIT's School of Hospitality Management and Tourism said she and her research colleagues were delighted to have received the funding for the project. "There are the tangible aspects of 'place' that my geography and environmental colleagues can identify — the beautiful landscape, the historical monuments, the traces of history. But there are also many intangibles: the civility with which visitors are received; the small warm gestures of hospitality; the way people speak; the music they share; their songs; their own rhythm of life. These may be the very things that draw tourists to a destination but they may be endangered by that very tourism. The capacity of an area to absorb visitors is critical to sustainable tourism management. It is our objective to develop techniques that will assist tourism managers in determining sustainable capacities in a given area." For further information please contact:

Elaine O'Halloran, Research Assistant, Tourism Research Centre.
tel 01 814 6094 or email elaine.ohalloran@dit.ie

Festival Research

There are many well established festivals being held all around the country at all times of the year and the Tourism Research Centre has developed a particular expertise in their analysis, providing the organisers with valuable information.

Greystones Arts Festival

The Greystones Arts Festival is the largest street theatre festival along the east coast and is sponsored by Carlsberg, the Arts Council and Wicklow Tourism. Last summer the TRC surveyed visitors to the festival and provided the organisers with a comprehensive report of their findings. When the face-to-face interviews with festival visitors were analysed the TRC was able to provide the organisers with key information to help them plan subsequent events.

The report included information on:

- visitor profiles
- how they heard about the festival
- what influenced their decision to attend
- suggestions for improving programme content
- levels of expenditure
- recommendations to improve marketing

The demand study took place in the glorious sunshine over the August Bank holiday weekend in the town.

The Ballyhoura experience

The Tourism Research Centre was commissioned by Ballyhoura Country Holidays and Ballyhoura Fáilte to undertake visitor research at the Ballyhoura Walking Festival. It also organised workshops with invited

participants to input into the development of a manual for organising walking festivals in Ireland.

The project objectives were to:

- optimise the walking product and its spin-offs for Ballyhoura Country Holidays
- assess the socio-economic impact of walking festivals in Ireland
- identify and profile festival attendees
- establish what people are getting from it and why they are attending.
- enhance the economic benefit of walking festivals.
- improve the marketing of walking festivals.
- produce a manual to provide practical advice to walking festival organisers

The project team also provided a method for calculating the economic benefit of walking festivals and a method for expanding them.

Killarney SummerFest

For this project the TRC surveyed visitors to the Killarney SummerFest to help shape the future of the festival.

There were several objectives including the need to:

- profile the visitors
- determine their spending power
- identify how they found out about the festival and whether they had received enough information
- determine which events were entertaining and which ones were not



- identify events for future festivals
- assess whether visitors would return or would recommend the festival to relatives/friends.

By meeting these objectives the TRC could assess how much money was spent at the festival and estimate its socio-economic impact on the region. It made recommendations on how to improve the marketing of the festival and provided the organisers with independent research findings to underpin future programming and planning. More information on the Tourism Research Centre's expertise on festival research is available from: **Elizabeth Kennedy, Manager,** tel 01 814 6091, or email elizabeth.kennedy@dit.ie.

Profiling Visitors to Tara

Tourism Research Centre researchers interviewed 200 visitors to the ancient site of the Hill of Tara in County Meath. The research was carried out for Cunnane Stratton Reynolds (CSR) which was preparing a management plan

for the state-owned land at the Hill. The interviews took place over a 10-week period and information on visitor statistics and visitor opinions provided CSR with valuable information to feed into their final report.



Music to their Ears

When the National Concert Hall decided to develop a new marketing plan to attract audiences it needed to find out more about people's perceptions of the venue and their attitudes to ticket prices, facilities and competitors. DIT's Tourism Research Centre was therefore commissioned to carry out qualitative and quantitative research among users and non-users of the venue. Audience surveys took place during the intervals and after different concerts in the NCH on different days of the week. Another 300 respondents replied to an e-survey which was sent to members of the NCH database. Face-to face surveys

were also conducted with those who had not been to the NCH in the previous 2 years, but who had an interest in classical, opera, traditional/Celtic, jazz, popular and dance/ballet music. TRC facilitators also held focus groups in Dublin, Kilkenny and Galway, with users, non-users and 'Friends' of the NCH. A trained evaluator provided an objective viewpoint of the business, from a customer's perspective. The mystery shopper evaluated the call centre, box office procedure, bar and restaurant service, and staff. A detailed analysis of customer service was provided to the client with recommendations on how to make improvements.

Finally, the team analysed the pricing policy and marketing strategies of competitors such as the Helix, University Concert Hall Limerick and Belfast Waterfront Hall. The research results were used by the NCH to underpin the development of its new marketing plans. The TRC with its particular expertise and knowledge of the tourism and hospitality sectors can combine qualitative and quantitative research methodologies to help companies working with these sectors to make strategic decisions based on independent research. Contact **Elizabeth Kennedy**, tel 01 814 6091 to find out more or email elizabeth.kennedy@dit.ie.

School of Culinary Arts and Food Technology

DIT's National Bakery School

In 2000, the National Bakery School, based in DIT Kevin Street, took on the challenge of falling student numbers and transformed itself into an overnight success story. This was achieved through a three-phase action plan that involved:

- critical self examination
- researching industry trends on the Continent, in the USA and in Ireland
- strengthening industry links by promoting the concept of the professional artisan/specialist baker

The School now offers a very popular series of part-time courses in professional baking as well as a 2-year Higher Certificate in Baking Technology and Management. Derek O'Brien, Head of Department of Baking Technology and Management has presented a paper outlining the School's success story at events including the International Richemont Club, held in Antwerp, Belgium and the AGM of Mills and Millers of Ireland, in Ramelton, Co Donegal.

Derek has also delivered a paper ('The international bakery industry and consumer trends in Ireland') at a seminar on "Innovation in Baked Goods" organised by Enterprise Ireland. This paper examined trends in the baking industry in the UK and the negative influence of the multiples. It compares the UK trends with the Continental bakery industry. It also examines the impact of low cost food on daily life in the UK and the knock on effect this has on the UK food industry and in particular the bakery sector. Derek recommended the Irish bakery industry not to mirror the UK experience.

At the Richemont Club Italia, in Rimini, Italy, Derek O'Brien introduced non-Irish bakers to the trends that have occurred in Ireland over the past 50 years with a presentation entitled 'The bakery industry in Ireland 1955 — 2005'. He also looked forward and suggested trends for the future of the industry in Ireland.

Derek is currently providing Evron Foods in Northern Ireland with the benefit of his knowledge and experience in a Fusion-funded project. Fusion is an all-island network between industry and academic, enabling knowledge and technology transfer across the island, supporting business innovation and increased capability. Fusion achieves this by establishing and supporting three way cross-border partnerships between companies with technology based development needs, research centres with specialist expertise and high calibre graduates. The project is currently developing a range of Irish ethnic breads. On a previous project funded by the Department of Agriculture and Food Derek and his team in collaboration with the National Food Centre and University College Dublin developed a range of organic bread and cakes.

The National Bakery School has had some distinguished guest lecturers this year including: Loudvic Richard, Meilleurs Ouvriers de France, who delivered a Master Class in classical French pastry and Cyril Hitz, Johnson & Wales University, Rhode Island, USA, member of successful USA team at Coupe de la Boulangerie, Paris, 2002, who delivered Master Class in Classical Breads and Bread Modelling. Members of the Food Writers Guild of Ireland also spent some time in the School attending a seminar on baking and a hands-on baking demonstration. For more information on the National Bakery School please contact: **Derek O'Brien, tel 01 402 4566, email derek.obrien@dit.ie.**

National Team Wins Bronze

The Irish National Baking Team won yet again in the 'Coupe d'Europe de la Boulangerie' — European Bakery Cup Competition, held in Nantes. The team — all colleagues from DIT's National Bakery School — won the bronze medal and were only narrowly beaten by Switzerland and France who won Gold and Silver respectively. Derek O'Brien, Head of the National Bakery School at DIT, said "Ireland has once again shown it is one of the best on the European Bakery scene. Our team was placed ahead of 6 other countries and was only narrowly beaten by Switzerland and France, both countries having long traditions in baking quality. This is a fantastic achievement for Ireland and Irish craft bakers. The team has worked closely together and practiced hard, and in doing so they have honed their skills and expertise to the point that Ireland is now recognised as one of the leaders in the European Baking scene."

The team's task was to produce a range of artisan breads, classical pastries and an artistic bread piece. Everything had to be produced in an 8 hour period on the day to a given specification. The theme for this year's competition was 'A National Monument'. For their decorative bread piece the Irish team produced a Celtic cross and the Book of Kells, and this was complemented by a range of artisan breads and viennoiserie (classical pastries). The winning team members — all staff at DIT's National Bakery School are: Robert Humphries, Artisan Bread Specialist, Clane, Co. Kildare; Dolores Spain, Classical Pastry Specialist, Ennis, Co. Clare; Michelle O'Connor, Artistic Bread Specialist, Ballybunnion, Co. Kerry. The Irish International jury member is Jimmy Griffin, President of the Richemont Club Ireland and Griffins Bakery, Galway.

International Placements



On the third year of the BA Culinary Arts programme, students spend a period of time on placement in various establishments throughout Europe. This is an integral and compulsory part of the programme and is funded by the EU's Leonardo da Vinci Mobility programme, managed in Ireland by Leargas. Many of the students continue to work in the establishments after the compulsory period of placement has ended and graduates return again after they have finished their degree to work full-time for the host company. Most courses within the faculty require students to spend a period of time on placement in Ireland at some stage. If have any queries about this or would like to provide a placement stage for one of the students please contact **Oonagh Birchall, tel 01 402 4353 or email oonagh.birchall@dit.ie.**

The History of Dining in Ireland



Exciting Career Options For New Graduates

Last November a group of 27 graduates from the new four year BA (Honours) Culinary Arts Degree Programme attended their conferring ceremony in St Patrick's Cathedral. This was the second group of graduates to finish this innovative course which is having a major impact on industry and providing the graduate's with exciting career options.

They have already secured a wide range of interesting positions across the food industry. Roisin ÓNeill from Wicklow and Paul Williams from Waterford have both secured positions in 'The Fat Duck' restaurant in the UK. This is a three star Michelin Restaurant, recently voted "best restaurant in the world".

Denise Kelly from Roscommon is registered for a PhD in the School of Culinary Arts and Food Technology where she will investigate 'Food Anxieties'. Pol Ó h-Eannaich from Dublin has been made Executive Chef in one of Dublin's newest restaurant ventures — Dax Winebar. Michelle Barry from Dublin is pursuing a career in wine retailing with O'Briens Wines and a number of other graduates are studying with the Wine and Spirit Trust. Francesca Forghieri from Milan, Italy has joined Musgraves as part of their management graduate programme and loves the challenge. The BA Honours programme in Culinary Arts is the first of its kind in Ireland. It focuses on food, wine, cooking and gastronomy all of which are underpinned by strong scientific and management principles. Within the programme students undertake internships and periods of training in leading organisations both nationally and internationally in a unique partnership with the broad food industry.

Students can also select from a number of electives in their final year and tailor the programme to suit their individual career aspirations. Graduates from this course will be the movers and shakers of the food industry in the near future.

Máirtín Mac Con Iomaire, lecturer in the School of Culinary Arts and Food Technology, is researching 'The Emergence and Development of French Cuisine in Dublin 1900-2000' for his PhD. There is very little published material or knowledge of the development of restaurants and gastronomic dining in Dublin over this time. His research aims to answer two main questions: How did gastronomic dining develop in Dublin from 1900 — 2000. How did French Classical Cuisine in particular influence the development of gastronomic dining in Dublin from 1900 — 2000.

For his research Máirtín interviewed key players in the Irish culinary field over the last century. He has collected old menus, photographs and other artefacts, and has extensively reviewed documentary evidence. After he appeared on the Marian Finucane radio programme to discuss his project, he generated a great deal of interest and received lots of useful information for his research from the listeners.

Máirtín will tell the story of Dublin's leading restaurants from Jammet's (1900 — 1967) to Restaurant Patrick Guilbaud (1981 — Present). His project will look at the origins of the restaurant concept and how it developed from dining in the large houses of the time to private clubs and beyond. He will research the golden age of the hotel restaurant, the rise of the chef/patron establishments, and the development of ethnic restaurants in Ireland.



Culinary Arts Academy Awards

The final year students of the BA Culinary Arts degree once again pulled out all the stops to deliver a gastronomic experience that was both innovative and enjoyable. Invited guests including staff and industry representatives were treated to a spectacular night of excellent quality food and drink as the students demonstrated the multi-disciplinary skills that they had learned throughout the 4 years of their course. With an Academy Awards theme to the night each course received a nomination for the chef in charge of the course and guests were asked to nominate their preferred dish. The food was the subject of some lively discussions around the room.

Worldskills Triumph



Sinead Leacy, of New Ross, Co Wexford, pictured above with Tony Conlon, was awarded a gold medal for her performance in Restaurant Service at the

Food Innovations in Cathal Brugha Street

Once again the final year students of the BA in Culinary Arts have demonstrated creative and enterprising talents by developing a range of innovative and novel food products. Dr Roisin Burke, lecturer in Food Product Development and Culinary Science describes some of the exciting new products developed by this year's group of students.

New product development is a significant element of the student's degree course. The product ideas are developed in the third year of the programme and practical work commences and continues over five months in fourth year. They worked on product formulas, carried out trials and evaluated shelf-life and they also organised expert taste panels and consumer trials as part of their consumer research. Finally, the students chose packaging options and worked on packaging design and labelling.

This year the 34 final year students developed a range of new foods including nutritional products; functional foods; low fat and organic convenience foods. Examples of new products with a nutritional emphasis were: gluten-free pizza and muffins, gluten and diabetic-friendly breads, lactose-free ice-cream and mini fruit salads for children. Functional foods included a peach probiotic yoghurt drink with Lutein to help prevent Age

Related Macular Degeneration (A.M.D.). Food products developed for specialty markets with an emphasis on healthy eating were low-fat ice cream sundaes, organic ravioli and organic pizzas.

Delicious value-added food products and ingredients included compound butters, ice-cream terrines, flavoured sugars, flavoured oils, gourmet seasonal game sausages, fresh tomato salsa, bread bowls, a range of flavoured cottage cheeses, sandwich fillings, goat's milk cottage cheese, ginger and lemongrass chocolate spreads, enriched breads, and a palate cleanser with a citrus flavour.

The development of convenience foods was also popular and products included cookie mix for children, freshly frozen stocks, frozen par-baked scones, and convenience chilled risotto meals. The food products were aimed at a broad range of potential markets including restaurants, hotels, delicatessen shops and supermarkets. Examples of the food products were displayed, before invited guests, staff and past students, in May this year. All agreed it was a very successful showcase and they are already looking forward to next year's event. If you would like to hear more about product innovation in the School please contact:

**Dr Roisin Burke, tel 01 402 7506,
or email roisin.burke@dit.ie.**

WorldSkills competition in Helsinki, Finland. Having achieved exceptionally high marks in her category, Sinead also achieved the honour of being placed in the "Albert Vidal Top Twenty Awards". Sinead prepared for the competition over 16 weeks in the School of Culinary Arts & Food Technology. She was under the personal guidance of lecturer Tony Conlon who was able to give her the benefit of his extensive experience in the hospitality industry as well as his knowledge of the WorldSkills competition. The competition provides a unique means of exchange and comparison of world-class competency standards in the industrial trades and service sectors. Sinead was part of the Irish team which competed against almost 700 young people from 38 other countries. The Irish contingent performed impressively winning 2 more gold medals, 1 silver, 1 bronze, and 9 medallions of

excellence in a variety of other skills. The Irish team were placed seventh in the world — the highest ranking achieved by the country to date. This achievement in the WorldSkills competition marks the pinnacle in the career of a young woman who has to date been awarded a silver medal in the Department of Education and Science National Skills Competition (Restaurant Service) 2005; won a gold medal in both junior and senior cook serve competitions; a silver medal in napkin folding at the National Catering Exhibitions and competitions held in the RDS this year; and a gold medal in restaurant service in the same competition in 2003. Tony Conlon is a veteran of three WorldSkills Competitions. Apart from his input into Sinead's triumphal success in the competition Tony also performed his duties as Chief Expert of Restaurant Service, while in Helsinki.



3rd International Conference on Hygienic Coatings

Giving up a chance to participate in St Patrick's Day festivities is a sign of real dedication. Two members of the new Centre for Research in Engineering Surface Technology (CREST, located in the Focas facility in Camden Row, Dublin 8) did just that when they attended the third International Conference on "Hygienic Coatings and Surfaces" on 16th and 17th March 2005 in Paris EXPO events centre. Held just over a year after the last successful Congress (which took place in Florida USA in January 2004), this is now a very active multi-disciplinary research field. Applications range from the food processing industry to the architectural and biomedical device sectors and the future of these coatings materials looks very exciting. Examples include use of polysiloxane coatings to prevent adherence of biofoulants on concrete in power stations and metal-releasing biocidal coatings used in refrigerators. Dr Brendan Duffy and Ms Yanmei Ma represented CREST DIT at this event where Ms Ma presented a poster entitled "Silver Dissolution from Silver-Containing Alloys in Saline Solution", co-authors being Dr John Cassidy of the Chemistry Dept and Dr Tony Betts of CREST. Their attendance was supported by the Research Support Unit under the direction of Dr Steve Jerrams.

New Innovation Masters

A new postgraduate degree in Culinary Innovation and New Product Development has been developed by the School of Culinary Arts and Food Technology. The course is designed to meet the needs of the Irish food industry and has been developed in consultation with food companies throughout Ireland. The course content will be a mixture of business, technical and culinary skills training and will be open to graduates with a determination to work in the Irish food industry as part of an innovation team. The course will be delivered on a part-time and full-time basis.

More details on this new course can be obtained from:

**Anna Cruickshank tel 01 402 4545,
email anna.cruickshank@dit.ie.**

Papers at this conference covered a wide range of topics including testing and standards (which currently vary in different regions throughout the world), biocidal coatings, which incorporate active biocidal agents, nanotechnology and anti-microbial products and services. Nanotechnology is playing a significant part in this research effort and another Conference entitled "EuroNanoForum 2005" is scheduled to be held in Edinburgh in September which will also deal with medical aspects of nanotechnology. Especially significant in the Paris Conference was work relating to the reduction of the MRSA problem in medical facilities and the need for coherent regulations to cover the development of standard test protocols. Representatives from both academia and industry attended the Paris Conference. It was organised by the PRA Coatings Technology Centre in the UK. Further information is available from: **Dr Brendan Duffy in CREST.**

CREST

The Centre for Research in Engineering Surface Technology (CREST) focuses on providing solutions to industry by scientific research and investigation for enterprise. Its precursor was the Materials Technology Department based in Enterprise Ireland, Glasnevin. Since June 2004, CREST has been operating from its new headquarters located in DIT's Focas Institute (see p 34) in the heart of Dublin City at Camden Row, Dublin 8. From here the centre engages with new and existing clients developing innovation partnerships. CREST aims to be a platform for applied research in surface technologies, contributing to both academic excellence and industrial growth in Ireland. It plans to strengthen its collaboration with SME's and multinationals, enabling product development innovation, coating specifications and QC method implementations. In other words it strives to consolidate its position as an effective interface between industry and academia through intellectual partnerships. A year after its relocation, the Centre was officially opened by Mr Micheál Martin TD (Minister for Enterprise, Trade and Employment) in May of this year. If you would like to find out more about CREST Contact: **Dr John Colreavy, tel 01 402 7940, or email john.colreavy@dit.ie.**

FOCAS INSTITUTE DIT



DIT's state of the art Focas Institute was established under the HEA programme for research in third level institutions, cycle 1 and officially opened in November 2004 by Dr Barry McSweeney, chief science advisor to the government. The facility addresses the common needs of research activities in science and engineering. The venture was founded on expertise already established within DIT and it aims to consolidate and develop this critical mass while nurturing new research activities. Focas will support a range of undergraduate and postgraduate research activities; promote interdisciplinary collaboration within the Institute and with other national and international bodies; and it will provide a support service for industry. It will also contribute strongly to the development of self-sustaining research teams in a number of strategic areas. Focas will underpin postgraduate research, undergraduate project work and feed into undergraduate and postgraduate curriculum development. The Focas Institute provides state of the art core laboratory and technical support to its research teams in areas such as sample preparation, spectroscopy and microscopy, as well as administrative assistance. It has excellent seminar and meeting room facilities which regularly host events covering a broad range of topics. Research activity is primarily in: novel materials synthesis and characterisation; nanotechnology; surface science and engineering; biotechnology; sustainable energies; and communications networks. Several research groups are based in Focas (see Research Groupings below) and most activities are undertaken within those groups. However, the Institute also houses four DIT-funded inter-disciplinary projects in line with a key strategic objective to create multi-disciplinary research teams within DIT.

Research Groupings: Nanophysics & Surfaces

This group concentrates on the study of low dimensional structures such as one-dimensional "wires" and zero-dimensional quantum "dots". As the length scales of such systems shrink, unusual properties arise due to the quantum confinement (squeezing) of electrons on scales approaching the electron wavelength. These properties can have commercial potential in novel device production. Understanding exactly why such unusual properties arise can help the team to engineer new

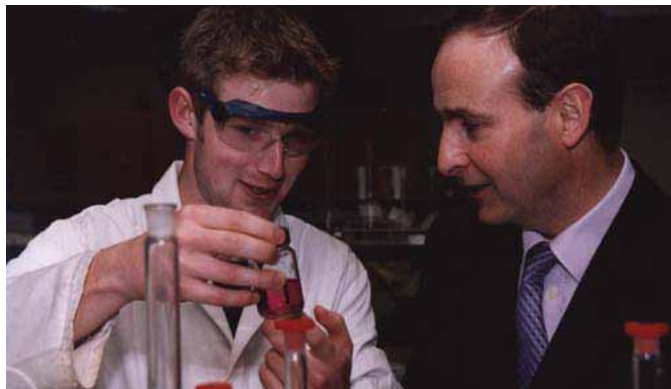
properties that are desirable for modern technologies. The group has ultrahigh vacuum facilities for the growth and analysis of such structures and has cluster computation for the modelling of electronic and optical behaviour.

Physics of Molecular Materials

This group is active in the development of novel light emitting polymeric materials which could potentially lead the way towards plastic displays and lasers. The area of Fullerene research could have potential applications in electronics and nanoelectronics, and research in the related carbon nano-structures is aimed at purification and processing, towards composite materials with mechanical, electrical and biotechnological applications. The group also collaborates with the Radiation and Environmental Science Centre in the application of spectroscopic techniques for early cancer diagnosis.

Materials Synthesis & Applications

This team is involved in the synthesis and characterisation of cyclodextrin derivatives, ultimately for use in the separation and detection of chiral compounds which are extremely important processes in the pharmaceutical sector leading to single enantiomeric drugs. Also in the area of pharmaceuticals, the ability of metallo-complexes to mimic enzymes is being assessed and to date the group has been successful in the synthesis and characterisation of materials which have been found to have very good anti-fungal activity. Another aspect of the work of this group involves novel nanosized materials as photovoltaics and thermistors for the semiconductor industry. The group has recently extended its work to include mechanistic and stability studies on oxidative metabolites of aromatic substrates produced by fermentation. The fermentation products can potentially be processed to form pharmacologically and industrially useful materials and this work also enhances understanding of the mutagenicity of polycyclic aromatic hydrocarbons. The group also collaborates with the Physics of Molecular Materials group in the synthesis of conducting polymers and the Radiation and Environmental Science Centre in the development of analytical techniques for biological media.



Mr Micheál Martin TD, Minister for Enterprise, Trade and Employment at the opening of the CREST centre in the Focas Institute

Biomedical & Environmental Sensing

Research within this group consolidates the body of expertise already accumulated in the Institute in air quality monitoring and environmental sensing techniques. Its aims include extending the work on characterisation of pollutants in the atmosphere, the study of their harmful effects, and in developing novel sensing methods. They are also involved in trace metal analysis using graphite furnace atomic absorption spectroscopy and anodic stripping voltametry. Of particular concern are lead levels in potable water and they are developing a technique to accurately determine the lead content of seawater. The team has considerable expertise in the design, construction and testing of biomedical microspectrometer sensor systems. These have applications for monitoring the redox reactions of respiratory pigments in cell extracts and permeabilised cells. Conducting polymers based, for example, on isoindoles, show similar spectral changes after optical or electrochemical stimulus. These colour changes can therefore, be used for sensor applications. The group will explore the applications of these sensor materials and micro systems for environmental monitoring.

Communications Network Research Institute

The CNRI has origins in the School of Electronic and Communications Engineering and is headed-up by Mark Davis who is on a research secondment funded by Science Foundation Ireland. There are 5 researchers working in the institute. The CNRI is funded under a SFI Multi-Investigator Award and an Enterprise Ireland Informatics Initiative project. It is undertaking research in wireless networks and specifically the IEEE 802.11 family of wireless LAN standards. The main focus of the work is in radio resource management for quality of service (QoS) provisioning. This is a critical element in the delivery of real-time services such as Voice over IP (VoIP) and video streaming over wireless networks.

Solar Energy Group

The Solar Energy group comprises four staff members, a postdoctoral researcher and three postgraduate students. Group activities include the development of solar concentrators, both of the conventional light pipe form for solar heating, and

luminescent harvesters for increased photovoltaic efficiency. Activities are expanded through collaboration with the School of Electrical Installations, considering hybrid solar and conventional electrical installation systems.

Holographic Photopolymers

The Centre for Industrial and Engineering Optics (IEO) maintains a core of research expertise in optical, non-destructive testing, and holographic materials and devices. These can be utilised by Irish industry for leading edge systems development and R&D. The IEO offers applied research, contract R&D, problem solving, design, measurement and consultation to industry. Recently it has made advances in the development of a photopolymer material which can record holograms and produce impressive three dimensional images without the need for chemical processing. They are also working on optical sensors technology including a low cost alternative to Laser Doppler Velocimetry.

Sustainable Energies Research

A sustainable energy research group has been established at the Dublin Institute of Technology since 2003, and includes researchers from the Faculties of Engineering and the Built Environment (DIT Bolton Street), and the Faculty of Science (DIT Kevin Street). The group centres its research activity on exploring low energy technologies to promote a healthy environment using sustainable energy with minimal consumption and green house gas emissions.

Radiation & Environmental Science Centre

The researchers in RESC work in the areas of radiation biology, environmental toxicology and biospectroscopy. Their work "non-targeted effects" of ionising radiation could have important implications for radiotherapy and could potentially lead to the development of novel therapeutic agents. Their eco-toxicological research addresses the need to develop new toxicity tests for sediments to comply with the EU Water Framework Directive (which requires monitoring of transitional and coastal waters from 2006). The biospectroscopy research (in collaboration with the Physics of Molecular Materials group) could lead to novel instrumentation for early cancer diagnosis.

FEATURE at FOCAS

In June 2005, the Institute started to host the SFI Ureka site FEATURE, (Focas on Education in Advanced Techniques and Research Expertise). This will utilise the framework and infrastructure of the Focas Institute to train young scientists in the application of advanced experimental techniques for the analysis of materials, while exposing the participants in a "fun and engaging way" to the research environment. In addition to the specific research projects, the participants will engage in a programme of Core and Group Seminars, as well as a support training programme. The programme culminates in a two-day symposium at which the students will present their work. FEATURE will run for 12 weeks until September 2005, and will be repeated in 2006 and 2007. Full details of the Focas Institute, the core facilities and research activities can be found at: www.focas.dit.ie. If you would like any more information on this new venture or any of the research groups please contact: Hugh.Byrne@dit.ie, Focas Manager, tel 01 402 7900.

Inventors Competition



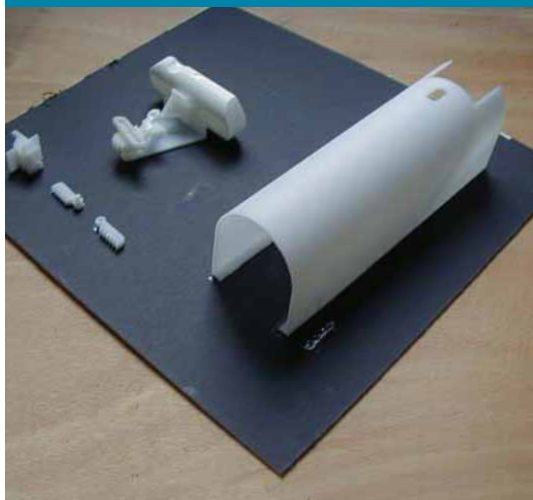
At the inaugural DIT Inventors Competition are (from l-r) Professor Brian Norton, President DIT, Dan Barry, winner of the competition and Tom Flanagan, Head of Innovation and Industry Services, Faculty of Engineering.

Celebrating Leonardo Da Vinci's birthday in May, President Brian Norton announced the winners of DIT's first Inventors Competition. Entries for the competition came from students, staff and alumni across the DIT. The judges were: Tom Flanagan, Head of Innovation and Industry Services, Faculty of Engineering; Margaret Whelan, Head of Industry Development, DIT; and Mary Ryan, CEO, Product Innovator — the Concept to Commerce TM Company.

They looked for unique high-value inventions and were delighted with what they found! Postgraduate student Dan Barry, School of Control Systems and Electrical Engineering won 1st prize with his sound source separation algorithm which is already attracting industry attention. Dr Jim McGovern, Head of School of Mechanical and Transport Engineering

won 2nd prize for his invention of a unique image capture device and Dr Yuri Panarin, School of Electronic and Communications Engineering won 3rd place for his novel optical switch design. Runners up were Kirsten Foy, School of Mechanical and Transport Engineering and Dr Noel Brady, Dublin School of Architecture for their inventions in electronics and building material designs, respectively. "It all starts with a great idea" said Tom Flanagan, competition organiser, at the awards ceremony. "If you have that, the Research and Enterprise team at DIT can help attract funding for more research and development and commercialisation activities. We can protect your intellectual property and help you with licensing or provide you with the advice and assistance to build a company around your ideas".

Rapid Prototyping at DIT



If you have a great idea for a new product and you need to build a prototype to interest investors and customers then maybe dit can help! DIT's School of Manufacturing Engineering in Bolton Street has a range of rapid prototyping equipment which it uses to teach a range of courses including its new degree in product design. These machines can be made available to entrepreneurs and designers to produce a prototype for new or redesigned products. The equipment includes: a Fused Deposition Modelling (FDM) Rapid Prototyping machine; Vacuum Moulding; Reaction Injection Moulding (RIM); and Computer Numerical Controlled machines. The FDM process extrudes thermoplastic from a small head and by laying it down in the cross sectional shape of the required part builds it layer by layer. A solid modelled part is built-up using polyester, polypropylene, elastomers, investment casting wax or ABS. The Stratus Dimension machine has a build envelope of 150mm x 150mm in the 'x' and 'y' axis and 200mm in the 'z' axis. To

produce larger prototypes the machine can build a series of smaller parts, which can be dovetailed and then joined together.

Range of applications

- Conceptualisation and presentation
- Design, analysis and functional testing
- Patterns and masters for tooling

Advantages

- Simple process reduces cost of machine
- Robust prototypes
- Variety of materials including ABS
- Only post processing required is removal of supports
- Good micro surface finish
- No health and safety issues

If you are interested in having a prototype designed and built please contact: **Tom Flanagan** tel 01 402 3616 or email tom.flanagan@dit.ie.

Immigrant Entrepreneurship and Civic Participation

An exciting and innovative collaboration has been set up between the Centre for Transcultural Research and Media Practice (School of Media), the Graduate Business School (Faculty of Business), Legal Studies (School of Social Sciences and Legal Studies), multi-cultural newspaper, Metro Eireann, the Migrant Rights Centre, Ireland and Ralaheen Research. This interdisciplinary initiative will look at immigrant entrepreneurship as an emerging phenomenon in Ireland, signalling an important shift in the social integration of immigrants into Irish cultural life.

The Immigrant Entrepreneurship and Civic Participation group argues that self-employment and business ownership plays a central role in the construction of the image of the immigrant in the receiving country. Immigrant businesses do not only introduce new products and services to the market but also cultural traditions, kinship structures and diverse cultural practices.

Through the lens of action-based media research, ethnographic fieldwork, and social and policy analysis, this project will ask new questions about the development and range of immigrant businesses including migrant media enterprises. It plans to look at the cultural codes and knowledge transmitted through everyday business transactions, the local and global networks created through entrepreneurship and the legal conditions under which they operate. One of the key concerns will be the obstacles and impediments facing immigrant entrepreneurs when establishing and expanding businesses. The Immigrant Entrepreneurship and Civic Participation research group will seek funding for a number of research projects and public events in the upcoming months.

Growing Entrepreneurs

Hothouse is a year-long programme delivered by DIT's Project Development Centre in Docklands Innovation Park in the centre of Dublin. It provides knowledge-intensive start-ups with the expertise, networks and tools they need to develop highly successful businesses capable of competing in global markets. Over the past 10 years the PDC has helped launch over 300 new businesses and it has a wealth of experience in delivering practical programmes for dynamic Irish businesses. Hothouse offers:

- a base in the entrepreneurial environment of a dedicated incubator
- workshops to improve capabilities in key business areas
- access to a network of experts and entrepreneurs help in raising investment

Participants have access to broadband communications, professional reception services, meeting rooms and a range of office facilities.

Workshops

A series of 12 practical weekend workshops led by experienced business people helps companies address critical issues including:

- preparing a business plan which attracts investment
- exploiting markets
- building a successful team
- enhancing negotiating capability

Business counselling

Hothouse provides access to an invaluable level of expertise:

- On-site coaching from the Hothouse team
- Strategic business counselling from a panel of experienced business people
- Buddy counselling with a successful entrepreneur from the network
- Industry specific support

Investment Forum

The Hothouse Investment Forum brings together venture capitalists and other potential financiers to listen to investment pitches. The Hothouse team provides coaching in selling business opportunities and preparing investment proposals.

Funding

Participants on the programme receive a training grant of €550 per month. Some may qualify for an additional CORD grant from Enterprise Ireland which can provide up to 50% of current salary. The 9th Hothouse Programme was launched in April this year. The sixteen participant entrepreneurs represent a variety of sectors ranging from digital media to electronics and software to healthcare. The Hothouse VII group had their final evaluation in April and were conferred with their CPD postgraduate diplomas in July 2005. In March 2005 it was announced that MyHome.ie, Ireland leading property website, invested €1m in NewAddress.ie, a participant company on the 7th Hothouse Programme.

Student Enterprise Competition



Alan Byrne, James Cadden, and Greg Byrne were the winners of the Dublin Institute of Technology/Bolton Trust Student Enterprise Competition. The winning idea was 'Bleep', an electronic magazine promoted by three students from 3rd year of the DIT Marketing Degree Programme. The final took place before a large audience and the €1,500 first prize was presented by Ms Regina O'Connor of AIB Bank. The competition is organised to stimulate a spirit of enterprise among DIT students and to encourage and support a rigorous business planning approach to entrepreneurial activities. The competition, now in its twelfth year, received over 112 entries in 2004 from across all faculties. The winners went on to represent DIT in the Enterprise Ireland Student Enterprise Competition with competitors from every college and university in Ireland, North and South. This year the total prize fund being offered is €12,000, with €5,000 going to the winning entry. A prize fund of €40,000 is on offer in the national competition. Pictured left are The Guardian Angel team at the competition semi-final.

VentureStart

In May 2005 DIT's Project Development Centre successfully tendered for an Enterprise Ireland contract to deliver a training programme to potential entrepreneurs. The Venture Start programme, which was delivered for the first time in June in Waterford, is designed to give participants a broad understanding of the processes involved in setting up a new business. Participants are currently in full-time employment but are considering setting up in business on their own. VentureStart aims to equip them with the knowledge and tools that they will need to make their decision and to introduce them to the issues that they will need to consider if they proceed down the entrepreneurial path. It will be delivered by the PDC management team together with a number of facilitators currently working with the PDC, and the input of successful entrepreneurs from the PDC network will also form an integral part of VentureStart.

France to double funding for Industrial Innovation

French Prime Minister Dominique de Villepin has announced that the government will double its grant for industrial research from 500 million to one billion euro. Speaking at the Paris Air Show on 18th June, Mr de Villepin explained that the grant to the Industrial Innovation Agency would be doubled and would back commercial projects in the fields of solar energy, nanotechnology, biotechnology and bio-fuels. According to the prime minister, Europe should respond to 'one of its most difficult crises' by redoubling its efforts to develop joint industrial projects. Mr de Villepin promised that France would press ahead with its own ambitious industrial policy to stimulate the economy and create jobs. Mr de Villepin insisted that small and medium sized enterprises (SMEs) 'must be directly associated with this project', and called on the Ministry of the Economy to 'make sure that SMEs can benefit alongside the big groups from the share to which they are entitled'. Mr de Villepin also announced that the National Agency for Research would receive 350 million euro. 'More upstream, we need to increase our efforts in favour of research to maintain a high quality in public research, increased cooperation between researchers and economic circles, and to favour the most promising projects'. Mr de Villepin's announcement follows strong criticism from UK Prime Minister Tony Blair of EU spending priorities and the need to allocate more to science, technology, research, development and training. **For further information on R&D activities in France, visit: www.cordis.lu/france/**

Commission approves State Aid Scheme for SMEs

The European Commission has given its approval to a German plan to support the users of technology centres and incubators with state aid. The German government wishes to set aside 120 million euro per year for newly created or technology-oriented small and medium sized enterprises (SMEs) that use these centres. When the plan was first announced, the European Commission expressed doubts as to whether it was compatible with the single market and EU state aid rules. Germany then amended its notification so that it stated clearly that all aid would be passed through to the enterprises using the services of the centres, and would not be

appropriated by the owners of technology centres and incubators. 'Incubators and technology centres help young entrepreneurs to develop their business ideas and to survive the first critical years on the market. I am happy to approve such aid which promotes innovation,' said EU Competition Commissioner Neelie Kroes on 3rd May. Under the scheme, the costs of office rental, consultancy services, research accommodation, networking with other companies, and cooperation with universities and research institutes — all services provided by technology and incubation centres — will be met by the government.

SFI Scholarship Young Women in Engineering



This scheme aims to identify and encourage more high achieving girls into third level education and to support them during their undergraduate career. This Programme will be launched in September 2005 at the start of the new school year. For more information see: www.sfi.ie.

Funding for Research Visits

The SYNTHESYS office has announced the third call for proposals under the Commission's Sixth Framework Programme (FP6) Integrated Infra-structure Initiative. SYNTHESYS project funding is designed to allow scientists based in EU Member States, associated states and candidate countries to undertake short visits to make use of the research infrastructures at one of 20 partner institutions, namely natural history collections, staff expertise and analytical facilities. SYNTHESYS is able to meet the users' costs for:

- research activities (including bench fees and consumables).
 - international travel.
 - local accommodation while based at the partner institute.
 - a per diem to contribute towards living costs.
- The present call is open until 16 September 2005.

Marine Institute Funding for SMEs

Applied Industry programme: the Marine Institute has invited competitive proposals from SME's under the NDP Marine RTDI Applied Industry Programme 2005. The aim of this programme is to facilitate Marine SMEs to improve their competitiveness in the market place or develop new business opportunities involving R & D projects. For more information see: www.marine.ie.

The Research Frontiers Programme 2006 Competition

The Science Foundation Ireland's Research Frontiers Programme 2006 Competition will be developed in two phases. A brief pre-proposal will be required and following review, the applicants of the most competitive pre-proposals will be invited to submit a full proposal application. The closing date for submission of the pre-proposal is 13:00 on Monday, September 26th, 2005. For more details see: www.sfi.ie.

IRCHSS call now open

The Irish Research Council for the Humanities and Social Sciences (IRCHSS) has launched a call for proposals from academic staff employed at third level institutions in Ireland for research project funding in the range of €6,500 to €250,000 tenable for a maximum duration of 3 years. Applications for project funding in the following thematic areas will be considered:

- Research infrastructures in the humanities and social sciences
- Identity, culture and society in Europe

The closing date is September 16th 2005. More details are available on: www.irchss.ie

Marine Micro Innovation Award 2005

The Marine Institute has also invited invites competitive proposals from SME's under the NDP Marine RTDI Micro Innovation Award Scheme 2005. The Marine Institute's Micro Marine Innovation award is designed to be a flexible innovation support to marine industry for micro projects and will be operated on a limited pilot basis in 2005. The next closing dates are: 16:00 hr on both 27th September and 24th November. For more details see: www.marine.ie.

Conference Grants

INTAS (The International Association for the Promotion of Co-operation with Scientists from the New Independent States (NIS) of the Former Soviet Union) has launched a series of research, conference and summer school grants.

1st cut-off date on 22 August 2005 with an INTAS decision on 22 September 2005 for both the COGs and CIGs. The earliest starting date for successful applications is 14 November 2005 for COGs and 24 October 2005 for CIGs.

2nd cut-off date on 22 November 2005 with an INTAS decision on 10 January 2006 for both the COGs and CIGs. The earliest starting date for successful applications is 7 March 2006 for COGs and 14 February 2006 for CIGs.

Conference Grants support the organisation of scientific events of particular relevance to INTAS scientific policy, including support grants for individual participants from the NIS countries. Grants could range from a few hundred Euros for individual support to €20,000 for support to the organisation in NIS countries. Conference Grants include:

Conference Organisation Grants (COGs) support the organisation of international scientific events (conferences, seminars, symposiums, workshops, etc) in the NIS countries; periodic conferences organised alternately in INTAS and NIS countries are also eligible for support.

Conference Individual Grants (CIGs) support, through individual grants, the participation of NIS scientists in international scientific events organised in or out of the NIS countries. This support may include coverage of travel costs and/or living costs and/or conference fees. **More details at www.intas.be**

Research Funding for SME's at DIT



Earlier this year, DIT hosted a seminar for SME's to inform them about funding opportunities available to help them develop new product and process innovations.

Three programmes were outlined

- Enterprise Ireland's Innovation Partnership Programme and its Commercialisation Fund
- InterTrade Ireland's Innova and Fusion programmes
- FP6 Co-operative Research/CRAFT and Collective Research programmes

For Enterprise Ireland's Innovation Partnership, a company and a 3rd level institution, work together to submit a funding proposal for a product or process innovation. This programme is open to all manufacturing and internationally tradeable services companies with a base in Ireland, in all areas of science & technology.

To date, 90%+ of Innovation Partnership applications have received funding based on an initial outline proposal acceptance. Grants run up to €190,000 and projects can last between six months and two years. A technical feasibility study (with grant-aid up to €9000) can also be submitted. This study is 100% funded and can take place over a period of up to six months. Applications can be made at any time. DIT researchers have collaborated with industry on a broad range of Innovation Partnership projects and its Offices of Innovation and Industry Services can advise companies how to make an application.

Enterprise Ireland's Commercialisation Fund is divided into three separate calls:

- Proof of Concept grants are up to €90,000 for one year. The next deadline for applications is 14th

September 2005.

- Technology Development grants are up to €350,000 for 3 years. There is one annual call for this programme, usually in November
- Campus Company funding is up to a maximum of €38,000 (inclusive of 50% costs). Several DIT researchers are currently working on Proof of Concept projects.

InterTradeIreland's Innova is an All-Island collaborative R&D programme. The aim is to stimulate, promote and support firm to firm research on a cross-border basis. Once the north/south collaboration between two companies is approved, they can then sub-contract the skills/research needed to institutes like the Dublin Institute of Technology. The programme is carried out over a period of 24 months and projects should be innovative, technology-based and market-led, consisting of industrial research or pre-competitive development activities. Each individual company involved in a collaborative project can attract up to €200,000 in financial assistance.

InterTradeIreland's Fusion programme develops and facilitates 3-way partnerships and projects between companies, institutions like the DIT and graduates. All partners work collectively to develop and implement a solution to a technology need within the company. The company is ideally technology-based and the graduate is usually a high calibre degree/diploma holder. The Institute provides one-to-one tailored assistance to solve the company's technology project in the form of the graduate who then acts as the link and agent for technology transfer between the college and the company. InterTradeIreland can provide a support package worth up to stg £61,500 for a two-year project. The package supports 50% of the graduate

employment costs and 100% of other eligible costs (e.g. academic expertise, graduate training and development). Also, ongoing co-ordination of the project is provided at no cost to the company.

There are two main FP6 initiatives that will assist SMEs: the Co-operative Research Scheme and the Collective Research Scheme.

Co-operative Research (CRAFT) is for small consortia of SMEs who contract researchers to carry out a significant part of a research project (the companies own the IP). The Commission provides financial assistance towards the cost of the research. The project usually takes place over one to two years and the budget is between €0.5m — €2m. Half of the budget granted goes towards research & innovation related activities and co-ordination related activities are 100% — funded (up to 7% of the overall contribution). The current call (FP6-2004-SME-COLL) is closing on 14th September 2005.

Collective Research is for suitable associations who contract researchers to carry out a significant part of a research project on behalf of their members. The association retains ownership of the IP on behalf of their members. The Commission provides financial assistance towards the research & training. The projects usually last between 2 and 3 years and the budget is €2 — €5m. Half of the research and innovation related activities are funded and 100% of co-ordination related and training activities. A call is expected over the coming months.

For more information on any of the above programmes, please contact: **Andy Maguire, tel 01 402 3009 or email andy.maguire@dit.ie**