

## Articles

# EUROFEST AT STRATHCLYDE

By Rose-Marie Barbeau, Strathclyde

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Eurofest 2005 was an event structured by the University of Strathclyde with the aim of encouraging a broader, more European perspective among staff and students, exploring what a European identity means for the University as an institution, and offering practical information on staff and student exchanges, research collaboration and other initiatives.

Sessions were spread over a day and a half, with the initial afternoon focusing on students and their interests, and then a one-day seminar for staff. The student sessions and the Eurofair provided an opportunity for students to hear about the benefits of studying abroad, on a personal level as well as a professional and education level. A raffle, a 'Euro-buffet' and pub night were among the lighter activities scheduled. Over 120 students attended Eurofest, which was an encouraging turnout. An even better indication of the success of the event is that over 200 students attended an information session on studying abroad which was held two weeks after Eurofest.

Eurofest events for staff focused on exploring the opportunities and challenges of being a European university. The sessions were attended by a broad cross-section of academic and administrative staff.

The day was launched with a keynote from Professor Frans van Vught, former Rector of the University of Twente, who detailed the current context of the unfolding Bologna process of reform in higher education and sketched the European profile — an ageing population and decreasing birthrate. This profile calls for a highly educated labour force and highly developed technology, but while Europe is currently the world's largest producer of scientific publications, it lags behind both the United States and Japan in levels of investment in both education and research and development.

However, he felt that the knowledge gaps were not solely the responsibility of governments. Business and industry have to be stimulated to invest in re-

search and development and higher education institutions have to adapt. Strathclyde Principal, Professor Andrew Hamnett, was pleased by staff response to Eurofest. What steps would have to be taken to facilitate greater cooperation with Europe? "What I would like to see," he says, "is a rapid resolution of the issue of fees. There has been a rapid increase in the number of courses offered jointly with European universities, primarily in the Bologna Cycle 2 (postgraduate level), and we would like to see this continue. The biggest problem is the different fee scales in various countries, which is caused by the differing percentages of government contribution to the bloc grant to higher education. In Germany and Denmark, for example, it has been, until recently, illegal to charge for courses; the bloc grant has paid completely for students in these countries making charging for a course held jointly with a German or Danish university a divisive issue."

A second issue in terms of joint courses is one of "quality assurance", he feels. "However, one of the advantages of working within a consortium such as ECIU is that we have chosen our partners with care, and built up trust over a long period."

Professor Hamnett is an enthusiastic supporter of staff exchanges, as the experience of working with or observing the work of European counterparts can be invaluable. And he feels the Leaders for Tomorrow programme, which is now being organised within the ECIU, has "worked very well in creating a cadre of Euro-minded administrative and academic staff as well as building capacity for strategic thinking in well-defined areas."



Over 120 students turned up and listened to presentations from employers, the International Office and students and graduates who had been on an exchange.

Please feel free to mail articles or other input for the next ECIU newsletter to:

saskia.hansen@strath.ac.uk

The next edition will be published in early March. The deadline for submitting articles will be 17 February 2006.

Presentations from the Eurofest staff day are available on the web at [www.strath.ac.uk/eurofest](http://www.strath.ac.uk/eurofest)

## Swinburne ranked fourth for learning and teaching quality

Swinburne has performed outstandingly well, achieving fourth place in the nation in a recently released ranking system comparing the learning and teaching performance of universities across Australia.

The first five institutions are:

1. University of Wollongong
2. Australian Maritime College
3. University of Melbourne
4. Swinburne University of Technology
5. University of Queensland

Swinburne's Vice-Chancellor Professor Ian Young said the rankings are based on data obtained from students via the Graduate Destination Survey and the Course Experience Questionnaire.



"The surveys are conducted by Graduate Careers Australia (GCA), a not-for-profit body devoted to researching and promoting career outcomes for graduates," Professor Young said.

"According to GCA the results provide one of the best national measures of the quality of teaching and learning, and of graduate destinations." Universities are ranked on seven criteria including student feedback,

drop-out and pass rates, along with the percentage of graduates in full time employment and those going on to further full time study.

Professor Young said the outstanding result reflects the efforts of staff across the University.

"A positive student experience at Swinburne reflects the contribution of staff directly providing teaching and learning as well as those involved in administrative, student services, resources, international and research roles."

Swinburne, now ranked in the top tier of Australian universities for Learning and Teaching, received \$3.852M in additional funding from the Australian Government for "best demonstrating excellence in teaching and learning".

Please read more about Swinburne University of Technology on:

<http://www.swinburne.edu.au/index.php>



## Nanotech cooperation Twente and Canada

The MESA+ Institute for Nanotechnology of the University of Twente, the leading nanotech institute in The Netherlands, has signed a memorandum of understanding with two Canadian colleague institutes: the National Institute for Nanotechnology (NINT) and the University of Alberta, both in Edmonton. At MESA+, 450 scientists are employed, working on fields like nanofluidics, nano-electronics and nanofabrication. MESA+ is successful in generating business out of this new field of research: in few years time, around 30 spin-off companies have started. NINT is a young and small institute of the National Research Council in Canada. By signing the first MOU with a European colleague, NINT wants to further explore European connections.

One of the 'vehicles' for that will be the Frontiers network of the EU. The signing ceremony took place in the presence of the Ambassador of Canada in The Netherlands, Mrs. Colleen Swords.



From left to right:

*Dr. Steven Dew, University of Alberta, Edmonton*

*Prof. David Reinhoudt, scientific director MESA+, University of Twente*

*Dr. Nils Petersen, National Institute for Nanotechnology*

*Dr. Anne Flierman, Chairman of the Board, University of Twente*

Read more about nanotech at Twente on:  
[www.mesaplus.utwente.nl/](http://www.mesaplus.utwente.nl/)

## University of Aveiro research recognized with three prizes

The excellence of the research produced in University of Aveiro was once again recognised. This time, José Maria da Fonte Ferreira, professor and researcher of the Department of Ceramics and Glass Engineering, and Sergey Dorogovtsev, Research Coordinator in the Department of Physics were awarded with the Excellence Stimulation 2005 Award. João Gama Oliveira, a Physics PhD student from the University of Aveiro, was awarded with the Stimulus for Research prize.

The «Excellence Stimulation 2005» Award, for which the researchers José Maria da Fonte Ferreira and Sergey Dorogovtsev have applied individually, recognises the high quality that University of Aveiro has been associated with in terms of research, supported by the results of its successive external and international evaluations of the Research Units (75% of these Units are classified as “Excellent” or “Very Good”, clearly above the national average).

The «Excellence Stimulation 2005» Award distinguishes the researchers working in Portugal, which have a professional career of scientific and technological research and have *curriculum vitae* of exceptional merit in their particular investigation domain. The award consists in the opportunity to highlight Portuguese researchers, whose productivity is levelled by international patterns, projecting the researcher’s figure on society, thus increasing consciousness of the importance of his activity.

The attribution of the «Excellence Stimulation 2005» Award results in a financial contribution granted exceptionally to the institution where the researcher works, to finance his own investigation activities and scientific dissemination. According to the award promoters, it seeks to stimulate the excellence and competitiveness of the Portuguese scientific system in the face of the growing dynamics of science internationalization.

Meanwhile, João Gama Oliveira was awarded with the Stimulus for Research. The Calouste Gulbenkian Foundation instituted the “Estímulo à Investigação” Program to stimulate creativity and quality in research activity among young scientists.

This program annually distinguishes research propositions of high quality in scientific areas of high potential and simultaneously supports its execution during the following year, in Portuguese Research Centers. The Gulbenkian Program “Estímulo à Investigação” grants financial support for the prize winners, divided into two parts: an amount for the researcher and another one for the institution that supports the fees for the execution of the research during the ensuing year.



João Gama Oliveira

The research to be developed by João Gama Oliveira with this award will include two areas: the writing habits in letters by Einstein (1879 – 1955) and Darwin (1809 – 82) and the occurrence frequency of numbers in the World Wide Web.

Before the existence of communication means like e-mail or fax, the scientific community was dealing with an extended universe of letters, the main medium used to exchange new ideas and results. But were the communication patterns in any way different from the current world of instant access, or was it just the means used that changed while retaining the same global communication dynamics? According to the record of the complete correspondence sent or received by both scientists, João Gama Oliveira proposes to obtain an answer to this question. Recent studies have showed the existence of a complex pattern in case of electronic communication, where both the scheduled answer time to consecutive e-mails sent by someone and the time taken to answer follow a long tale distributions in the shape of power law, contrasting with the exponential distribution predicted by current human behaviour models based on Poisson processes.

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**João Gama Oliveira**, [joaogo@fis.ua.pt](mailto:joaogo@fis.ua.pt)  
Physics PhD student

## New Rector at Politecnico di Torino

Mr Francesco Profumo took up the function as Rector at the Politecnico di Torino on 1 October (see picture to the right). Mr Profumo’s academic field is Electrical Engineering and he furthermore brings years of experience from working abroad into his new role as rector, such as 3 years in the US, a year in Japan and furthermore industrial experience from before he started his academic career. The Rector represents the Politecnico in all its legal aspects; he is the guarantor for freedom of research, teaching and study and protects the rights of all employees and students of the Politecnico di Torino.



Francesco Profumo

## T-Xchange: the designer playing games



In a new design facility of the University of Twente, the so-called T-Xchange, virtual reality and gaming techniques will play a major role in speeding up innovation processes. Using, for instance, scenario-based design techniques and advanced visualization, designers -or even future users of new products- can rapidly compare alternative design strategies and play with them in a virtual environment. They therefore get high-tech audiovisual support, for example using a large half round screen for 3D visualization, tablet pc's and haptic tools. For the T-Xchange, UT has found partners like Thales Netherlands as well as smaller companies. One of the current projects is within healthcare: using VR-techniques, it will be possible to train the skills of surgeons, but how do you design methods like this. In the T-Xchange, designers learn to think 'out of the box'. The method is not restricted to product design, however: organizational changes can be 'played' and trained as well. Thales, for example, is putting much effort in technology for security. In this field, the T-Xchange could function as a virtual crisis centre. During the opening, on November 24, many representatives of science and industry were present.

## Six competitive LiU research environments now selected

Six LiU research environments get a green light from President Mille Millnert to proceed with application to the grant dispersal administered by the Swedish Science Research Council (Vetenskapsrådet). The fund, which promotes scientific quality and renewal potential, is named in honor of the internationally renowned 18th-century Swedish scholar Carolus Linnaeus. It provides extra funding for strong research environments and is organized in such way that the funds application must be sought by the host university, not the scientific teams. A maximum sum is set for each university; the LiU ceiling is MSEK 45.

Twenty-three LiU research teams submitted an internal application. The quality assessment committee judged past successes such as publication in scientific journals, references by other research articles to the team's findings and earlier grants. Using this yardstick, President Millnert and his faculty deans shortlisted six research environments.

'Unfortunately, the stipulations mean that several of our promising research environments cannot be nominated. It is gratifying however that so many research teams have created border-crossing collaborations in well-related areas, and that the six nominated environments represent all faculties,' says President Millnert.

He and his committee of faculty deans will closely follow the progress of the nominated environments. LiU research is also competing for grants from the Swedish Foundation for Strategic Research (Stiftelsen för strategisk forskning)

The six environments chosen for nomination to the Swedish Science Research Council competition are as follows.

### [Talk-in-Interaction? Communicative activities in social contexts](#)

Jan Anward at ISK, Language and Culture; Karin Aronson at the Tema Institute, Child Studies; and Per Linell at the Tema Institute, Communication Studies.

### [Systems neurobiology](#)

Anders Blomqvist, Fredrik Elinder, Sivert Lindström at IBK, Department of Biomedicine and Surgery; Per Jensen, Stefan Thor at IFM, Department of Physics, Chemistry and Biology.

### [Initiatives for New Functional Materials](#)

Lars Hultman, Igor Abrikosov, Ulf Helmersson, Erik Janzén, Bo Monemar, William R. Salaneck, Sven Stafström, Göran Hansson, Roger Uhrberg, Rositza Yakimova, at IFM, Department of Physics, Chemistry and Biology.

### [Soft Matter Science](#)

Olle Inganäs, William R. Salaneck, Ingemar Lundström, Bo Liedberg, Sven Stafström at IFM, Department of Physics, Chemistry and Biology; Magnus Berggren at ITN, Department of Science and Technology.

### [Decision and Control](#)

Lennart Ljung, Fredrik Gustafsson, Lars Nielsen at ISY, Department of Electrical Engineering; Patrick Doherty at IDA Department of Computer and Information Science; Anders Ynnerman at ITN, Department of Science and Technology.

### [Hearing Impairment and Deafness: Genetic, Neural, Cognitive and Communicative Aspects](#)

Jerker Rönnberg, Gerhard Andersson, Björn Lyxell at IBV, Behavioral Sciences; Birgitta Larsby, Stig Arlinger, Thomas Lunner, Stefan Stenfeldt at INR, Neuroscience and Locomotion; Erik Borg and Berth Danermark, both active at the university in Örebro

## High Technology Small Firms Conference

*11-13 May 2006, University of Twente*

On behalf of the Dutch Institute for Knowledge Intensive Entrepreneurship (Nikos), at the University of Twente, and Manchester Business School (MBS), we have the pleasure of inviting you to this year's High Technology Small Firms (HTSF) conference in Enschede, The Netherlands. This international conference will provide a unique opportunity for academics, opinion formers, policy makers and practitioners to discuss the latest developments in the field of HTSF's. We offer both academic research as well as practically orientated parallel sessions to provide the optimal platform for discussion. The 2006 conference marks the celebration of Nikos' fifth anniversary. The conference will therefore start with a doctoral workshop and close with a seminar, providing a forum for debate on the future of knowledge-intensive entrepreneurship research, in which several scholars, among them Dr. Gregory Dess of Texas University at Dallas and Prof. Hamid Bouchikhi, chairman of the EFMD Entrepreneurship Innovation and Small Business Network (EISB), will present their views.

### Topics

HTSF's play important roles in many innovative fields, such as e-business, life sciences (bio-technology), micro-systems technology and environmental technology. These firms are often part of a heterogeneous network, co-operating with large firms, (university) research institutes, more traditional SME's and other HTSF's. For this year's conference we are especially interested in the commercialisation of knowledge and the roles of HTSF's in the process. Papers related to interfaces of entrepreneurship with technology, strategy, marketing, networking and organisation, and instantiations such as academic, student, female, corporate or global entrepreneurship will be considered, as will papers on other HTSF-related topics (e.g. heterogeneous networks, business development and growth, funding, governmental policies). Best Paper Awards will be given for the best research, practitioner and PhD papers presented at the conference.

### Doctoral workshop

A doctoral workshop will be held on May 10. The workshop provides an opportunity for PhD students who are interested in pursuing research in Entrepreneurship and Innovation to discuss their work with senior scholars and meet fellow

students from a variety of universities. Potential candidates should submit a proposal according to the instructions below plus their CV.

### Abstracts & Papers - Submission dates

Initial abstracts (500 - 700 words) should be submitted by Sunday January 15, 2006. Acceptance of abstracts will be communicated by Monday January 30, 2006.

Full papers are to be submitted by Monday April 3, 2006. All papers accepted should be presented at the conference. All papers presented will be considered for inclusion in a book series annually published by Elsevier publishers.

### Conference fee

The full conference fee for three days is approximately €495. The fee includes participation in the conference, conference catering, conference documentation and participation in the Best Paper Award. The fee is payable by both delegates and speakers. Accommodation is available in the following price categories (single room, breakfast included) € 38,50

[Logica](#) € 62,- [Drienerburgh](#) and € 94,25 [De Broeierd](#), according to the quality of the accommodation. All hotels are located within walking distance of the conference centre. PhD students who participate in the doctoral workshop will receive a reduction of € 150 on the conference fee.

### Enquiries and Bookings

Dr. Aard J. Groen, scientific director of Nikos, Mrs Annemarie Ridder / Mrs Gloria Rossini,  
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### NIKOS: Mission and Vision

The mission of Nikos is to get more understanding and stimulate knowledge intensive entrepreneurship by means of research, teaching, training & advice and business development support

The vision of Nikos is that Entrepreneurship takes place in networks of value creation and trade in which persons, organisations and intermediary actors are dependent on each other in recognizing, and exploiting opportunities.

## Entrepreneurship Research

Dr A Groen is furthermore, in cooperation with Prof Sørensen from Aalborg University, in charge of the ECIU project on Entrepreneurship Research. Work is currently on-going and the participants are aiming at presenting the final results of this project at the AC21 Conference at the University of Warwick in early July 2006. Read more about the AC21 Conference on Page 6.

## AC21 International Forum 2006: 4-6 July 2006

### “Global Education – Universities in the 21<sup>st</sup> Century”

The University of Warwick is hosting the AC21 International Forum on 4-6 July 2006 and has invited ECIU members to either join the conference as participants or to contribute with presentations at the Conference. As well as being a showcase of the latest thinking in a number of research areas, this conference will explore the globalisation of higher education through the demands on leadership, the development of enterprise and innovation in universities and the changing relationship between universities and their students. It will attract senior representatives from Europe and from [AC21](#)'s partner institutions all over the world.

AC21's vision is to take a genuinely trans-global look at international trends affecting higher education. To facilitate this cross-disciplinary look at global higher education, the conference will be run as three major streams, with a major “research festival” running concurrently. The structure will be such that delegates can “cross over,” attending sessions from other streams and the research festival.

Each of the conference streams will take a detailed look at the development of universities from their own specific standpoints. However, the structure will allow easy transfer and movement between the streams. This format will allow for tailored participation for each delegate, offering in-depth coverage of some of the most important issues affecting universities in the 21<sup>st</sup> Century.

AC21 is pleased to announce that one of the main speakers will be Professor Mosa Al-Mosawi, President of Baghdad University, speaking on the leading role universities can take in the redevelopment of countries affected by conflict and natural disaster.

For more information, please visit: [www2.warwick.ac.uk/newsandevents/events/ac21](http://www2.warwick.ac.uk/newsandevents/events/ac21)

#### AC 21

Established June 2002 at the first International Forum at Nagoya University, **the Academic Consortium 21 (AC21)** plans active exchanges of students, faculty members and administrative staff, provides shared access to information on research interests and academic activities, develops cooperative education programs and supports international exchange of culture between local communities.

## ECIU Executive Board meeting

The Deputy Vice-Chancellor at Warwick, Professor Stuart Palmer, hosted the ECIU's autumn Executive Board meeting on 18 November. All participants were invited to attend a tour on campus on 17 November, which included visits to prominent research areas and to the Warwick Manufacturing Group.

At its meeting on 18 November, the ECIU Executive Board discussed progress within the different ECIU activities, and discussed new ideas and suggestions for collaboration. Main discussions were linked with the ECIU Graduate School and various new initiatives such as a possible scheme offering grants for the mobility semester in the current ECIU Joint Master Programmes. There was broad support for such a scheme, though more work was needed before the scheme could be officially launched.

Other discussions dealt with student mobility, staff exchange and how best to provide more information about research activities within the Consortium. The latter issue was also discussed by the ECIU PR group at its meeting on 1-2 December and a new strategy will be set up to ensure better communication about the ECIU within the different member institutions.

The next ECIU Executive Board meeting takes place on 19 May and will be hosted by Linköpings universitet in Sweden. The ECIU General Meeting takes place on 18 May and the topic for this meeting is expected to be technology transfer.

#### *On-going ECIU JMP developments*

##### *Management of Innovation and Technology (EMIT)*

Partners: UTC, Strathclyde, TUHH, and AAU

##### *Environmental Studies*

Partners: UAB, UA, TUHH, AAU, UT, LiU

##### *Life Sciences Technologies*

Partners: LiU, Warwick (and possibly UA, TUHH)

##### *East Asian Studies*

Partners: UAB, UA (and possibly LIU and Strathclyde)

## Driving Innovation from Universities into Scientific Enterprise (DIFUSE)

Through the excellent work of the TuTech in Hamburg, the ECIU has been successful in winning a bid for funding from FP6, Research & Innovation. Eight ECIU members, or affiliate tech trans offices, participate in the project that will start in spring 2006 and has a 24 month duration. The financial contribution of the EC is up to €597.313.

### *Specific contribution of DIFUSE*

Using the consortium membership as a baseline, DIFUSE will address and compare current practices in particular four main themes

- *Each university's TT organisation:*
- *Encouragement and support for scientific entrepreneurship and incubation*
- *Methods of working with industrial partners*
- *Policies on IPR protection and exploitation*

These comparisons will provide in themselves some valuable insights from which other universities with less well developed TT activities could draw inspiration, but the key goal of DIFUSE is for the ECIU to draw up proposals for some form of common, mutually supporting trans-national technology transfer cooperation which also could be used as a role model for others. Realistically it cannot be expected that the implementation will occur as part of this SSA because deep and durable cooperation which ECIU aspires to achieve between its members (and has been successful in achieving in other fields) takes time and needs to be built on solid measures which will require formal governing

body approval. Nevertheless DIFUSE will provide significantly useful results for exploitation not just by the ECIU.

### *Results*

Derivation of a model for trans-national collaboration – a proposal for a “charter for cooperation” - between universities at the European level for mutual technology transfer support, IP portfolio management which shows clear benefits and opportunities for making TT more cost effective through cooperation.

Identification of ways and means of cooperating more effectively with other existing pan-European TT initiatives such as the IRC network, IRE, Regions of Knowledge and others.

Proposals for how research results from two or more universities to “bundle” research results for transfer to the private sector, in a form which transcends Member State judicial boundaries.

A best practice conference, report and a “road show” which presents the findings and experience of DIFUSE

Development of some basic case study training material suitable for universities embarking on developing more professionally organised TT services which could be used for dissemination

A separate project website will be set up to disseminate the results of the project on an ongoing basis. The link will be included in an ECIU newsletter, when the website is up and running. Firstly the contract negotiations with the Commission needs to be concluded and the project will then kick off in late spring 2006.

## Technology Showcase

Technology from across the University of Strathclyde was put in the shop window on 15 November, giving Scottish industry a unique insight into collaboration opportunities.

Fifty- five technologies at varying stages of development were on show which could offer spin out options, form the basis of a start-up, enhance the product range of Scottish SMEs or be licensed to a large company.

Alasdair Mackay, Head of Business Development in Research and Consultancy Services, said: *“Strathclyde has an excellent reputation for working with industry and is one of the UK's top university earners in royalty income. However, many companies claim they can never find what they need. We are challenging the business and investment community to come and talk to our inventors and Business Development Team and see if there is a match between their business needs and our innovative technologies.”*

Among the technologies on show were :

- A new type of fire-retardant foam using nano-clay particles;
- A preventative treatment for MRSA and other superbugs;
- Innovative ways of drug delivery;
- New method of immobilising stolen cars by remote control;
- Intelligent Inks.

Alasdair continued : *“The best commercialisation interaction is not necessarily about solving problems, but identifying at an early stage what can be achieved, with a bit of imagination, through ongoing collaboration and an entrepreneurial team”*

## From a Mill to a Science Centre

By Paulo Renato Trincão, Aveiro

Portugal has an innovative project in the European scene: to provide its main cities with interactive science and technology centres. This project is called "Ciência Viva – which literally means Science Alive" and for 10 years now has been contributing to the improvement of a scientific and technological culture among Portuguese people and the improvement of experimental lessons in schools.

Aveiro is a young city situated in the centre of Portugal and deserved a Ciência Viva centre for a long time. The University of Aveiro has always valued the dissemination and communication of its scientific and technological work, throughout not only the city, but also the entire country.

Some of the University's activities have been created and prepared with the singular purpose of disseminating science and technology, for instance, the project "Matemática Ensino – Mathematics Teaching", "Biologia na Noite – Biology in the Night", and the Masters Degree in Science Communication and Education. The existence of these activities made a solid ground for the creation of Aveiro's Ciência Viva Science Centre which was named Fábrica, literally meaning "Factory".

### The challenge

This project began in October 2003 as a clear and concrete challenge: to idealise, to study and to establish a programme and a calendar to occupy the space of the old Aveiro's mills with science and technology activities. The mills were vacant for many years and were left in ruins, but among the debris we could sense the dignity and the potential of all that space.

The thing that immediately caught my attention was the size of the building: 10.000 square meters presented, and still presents, one of the more difficult problems in our Science Centre. This was the scenery and we were left with two options:

- to define a future programme of events and activities to occupy the huge building, and to look for sponsors who can turn that programme into a reality;
- to occupy part of the building straightaway, after the removal of debris and some repairs, defining the future for the Science Centre while promoting some activities.

We chose the second option.

### The present centre

Fábrica is in permanent construction. Everything is unfinished, everything is in progress. We encourage our visitors to criticise and participate in this process. Ideally, everyday is a different day to those who visit Fábrica. The interaction with a public of all ages, as well as the task of conquering new publics for science and technology, represent Fábrica's main missions. We incite our visitors to interact and experiment for themselves. The fact that the University of Aveiro

played a major role in Fábrica's creation and management, allows a constant flow of ideas and projects that contribute to the centre's dynamism.

Fábrica is divided in six areas: Temporary Exhibition Room, Projection Room, Didactic Laboratory, National Stadium of Robotic Football, Theatre, and Offices. "Sentir.com – Feeling.com" is our current temporary exhibition and will be open until 15th December 2005. It explores the five senses and is planned to be visited by primary school children. After the 15<sup>th</sup> December, Fábrica will open its doors with the exhibition "Jogos do Mundo – Games of the World" and all visitors will be able to learn and to play traditional games where mathematics plays a major role.

In February we will launch the exhibition that will be Centre's foundation: "Dar à Luz – Giving Birth" is the name of this exhibition that will approach visitors to the theme of Light and Physics in a multidisciplinary way.

### Didactic Laboratory

The Didactic Laboratory is a polyvalent space, where all kinds of scientific experiments are made and presented to the public.

Making toothpaste and chromatographies are solely two examples of all the experiences related to the "Sentir.com" exhibition.

### Robotis: National Stadium of Robotic Football

Fábrica's stadium is the first permanent National Stadium of Robotic Football in Portugal. Visitors can watch football games and demonstrations that illustrate the robots' abilities.

Fábrica also has a LEGO Mindstorm centre where visitors are invited to programme and interact with little robots.

### The kitchen is a laboratory

In this area, visitors can learn the chemical and biochemical processes behind the preparation of food.

"From grain to bread" is the project that celebrates Fábrica's old mills where the grains were crushed into flour that would later become bread. In this kitchen, visitors learn all the processes behind the preparation of bread, while they make it by themselves. We have made other projects in the past, mainly focusing the chemistry of the eggs and of the cheese.

Besides these interactive activities, we also organise conferences, music shows photography exhibitions, etc, that contribute to the establishment of a cultural environment within a science centre.

In its first year, Fábrica has received 30.000 visitors of all ages.

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## ECIU and the European Institute of Technology

**Following discussions at the last ECIU Executive Board meeting, the ECIU has submitted the below statement in response to Commission's consultation paper on the European Institute of Technology (EIT).**

*The present statement represents the views of the members of the European Consortium of Innovative Universities (ECIU) as expressed during a discussion about the EIT at the ECIU's 14<sup>th</sup> Executive Board meeting on 18 November 2005. As this meeting took place after the official close of the deadline for submitting a response to the consultation through the electronic interface, the ECIU decided to submit a response in the form of a letter to different stakeholders within the Commission following its meeting on 18 November.*

"The ECIU is a consortium of eleven European universities and three associate partners – all with particular strengths in engineering and science, new and innovative approaches to teaching, and a strong track record with respect to collaboration with industry and business. The objectives of the Consortium are to facilitate the development of further Joint Master Programmes, an improvement of student and staff mobility across the Consortium, and an increased level of university and industry interaction through broad knowledge transfer and more specific technology transfer activities.

The ECIU is happy about the fact that a public consultation was set in place to sound the interest and views of key stakeholders within the larger European arena about the EIT.

The ECIU member institutions are critical of the idea as such, and in particular of the implied setting-up of an

EIT as a single institution based on a US model. Rather than copying what might have worked well in a different historical and geographical context, Europe should find answers to the challenge of increased global competition by exploring distinctive and unique European solutions.

If, however, the European Commission proposes to proceed with the idea of an EIT, the ECIU would strongly encourage the Commission:

- To ensure alignment and coordination with other initiatives such as the European Research Council, the proposed FP7 and existing technology transfer and innovation activities.
- To organise the EIT as a programme with a primary focus on the commercialisation of research within the knowledge triangle of research, teaching and knowledge & technology transfer. Any attempts at looking at the commercialisation of research results in isolation from the research and teaching base should be avoided.
- To fund the commercialisation efforts of existing technology-based network or consortia of universities and to strengthen the collaborations that are already in place.

On behalf of the ECIU Executive Board,

Yours sincerely,

Prof Eberhard Becker  
ECIU Speaker and Rector of the University of Dortmund"

*This letter was sent to various stakeholders in the Commission following the ECIU Executive Board meeting on 18 November 2005.*

## A European Institute of Technology?

In its mid-term review of the Lisbon Strategy, the Commission indicated that it would explore the idea of a 'European Institute of Technology'. According to the Commission, an EIT could strengthen Europe's knowledge-triangle of research, education and technology transfer – providing critical mass and a world-class model for teaching and research, facilitating partnerships between the academic and business worlds and enhancing the profile of European research internationally. Following intensive discussion between Commission departments and with external experts, the Commission published a consultation document and sought input from the wider education, research and innovation communities about their ambitions on this issue. The public consultation concentrated on first-order issues – the EIT's key missions, objectives, added value and possible structure.

The purpose of this consultation was to gather the opinions of the various stakeholders involved, to inform the Commission on whether to take the idea further. The outcome of this consultation will be published as a report on the EIT website in early 2006. Read more on: [http://europa.eu.int/comm/education/eit/index\\_en.html](http://europa.eu.int/comm/education/eit/index_en.html)

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## ECIU & Bologna

At the recent Bologna Workshop, hosted by the TUHH on 14 October 2005, a set of obstacles with respect to the creation of Joint Masters' Programmes (JMPs) were identified, but time did not permit the participants to find actual solutions to the obstacles and challenges.

It was consequently felt to be both helpful and useful to organise a follow-up workshop with a hands-on approach to finding specific solutions to the programmes that are currently in the pipeline. The objectives of the meeting consequently are to:

- Provide a few best practice cases of JMPs that have successfully addressed the problems associated with joint degrees involving partners with different fee structures;
- Address the challenges associated with JMP developments both horizontally, based on generic themes related with JMPs such as Quality Assurance, and vertically by focussing on particular JMP developments;
- Task small working groups with the job of proposing solutions to the technical problems related with specific master programme developments;
- Provide the solutions needed for each of these JMPs to finalise their programmes;
- Offer advice and help with respect to setting up Consortium Agreements; and
- Draw up a Roadmap for the work ahead: where are we now, where are we going and how are we getting there?

The meeting takes place on 23-24 February 2006 at Strathclyde with invitations being targeted at staff involved in ECIU JMP developments and administrators who can help provide solutions to the challenges and problems encountered.

## ECIU Activities

A number of project meetings or seminars have or will take place over the coming months:

- ECIU Leadership Programme Development meeting, Spring 2006 (date to be confirmed)
- ECIU JMP "Hands-On" Workshop, 23-24 February
- Student Wing meeting, TUHH, 7-8 April
- ECIU PR group meeting, LiU, 17 May
- ECIU Annual General Meeting, LiU, 18 May
- ECIU Executive Board meeting, LiU, 19 May

Please read more about the ECIU and these activities on the website: [www.eciu.org](http://www.eciu.org)

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