September/October 2006

Year 3, volume 3

ECIU News
European Consortium of Innovative Universities

Articles

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

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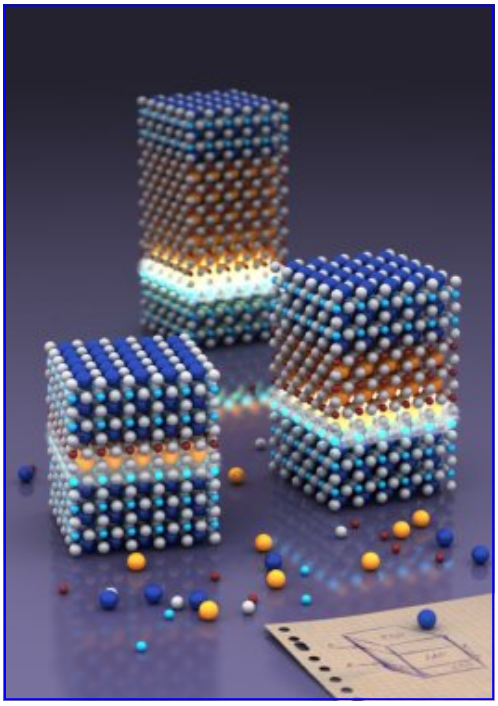
The next edition will be published in December. The deadline for submitting articles will be **1 December 2006**.

Nano sandwich shows unsuspected properties

Materials get challenging new properties if you create them by placing ultra smooth layers of separate materials on top of each other. The interfaces between the materials are crucial. It becomes even more interesting when the interfaces mutually influence each other, scientists of the MESA+ Institute for Nanotechnology of the University of Twente, the Dutch foundation FOM and the University of Antwerp found out. By 'sandwiching' layers in the proper order, they can lead to new electronic properties. The results are published in the July issue of Nature Materials.



Artist's impression (Jeroen Huijben, UT) of the conducting interfaces

In their article, the scientists prove that electrical conductivity changes when ultra thin layers of strontium titanate and lanthane aluminate are 'sandwiched' using a laser deposition technique that has been previously developed at MESA+. Placing these materials on top of each other with atomic precision, two types of interfaces are possible: LaO-TiO_2 and AlO_2-SrO. The first will behave like a metallic conductor, the second like an insulator. The way the interface is layered makes the difference.

Placed in each other's proximity, the interfaces influence each other electronically. Electric tests show that for distances less than six 'unity cells' –about 2.3 nanometres-, the conductivity of the LaO-TiO_2 interface decreases gradually. This process has been studied down to the sub nanometre dimensions of a single unity cell of about 0.4 nanometres. The decrease of conductivity can be fully explained by the decrease of the density of charge carriers. The high mobility, shown at 'larger' distances, remains the same for sub nanometre dimensions. This is interesting for developing e.g. a new type of transistor based on the principle of interface conduction.

Interesting research issues that follow include: how do these newly found properties respond to external influences like the application of an electric field or light that is pointed at the layers?

The research has been carried out at the MESA+ Institute for Nanotechnology at Twente and co-financed by the Netherlands Organisation for Scientific Research, the Dutch Foundation for Fundamental Research on Matter FOM, the national NanoNed programme and the European Science Foundation.

Further information: www.utwente.nl/nieuws/pers/en/cont_06-029_en.doc/

Source: Twente press release, 28/06/06

Rostov leads on university management developments in Russia

The Russian Association of University Managers and Administrators (RAUMA) was set up at Rostov State University (RSU) as an EC Tempus Project outcome in September 2006. Anatoly Narezhnuy, first Vice-rector of RSU, has been elected the chairman of RAUMA and Vladimir Zhukov, Vice-rector for international relations, is executive director. At present the Association includes four members, former Tempus project partners: RSU, Tomsk Polytechnical University, Tver State University and Tver State Medical Academy. The main aims of RAUMA are the development and introduction of modern principles of university management and of training programmes for university middle-level managers, and the dissemination of best practice on university management in the whole of Russia.

Alla Batchenko, Rostov State University

Latest Tempus developments: http://ec.europa.eu/education/index_en.html

ECIU roadshow at Swinburne

ECIU delegates have enjoyed visits to Swinburne University of Technology and are helping identify and build links between Swinburne and other ECIU institutions.

In late July and early August, the ECIU Speaker and I had the pleasure of visiting Swinburne on two separate trips. Professor Becker gave a general presentation about the ECIU to all interested staff and got a turbo-introduction to research and education at Swinburne, whilst I was there for two weeks with more time for in-depth discussions. Sue Fujino, the ECIU Local Coordinator at Swinburne, had organised an intensive programme: I met with Deans, Vice-Deans and professors from all five faculties, the Lilydale campus and various administrative units. Additionally, the Pro Vice-Chancellor (International) and I travelled to Canberra to meet representatives from the Australian Department of Education, Science and Training who were interested in discussing the progress of the Bologna Process and the link between an activity such as the ECIU Graduate School and Bologna, as well as Swinburne's involvement in such European developments.

As the research profile from Swinburne shows (see last edition of the ECIU Newsletter), there are many impressive activities at Swinburne and many opportunities for collaboration, ranging from sharing experiences about obtaining particular types of accreditation, staff development activities through the ECIU's administrative staff development programme, student mobility activities (e.g. intensive summer courses or study trips in Europe and Australia), development of joint programmes, and perhaps even joint approaches to recruitment of international students.

Over the coming months we will be following up the many action points and initiatives identified during my visit. However, as staff throughout Swinburne University expressed a clear interest in the Consortium and would like to explore opportunities for engagement in its activities, many ECIU institutions can expect to be approached about collaboration on existing activities and proposals for consideration of new initiatives.

Saskia Loer Hansen, ECIU Secretariat

Bringing the universe to life

Demystifying science and astronomy for the public is a key part of the Centre for Astrophysics and Supercomputing's mission at Swinburne University of Technology.

One of the most dynamic research centres based at Swinburne, the Centre for Astrophysics and Supercomputing, sets itself apart in the astronomy education field through its wide range of public programmes.

Dr Sarah Maddison with local school students in the virtual reality theatre.

The Centre's 3D virtual reality theatre is used for many of its public 'outreach' education programmes including regular virtual 'tours' of the universe. Using a mixture of interactive content and 3D films developed at the Centre, people can visualise the universe and, for example, virtually 'stand' on Mars and see the planet from the same perspective as the NASA rovers. These bring many scientific concepts and astronomy to life and have proved one of the Centre's most popular activities. "We want to inspire people to see science beyond a textbook, and the 3D technology gives a true-to-life picture of the universe," Dr Chris Fluke says. "It is very satisfying to see the way that students engage with our content. They are literally jumping out of their seats within seconds of the show starting, trying to catch virtual stars and planets as they spin past."

The Centre has expanded its public education programmes and now runs specialised workshops for secondary school students studying physics and professional development programmes for teachers that use the Centre's 3D technology. The striking 3D visuals and virtual reality technology are created by the Swinburne Spaceworks team – a collaboration between astronomers, animators, programmers and visualisation researchers. Spaceworks continues to explore research and development into innovative approaches to astronomy education. Acting as a commercialisation 'hub', it has successfully delivered virtual reality and astronomy education products for use in venues as far apart as Ballarat (regional Victoria) and the UK. The team's achievements were recognised with a Vice-Chancellor's Award for Excellence earlier this year.

The Centre is one of the newest and most rapidly growing research centres in Australia and has attracted renowned researchers in the field, most recently Professor Karl Glazenbrook from John Hopkins University, who is recognised as one of the world's leading observational cosmologists, and Professor Warrick Couch, who, as a Citation Laureate, is one of the 30 most cited scientists in Australia.

The Astrophysics research at the Centre spans the entire electromagnetic spectrum covering computational, theoretical and observational astronomy. The Centre's multi-faceted approach to broadening its funding base through a combination of research grants, commercial work, online teaching and University support has led to spectacular growth since its formation in 1998.

Further information: http://astronomy.swinburne.edu.au/ (*Further ECIU outreach news: page 6.*)

Kate Babic, Swinburne Media Centre

Virtual realities against pain

The feeling of pain produced during medical treatment can be reduced through sophisticated virtual reality helmets, a simple computer game and the determined predisposition of the patient. According to psychologists at the Universitat Autònoma Barcelona (UAB), this type of distraction even reduces the dosage of sedatives. The research suggests putting greater emphasis on methodology and on psychological aspects of this technique in order to improve its properties.

The video helmet in use

For over a decade, the technique of distraction has been researched and successfully applied in clinical practice to reduce pain associated with certain medical procedures. The technique is based on the assumption that there is an important psychological element in the perception of pain: the amount of attention given to the harmful stimulus affects the perception of the pain.

Distraction techniques are based on patients' limited capacity for attention, resulting in a reduction in attention to the stimulus and therefore a reduction in the stimulus itself. The ideal distractor is assumed to require an optimum amount of attention involving various senses (visual, auditory and kinaesthetic), an active emotional involvement, and participation by the patient to compete with signals from harmful stimuli.

The most recent advanced distraction techniques (ADTs) use 3D images combined with dynamic audio stimuli, making the techniques more likely to meet the requirements of an ideal distractor than traditional methods such as watching a film. The ADTs simulate real-life situations, and the possibilities are infinite. For example, users can already choose between activities such as flying, driving, skiing, and exploring buildings.

Publications on ADTs and pain have been reviewed to determine the clinical effectiveness of using these techniques as analgesic. The results suggest that the ADTs can significantly reduce the pain associated with medical treatment. The use of analgesic was clinically revealing in most cases, especially in patients with very high levels of pain: levels of anxiety were reduced during the exposure, and the side effects, such as 'simulator sickness', were hardly observed.

Although some studies continue to focus mainly on the technological aspects of ADTs, greater consideration is being given to psychological aspects. Personality traits (such as absorption and dissociation) have been identified as important factors for determining the level of involvement, possibly modulating the effectiveness of technological progress. For example, some patients perceive a reduction in their visual field (due to the video helmet) and a loss of awareness of the activities of the medical practitioner, as well as a loss of control, leading to an increase in anxiety and pain; other patients see it as positive that they cannot see what the medical practitioner is doing.

ADTs are therefore very useful as analgesic and can reduce the amount of analgesic administered. This new field of study can begin to move forward beyond its initial phase by placing more emphasis on methodology and psychological aspects.

Further information: www.uab.es/ - follow links to *News* then *Research*.

Source: UAB press release, 24/07/06

Aalborg on the search for cure to Parkinson's disease

Aalborg University (AAU) has recently received a grant for research into a possible cure to dementia diseases like Parkinson's disease. This grant will be used to form a network consisting of international pharmaceuticals companies and a team of professors from AAU's department of life sciences.

The Danish Agency for Science, Technology and Innovation has awarded AAU's department of life sciences a grant of 12.5 million DKK to facilitate and start the research to find out what actually causes neurodegenerative diseases like Parkinson's. This knowledge should help scientists find a cure for dementia diseases.

The grant will support work which has already commenced in a newly formed organisation within AAU called Cure Neurodegeneration Denmark (CureND). Apart from representatives from AAU, the CureND team consists of other Danish public research institutions and private companies. The team also includes one significant American pharmaceuticals company - the name has not been disclosed so far.

The head of the CureND group, Daniel Otzen (AAU), elaborates that the group will focus on two different strategies in order to determine what causes the brain to degenerate—the cause of dementia—and thereby to determine possible curses: firstly, the team will determine whether the dementia diseases occur because of a specific protein which needs to be identified and controlled in order to prevent the brain cells from degenerating; secondly, the team will undertake a thorough analysis of the production of proteins in the brain in order to identify the most important proteins that cause dementia. This knowledge could be used in the future research for medicine to prevent dementia diseases.

If the project results in the determination of what actually causes dementia diseases and thereby in a cure to these diseases, it will be a significant academic result and will have a tremendous effect on society.

Lene Hinnerup, Aalborg Universitet

Virtual reality in the production of pneumatics

Following an internal review of its employee training scheme, the pneumatics company Continental, situated at Clairoix in the Oise area, has brought to light the difficulties its employees were having in working the PU15Sb machine, which assembles the different components of a tyre. Not only was the training proving to be unsatisfactory, but it was affecting the company's productivity adversely because training sessions monopolised the machine at certain times.

Continental has therefore decided to develop software that will recreate the PU15Sb and its applications. In order to do this, the company has developed a partnership with the research centre at Compiègne University (UTC) and the regional council of Picardy to create a virtual reality training simulator.

The PU15Sb machine

The simulator will have three functionalities:
1. A virtual tour of the PU15Sb and its environment
2. Operating the machine in a normal state
3. Operating the machine in a damaged state

This virtual reality industrial production project is an excellent example of the possible synergy between industry and research centres. One obvious outcome is the involvement of businesses in more innovative, and therefore more competitive, activities.

The project offers the following opportunities to UTC:

- Participation in a pioneering project of training using virtual reality
- Production of an industrial application and benefit from the rewards
- Initiation of a true research partnership with Continental.

For Picardy Regional Council, the project presents an obvious interest in terms of training, economic action, innovation and knowledge transfer, including:

- Participating in the programme 'Clairoix 2008' of which the primary objective is to improve performance at the Continental site and thereby retain employment (the company is the largest private employer in the Oise area with 1171 employees).
- Encouraging the development of innovative pedagogical resources which use new technologies to train employees. The rewards of the experience, notably in the operators' perceptions of the simulator, will be greatly beneficial in instructing wider perceptions of this type of resource.
- Along with UTC, acquiring industrial competencies and benchmarks in the domain of training through virtual reality. UTC is positioning itself as a pioneer in the domain, thanks to this programme.
- Participating in the development of a long-term research partnership between UTC and Continental.

Further information: http://www.utc.fr/evenements/news/realite_virtuelle.html

Source: Compiègne press release 22/03/06

Award for Compiègne

Compiègne's high quality research has been recognised by the award of the 'Carnot' label by the French Research and Higher Education Ministry. The label is awarded to institutions whose laboratories have proved their technological competence and strong engagement in collaborative research.
Further information: www.utc.fr/evenements/news/label_carnot.html

AC21 and ECIU Entrepreneurship Research

The University of Warwick hosted the AC21 (Academic Consortium 21) Conference on 'Global Education: Universities in the 21st Century' in early July with participants from all over the world. The ECIU was represented by a small delegation from Dortmund, Aalborg, Strathclyde, Linkoping, Twente, and Warwick. Professor Stephen Hagen from Warwick, Prof Magnus Klofstein from Linkoping and Dr Aard Groen from Twente gave an introduction to the ECIU Entrepreneurship Research project and to entrepreneurship activities at their individual institutions. The presentation was well received and was followed by interesting discussions about entrepreneurship activities. As the results of the student entrepreneurship surveys had just come in early July, it was not possible to present an analysis of the data. This would be covered in the final project report, which is due by the end of the year.

Dr Groen will also be speaking to the ECIU Executive Board at its upcoming meeting on 6 October regarding the findings of the ECIU Entrepreneurship Research project.

Further information about the conference:
www2.warwick.ac.uk/newsandevents/events/ac21/

Further information about AC21: www.ac21.org/

Saskia Loer Hansen, ECIU Secretariat

Aalborg University welcomes elite students

Aalborg is the first university in Denmark to offer highly-skilled students the opportunity to participate in a new kind of elite education in order to meet their skills and level of qualifications.

Starting from September 2006, Aalborg University is going to offer a new kind of education aimed at students who are in the top of their class and who have a level of qualifications much above average. These A-students must have proven their skills by submitting a bachelor project which is rated to be at the very best end of the marking scale.

This new level of education will be available in the areas where Aalborg University is in the lead and is internationally recognised. The new education will be offered as an alternative to the traditional master degrees within the natural science field and include areas of research like:

- Incorporated software
- Sensory-motor interaction
- Protein biophysics
- Wireless communication
- Comparative well-fare studies
- Industrial dynamics
- Temporality and persuasive design

In order to ensure that the students studying under the terms of this new education will have the best opportunities to become part of the elite within these different areas of research, Aalborg University will provide these students with the best facilities possible within the university.

The students will be expected to carry out more complex and extensive projects than it would normally be expected from students at the same stage of their studies on a regular basis. They will also have to do more studying like lab research, extensive inclusion of literature sources and empirical methods.

The students will have the opportunity to participate in this new education during their entire master's degree or use it as a supplement to their regular semesters in their master's degree with a semester or two from this new level of education.

Photo source: Det Teknisk-Naturvidenskabelige Fakultet billedegalleri, photo 244 (http://nvc.itorg.aau.dk/gallery/)

Lene Hinnerup, Aalborg Universitet

Spin-out company honoured by the Queen

Diagnostic Monitoring Systems, a spin-out from the University of Strathclyde, has been presented with the Queen's Award for Enterprise.

Glasgow's Deputy Lieutenant, Dr Rajan Madhok, presented the award to company President, Dr Brian Hampton, at the City Chambers. The Queen's Award is one of the UK's most prestigious awards for business, and marks the company's success in International Trade.

Dr Hampton and Dr Madhok

Diagnostic Monitoring Systems Ltd, (DMS), designs and supplies innovative diagnostic equipment and services to the power transmission and distribution industry from its UK (Glasgow) and Asia-Pacific offices. Dr Hampton said, "DMS began over ten years ago, and with support from the University of Strathclyde, our significant growth has lead to this recognition of our success as a leading international company in our field. We are delighted to receive this award."

Established in 1995, DMS spun out from the University's Institute of Energy & Environment in the Department of Electronic and Electrical Engineering. The Institute's diagnostics laboratory was unique in the UK in that it allowed full-scale testing of components used in 400kV gas-insulated substations. DMS was the pioneer and is now the world leader in the use of the Ultra HighFrequency (UHF) technique for the detection of insulation defects in HighVoltage Gas-Insulated Substations.

The awards for Enterprise are presented every year to businesses that are able to demonstrate substantial growth in overseas earnings and commercial success. DMS supplies its equipment to countries all over the world, including: Korea, Malaysia and Hong Kong.

Source: University of Strathclyde press release, 16/08/06

Outreach to schools and the motivation of school students from a wide variety of backgrounds to consider university education are important in most countries. Aveiro, Strathclyde (article on page 7) and Swinburne (page 2) are just three of the ECIU institutions that have programmes and initiatives in place to help students develop their potential and to encourage interest and ambition in higher education.

Aveiro launches its first Summer Academy

Enjoying the campus and sunshine at the Summer Academy

This summer, for the first time, secondary school students aged 15 to 18 had the opportunity to spend a "different" week at the University of Aveiro. The purpose of the 2006 Summer Academy was to help young students discover their vocation and to allow them to experience much of what the University has to offer.

With a wide range of scientific, cultural and leisure activities, the Academy aimed to show the students the agreeable environment of the university campus, known as a leading place for study and student life, as well as the green open spaces around.

During the two weeks, 200 pupils had the opportunity to taste university life by participating in one or two of the five scientific, cultural and sports programmes developed in the Departments of Biology, Ceramics and Glass Engineering, Earth Sciences, Chemistry and Physics. The participants were supported by professors and researchers. Dozens of University students also acted as scientific and social mentors. For a few days, these youngsters were able to regard the University of Aveiro as their new home.

"The activities are fun and the contact with the university students was very interesting and useful. Besides, the professors were very kind and explained the subjects in a better and different way than we are used to at school. Here the buildings are excellent, the laboratories have very good conditions and the environment is very relaxing," said one of the pupils on the Chemical and Biology Programme.

Among the vast programme of laboratory activities prepared to increase the scholars' interest in Physics and Mathematics, two guest American professors, led by Professor Clint Sprott, took the participants through 'The wonders of Physics' – an unforgettable show of science—as well as through a set of activities known as 'getting down to work'. Professor Sprott has been presenting his show for about 24 years, but the show has been constantly updated and adapted to new and better ways: "we have developed better ways to explain the substances and to get involved with the public. There are procedures that we only have learned with experience," said Prof. Sprott, who was happy with the organisation, the availability and the support of the Department of Physics for the show.

But the participants were not always working. They could also visit the University library, go on study visits outside the University, take boat trips on the Aveiro lagoon and join walking tours through the city. They also spent time practising yoga and other sports on the campus lawns.

The Summer Academy was "a fantastic and spectacular programme, with excellent organisation", participants told us. The group spirit, animation and coordination of the social activities were the main concerns of the eight student mentors, who were happy to participate in the project: "From the beginning we stated clearly that more than being mentors, we were above all friends," said one.

Getting down to work in the lab

In the farewell session, an 'academic ceremony', the participants were offered a diploma, perhaps their first University Diploma, by the vice-rector herself, in the presence of most of the pupils' families.

At the end of this first Summer Academy, the coordinators of the scientific programmes confirmed their satisfaction: "Summer Academy was very positive and the objectives have been fulfilled. The participants told us that the contents were very well adjusted to their learning level."

For Ana Bela Dias, the coordinator of Summer Academy, "This is just another well accomplished initiative promoted by the University to motivate young people for the world of science, technology and knowledge in general. This edition is the first of many that will take place over the coming years."

Ana Vaz Martins, Aveiro

Summer Academy @ Strathclyde

The Summer Academy @ Strathclyde (S@S) is all about motivating students at a critical juncture in their education, developing their academic and social skills, their confidence, their desire to learn and achieve and offering them a taste of a university environment. S@S continues to go from strength to strength and is regarded as a model of excellence in Scottish education.

S@S began in 1999 and has grown significantly. This year, almost 1000 participants from 130 secondary schools in the West of Scotland were joined by young students from Norway, Sweden, Denmark Spain and Canada. The innovative curriculum is based on progressive challenges and incorporates three important components - Academic, Recreation and Study Support.

The programme is aimed at 14/15 year olds at the end of their third year of secondary education and caters for their different social backgrounds and wide range of interests and talents. Students are divided into groups and work together on a range of collaborative activities, assisted by University student mentors. Part of their work is presented at the end of the Academy as a group poster which displays their thought-provoking poems, essays and articles. This year's programme also included a 'Highland Games', a cookery demonstration presented in a foreign language (and filmed), a business simulation activity and engineering and archaeology workshops.

Through the programme, students learn important study skills which will help them at school and beyond: one student commented, "The mind mapping we learnt was really good and will help to organise my studying next year." Another said, "It's what you wish school could be like!"

The Academy culminates in a graduation ceremony where, as well as receiving certificates from a senior university officer, the students present a spectacular and highly entertaining show that they have prepared and organised themselves. The talents displayed are impressive, the students' enthusiasm is infectious and the warmth of the audience response reflects the students' achievements.

Students enjoy a challenge

The entertaining graduation show

Further information: www.strath.ac.uk/summeracademy/

Sources: S@S website; Christine Percival (Director, Innovative Routes to Learning, Strathclyde University); Fiona Campbell.

How do the media organise their EU coverage?

How do media in Europe organise and produce their EU coverage? Researchers from eleven European countries are currently dealing with this question within the scope of a three-year project. The 'Adequate Information Management in Europe' (AIM) project, which is financed by the EU, wants to examine the media's influence on the development of a European public from the empirical, theoretical and practical point of view. The first results of the international research project have now been published.

In a first field study the participants of the project analysed the EU coverage and production processes in ten European countries (Belgium, Germany, Eastland, Finland, France, Great Britain, Ireland, Italy, Lithuania and Norway). The Projektverlag has now published the results of this investigation under the title 'Understanding the Logic of EU-Reporting in European Mass Media'. The publication shows how EU coverage emerges against the background of different journalistic cultures and standards of professionalism in Europe. It points out connections between coverage and the structures and work routines in editorial offices. The study is based on qualitative guided interviews with journalists and a content analysis of the EU coverage in Europe. Overall 158 journalists, responsible for EU-coverage, took part in the interviews.

In the series *Adequate Information Management in Europe (AIM) – Working Papers* further publications of the AIM-project will follow. By the end of the year the results of a study about the work of EU correspondents in Brussels and the communication policy of the EU are to be published.

The AIM-project is coordinated by the Erich Brost Institute for Journalism in Europe at the Universität Dortmund and sponsored within the Sixth Framework Programme for Research of the EU.

Further information: www.aim-project.net *Source: Universität Dortmund press release, 25/07/06*

Views on the Bologna Process

In this edition we feature two views on the Bologna Process: one concerning the introduction of a high-quality university education system to match the Process at Linköpings Universitet, and the other the summary of doctoral research carried out at Twente University. Links to a third view of Bologna and the European Higher Education Area can be found on page 9.

High standards for Bologna educational programmes

"Educational quality is a core issue in the harmonisation of higher education in Europe," Janerik Lundquist (associate professor at Linköpings Universitet — LiU— and chairman of the Swedish Bologna Promotion Group) reminded his audience at the week-long session arranged by LiU on the Bologna Process.

Starting in the autumn term of 2007, entrants to Swedish universities will follow an educational system used throughout Europe. Undergraduate education will stretch over three years. Graduates can opt to study an additional two years at advanced master's level, and thereafter continue studies at researcher level.

A major benefit of the Bologna Process is the improved comparability of credit points and degrees among the participating countries. To date, the agreement has been signed by 45 nations, most in Western Europe, but including Cyprus, Turkey, Albania and Russia. "The Bologna process has provided an extraordinary opportunity to develop, clarify and improve educational opportunities throughout Europe," Janerik Lundquist points out. "Much work still lies before us. During the coming autumn we must develop new syllabi for all educational programmes."

In his lecture, Janerik Lundquist stressed the European mission to develop a common quality assurance policy for higher education. "Our task is to make higher education in Europe the best in the world. That means high standards of quality that extends throughout all participating countries. Today there is no common yardstick."

Further information: www.liu.se/en/information/news.html#4824

Source: Linköpings press release, 14/06/06

Bologna Process contributes little to convergence

The Bologna Process has so far contributed little to the convergence of European higher education systems, but has supported important national reforms. This is a key result of an international comparative doctoral study of the Bologna process conducted by Johanna Witte at the Center for Higher Education Policy Studies (CHEPS) of the University of Twente (doctorate awarded 7 July 2006).

The author compares the changes of degree structures and concomitant adaptations of the higher education systems of Germany, the Netherlands and France between 1998 and 2004, with England as a reference country. The thesis shows how the national starting points, interests, perceptions and competencies of actors differ and explains the nature and degree of change. In addition to the reform of degree structures as such the study investigates how this affects the relationship between different types of higher education institutions, the forms of quality assurance, curricular conceptions, access to higher education, graduates' transition to the labour market and the funding of degree programmes.

A central proposition of this study is that the introduction of the two-cycle degree structure is used by the participating countries for far-reaching reforms of their higher education systems as a whole. International trends serve as important arguments for national reforms. These are however often based on misunderstandings.

For example, accreditation was introduced as an 'Anglo-Saxon' system, although it plays hardly any role in English higher education. Much significance is attached to defining degree titles such as 'BA' or 'MSc' in national debates, although there are no common definitions internationally. If the Bologna Process is to lead to the convergence of higher education landscapes in Europe, the international dialogue needs to be intensified at all levels. "We cannot do without making a serious effort to understand our neighbouring countries", says Johanna Witte. This means: It is not sufficient if always the same handful of people participates in the European "Bologna meetings", the international exchange on higher education reform needs to be broadened. The ministers responsible for higher education in the Bologna signatory countries should re-establish a closer dialogue, beyond the official bi-annual conferences. The art of good higher education policy itself could become an issue of exchange, as the way higher education policy is done varies enormously between countries.

The Dutch higher education system is not the one undertaking the most ambitious reforms in international comparison, but the one with the fastest implementation. For example, the gap between university and hogeschool degrees remains wider than in Germany and the university Bachelor is not designed to qualify for the labour market, as it is in Germany. But consensus among stakeholders on the reforms is high, easing swift implementation.

Among the challenges for the future are to further improve the possibilities for hogeschool graduates to enter university Masters programmes and to allow for a better integration of the Masters and the doctoral phase, for example through graduate schools.

Further information: www.utwente.nl/cheps

Source: University of Twente press release, 07/06/06

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www.swin.edu.au

Bologna Process and the European Higher Education Area: the institutional view

An interesting and comprehensive overview of how an ECIU university presents Bologna and the European Higher Education Area in an institutional context can be found on the Universitat Autònoma Barcelona website at www.uab.es/servlet/Satellite?cid=1096479900713&pagename=UAB%2FPage%2FTemplatePlanaModel1

Conferences

5-6 October: International Conference on Public Administration, University of Warwick

25-26 October: Nano and Microtechnologies in the Food and Health Food Industries, Universiteit Twente

ECIU Activities

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

- ECIU Summer Academy/Widening Access meeting, 27-29 July, Strathclyde
- ECIU PR and Marketing meeting, 28-29 August, Strathclyde
- ECIU delegation to Pyeongtaek, South Korea, 4-10 September
- ECIU Student Wing meeting, 4-5 October, Torino
- ECIU Benchmarking workshop, 5 October, Torino
- ECIU Executive Board meeting, 6 October, Torino
- ECIU Leadership Development I, 9-11 October , Twente
- ECIU Leadership Development II, 12-14 February 2007, Hamburg
- ECIU Leadership Development III, 25-27 April 2007, Strathclyde
- ECIU General Meeting, 24 May, Rostov
- ECIU Executive Board meeting, 25 May, Rostov

Please read more about the ECIU and these activities on the website: www.eciu.org

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