



Universidade do Minho 1974-2014

**Universidade do Minho** Escola de Engenharia

# **ENGINews**

Nº 52

12th May 2014

Cooperation Agreement signed between the Portuguese Royal House of Braganza, the University of Minho and Guimarães Municipality promotes Award for Biomedical Sciences



Creation of the "Prince of Beira's Award for Research and Science"

#### **Awards**

# António M. Cunha receives Gold Medal from the University of Santiago de Compostela

Largo do Paço, Braga, 6<sup>th</sup> May



The University of Santiago de Compostela (USC), Spain, granted the Gold Medal to António M. Cunha, Full Professor of the Department of Polymer Engineering (DEP) of the EEUM and Rector of the UMinho since October 2009. The Gold Medal USC is granted to a personality which stands out for services to the institution, not only for its length, but also for their relevance. The Spanish academy points out the role of Professor António M. Cunha in bringing the two universities closer, which resulted in seven new cooperation agreements. His role as a bonding agent in the framework of the presidency of the CEER Foundation (Universities from North Portugal and Galiza) was also taken into consideration.

The Solemn Ceremony took place in the Noble Room at the Rectory of the UMinho and the Medal was presented by the Rector of the USC, Professor Juan J. Casares.

#### Mais...

#### Portuguese Ministry of Health honours Rui L. Reis

Lisbon, 7th April

The Portuguese Ministry of Health awarded a Distinct Services Medal to Rui L. Reis, Vice-Rector of the University of Minho, Director of the Research Group in Biomaterials, Biodegradables and Biomimetics (3B's) of the EEUM and President of the Associate Laboratory ICVS/3B's. The award was granted in a ceremony which took place on the International Health Day, during which several individuals and entities associated to charity and altruism were also honoured. Rui L. Reis was the first researcher to receive the two major awards of the European Society for Biomaterials (Jean Leray and George Winter) and a Clemson Award of the Society for Biomaterials, the "Oscars" in this research domain. The Full Professor of the Department of Polymer Engineering (DEP) of the EEUM is the Portuguese researcher with the most scientific publications ever (more than 700 papers) and one of the most cited authors worldwide. He is also President of TERMIS, the largest international society in tissue engineering and regenerative medicine and Executive President of the European Institute of Excellence in Tissue Engineering and Regenerative Medicine, located at Avepark, Guimarães, Portugal.



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### FC Portugal 3D wins robotic soccer challenge for the 3<sup>rd</sup> time

Magdeburg, Germany, 3<sup>rd</sup> to 5<sup>th</sup> April



The Team FC Portugal 3D, constituted by elements of the universities of Minho, Porto and Aveiro, won the European Simulated Robotic Soccer 3D League. With 83 scored goals and 0 suffered goals, the team returned from Germany with a clean record and one title more to add to the 24 others achieved in the simulated soccer area. The RoboCup German Open 2014 – European Robotic Soccer Championship gathered teams of researchers from all over the world, especially from Europe, which have demonstrated the quality of their robots in a competitive environment by performing complex tasks such as playing robotic soccer, following and recognizing people or locate victims in catastrophes. This was the 3<sup>rd</sup> consecutive victory for the team FC Portugal 3D at the RoboCup German Open.

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# Portuguese Royal House of Braganza signs agreement with UMinho and Guimarães Municipality

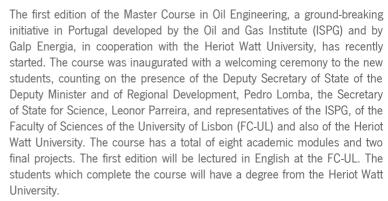
Guimarães, 5th April



The Portuguese Royal House of Braganza, the University of Minho and the Municipality of Guimarães signed a cooperation agreement which creates. for the next five years, the "Prince of Beira's Award for Research and Science". In the framework of this agreement, the entities intend to honour each year the excellence of research and contribute to new opportunities for applied research and ethics in the field of Biomedical Sciences, in which leads through the Research Group in Biomaterials, Biodegradables and Biomimetics (3B's) of the EEUM. The prize, which consists of 15 thousand euros, will award a work plan to be conducted by a Portuguese of foreign researcher, including students from the African Portuguese Speaking Countries (PALOP), less than 40 years of age. The award aims also at contributing towards the development of advanced therapies apart from boosting the development of a new generation of researchers trained in Tissue Engineering and Regenerative Medicine. The President of the Pedagogical Council of the EEUM, Professor Rosa Vasconcelos, participated in the Ceremony of Signature of the agreement representing the University of Minho.

#### **New Master Course in Oil Engineering**

Lisbon, 31<sup>st</sup> March



The ISPG was founded by the Portuguese universities of Minho, Aveiro, Porto, Nova in Lisbon, the Faculty of Science and Technology of the University of Coimbra and also the Instituto Superior Técnico and the Faculty of Sciences of the University of Lisbon.







#### **UMinho takes part in EIP Raw Materials Commitment**

European Commission, 7th April

The ROSE - Recycling Of Secondary raw materials for a sustainable optimization of construction processes in civil Engineering commitment, presented by a Consortium of education and research institutions of 7 countries, in which UMinho takes part, has been recently approved in the framework of the Raw Materials Commitment - RMC) of the European Innovation Partnerships - EIP. The goal of the EIP in Raw Materials is to reduce the EU's dependency on imports of raw materials by improving supply conditions from within and outside the EU, and by providing resource efficiency and alternatives in supply. The ROSE Commitment aims at contributing towards the goals set by the EIP from 2014 to 2020, with the goal of creating products, processes, services, technologies, business models or innovative ideas which may be transferred to the market and may bring major societal benefits. The Consortium gathers expertise in geotechnical, structural and chemical engineering, as well as materials science and technology. For the University of Minho, the areas of Geotechnics (Prof. A. Gomes Correia - coordinator and contact person at the UMinho) and Structures (Profs. Paulo Lourenço e Joaquim Barros) from the Research Centre ISISE - Institute for Sustainability and Innovation in Structural Engineering - will contribute a great deal to the development of proposals, in collaboration with other scientific domains of the EEUM, namely textile engineering (Prof. Raul Fangueiro), polymer engineering (Prof. Carlos Bernardo) and biology (Prof. Cândida Lucas).



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### Ana Alice Baptista appointed as co-chair of the Education & Outreach Committee from DCMI

Professor Ana Alice Baptista, from the Department of Information Systems



(DSI) of the EEUM, has recently been appointed as co-chair of the Education & Outreach Committee of the Dublin Core Metadata Initiative (DCMI). Among other responsibilities, this committee is in charge of proposing policies and determining procedures, as well as developing the master planning calendar for DCMI education and training, user best practice documentation and outreach activities. The DCMI is one of the most relevant worldwide initiatives for metadata and aims at supporting shared innovation

in metadata design and best practices across a broad range of purposes and

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business models.

### Top secondary school students work with UMinho's researchers for a week

Campuses of Gualtar and Azurém, 7th to 11th April



In a ground-breaking initiative across the country, the best students of the secondary schools in the Braga districts were invited to spend a whole week at the UMinho for a special training, which included specific lessons and integrated them in international research teams. The programme was inaugurated by the Rector of the UMinho, Professor António M. Cunha. Afterwards, the students participated in several activities in their areas of interest in the different Schools and Institutes of the UMinho. The EEUM received 20 students which participated in activities of several scientific areas available at the School, organized by the Research Centres 3B's, ALGORITMI, CEB, CGIT, CT2M, C-TAC e HASLab. The Rectory of the UMinho considers that this initiative – part of the celebration of the 40<sup>th</sup> anniversary of the UMinho – has contributed to bring the young students closer to the academy and to open the university's doors to quality higher education and state-of-the-art research, apart from disseminating the knowledge produced at the university to the general public.

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#### Student of the EEUM in ESA's Spin Your thesis programme

A team of Portuguese students was selected to participate in the programme Spin Your Thesis, created by the European Space Agency (ESA). The team members are Daniel Carvalho, Guilherme Aresta and Miguel Ferreira, from the Institute of Biomedical Sciences Abel Salazar, and Raquel Almeida, student of the Doctoral Programme in Bioengineering of the MIT-Portugal Programme at the EEUM. The research involves bioengineering, namely the ability of endothelial cell to form new blood vessels in hypergravity conditions, which may be applied to regenerative medicine or to the treatment of pathological situations related to vascularization. The project AngioGravity will be tested in September, at the ESTEC - European Space Research and Technology Centre, in the Netherlands. The access to ESA's facilities is granted through an initiative created by the Educational Office of the agency, with the programmes Spin Your Thesis! and Drop Your Thesis! Once a year, students have the opportunity to apply for microgravity and hypergravity experiences through their universities. There are no restrictions regarding the researched field of science. The only condition is that the access to these experimental facilities is crucial for the developed research.



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#### Students from the EEUM cooperate with off-road vehicle company



Two students of the Integrated Master Course in Mechanical Engineering, Ricardo Botelho and Pedro Marques, are currently cooperating with the company DePieres Competition in the framework of their Masters' dissertations, under the supervision of Professor José Meireles, from the Department of Mechanical Engineering (DEM) of the EEUM.

Ricardo Botelho's project, entitled "Optimization of the characteristics of a tubular competition vehicle chassis with two rear wheel traction", aims at contributing towards improving the performance of the produced vehicles, optimizing its performance and mass. The ultimate goal is to develop a new chassis for two wheel vehicles. The prototype development was promoted by Auto Sport, a specialized journal.

Pedro Marques' project, entitled "Optimization of the characteristics of a tubular competition vehicle chassis with full traction", aims at performing a dynamic study of the tubular chassis and at implementing a new type of push-rod suspension for Kart cross.

Link to Autosport's article (in Portuguese)...

#### Internationalization

### Visit of the IFPB - Instituto Federal de Educação, Ciência e Tecnologia da Paraíba

Campus of Azurém, 8th April



The EEUM received the visit of a delegation from the Instituto Federal de Educação, Ciência e Tecnologia da Paraíba (IFPB – Federal Institute of Education, Science and Technology of Paraíba, Brazil), constituted by the Vice-Rector of Research, Innovation and Graduate Degrees, Professor Nelma Mirian Chagas de Araújo, by the Director of Graduate Degrees, Professor Alexandre Fonseca D'Andrea, and by the International Advisor, Professor Maria Verônica Silveira Edmundson. The visit was included in an institutional visit to the UMinho and several of its Schools and Institutes, aiming at strengthening the existing cooperation, already established in the framework of a cooperation agreement signed in 2012.

### Visit of the IFPI - Instituto Federal de Educação, Ciência e Tecnologia do Piauí

Campus of Azurém, 5th May



The EEUM received a visit of a delegation from the Instituto Federal de Educação, Ciência e Tecnologia do Piauí (IFPI – Federal Institute of Education, Science and Technology of Piauí, Brazil), constituted by the Rector of IFPI, Professor Paulo Henrique Gomes de Lima, the Vice-Rector of Research and Innovation, Professor Ayrton de Sá Brandim, and the Advisor for International Relations, Professor Áurea Regina do Nascimento Santos. The visit was included in an institutional visit to the UMinho and several of its Schools and Institutes, aiming at knowing the UMinho and establishing the basis for a broader cooperation with the IFPI.

### **Applications MIT Portugal Program**

**Application submission dates:** 

<ul> <li>Doctoral Program Leader</li> </ul>	s for Technical Industrie	s: 15 <sup>th</sup> May 2014,	17:00h, GMT	(deadline extended)
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 Advanced Courses Bioengineering Systems and Technology Management Enterprise: 15<sup>th</sup> May 2014, 17:00h, GMT

More information:	www.mitportugal.org
	(E. No Augusti and Malaka)

**ENGINews** is a publication of all members of the EEUM. Please send your news to divulgacao@eng.uminho.pt

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Thank you for your understanding.