

## ENGINews Nº 42, 21" June 2013

## **Awards**

## **UMinho Excellence Scholarships granted to EEUM's students**

Salão Nobre, Largo do Paço, Braga, 22<sup>nd</sup> May



The UMinho has granted this year's Excellence Scholarships during a ceremony presided by the Rector of the UMinho, Professor António M. Cunha. The best student of each 1st and 2nd cycle degree courses has been granted a scholarship equivalent to a full year fee. The main goal of the Excellence Scholarships is to award student merit, while avoiding students to abandon the university due to financial reasons. The following students of the EEUM were distinguished:

André Ribeiro Ferraz da Cunha Santos (LFI)

André Ribeiro Ferraz da Cunha Santos (LEI) Ana Isabel Torres de Araújo (DMM) Diana Alexandra Costa Campos (MIEBIOL) Gabriela de Matos Gomes Belsley (MIEBIOM) Filipa Manuela Neto Paiva (MIEC) Cláudia Sofia Pereira Peixoto (MIEMAT) Pedro Alexandre Amaro Pereira (MIEEIC) Helena Sofia Martins Lopes (MIEM) João Pedro Peixoto Costa (MIEGI) Bruno Alexandre Oliveira de Faria (MIEGSI) António Carlos de Almeida Brandão Capelo (LEI) Sara Alexandra Baptista Araújo (DMM) Margarida Reis Soares (MIEBIOL) Helena Daniela Ribeiro Torres (MIEBIOM) Diana Filipa Fernandes Pereira (MIEP) Paulo Jorge da Silva Santos (MIEEIC) Micael Teixeira Gonçalves (MIEGI)

# Researcher from Algoritmi Research Center wins Best Poster for Microsystems Technology

Gaithersburg, USA, 14th May



Pedro Anacleto, Biomedical Engineering PhD student and researcher from the Algoritmi Research Center, under the supervision of Professors Paulo Mendes and Higino Correia, was awarded Best Poster during the Spring 2013 Symposium: Microsystems Technology: Fulfilling the Promise. The awarded poster, "3D Self-Folding Micro-Antennas", is based on a project consisting of the development of micro-antennas for application in implantable micro devices. The micro structures are composed by several panels (2D) manufactured on silicon substract, using photolytographic techniques. The structures are then folded using self-folding techniques in order to obtain a tridimensional structure. The event was sponsored by the Mid-Atlantic Micro/Nano Alliance and took place in the National Institute of Standards and Technology (NIST), in Gaithersburg, USA.

## Researchers from the Algoritmi Research Centre awarded by APDIO

Bragança, 3<sup>rd</sup> to 5<sup>th</sup> June



The Portuguese Association of Operational Research (APDIO) granted two awards to researchers from the Systems Engineering, Optimization and Operations Research Group (SEOOR) of the EEUM's Algoritmi Research Centre.

The Isabel Themido Award is granted to the best scientific paper published by APDIO's associates in an international scientific journal during 2011/2012. The award was granted to the paper "New constructive algorithms for leather nesting in the automotive industry, Computers and Operations Research", by Cláudio Alves, Pedro Brás, José Valério de Carvalho and Telmo Pinto.

The APDIO/IO 2013 Award is granted to MSc and PhD projects in the area of Operational Research approved in Portugal between 2009 and 2012. The award was granted to the dissertation "Heuristic methods for the problem of irregular shapes' placement", by Telmo Pinto.

#### Team from the EEUM awarded in the Shell Eco-marathon

Rotterdam, 15<sup>th</sup> to 19<sup>th</sup> May



The Shell Eco-marathon is a competition of fuel consumption aimed at presenting innovative projects of energetic efficiency. The vehicles are prepared to race the largest possible distance with the lowest energy consumption. Among the five Portuguese teams which entered this year's competition, the team from the EEUM, "BebUMLitro", stood out as the Best Iberian Team with their vehicle "EconomicUM", achieving the 8th place in the gas prototype category, with 1041.09 km/l. More than three thousand students from 21 countries participated in the competition.

#### News





The Vice-Dean of the EEUM, Professor António Gomes Correia, has recently traveled to Indonesia, in the framework of the co-operation protocol signed by the UMinho and the Universitas Indonesia (UIndonesia). Under the joint invitation of UIndonesia and the Indonesian Ministry of Public Works, the mission aimed at initiating the cooperation in terms of research and development, namely regarding knowledge and technology transfer. The Vice-Dean of the EEUM presented the talk "Sustainable Development: Recycled Unbound Based Courses" in the seminar "Pavement Recycling", organized by the Ministry of Public Works. Professor Paulo Pereira, from the Department of Civil Engineering (DEC) of the EEUM and former Dean of the EEUM, also participated in the seminar with the talk "Sustainable Development: Combining High RAP Content and Warm Mixes".

The mission allowed the strengthening of the cooperation established with the UIndonesia, particularly the Faculty of Engineering, as well as establishing contacts with the Ministry of Public Works and the Directorate General of Highways and also with His Excellency, the Ambassador of Portugal in Indonesia, Dr. Joaquim Moreira de Lemos.

## Researchers from the HASLab developed application to avoid Excel errors



The HASLab – High Assurance Software Laboratory of the EEUM, in collaboration with the INESC TEC and the Faculty of Engineering of the University of Porto (FEUP), developed innovative software which allows avoiding errors in Excel sheets. The application would avoid the critics made to the Harvard researchers responsible for the economic predictions in which several governmental austerity programmes were based. Presently it is estimated that 94% of all Excel sheets have errors. The application is called MDSHEET and is being patented aiming at commercial exploration.

## Employability levels increase demand for IT MSc and postgraduate courses

Exame Informática Magazine, 29<sup>th</sup> May



The information technologies (IT) sector is the most dynamic sector in Portugal when it comes to employment, with employability rates close to 100%. This reality is very different from other business areas dominated by unemployment, mainly amongst young professionals, which influences the students' choice of a higher education degree. In an interview to Exame Informática Magazine, the Presidente of the Pedagogical Council of the EEUM (CP-EEUM), Professor Rosa Maria Vasconcelos, identified a gradual concern with employability, due to the economic crisis. The President of the CP-EEUM referred that the demand for IT courses is increasing, both national and internationally, due to the lack of skilled professionals in the industry and global market job offers.

## Researcher from C-TAC on Top 25 of Construction and Building Materials



The researcher from the Centre for Territory, Environment and Construction (C-TAC) of the EEUM, Fernando Pacheco Torgal, is the main author of 4 of the top 25 most viewed scientific papers in the scientific journal "Construction and Building Materials" between January and March 2013. Of the 25 papers, 6 are from Portuguese authors, from which 4 are from the EEUM's researchers. Fernando Pacheco Torgal is also the author of the book "Eco-efficient Construction and Building Materials", which is included in the 25% most downloaded books of the publisher.

**ENGINews** is a publication of all members of the EEUM.

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