MECHANICAL ARM FOR WASTE COLLECTION

The Industrial Equipment Design Centre (CDEI UPC) in collaboration with the company PALVI has conceptually analyzed the design of a mechanical arm for bilateral bin collection, to support the redesign of mechanisms associated with this task. CDEI UPC analyzed the state of the art, revised the conceptual design of the existing mechanism, the guiding system and the transmission required to carry out the functions of the Machine. The Centre also revised resistance and kinetics calculations using various proposed alternatives, to obtain a robust, optimized final product. The result is part of the Dule System, a general system for selective waste collection, comprised of a bilateral, one-operator, totally automatic robotic device assembled on a waste collection lorry that can collect underground and surface bins. This system has already been launched on the market and is complemented by cleaning equipment.

WEAVING THE FUTURE WITH THE YARN OF INNOVATION

On 2 October, the International Textile Congress “Weaving the future with the yarn of innovation”, which was jointly organized by Innotex Center UPC, was held in Terrassa. The Congress was a meeting point for discussion and to increase the visibility of innovative activity within the textile sector. Speakers included Lutz Walter, the Secretary General of the European Textile Technology Platform and head of R&D at Euratex; Braz Costa, the General Director of CITEVE and president of Textranet; PhD. Gwendolyn Hustvedt from the University of Texas; and José Antonio Tornero from the Innotex Center UPC. Other companies, entities and associations in the sector also collaborated, and over 160 participants attended.

NEW DEVELOPMENTS IN NATURAL LANGUAGE PROCESSING

The Languages and Speech Technologies and Applications Centre (TALP UPC) jointly organized the 30th Edition of the annual Conference of the Spanish Society for Natural Language Processing (SEPLN), which was held in Girona on 17-19 September. At the event, the latest Spanish research and developments in natural language processing (NLP) were presented to the scientific community and companies in the sector. Applications of the research and dissemination of new projects in this field were also presented.
PARTICIPATION IN LES RENDEZ-VOUS CARNOT 2014

CIT UPC has taken part in the seventh Edition of the Les Rendez-vous Carnot 2014 in Lyon on 8 and 9 October. The event is a meeting point for contract R&D at the service of innovation in companies. With the collaboration of ACCIÓ, CIT UPC as a Center of the network TECNIO center presented technologies that are developed by the Member Centers in areas such as biomedical engineering technologies, production and automotive technologies to companies in various sectors interested in studying opportunities for collaboration. The event brought together over 2,500 visitors and promoted more than 8,500 meetings between companies and R&D suppliers.

CIT UPC AT THE EUROPEAN INNOVATION PARTNERSHIP ON SMART CITIES AND COMMUNITIES

CIT UPC is part of a working group on urban mobility and sustainable construction in the European Innovation Partnership on Smart Cities and Communities (EIP-SCC). EIP-SCC is a platform for collaboration created by the European Commission to stimulate projects that improve life in cities, make them more energy efficient, improve transport and promote citizen participation, among other aspects. Within the cluster, CIT UPC carries out two projects led by i3Lab FIB UPC in the context of Sustainable Urban Mobility and Districts and Built Environment. The cluster’s first meeting was held on 9 October in Brussels.

RESEARCHERS

EXPOQUIMIA R+D+i 2014 AWARDS

A new dental material to prevent infections, designed by PhD. Maria Pau Ginebra and PhD. Xavier Gil, of the Biomaterials, Biomechanical and Tissue Engineering Division (BBT) of the Biomedical Engineering Research Centre (CREB UPC) has received the Expoquimia a R+D+i 2014 award this year, which was presented on 2 October at the Expoquimia international exhibition in Barcelona. The project “Antimicrobial biomaterials for bone replacement and growth” that was submitted is related to an innovative biomaterial that prevents infections in dental implants and improves resistance to bacterial infections when it is used to join bone and prosthesis, which makes the biological seal between the two parts safer.

THIS MONTH ON THE CIT UPC BLOG...

THE INDUSTRIAL DOCTORATES PLAN: AN OPPORTUNITY AND A CHALLENGE

As in the main European countries, the number of doctoral students trained by Catalan universities is increasing annually. [...] +Read more.
REPORT ON THE EUROPEAN RESEARCH AREA 2014

A new Progress Report has been published on the situation of the European Research Area (ERA). The document shows that the ERA partnership, comprised by Member States, authorities in the area of research and the Commission, has made progress towards implementing the ERA. The conditions prior to establishing the ERA, in which researchers and scientific knowledge can flow freely, are already in place at European level. The Report concludes that, for the ERA to operate as expected, reforms need to be made at Member State level.

EUROPEAN COMMISSION REPORTS ON INDUSTRIAL COMPETITIVENESS

Two reports on Industrial Competitiveness have been published by the European Commission that highlights how important it is for the EU and Member States to implement actions that have a greater impact in areas such as investment, access to funding, public administration, access to foreign markets, innovation and the cost of energy. Both reports stress the competitive advantages of the European manufacturing industry, which can be used to promote economic growth, despite the complex current economic situation.

INDUSTRIAL DOCTORATE PROGRAM

This is a financial aid program for companies and universities to carry out an industrial doctorate project in a company and in a university research group, to prepare a doctoral thesis. Applications on the program’s website.

CALL FOR APPLICATIONS: TECNOBONS 2014

The Government of Catalonia has announced a call for applications for a new program of action: TECNOBONS 2014.

ACOUSTIC IMPACT OF THE HELIPAD AT VALL D’HEBRON HOSPITAL ON SANT RAFAEL HOSPITAL

The Acoustic and Mechanical Engineering Laboratory (LEAM UPC) has studied the acoustic impact of the helipad constructed in 2003 at the Vall d’Hebron Hospital, Barcelona, on the Sant Rafael Hospital that is situated a few hundred metres away. The result of the study was a proposal for a route and flying conditions that would reduce the impact on the environment.