

TECHNOLOGY MADE REAL

CIT UPC CENTERS

ADVANCED PRODUCTION: NEW SUCTION EQUIPMENT FOR TRENCHERS



The Hydraulic and Pneumatic Systems Laboratory ([LABSON UPC](#)) and [Nextrencher](#) have worked together **to develop new suction equipment for trenchers**. One of the innovations incorporated into the new machine is a high-performance suction system to leave trenches completely free of waste (stones and earth). This reduces execution costs and improves the quality of the finish.

LABSON UPC collaborated in the project at various levels: in an analysis of the state-of-the-art of existing suction system technologies, in the proposal and validation of the best technical solution, in the conceptual design of the equipment, and in implementation and final verification after construction. [Read more](#)

TIC: My-TRAC: A PLATFORM TO OPTIMIZE AND PROMOTE PUBLIC TRANSPORT



The Data Management Group ([DAMA UPC](#)) is leading My-TRAC, a [European project](#) to create a cross-cutting platform for public transport users and operators. The platform will improve the experience of seamless transport: a concept of a journey in which users take different forms of transport that are connected in a continuous, integrated, efficient and intelligent way.

The project will focus on developing an application called **Travel Companion for users**, and a **web-based interface for public transport operators**. This interface will be used to gather information from the network and update existing data. [Read more](#)

CONFERENCE ON ELECTROMAGNETIC COMPATIBILITY AT THE UPC



The Electromagnetic Compatibility Group ([GCEM UPC](#)) has organised the [Third Spanish Conference of the EMC](#), which was held in Barcelona on 6 and 7 November at the [UPC](#), once again with the support of the Spanish Chapter of the [IEEE EMC](#). During the conference, advances made by universities, companies and research centres in the area of electromagnetic compatibility were presented. In addition, companies working in the fields of EMC instrumentation, software and services presented their products and services in an exhibition area as part of the event. Over 160 people participated in this edition.

CIT UPC ACTIVITIES

THE UPC PRESENTS TECHNOLOGICAL SOLUTIONS AT THE SMART CITY EXPO WORLD CONGRESS 2017

The Universitat Politècnica de Catalunya ([UPC](#)), through CIT UPC, has

participated in the **2017 Smart City Expo World Congress**, the most important event on smart cities, at the Gran Via venue of Fira de Barcelona from 14 to 16 November. The **UPC's Technology Centre (CIT UPC)** has presented smart technology solutions covering the fields of urban mobility, electric vehicles, urban planning, data science, smart grids, emergency management, robotics, waste management, renewable energies, communications and eHealth. [Read more](#)



CIT UPC HOSTS THE RAILGRUP RESEARCH, DEVELOPMENT AND INNOVATION COMMITTEE

On 17 October, **CIT UPC** hosted the meeting of the **Railgrup Cluster Research, Development and Innovation Committee**, of which it is a member. The meeting focused on the presentation of technological solutions for innovation in the sector, to promote and coordinate research, development and innovation policies. Technological capabilities and projects were presented on: the field of Condition Based Maintenance (CBM) and Industry 4.0, by Dr Luis Romeral, director of the **MCIA UPC**; Smart Mobility and Big Data, by Dr Josep Lluís Larriba, director of **DAMA UPC**; Optical Engineering and Photonics, by Dr Santiago Royo, director of **CD6 UPC**; and simulation for high temperature and climate control, by Dr Carles Oliet, a researcher with the **CTTC UPC**.



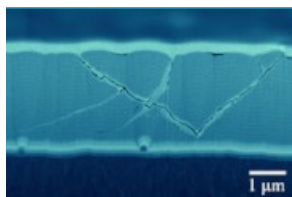
RESEARCHERS

THE RAI RECOGNISES THE RESEARCHER JOSEP M. FONT FOR HIS SCIENTIFIC CONTRIBUTIONS IN ROBOTICS



The researcher Dr **Josep Maria Font**, director of the Biomechanics Division of the Research Centre for Biomedical Engineering (**CREB UPC**), has been honoured with one of the young researcher awards from the Royal Academy of Engineering of Spain (**RAI**), for the **ABLE project**, a **robotic exoskeleton** to assist in walking and rehabilitation of people with spinal injuries, and for his contributions to the robotics field. [Read more](#)

OUR TECHNOLOGICAL CAPABILITIES



MATERIALS TECHNOLOGIES: FUNCTIONAL AND STRUCTURAL MATERIALS

We are able to analyse the structural integrity, reliability and mechanical behavior at different temperatures of all materials. We are also able to implement surface modification techniques and to develop new microstructures. [More information](#)

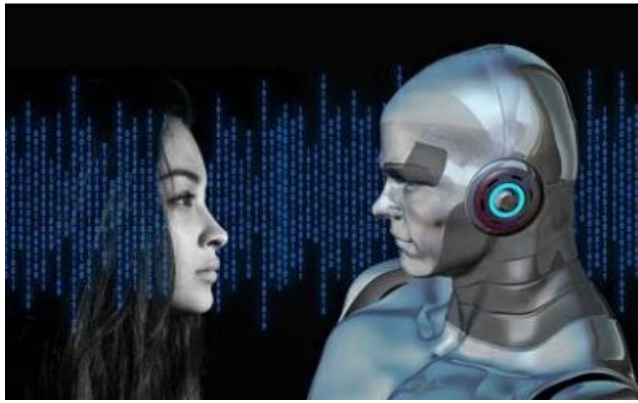
THIS MONTH ON THE CIT UPC BLOG...

CHATBOTS: The challenge of talking to machines

In 1966, Joseph Weizenbaum, a professor at the MIT, wrote a simple conversation program called Eliza, which simulated a Rogerian psychotherapist. Rogerian theory postulates that patients... [Read more](#)

CALENDAR





DID YOU KNOW...

MODELLING OF TRANSPORT IN THE FIRST RING OF THE BARCELONA METROPOLITAN AREA

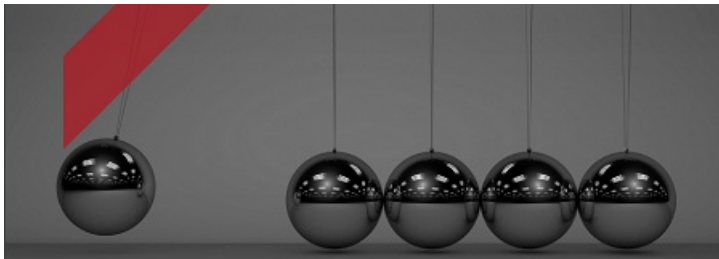
As part of the Virtual Mobility Lab (VML) project, [inLab FIB UPC](#) has generated the first in-depth multimodal model of Barcelona Metropolitan Area, which includes both the offering of all public transport modes, as well as private vehicles and the updated demand for mobility. The new model will support those who make decisions on mobility policies, transport operators and new companies that are developing mobility alternatives and wish to assess them. The VML is being undertaken in the framework of the [CARNET](#) initiative and in collaboration with [SEAT](#) and the [PTV Group](#).



DID YOU KNOW...

PUBLICATION OF A REPORT ON THE SOCIOECONOMIC IMPACTS OF PUBLIC UNIVERSITIES AND THE PUBLIC RESEARCH SYSTEM IN CATALONIA

The Catalan Association of Public Universities (ACUP) has published a report entitled [Socioeconomic impacts of public universities and the public research system in Catalonia](#). Through the activity of the eight Catalan universities that were analysed, their associated bodies, and companies considered to have ties to the Catalan system of public universities, as well as the spending of students and visitors, a total revenue of 4.545 M€ (12.4 M€ day) was made in Catalonia in 2015. Public Catalan universities contributed to the Catalan economy with 1.4% of GDP and generated almost 45,000 full-time jobs. [More information](#)



INFORMATION OF INTEREST

INDICATORS OF THE SPANISH SCIENCE, TECHNOLOGY AND INNOVATION SYSTEM 2017

The 2017 report on the “[Indicators of the Spanish Science, Technology and Innovation System](#)” has been published. The report deepens knowledge of the current state of activities at state, autonomous community and international level by presenting the main research, development and innovation indicators, to meet the information needs of all stakeholders in the Spanish Science, Technology and Innovation System.



 [Subscribe](#)

 [Recommend](#)

 [Download newsletter](#)

 [Cancel subscription](#)

■ **Contact us!**

We aim to be a bridge of contact for all those who work in research and innovation. Feel free to participate by sending your news, comments, needs or any other relevant information that you want to share.



www.cit.upc.edu



info.cit@upc.edu



+34 93 405 44 03

Membre de:

