

# Invitation

## “NANOelectromobility - SEVILLE 2012”

**27<sup>th</sup> of JANUARY 2012, at Engineering School, University of Seville, Spain**

The introduction of electric mobility requires addressing the technological, industrial, infrastructure and market challenges in order to enable the adaptation of the new electrical mobility sector to different regions in Europe.

In this context, on behalf of the ARTEMIS JU projects addressing nanoelectronics and embedded systems developments for electric mobility, we would like to welcome you to the “NANOelectromobility” public event which will take place at the at Engineering School, University of Seville on 27<sup>th</sup> of January 2012.

The goal is to present the activities related to electro mobility, renewables, infrastructure, the connection to Smart Grid/Internet and emphasis the involvement of the partners from different European countries and capture the interest of the public authorities, the industry, research and academia in Andalucia Region.

### KEY TOPICS

The “NANOelectromobility” public event will focus on technology based Innovation addressing the hot topics of the present and future EV industry value chains:

- Energy storage and management,
- Electric vehicle powertrain and bidirectional charging,
- Electric vehicle architecture,
- Embedded systems modules for electric mobility applications
- Communication technologies developments for electric mobility
- Vehicle integration with information and communication technologies
  - Vehicle to Vehicle (V2V)
  - Vehicle to Infrastructure (V2I)
  - Vehicle to Grid and Internet Connection (V2G+I)
- Internet of Energy Architecture
- Battery management systems and integration with the uni- and bi- directional charging modules
- Charging stations (AC and DC fast charging stations)
- Communication platforms and energy broker integration for electric mobility.

### TARGET AUDIENCE

This event is designed to bring together the public authorities, government policy makers and the technical experts from different European countries working in the field of the nanoelectronics and embedded systems, communications, automotive and electric energy utilities to address the technological, industrial, infrastructure and market challenges for electric mobility applications.

## PROGRAMME

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| 08:30 –<br>09:00 | Registration  |
| 09:00 –<br>09:30 | <p>Welcome &amp; Opening/ Bienvenida y Apertura</p> <p><b>Sr. Don Ramón González Carvajal</b> Vicerrector de Transferencia Tecnológica Universidad de Sevilla /Vice-chancellor Technologic Transfer</p> <p><b>Sr. Don Marcos Toscano</b> Director General Adjunto/ Deputy Manager GPtech</p>  |
| 09:30 –<br>10:00 | <p>Electromobility: Oportunities and threats /Electromovilidad: Oportunidades y Amenazas del sector</p> <p><b>María José Collinet</b> Directora de Renovables e Infraestructura energética/Renewable Management Agencia Andaluza de la Energía</p> <p><b>Germán López Lara</b> Director Técnico de energía y Medioambiente/Technical Officer energy and enviroment CTA</p> <p><b>Raul García Esparza</b> Departamento de Aeronáutica, Transporte y Seguridad. Dirección de Mercados Innovadores y Globales /Aeronautics, Transport and Security Department Directorate of Global Innovative Markets.</p> <p><b>Arturo Pérez de Lucía</b> Director Gerente / Manager Director AEDIVE</p> |
| 10:00 –<br>10:30 | <p>Powertrain electrification and mass production of EVs. Keynote speech</p> <p>Jean-Luc Maté, Vice President Strategy &amp; Technology, Continental Automotive, France</p>   |
| 10:30 –<br>11:00 | <p>Towards zero emissions mobility: Market vision and new industry trends. Keynote speech</p> <p>Francisco Carranza, Manager External Affairs Europe, Renault-Nissan Alliance, France</p>   |
| 11:00 –<br>11:30 | Coffee/Tee Break + Poster Session   |
| 11.30 –<br>11:50 | <p>Electric Vehicle: Zero Emission</p> <p>Ken Lam, Duracar Holding BV, Nederland</p>  |
| 11:50 –<br>12:10 | <p>Verification technologies for automotive applications</p> <p>Colin O'Halloran, Digital Systems Integrity , QinetiQ, UK</p>   |
| 12:10 –<br>12:25 | <p>POLLUX: Electronic &amp; Electric Architecture activities</p> <p>A. Harrar, Peugeot, France</p>  |
| 12.25 –<br>12:40 | <p>Key Technologies for the Electric Vehicle – market vision and new industry trends</p> <p>Gereon Meyer, VDI/VDE-IT, Germany</p>   |
| 12.40 –<br>13:00 | <p>Co-Simulation Tool chain for Modeling Vehicle System Performance, Stability &amp; Efficiency, for EV with Multiple e-Machines</p> <p>Stephen Jones, AVL LIST GMBH, Austria</p>   |

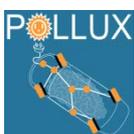
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|------------------|---|
| 13:00 –<br>13:45 | LUNCH + Poster Session  |
| 13:45 –<br>14:05 | How to shape the future of electric mobility? From electric motor to communication and electric infrastructure.<br>Randolf Mock, SIEMENS, Germany |
| 14:05 –<br>14:25 | Nanoelectronics and Embedded Systems from Electric Vehicles to Internet of Energy<br>Ovidiu Vermesan, SINTEF, Norway                              |
| 14:25 –<br>14:45 | Communications technologies: From CAN Partial Networking to Ethernet.<br>Peter Hank, NXP, Germany   |
| 14:45 –<br>15:05 | Automotive networking, the symbiosis of FlexRay and Ethernet.<br>Harald Gall, austriamicrosystems, Austria  |
| 15:05 –<br>15:30 | ARTEMIS JU: European Cluster projects and Project synergies.<br>Eric Schutz; Executive Director ARTEMIS   |
| 15:30 –<br>16:00 | COFFEE BREAK NETWORKING + Poster Session  |
| 16:30            | Closing   |



The **ARTEMIS Joint Undertaking (JU)** is a public-private partnership focusing on Embedded Computing Systems that brings together the ARTEMIS member States, the European Union, and ARTEMISIA, (non-profit Industrial Association representing European R&D actors). The ARTEMIS JU was set up in February 2008 and will manage and co-ordinate research activities through open calls for proposals through a 10-year, € 2.5 billion research programme on Embedded Computing Systems.



The **ENIAC Joint Undertaking (JU)** is a public-private partnership for the promotion of nanoelectronics. It brings together ENIAC Member States, the European Commission and Aeneas (an association representing R&D actors in this field). ENIAC has set itself the goal of strengthening and extending Europe's position in the global competition in the micro- and nanoelectronics arena. ENIAC was founded in February 2008. It will allocate grants through to the year 2013 and execute the projects selected for funding till December 31, 2017. The total value of the R&D activities generated upon its conclusion is estimated at € 3 billion.



**ARTEMIS project POLLUX** (Process Oriented Electronic Control Units for Electric Vehicles Developed on a multi-system real-time embedded platform) is a €33m collaborative initiative, in partnership with 36 partners, from 10 European countries that has as aim to reduce the development time and cost of the complex, high reliability mechatronic systems needed for the mass deployment of electric vehicles through the creation of a common reference architecture for distributed embedded systems, including real-time middleware , and multicore hardware and in-vehicle communication.



**ARTEMIS project IoE** (Internet of Energy for Electric Mobility) is a €45m cross-European electro mobility initiative, in partnership with 40 partners, from 10 European countries representing the semiconductor and electronics industry, electric utilities, electric car manufacturers, municipalities, universities and research institutes. The project develops hardware, software and middleware for seamless, secure connectivity and interoperability achieved by connecting the Internet with the energy grids. The application of the IoE will be the infrastructure for the electric mobility.



**ENIAC project E<sup>3</sup>Car** (Energy Efficient Electrical Car), consists of 33 partners from 11 European countries incurring total R&D costs of €44m. E<sup>3</sup>Car applies nanoelectronics as a key enabling technology to innovate, demonstrate benefits and then promote standardization by influencing its Europe-wide consortium. In this context the project is addressing the development of highly efficient electrical vehicles, the battery control, the high-voltage components (IGBTs, high-voltage FETs) and the architectures and subsystems for the electronics of electrical vehicles.



## **VENUE**

Engineering School Seville, Spain.

Escuela Superior de Ingenieros

Avda Camino de los Descubrimientos S/N

41092 Isla de la Cartuja

Sevilla, Spain

## **MAP**

<http://aplicaciones.esi.us.es/english/>

[http://aplicaciones.esi.us.es/english/ubicacion\\_etsi](http://aplicaciones.esi.us.es/english/ubicacion_etsi)

## **WORKING LANGUAGE**

The working language of the event will be English.

## **ACCOMODATION**

BARCELÓ RENACIMIENTO

<http://www.barcelo.com/BarceloHotels/en-GB/Hotels/Spain/Seville/Renacimiento/Home.htm>

Avd. Camino de los Descubrimientos, Isla de la Cartuja, Sevilla

Name for booking: GPtech Technical Meetings

Price: 79€ double room/single room

**For more information about accommodation or further details, please contact:**

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