

# LEVS

## 1<sup>st</sup> World Light Electric Vehicle Summit

**Barcelona, 20<sup>th</sup> & 21<sup>st</sup> September 2016**

Tuesday, 20<sup>th</sup> September 2016

*8.00 Registration & Welcome Coffee*

9.00 Opening Session - Worldwide Context

LEVS' Mission and Goals

Vergels Frédéric, Electri-city.mobi, BE

Welcome in Barcelona!

Angel Lopez, Plataforma LIVE - Barcelona city, ES

Legal Framework for Light Electric Vehicles

Tbd., European Commission, BE

Small Electric Vehicles – A New Taskforce by IEA Hybrid & Electric Vehicle TCP

Stephan.Schmid, DLR, International Energy Agency, DE

Setting the Scene

Annick Roetyneck, AVERE, the European Association for Electromobility, BE

Sustainability, a Key Objective for the Motorcycle Industry

Tbd., ACEM, the European Association of Motorcycle Manufacturers, BE

On-going Projects Regarding E-bikes and Market Profile

Manuel Marsilio, Confederation of the European Bicycle Industries, BE

What's Happening in the Rest of the World?

Chris Cherry, the Light Electric Vehicle Education & Research Initiative -  
University of Tennessee-Knoxville, US

The 2025 Electric Vehicles Horizon

Valerian Croitorescu, University Politehnica of Bucharest, RO

*11.00 Coffee Break*

11.20 Lecture A1 - Market Overview: Feed-back of Existing Actions & Perspectives for the Future

Cité Lib by Ha:mo : first feed-back

Rody El Chammas, Toyota Motor Europe, FR

Learning from the Light Electric Vehicles from the Tour de Sol Era

Urs Muntwyler, Berner Fachhochschule, CH

Four Years of Barcelona SMARMOTO Challenge

Emilio Hernandez, Universitat Politècnica de Catalunya - BarcelonaTech, ES

Electric City Transport - Challenges of New Urban Mobility Models through the Development of LEVs

Francesco Edoardo Misso, T-Bridge, IT

Horizon 2020 Opportunities for Light Electric Vehicle R&D Projects

Yoram Bar-Zeev, Beacon Tech, IL

13.00 *Lunch*

14.00 Parallel Sessions

B1 - Technology Overview

B2 - Introduction Scenario

Lecture B1 - Technology Overview: State of the Art, Challenges, Point of View and Vision

The Elbibi Project

Bart de Wert, ELBIBI, NL

Light, Long Range, Long Life, Low Voltage Batteries for Electric Scooters

Baltasar Lopez, EURECAT, Centre Tecnològic de Catalunya, ES

RESOLVE - New Vehicle Architecture for Urban Mobility

Giovanni Costa, Ricardo Motorcycle Germany, DE

SCUTUM - First Electric Scooter that Send E-mails?

Emilio Hernandez, Universitat Politècnica de Catalunya, ES

Lecture B2 - Introduction Scenario: Best Practices, Lessons Learned and Outlook

Fostering the Use of E-scooters in Urban Areas - The "ELECTRA" Project Experience in Murcia

Jaime Ruiz Huescar, Local Energy Agency of Murcia City Council, ES

Electric Bikes: Power your Commute  
Zach Henkin, Drive Oregon, US

Delivery of Goods and Services in European Urban Areas by Electric Bicycles  
Emilio Gonzalez, ITENE, ES

Share your Bicar  
Hans-Jörg Dennig, Zurich University of Applied Sciences, CH

### 15.20 *Coffee Break*

### 15.40 Parallel Sessions

C1 - Technology Overview (cont.)

C2 - Introduction Scenario (cont.)

Lecture C1 - Technology Overview: State of the Art, Challenges, Point of View and Vision (cont.)

VMS Balancing System  
Ricardo Lozano, VMS, ES

Next Generation Propulsion Architectures Based on Fully Integrated GEM In-wheel Motors  
Simon Mandelj, GEM Motors, SI

Serial Hybrid Drive in Bike  
Steffen Braune, Harz University, DE

Detailed Analysis of State of the Art Battery Systems  
Matthias Kuipers, Forschungszentrum Jülich, DE

Lecture C2 - Introduction Scenario - Best Practices, Lessons Learned and Outlook (cont.)

How to Prove Autonomous Light Electric Vehicles Are Safe Enough?  
Tom Jansen, Ricardo, NL

Challenges and Opportunities for Improving the Safety of Lightweight Vehicles  
Huw Davies, Coventry University, UK

New Rules in 2017 for Lithium Batteries and Electric Vehicles in Road, Sea and Air Transport Modes  
Marco Ottaviani, IT

The Speed Pedelec: An Alternative for the Belgian Commuter?  
Bram Rotthier, University of Leuven, BE

17.00 Poster Session

*With Networking Drink*

Technology to Manage Shared Light Electric Vehicle Fleets

Carly Keller, Scoot Networks, US

Concept of Multi-Purpose Mobility for Wheelchair

Junichi Yasu, Accurate Systems, JP

Portable Range Extender

Valerian Croitorescu, University Politehnica of Bucharest, RO

The Perroque<sup>®</sup>, Today's Electric Boat for the Future

Carl Henry Perrochat, Perroque, FR

A Systems Approach to Urban Mobility

Hugo Gabele, Hochschule Esslingen, CH

GEM In-wheel Motor: High-performance Direct Drive for LEV Based on Multiphase Motor Design

Raphael Mutter, GEM Motors, SI

Connecting Vehicles, the Billion Nobody is Talking About!

Kristjan Maruste, Comodule, EE

The Electrical Bicycle as an Always Connected Service Platform

Juan Pedro Rodriguez Nieto, UUALK, ES

Creation of a Specific Photovoltaic Panel for an Ultra-light Electric Car Focused on Urban Transport

Gil Sanchez Marina, University of Malaga, ES

Type Approval, Homologation and Certification of LEV and its Battery Systems in Europe, USA, China, Korea and Japan

Volker Blandow, TUV SUD, DE

Integration of Hybridized Balancing with PLC Communications over the High Voltage DC Bus on an EV Battery

Jose Manuel Torrelo Ponce, ITE, ES

Noise Characterization of the High Voltage Line on Electric Vehicles

Angel Ros, ITE, ES

Battery Modularity & Urban Mobility

Maurice Van Giezen, Cleantron Cleantech Batteries, NL

Fuel Cell Powered Work Bicycles - A Feasibility Study  
Anders Lundblad, Mälardalens University, SE

Direct Yaw-Moment Control for Motor-Wheel Driven Electric Vehicle Based on Model  
Predictive Control  
Houyu Yu, Wuhan University of Technology, CN

Where Is the Balance Between Performance and Energy Efficiency?  
Santiago Meier, Sunbike Electric, ES

Integrated Propulsion System  
Valerian Croitorescu, University Politehnica of Bucharest, RO

Algorithms for Lithium-based BMS: Guidelines  
Carlos Blasco, Instituto Tecnológico de la Energía, ES

Overview of Requirements for an Electronic Drive for Traction Applications  
Alexis Rais, Sael, IT

Pure Electric E-Bike Clothing - Protective Apparel  
Marcello Stampacchia, Pure Electric, IT

Lighten'up: Weight is the Key!  
Gaël Lavaud GazelleTech FR

Motor Sound Quality Augmentation to Support Driver Involvement and Enhance  
Product Image  
Tbd, Ricardo, UK

The SPRINT Project  
Paola Astegiano, University of Leuven, BE

20.30 - ... [Gala Dinner](#)

## Wednesday 21<sup>st</sup> September 2016

8.30 *Registration & Welcome Coffee*

9.00 Lecture D1 - How to Integrate LEVS Into Urban Transport? Policies & Infrastructure

How a New Electric / Electronic Architecture Would Unlock the Features Expected by the Users

Charles Boulanger, Ricardo, UK

An Open Source and IKEA-like Vehicle, Ready for the Market

Ricardo Paramo, Evovelo Green Driving, ES

Market Development Strategies in Berlin: How Can Innovation Policy Lead to New Urban Transport Solutions with LEVs?

Martin Soelle, Berlin Agency for Electromobility, DE

Dutch Research on Business Models for Light Electric Vehicles in City Logistics

Walther Ploos van Amstel, Amsterdam University of Applied Sciences, NL

The ESPRIT Project and its Electric Vehicles for Car Sharing Operations

Schwieger Bodo, Team Red, DE

KURT: A Novel Scalable and Modular E-vehicle Platform for Cost-efficient Urban Mobility

Pieter Van Schaik, Altreonic, BE

11.00 *Coffee break*

11.20 Lecture E1 - Environmental Aspects: Energy Efficiency

Driving Cycle Development of Small Electric Vehicles of European Community Classes of L1e to L6e with Speed of up to 45km/h

Dennis Saul, University of Applied Sciences and Arts Hannover, DE

Energy Requirements for L-category Vehicles (Specifically Three-wheelers and Quadricycles)

Allan Hutchinson, Oxford Brookes University, UK

A Design Methodology for Hydrogen Fuel Powered City Vehicles in Rear Impact Collisions

Michael Orłowski , Coventry University, UK

Looking Ahead to 2040: How the Use of Hydrogen Will Evolve and Grow

Jose Luis Crespo, Plug Power, US

12.40 Closing Session - Strategies for the Future

We Are Leaving in a World of Opportunities  
Rune Haaland, EVUnion, NO

LEVS Message to the COP 22  
Silvia Brutschin (tbc.), Twike, DE

What's next?  
Vergels Frédéric, Electri-city.mobi, BE

13.15 *Lunch*

14.45 - ... LEVs Tests in Barcelona & Press Conference

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