

FIRST WORKSHOP

# > FUTURE POWERTRAINS

ROVERETO 15-16 FEBRUARY 2018 POLO MECCATRONICA

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## INN4MECH 2018

Inn4Mech, at it's first edition, is organized by **Polo Meccatronica**, Rovereto, in partnership with some of the **most important industries of the mechatronic sector.** 

**Inn4Mech** addresses industrial researchers, technicians, operation managers of large companies and SME's as well as academics providing **highlights on technical novelties**, **future technologies**, and it is conceived as a **platform for matchmaking networking** for industrial **R&D projects**.

Each edition will focus on a different topic concerning mechatronics and Industry 4.0 and host scientific and cutting edge innovation speeches, made by primary academic and industrial speakers.

The upcoming event will take place on **February 15th and 16th 2018 in Rovereto**, in the framework of **Polo Meccatronica**, **Teatro Zandonai** and the modern art museum **"MART"**.

The central topic of **Inn4Mech 2018** will be **Future Powertrains** for automotive and off road applications, focussing on powertrain optimization, innovative control, sensing technologies, modelling, simulation and communication technologies.

#### **AGENDA**

Inn4Mech hosts three plenary sessions focused on:

scientific scenarios and future trends in powertrain public funding programmes and initiatives for R&D and innovation in the mechatronic sector

Inn4Mech hosts four technical workshops, each alternating academic studies and industrial experiences.

 $\textbf{A summary round table} \ will \ close \ the \ event \ focussing \ on \ workshop \ highlights.$ 

Networking sessions will be organized to foster the establishment of R&D partnerships among participants. On February 16 optional guided visits to cutting edge EU funded **ProM Laboratory** will be scheduled.

CONTACTS

info@inn4mech.eu www.inn4mech.eu

## Day I 15 FEBRUARY

#### 9.00 - 10.00

➤ Registration and Coffee-Break

#### 10.00 - 10.45

> Morning Plenary Session - **Hybrid Powertrains** 

Speaker	Organisation	Title
Simona Onori	Stanford University www.stanford.edu	Hybrid Powertrains

#### 11.00 - 13.00 Parallel Workshops

> Workshop Option 1 - Materials and Processes

Speaker	Organisation	Title
Ho Chaw Singh	NTUitive www.ntuitive.sg	Design for Additive Metal Manufacturing
John Walker	University of Southampton www.southampton.ac.uk	Influence of Urban Drive Cycles on the Durability of Lightweight Engine Materials
Lorenzo Palmieri	New Olef www.newolef.com	Low-pressure Process Development of an Alloy Frame with Internal Cores
Alessandro Leverano	FCA Group www.fcagroup.com	World Class Manufacturing: towards Manufacturing Competitiveness

#### > Workshop Option 2 - Control & Automation, Mechatronics, Al

Speaker	Organisation	Title
Piero Altoè	NVIDIA www.nvidia.it	Deep Learning Applications for Industry and Automotive
Richard Burke	University of Bath www.bath.ac.uk	Dynamic Control of Powertrain

#### > Workshop Option 2 - Control & Automation, Mechatronics, AI

Speaker	Organisation	Title
Sergio Savaresi	Politecnico di Milano www.polini.it	Electric Powertrains for Small Vehicles
Roberto Mati	AITRONIK	Driving, Control and Safety on a Unique Platform. A Feasible Scenario?

#### 13.00 - 14.30

> Business Lunch

#### 14.30 - 15.15

**>** Afternoon Plenary Session - **Powertrains in 5 years** 

Speaker	Organisation	Title
Heribert Reiter	<b>AGCO</b> www.AGCOcorp.com	Agricultural Future Powertrains

#### 15.30 - 18.00 Parallel Workshops

> Workshop Option 1 - Simulation and Modelling

Speaker	Organisation	Title
Alfonso Ortalda	Enginsoft www.enginsoft.com	Software Technologies for Simulation (3D)
Giulio Camauli	Siemens www.siemens.com	Software Technologies for Testing (1D)
Egemen Ergene Jason Stanley	Dana Incorporated www.dana.com	Transformation from Traditional Design and Simulation towards Advanced Technologies
Giuseppe Miccoli	CNR IMAMOTER www.imamoter.cnr.it	Adaptive Order FEM Approach to Vibroacoustic Simulation in the Automotive Field
Massimo Martelli	CNR IMAMOTER www.imamoter.cnr.it	Amesim-Modelica Integration for Off-Road Vehicle Modelling

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## Day I 15 FEBRUARY

#### ➤ Workshop Option 2 - Electronics, sensors and ICT

Speaker	Organisation	Title
Federico Brivio	<b>Bosch</b> www.bosch.com	Way to Electrification - The Bosch Approach
Giulio Bondani Gianluca Bacchiega	IRS - Ingegneria, Ricerca, Sistemi www.irsweb.it	Creating an Embedded Digital Twin: monitor, understand and predict Device Health and Failure
Alfredo Maglione	Optoelettronica Italia www.optoi.com	New Sensors Technologies for Smart Powertrain
John Favaro	Intecs Solutions www.intecs.it	Current Initiatives in Functional Safety for Automotive Electronics and Sensors

#### 18.30

➤ Aperitif at the MART – Modern Art Museum with the possibility of one2one meetings and/or guided tour to the exhibition "Magic Realism"

#### 20.00

Networking Gala-Dinner at the MART – Modern Art Museum

## Day II 16 FEBRUARY

#### 8.45 - 9.30

> Registration and Coffee-Break

#### 9.30 - 11.30

Plenary Session - R&D & Innovation programmes and initiatives: EU, national, regional schemes

Speaker	Organisation	Title
Wim De Kinderen	Vanguard Initiative www.s3vanguardinitiative.eu	Towards the Right Funding Mix to realize Demonstration Infrastructures in the EU
Antonio Carbone	APRE www.apre.it	EU Funding Programmes and Initiatives for R&D and Innovation projects in Mechatronics and Industry 4.0
Leda Bologni	Cluster Fabbrica Intelligente www.fabbricaintelligente.it	Italian National Funding Programmes and Initiatives for R&D and Innovation Projects in Mechatronics and Industry 4.0
Elisabetta Sovilla	Provincia autonoma di Trento www.provincia.tn.it	Regional Funding Programmes and Initiatives for R&D and Innovation Projects in Mechatronics and Industry 4.0

#### 11.30 - 12.45

➤ Round table Session with the Technical-Scientific Committee and the Speakers

#### 13.00

> Business Lunch

#### 14.00 - 16.00

> Expo and Visits to the ProM Laboratory - www.promfacility.eu

## **PATRONAGES**







































## **PATRONAGES**













### Venues

#### Teatro Zandonai >

Plenary sessions on February 15th





Mart – Modern Art Museum >
Networking Gala-Dinner on February 15th

#### Palazzo dell'Istruzione University of Trento >

Workshop sessions on February 15th





#### Polo Meccatronica

Plenary sessions, networking lunch and ProM visits on February 16th