



**POLITECNICO
DI TORINO**



*Ministero degli Affari Esteri
e della Cooperazione Internazionale*

12-13

NOVEMBER **2018**

IoT technologies
applications and potentials

**6th Korea-Italy
S&T Forum**

Politecnico di Torino

Castello del Valentino

Viale Mattioli 39, 10125 Torino

November 12th

FORUM DAY SALONE D'ONORE

9.00 **Registration**

10.00 **Opening remarks**

Moderator: Francesca Verga
Vice Rector for International Affairs

Guido Saracco, Rector, Politecnico di Torino
Vincenzo De Luca, Director-General for the Promotion of the Italian Economic System, MAECI

Jong-hyun Choi, Ambassador of the Republic of Korea In Italy

Giuseppe Valditara, Head of the Department of Higher Education and Research, MIUR

Song Kyung Hee, Director General International Cooperation Bureau, MSIT

Vincenzo Ilotte, President, Camera di Commercio

11.00 **Coffee break**

11.45 **Byoungyoun Cho**, Deputy Director, Europe & Africa Cooperation Division, MSIT

Emilio Campana, Director of the Department of Engineering, ICT and Technology for Energy and Transport, CNR

Jong-Deok Kim, Director of the Office of Global Programs, NRF

Alberto Barberis, President of the Turin Young Entrepreneurs Association, Unione Industriale

Paola Pisano, Deputy Mayor of innovation and smart city, Città di Torino

13.00 **Group photo**

13.15 **Lunch**

14.30 **Plenary Session – Enabling Technologies**

16.30 **Chairman:** Marco Mellia

Enrico Macii, Politecnico di Torino
“Industry 4.0: Challenges, Opportunities and Perspectives”

Marco Cusinato, REPLY
“Integrating IoT enabling technologies for the factory of the future”

Andrea Onetti, STMICROELECTRONICS
“Sensors accuracy to drive pervasion of electronics in Industry, Automotive and Personal Electronics”

Paolo Calefati, Prima Industrie S.p.A.
“Mechatronics solutions in additive manufacturing”

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8.30 **Registration**

MORNING PARALLEL SESSIONS

09.00 Parallel Session 1

12.30 **Smart Car (Stanza della Caccia)**

Chairwoman: Barbara Caputo

Antonio Casu, Italdesign

“Strategy and competences to drive the future”

Alberto Pisoni, GM

“The paradigm shift of automotive in the IoT world. A practical example”

Barbara Caputo,

IIT Milano- Politecnico di Torino

“Deep vision and autonomous driving”

Roberto Gavazzi, TIM *“IoT and Smart Roads”*

Alberto Zanella, CNR

“Wireless technologies for connected vehicles”

Hyunchul Shim, KAIST

“Development of a Machine-learning Enabled Self-Drivig Car”

Seok-Cheol Kee, Chungbuk National University

“Towards Fully Autonomous Driving : Research Activities at Smart Car Resarch Center of Chungbuk National University”

Aechol Kim, SOSLAB

“Hybrid Lidar Technology Introduction”

09.00 Parallel Session 2

12.30 **Health Care (Stanza dello Zodiaco)**

Chairman: Minkyu Je

Federico Bussolino, Università degli Studi di Torino
“A preclinical and translational platform to personalise the clinical management of thoracic cancers”

Giovanni Blandino, Istituto Nazionale dei Tumori Regina Elena
“Circulating non-coding RNAs: novel biomarkers for cancer diagnosis and therapy”

Alessandro Angelini, Università Ca' Foscari Venezia
“Library-based display technologies for the molecular evolution of innovative therapeutics”

Francesco Baldini, CNR

“POCT, intracellular nanosensing and optics: a successful synergy”

Eros Pasero, Politecnico di Torino

“ECG WATCH: A Wearable Smart Device to Monitor Multiple Vital Parameters”

Minkyu Je, KAIST *“Integrated Circuits and Microsystems for Emerging Biomedical Applications”*

JeongGil Ko, Ajou University

“Embedded/Mobile Systems for Improving Clinical Applications”

Kyuhwan Jung, Vuno Inc.

“Data-driven Approaches for Medical Image Analysis and Their Clinical Applications”

12.30 **Lunch**

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AFTERNOON PARALLEL SESSIONS

14.30 [Parallel Session 3](#)

18.00 **[Smart Manufacturing \(Stanza della Caccia\)](#)**

Chairman: Paolo Calza

Paolo Fino, Politecnico di Torino
"Additive Manufacturing @ Polito: Strategic approach and future prospect"

Paolo Calza, AVIO AERO *"AvioAero Experience on Additive Manufacturing"*

Oscar A. Peverini, CNR
"Additive Manufacturing of Microwave Components"

Young Jae Jang, KAIST
"Artificial Intelligence (Deep Q-learning) based Automated Material Handling System (AMHS) Design and Development for Semiconductor FAB and Flat Panel Display Production Line"

Duck Young Kim, UNIST
"The Ulsan Modular Factory Testbed"

Hyun Kim, ETRI
"Factory as a Service using ICT-enabled Smart Factory"

Ki-Deok Kweon, TSPG International Inc
"The Logistic automation system in the warehouse of smart factory"

14.30 [Parallel Session 4](#)

18.00 **[Environment and Energy \(Stanza dello Zodiaco\)](#)**

Chairman: Song Chong

Girolamo Di Francia, ENEA
"IOT for Urban Innovation – Air Heritage Project"

Federico Vitali, FAAM Lithops
"Seri-FAAM lithium battery project: from the cradle to the cradle through the grave"

Claudio Lanciotti, MANZ ITALY
"Lithium ion cell structured by positive and negative electrodes, laminated together ONTO functionalized polyolefin separators. A solution for EV Battery application"

Paolo Menesatti, CREA
"Energy in Agriculture: innovations for sustainability"

Song Chong, KAIST
"Human Mobility Patterns: Measurements, Models and Implications"

Jeongyeup Paek, Chung-Ang University
"Low-power and Lossy Wireless Network for Smart Grid and IoT"

Kwang Bum Lee, Data Alliance Inc.
"IoT-based Environment Monitoring and Energy Management"