

# The 4<sup>th</sup> Industrial Revolution Forum in ULSAN

## (Future of Production and Workforce by Transforming Manufacturing Industrial Cities)

### Overview

**Date:** 6<sup>th</sup> – 7<sup>th</sup> of November., 2018

**Venue:** UNIST Kyungdong Hall, Main Administration Building

**Theme:** Future of Production and Workforce by Transforming Manufacturing Industrial Cities

### Objectives

- To establish a platform sharing ideas, policies, best practices and experiences transforming manufacturing cities to sustainable and smart cities
- To build global showcase for manufacturing city transformation

### November 6th (Tuesday)

Time	Session
9:00 ~ 9:30	<b>Registration</b>
09:30 ~ 10:00	<b>[Opening Ceremony]</b>
	Mooyoung Jung (President, UNIST)
	Chulho Song (Mayor, Ulsan Metropolitan City)
	Government/ Congress
10:00 ~ 12:00	<b>[Plenary Speeches]</b> The 4th Industrial Revolution and digital transformation are widely recognized as the key enablers of achieving a sustainable society. However, traditional industrial cities heavily dependent on manufacturing have been slow in adoption of new technologies. We need to transform production toward greater economic, social and environmental sustainability. We will learn how academia, industry, society and government are prepared for these challenges and share a few solutions for the manufacturing oriented cities.
	<b>“Learning Through Testbeds at the Industrial Internet Consortium (IIC)”</b> Richard Mark Soley (Chairman & CEO, Object Management Group, General Secretary of IIC)
	<b>“Smart Production Systems in POSCO”</b> In-Hwa Chang (President, POSCO)
	<b>“World Manufacturing Forum -Innovation and Development in the Manufacturing Sector ”</b> Marco Taisch (Professor, Politecnico di Milano & WMF Scientific Chair)
	<b>“Big Data and workforce for the future”</b> Sang-Kyun Cha (Founding Director & Professor, Big Data Institute, Seoul National University)
	<b>[Round Table Discussion]</b> Moderator: Yoo-Seong Song (Professor, University of Illinois at Urbana-Champaign)

12:00 ~ 13:15	<b><u>Lunch and Networking</u></b> <b>Special Lecture “ 3-D Printing and its application” John Hart (Professor, MIT) (TBD)</b>
13:15 ~ 14:30	<b>[Session 1]</b> <b>Transformation Initiatives – Future of Production</b> Moderator: Young-Sup Joo (Professor, Korea University & Former Minister of SME)  Rapid change of technology affects manufacturing industry in the way of globalization, new job skills, infrastructures and financing. This session discusses metrics to measure readiness of the transformation and case studies.
	<b>Keynote “Joining Forces toward European Industrial Data Space H2020 Project Boost”</b> Dimitrios Kyritsis (Professor, EPFL, ICT for Sustainable Manufacturing)
	<b>Keynote “Future of Production Innovation Initiatives in Korea”</b> Young-Sup Joo (Professor, Korea University & Former Minister of SME)
	<b>Keynote “Innovation and Development For SME’s in the Labs Network Industrie4.0”</b> Dominik Rohrmus (Siemens and LNI4.0)
	<b>Keynote “Development of I4.0 and Smart Industry Readiness in Singapore”</b> Fabian Tan (Regional Director, Singapore EDB)
14:30 ~ 14:45	<b>Break</b>
14:45 ~ 16:15	<b>[Session 2]</b> <b>Transformation Initiatives – Future of Workforce</b> Moderator: Han-Kyun Woo (Professor, UNIST)  Digital transformation brings fear on increasing job displacement and skill mismatches, without clear plans to capitalize job creation opportunities. This is an opportunity sharing any examples of successful training, re-skilling or upskill programs. Central and local government policies toward maximizing opportunity are to be discussed
14:45 ~ 15:05	<b>Keynote “ Future of Production Workforce”</b> World Economic Forum
15:05 ~ 16:15	<b><u>Panel Discussion:</u></b> Roger Zbinden (Swiss Business Hub Korea, Swiss), Nampuraja Enose (Industry 4.0 Leader, Advanced Engineering Group of Infosys, India) Alexander Renner (Science counselor, Embassy of Germany, Germany) Sung-min Hong (Division head, STEPI (Science and Technology Policy Institute), Korea) (TBC) Jun-young Lee (Professor, University of Seoul, Korea) (TBC)
16:15 ~ 16:30	<b>Break</b>
16:30 ~ 18:00	<b>[Session 3]</b> <b>Initiatives on Global Industrial City Innovation Model</b> Moderator: Gihyoung Cho (Professor, UNIST).  Transformation of manufacturing city can be achieved by reinforcing international cooperation with global industrial cities and private companies, promoting investment, and accelerating application of technologies. A few models will be shared and ideas are to be developed to promote smart industrial city model. At the same time, building a platform by utilizing a global innovation network will be discussed.
16:30 ~ 16:50	<b>Keynote “Innovation Cluster of Industrial City Transformation Efforts in Ulsan”</b> Dong-Hyung Cha (President, Ulsan TechnoPark)
16:50 ~ 18:00	<b>[Panel Discussion]</b> Luciano Cunha de Sousa (Director, Brazil Ministry of Foreign Trade and Services), David Romero (Professor, ITEM, Mexico) (City of San Diego, USA)
18:00 ~ 18:15	Closing Comments
18:15 ~	<b>Networking Dinner</b>

**November 7th (Wednesday)**

**Industry Tour (Optional) 9:00- 12:00**

Course A: Hyundai Automotive & Hyundai Heavy Industry

Course B: POSCO

**Special Session on Smart Mobility (Optional) 10:30 – 18:00**

**(Joint project of Ulsan Metropolitan City, San Diego, UNIST, and UCSD)**

Time	Contents	Speaker (Presentation)
10:30~11:00	Receipt	
11:00~11:05	Opening Ceremony	Moderator
11:05~11:30		UNIST President, UCSD Official, Ulsan Mayor, City of San Diego official (Opening Address and Congratulatory Address)
11:30~12:00	Keynote Speech	Professor Sujit Dey, UCSD (STIP introduction and development strategy)
12:00~13:00	Lunch	
13:00~13:20	Smart Mobility Policy	Government departments (Policy of Ministry of Land, Infrastructure and Transport)
13:20~13:40		David Graham, City of San Diego (City of San Diego Autonomous Driving Policy)
13:40~14:00		Ulsan City, Traffic Policy Division (Autonomous vehicle test bed infrastructure construction policy)
14:00~14:20	Break Time	
14:20~14:40	Smart Mobility related technology	Professor Xinyu Zhang, UCSD (Cooperative Research Project, UCSD contents)
14:40~15:00		Professor Kim Hyo-il, UNIST (Cooperativet research project UNIST contents)
15:00~15:20		External experts, Research Institute
15:20~15:40		External expert, Related Company (5G infrastructure)

15:40~16:00	Break Time	
16:00~16:20	Smart Mobility related infra and system	External experts, Hyundai Motors (Hyundai Motors Growth Strategy in the Age of Smart Mobility)
15:20~16:40		CEO, Lee Seok Woo, PentaSecurity System (Security solution for smart car)
16:40~17:00		Related Professionals (Key material for vehicle lightweighting)
17:00~17:30	Panel Discussion	Commercialization of autonomous vehicles
17:30~18:00	Finishing and Networking	