





#### European Forum

# New Academic – Industry Higher Education Models for Industrial Engineering and Management: Towards the Foundation of a University – Industry European Graduate School

G7 Event - 'Palazzo della Provincia' - Lungomare N. Sauro, 29 - BARI **May 20**th **2017** 

# Under the high patronage of the European Parliament

## Rationale and Purpose

The ongoing fourth industrial revolution, also known as Industry 4.0, is pervading world-wide economies of most industrialized areas and will play a strategic role for the European economic growth and jobs' creation.

The re-industrialization process of Europe refers to a strategic industrial policy as well as to coordinated actions to add value to investments both in technologies and in human capital.

As far as the human capital is concerned, a critical mass of knowledge workers in Industrial Engineering and Management (IE&M), from the shop floor to the research & innovation level, is required to benefit from the great, mostly unexplored, potentialities of I4.0 technologies. However, an increasing mismatch between industry demand of talented/skilled workforce vs. the offer of IE&M education is observed in the labor market in Europe.

Qualitative and quantitative knowledge gaps in IE&M workforce are observed. Leadership capability, intellectual property and startup generation, KETs' exploitation, digital factories design and operation are major qualitative fields of knowledge gaps. Workforce aging, as a consequence of the aging of the European population, as well as a strong world-wide competition for human capitals that Europe is experiencing against major industrial competitors, mainly from Asia and US, reduce the availability of knowledge workforce and obstructs the reaching of the critical mass of competences globally required to face the re-industrialization of Europe.

A crucial role is expected by the European Higher Level education system.

However, a systemic and coordinated action to educate a critical mass of knowledge workers in Europe is still missing. Most of the European Universities are limited by structural capacity constraints in offering new curricula and lifelong learning programs consistent with an updated and unified body of knowledge of IE&M, widely recognized and consistent with Industry expectations. As a consequence, companies tend to internalize education processes with significant economic efforts which are not always finalized towards an effective knowledge transfer.

Therefore, a University-Industry knowledge alliance for higher education is required.

The forum is promoted and organized by the European Academy for Industrial Management. The forum is of interest for Institutional, Industrial and Academic stakeholders which are the representatives of the Ministries of Research/Education, Industry and Economic Development of Member States, European Companies, University professors and students of Industrial Engineering and Management.

The Forum aims to involve stakeholders in building up and experiencing updated education paths for young as well as industry workforce, and supporting the foundation of the European Graduate School of Industrial Engineering and Management as an effective organization to spread and implement in Europe new models of higher education in IE&M. The Forum follows the *Bari G7 Summit of Finance Ministers and Central Bank Governors*' witnessing the worldwide role of Higher Education of IE&M in Economic Growth and jobs' creation. It takes on a great meaning in the year celebrating the 60th Anniversary of the Treaty of Rome (March 25th, 1957) establishing the European Economic Community.







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### **Program**

8.30 Registration

#### 9.00 Welcome

Antonio Decaro, Mayor of Bari 'Metropolitan City'

Loredana Capone, Assessor to the 'Economic Development' Dep. of the Regional Govern of Apulia Domenico De Bartolomeo, President, Confindustria Bari-Bat

#### Invited Presentations

Advanced IE&M Higher Education: Requirements from the World's Largest Automotive Manufacturer Bernhard Huck, Head of Industrial Engineering and Production Systems, Volkswagen, Wolfsburg New Models of Industrial Engineering and Management Higher Education:

Towards a European Graduate School

Giovanni Mummolo, Professor, Polytechnic University of Bari, President of AIM

A Erasmus Plus Project in Higher Education

Uwe Dombrowski, Professor, TU of Braunschweig, vice-President of AIM

Convention for Setting up the European Graduate School of Industrial Engineering and Management

Hendrik Van Landeghem, Professor, University of Ghent, Secretary & Treasurer of AIM

#### 10:45 Coffee Break

### 11:15 Round Table on:

Stakeholders' Expectations & Road Map Towards the School Foundation

Chair of Round Table: Giovanni Mummolo

Eugenio Di Sciascio, Rector, Polytechnic University of Bari

Aytaç Işık, VP, The European Students of Industrial Engineering and Management Organization

Vito Pertosa, President, Mermec Group

Francesco Paolo Sisto, Member of the Parliament of the Italian Republic

**Invited Speakers** 

# 12:30 Closing Remarks, Antonio Tajani, President of the European Parliament

### 13:00 Closing of the Forum

The European Academy for Industrial Management (AIM), founded in 1978, is an Association of full professors of 35 European Universities from 22 Countries with strong industry relations. AIM promotes deep investigations and open debates on higher education models in Europe.