3rd International Science and Business Conference

# **FUTURE ENGINEERING 2016**

29 – 30 September 2016, Hotel "Europa", Starachowice



On September 29<sup>th</sup> and 30th, Europa hotel hosted 3<sup>rd</sup> 2016 Future Engineering conference, which brought together science and business representatives ready to speak about common projects in the broad theme of manufacturing technologies.

**This year's edition was exceptional** as it broadened the scope of the conference towards foresight through the international <u>Foresight Europe Network</u> (<u>FEN</u>) featured session on the interdependencies between foresight and innovation management.

During the 3,5 hours of speeches, the audience was introduced to best **11 foresight practices** presented by representatives of: Italy, Germany, Slovenia, Greece, Iran, Hungary, Austria, United Kingdom and Poland. We expect the majority of them to be published in the topical collection of <u>European Journal of Futures Research</u> already this year.









## **CONCLUSIONS FIRST**

**Keynote foresight session and a panel discussion** resulted in bringing in on stage crucial needs related to:

- Rebranding foresight itself, underlining its practical value (especially to corporate beneficiaries and policy decision-makers) and benefits stemming from i.e. trend monitoring, roadmapping, future-oriented technology analysis, technology intelligence, innovation creation etc.;
- Building foresight excellence through the combination of evidence-based methods (quantitative) and societal needs-tailored approaches (citizen engagement);
- Increasing foresight awareness and capacity through tailored formal and non-formal educational offer and;
- Strengthening the role of foresight as one of the key instruments in the implementation, monitoring and update of smart specialization strategies combined with Entrepreneurial Discovery Process.



Panel experts (from the left): Krzysztof Mieszkowski (IPTS, Spain); Marcin Kardas (MNiSW, Poland); Piotr Jutkiewicz (4CF, Poland); Björn Sautter (FESTO, Germany); Gualtiero Fantoni (Pisa University); Blaž Golob (GFS Institute, Slovenia); and Anna Sacio-Szymańska (ITeE-PIB, Poland) panel moderator.

Apart from valuable conclusions derived from the panel discussion, the ITeE – PIB team has collected important **messages of wisdom**, directly from the minds of professionals. Enjoy the read!



1. Foresight constitutes a **powerful mechanism**, able to identify problems in the dynamics of innovation systems, but also to play a catalytic role in repairing such systems, e.g. from innovation process blocks.

### **Emmanuel KOUKIOS**

National Technical University of Athens (Greece)

2. Foresight provides a framework for a group of people concerned with **common issues at stake** (future of EU manufacturing, R&D and innovation priorities, transport and mobility, the future of work) to jointly think about the future in a structured and constructive way.



Blaž GOLOB

Director of GoForeSight Institute

Chairman of the Ljubljana Forum on Future of Cities (Slovenia)



3. The ecosystem approach has to be in the centre of upcoming vision and constituency building process integrating all relevant relations of the **quintuple helix model**, and broadening the scope with manufacturing as key enabling function in a highly networked, digitizing and circular economy of the future.

**Björn SAUTTER** FESTO (Germany)

4. How to make technology foresight less expensive, while keeping its quality high? More quantitative methodologies, such as the analysis of patents and papers, offer an effective way to **cross-validate expert-based analyses** (and vice-versa).



## **Gualtiero FANTONI** University of Pisa (Italy)



**5.** How is future constructed in the corporate strategy-making practice? The **two approaches to foresight** co-exist in the practice of the company: consciously and deliberately applied future anticipating techniques and so called every-day practices e.g. future-oriented product design, employee selection, supply chain management.

# Judit GÁSPÁR

Corvinus University (Hungary)

6. Current governance structures are increasingly showing inability to address complex issues such as the **Grand Challenges**. Using the tools of anticipatory governance – forward looking and participation – is essential in order to govern innovation actively and responsibly.



#### Niklas GUDOWSKY

(Institute of Technology Assessment, Austria)

We would like to thank all the speakers for their valuable contributions and the audience for challenging questions. **THANK YOU!** Let's meet again at 2017 Future Engineering conference!









