



Since the beginning of industrialization, large clusters of electro-mechanical and furniture manufacturers, and component suppliers have grown in Friuli Venezia Giulia, Italy, and in Ostwestfalen-Lippe (OWL), Germany.

Today, both regions show a similar variety of industries with their particular strengths and influence on the global economy.

In 2011, the University of Trieste and the OWL University of Applied Sciences have introduced an international double Master's degree in "Production Engineering and Management".

The International Conference was embedded in that Master program from the very beginning and carried out for the first time in June 2011. Since the third edition of the conference, the topic of Direct Digital Manufacturing has been added alongside Product Life-Cycle Assessment, Lean Manufacturing, Supply Chain Management and Wood Processing Technologies.

All these topics are strictly related to the concepts of innovation and sustainability in manufacturing, which are enabled by new and renewable materials, energy reduction, smart processes and technologies, and are supported by digital infrastructures and data management technology for efficient decisions.

This year's conference is particularly focused on the discussion of solutions that can bring benefits to manufacturing in today's challenging but information-rich environment.

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Web Site and registration form:
www.pem.units.it



UNIVERSITÀ
 DEGLI STUDI DI TRIESTE

9th International Conference

Production Engineering and Management

October 3 to 4, 2019

H3 building - room 1B
 via Alfonso Valerio, 10
 Triest, Italy



TECHNISCHE HOCHSCHULE
 OSTWESTFALEN-LIPPE
 UNIVERSITY OF
 APPLIED SCIENCES
 AND ARTS

Thursday, October 3rd

08.30 Registration

09.00 – Welcome addresses

09.45 – “A. Zanussi” study awards

10.00 – Wood Processing Technologies and Furniture Production

Introduction by chairman: F. Bulian (CATAS)

- N. Koelli: *Densification of Wood*

- D. Petkovic, A. Jeleč, A. Bajtarevic: *Group Technology concept in chair production*

- F. Bulian, A. Giavon: *Risk analysis on furniture: a holistic approach*

11.30 – 11.50 Coffee Break

11.50 – Industrial Engineering and Lean Management

Introduction by chairman: L. Francescato (Electrolux Domestic)

- L. Schulze, L. Li: *Production and logistics of mixed cartons*

- M. Ceolin, L. Talon, G. Buiatti, D. Pozzetto, R. Campanella: *Application of continuous improvement within Electrolux Professional’s GR&D*

13.10 – 14.10 Lunch Break

14.10 – Industrial Engineering and Lean Management

Introduction by chairman: S. Tackenberg (TH OWL)

- H. Dadhaboy, M. Nicolich: *Production scheduling and simulation - A case study*

- L. Li., L. Schulze: *Examination of Performance Improvement Opportunities of an Automated Guided Vehicle System through Simulations*

- S. Bait, A. di Pietro, M.M. Schiraldi: *Extended-VSM: a top-down approach for building simulation models through VSM*

15.20 – 15.40 Coffee Break

15.40 – Cleaner and sustainable production

Introduction by chairman: C.M. Caroni (Electrolux Professional)

- C. Feldmann, T. Kirsch: *Increasing the sustainability of manufacturing processes: Ecological impacts of Additive Manufacturing*

- D. Chinese, G. Lazzaroni, A. Polo: *Exploring the links between maintenance policies, systems economics and environmental performance: a modelling approach and case study*

- F. Burlon, R. Furlanetto, M. Simonato: *Diagnosis of centrifugal pump problems for improving the lifetime of professional appliances*

- R. Cefalo, D. Pozzetto, L. Toneatti: *Redevelopment of a production activity in an energy generation plant powered with woody biomass*

- A. Aghazadeh Ardebili, E. Padoano, N. Rahmani: *Providing Green Services – The case study of thermal paper waste and unnecessary transportations in the payment service*

Friday, October 4th

09.00 – Product Life-Cycle and Supply Chain Management

Introduction by chairman: P. Pierdomenico (Wartsila)

- S. Zuin, R. Saitov, M. Celotto, I. Rustemi, M. Massaroni, G. Brotto: *Analysis of durability of cooking appliances through a Life Cycle Assessment*

- H. Bakhit, F.-J. Villmer: *Agile methodology for physical product development: limitations and solutions*

- P. Pierdomenico: *Rapid Plant assessment: application of a traditional technique in the digital era*

- G. Aiello: *Integrating Blockchain and IoT for secure Supply Chain Management*

- F. Etmannmehr, A. Huxol, F.-J. Villmer: *Innovation of supplier selection*

- G. Aiello, G. Mascarella, S. Vacante, S. Fasoli: *Shipping 4.0: General framework for a new cybershipping era*

11.10 – 11.30 Coffee Break

11.30 – Direct Digital Manufacturing in the context of Industry 4.0

Introduction by chairman: Eva Scheideler (TH OWL)

- E. Hartweg.: *Digital Transformation – Quo Vadis Enterprise Resource Planning*

- L. Materna, S. Hinrichsen, B. Adrian, A. Schulz: *How to improve Shopfloor Management*

- S. Sheikhi, E. Mayer: *Applied digitalization in the field of robotic reconditioning of structures*

13.00 – 14.00 Lunch Break

14.00 – Direct Digital Manufacturing in the context of Industry 4.0

Introduction by chairman: F.-J. Villmer (TH OWL)

- J.T. Sehr, O. Pannitz: *Transferability of process parameters in Laser Bed Fusion processes*

- F. Simoni, A. Huxol, F.-J. Villmer: *Surface optimization in SLM by re-melting of up-skin layers*

- M. Beyer, A. Shrotri, O. Stübbe: *Evaluation of Stereolithography processes for the production of lens prototypes*

- A. Huxol, E. Scheideler, F.-J. Villmer: *Image processing for process monitoring in Additive Manufacturing*

15.50 – 16.10 Coffee Break

16.10 – Innovative Management Techniques and Methodologies

Introduction by chairman: C. Feldmann (FH Münster)

- S. Fernströning, C. Feldmann.: *Perception of AM by SME: Empirical survey via World Cafés*

- W. Appelfeller, C. Feldmann, W. Jungkind, S. Tackenberg: *Digital Transformation of Companies: Experience gained in the implementation of a IoT check*

- S. Arena, P.F. Orrù, A. Zoccheddu, L. Sassu, C. Mattia, R. Cozza: *Fault prediction of a centrifugal pump using machine learning methods techniques*

- M. Pellegrini, F. Dal Magro, A. Meneghetti: *Digitization of a filtration system for predictive maintenance: devices location*

- J. Yan, A. Huxol, F.-J. Villmer: *Paradigm, typology and process of customer co-creation*