“Viable solutions for today’s industrial production integrating a breakthrough vision for a digital sustainable future”

ICPR-AEM & QIEM 2018 is a special joint scientific event organized for the third time in Cluj-Napoca by the International Foundation for Production Research (Regional Committee Africa, Europe and the Middle East) and the Technical University of Cluj-Napoca. This edition addresses the following topics and many more:

- Digitalization and virtualization from industry towards daily life
- Advanced manufacturing: technologies and solutions for production
- Robotics and AI from emerging reality to production assets
- Innovation as the main competitive engine in production engineering
- Product & production quality: flexible, customized and fast to market
- Cleaner, safer and sustainable solutions for products and processes
## OVERVIEW PROGRAM

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<td>11.00-11.30</td>
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<td>Coffee break Mezzanine</td>
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<tr>
<td>13.00-14.30</td>
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<td>Parallel sessions &amp; Conference closing Bernini &amp; Botticelli</td>
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Registration available July 25\(^{th}\), 8 AM to July 26\(^{th}\), 1 PM
Wednesday, 25.07.2018
Official opening & Keynote Speakers
9\textsuperscript{30}-11\textsuperscript{00}

**Welcoming addresses**

- Prof. Vasile Țopa, Rector of the Technical University of Cluj-Napoca
- Prof. Dieter Spath, Fellow of the International Foundation for Production Research
- Prof. Daniela Popescu, Chair of the ICPR-AEM & QIEM 2018 Conference

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<td>“Architecting Cyber Manufacturing Systems”</td>
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<td>Missouri University of Science and Technology, USA Fellow of INCOSE and IIE</td>
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<tr>
<td>Prof. Engelbert Westkämper</td>
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<tr>
<td>University Stuttgart, Germany Fellow of CIRP</td>
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<tr>
<td>Prof. Anthony SF Chiu</td>
<td>“Sustainable Consumption Pattern on Global Resource Use”</td>
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<td>De La Salle University, Manila, Philippines</td>
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### Keynote Speakers
### 11:30 - 13:30

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| Prof. Dieter Spath  
President of acatech, Germany  
Fellow of IFPR | “Transformation@Work - How we will work tomorrow” |  |
| Prof. Albert Weckenmann  
Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany  
&  
Prof. Numan Durakbasan  
| Prof. Oliver Riedel  
Director Fraunhofer Institute for Industrial Engineering IAO, Germany | “Cognitive Digital Twins towards Engineering and Manufacturing Excellence” |  |
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**Wednesday, 25.07.2018**

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<td>Jörg Niemann, Tim Schemann and Justus Erkens</td>
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<td>Mehmet Gulsen</td>
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<td>Michał Adamczak, Roman Domański, Piotr Cyplik and Olga Szymańska</td>
<td>DELIVERING OF LOGISTICS PROCESSES SIMULATION SKILLS</td>
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<td>SAFETY MANAGEMENT WITHIN A ROBOTIC MANUFACTURING SYSTEM THROUGH LAYOUT DESIGN</td>
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<td>Oliver Todorovic and Carmen Constantinescu</td>
<td>FOUNDATIONS FOR ECONOMIC EVALUATION OF EXOSKELETONS IN MANUFACTURING</td>
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**Wednesday, 25.07.2018**

**16:30 - 18:00 hrs**

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- **9:30 - 11:00 hrs**
  - **Chairs:** Joni Kukkamaki, Alexandru Marin
  - **Room:** Bernini

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<td>Constantin Bungau, Adriana Borza and Aurel Caus</td>
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<td><strong>Evaluation of Supply Chain Complexity at Material Flow Level for a Romanian Company</strong></td>
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- **11:30 - 13:00 hrs**
  - **Chairs:** Daniela Popescu, Carmen Constantinescu
  - **Room:** Bernini

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