



# CLC 2024

LOGISTICS, DISTRIBUTION, TRANSPORT & MANAGEMENT

## Conference Program – CLC 2024

28 – 29 November 2024

### 28.11.2024 Thursday

9.30 Registration - AGH Energy Center, Building C6, Czarnowiejska 36 st., 3rd floor, hall 307-308

### 10.00 -10.15 Opening of the Congress

Charman : Jerzy Feliks - AGH

### 10.15 – 12.30 Plenary session

#### **BUKOWSKI Lech**

University of Dąbrowa Górnicza, Dąbrowa Górnicza, Poland, EU

[Logistics 5.0: Towards effective collaboration between human and artificial intelligence in supply chains](#)

#### **KALETA Jacek**

Samat Poland, Cracow, Poland, EU

[Implementation of a dynamic IRP model for the optimization of the LPG routing and delivery process to gas stations](#)

#### **OLEARCZUK Dariusz, KARKULA Marek**

Optidata, Cracow, Poland, EU, AGH University of Krakow, Cracow, Poland, EU

[AI Artificial Intelligence and IT in Transport Management: Theory and Practical Guide to Opportunities and Challenges.](#)

#### **JÓZEFOWSKI Bartosz**

Krakow Technology Park

[Krakow DIANA Accelerator](#)

### 12.30 – 13.30 Lunch

## 13.30 - 15.30 Plenary sessions

### 1. MUCHOVÁ Patrícia

Technical University of Košice, Košice, Slovakia, EU

[Operational transport planning using a heuristic approach](#)

Co-author: ONDOV Marek

### 2. SKUPIEŃ Emilia

Wroclaw University of Science and Technology, Wrocław, Poland, EU

[Maturity Model for Transport System Assessment](#)

### 3. GÜNEY Hasan

Borusan Lojistik, İstanbul, Turkey

[Internal Auditing in Logistics: AI-driven and Advanced Analytics Solutions](#)

Co-authors: USTAOĞLU Ahmet, TÜRKER Ahmet Yesevi, ELÇİ Tuğçe, KANTAR Deniz

### 4. BURCHART Dorota

Silesian University of Technology, Poland, EU, Katowice, Poland, EU

[ENVIRONMENTAL STRATEGY AND KEY INDICATORS ANALYSIS IN SUSTAINABILITY ESG REPORTING IN AUTOMOTIVE INDUSTRY](#)

Co-authors: LENORT Radim, STANIEK Marcin, HORAK Josef, PRZYTUŁA Iga

Collaboration: Skoda Auto University, Czech Republic, EU

### 5. MALČIC Tomáš

Škoda Auto University, Mladá Boleslav, Czech Republic, EU

[Implementation of Unit Load Agv Technology in Streamlining of the In-House Logistics of an Automotive Assembly Hall](#)

Co-author: ZÁRUBA Jiří

Collaboration: VSB - Technical University of Ostrava, Ostrava, Czech Republic, EU

### 6. HAKE Cornelius<sup>1 2</sup>

Hochschule Karlsruhe – University of Applied Sciences, Karlsruhe, Germany, Stuttgart, Germany, EU

[Evaluation of Artificial Intelligence Methods for Lead Time Prediction in Non-Cycled Areas of Automotive Production](#)

Co-authors: WEIGELE Jonas<sup>1</sup>, KRAUSS Benjamin<sup>1</sup>, FRIEDRICH Christian<sup>2</sup>, REICHERT Frederik<sup>3</sup>

Collaboration: <sup>1</sup> Dr. Ing. h.c. F. Porsche AG, Stuttgart, Germany; <sup>2</sup> Hochschule Karlsruhe – University of Applied Sciences, Karlsruhe, Germany; <sup>3</sup> Hochschule Esslingen, Esslingen, Germany

## 16.45 – Excursion

**The tour supervisor is Professor Marek Karkula AGH.** Meeting point Rynek Główny 1

The exhibition "Following the traces of European identity of Krakow" is presented in the Rynek Underground branch of the Historical Museum of the City of Krakow (Krakow, Rynek Główny 1. The Market Underground is a museum under the Main Market Square in Krakow, which contains the remains of Krakow from centuries ago. Most of the museum consists of fragments of Old Krakow that have been excavated.

You will be divided into two groups. The first one gathers in front of the entrance to the museum at 16.45 (entrance at 17.00), the second at 17.15 (entrance at 17.30). 30 minutes between the groups you can spend on small shopping in the Sukiennice Crothall or walking around the Main Square. Getting to the museum – on foot, about 500 m from the Bagatela tram stop. Please ask the organizers about tickets for the tram on the AGH Bagatela route if needed.

After the tour, from 19.00 we meet for dinner at the Gościnna Chata Restaurant - 10 Sławkowska Street, Krakow - 300 meters walk from the Rynek Underground Museum.

**19.00 – 21.30 Regional dinner, Gościnna Chata Restaurant, 10 Sławkowska Street, Krakow**

## 29.11.2024 Friday

**9.00 Registration.** Building C6, AGH Energy Center, Czarnowiejska st. 36, 3rd floor, hall 307-308

### 9.30 – 10.30 Poster session A – part one

#### PA1. FIDLEROVÁ Helena

Slovak University of Technology in Bratislava, Trnava, Slovakia, EU

[INNOVATION4.0 IN LEAN MANUFACTURING: CASE STUDY OF THE ASSEMBLY WORKPLACE](#)

Co-authors: BLAHOVA Jarmila, MAKYŠOVÁ Helena

#### PA2. GIEL Robert

Wrocław University of Science and Technology, Wrocław, Poland, EU

[Risk management in logistics: Digital Twins and their role in operational threat assessment](#)

#### PA3 GLOVA VÉGSÖOVÁ Olga

Technical University of Košice, Faculty of Mining, Ecology, Process Control and Geotechnologies, Košice, Slovakia, EU

[Effective Evacuation Strategies in Crisis Management Logistics](#)

#### PA4 HOLMAN David

Škoda Auto University, Mladá Boleslav, Czech Republic, EU

[Purposeful Mindset Enhanced by On-line IT Solution for Long Term Competitive Advantage in the Automotive Supply Chain](#)

Co-authors: DOLEJŠOVÁ Venuše, FIBIŠ Dalibor

**PA5 JAGODA Agnieszka**

Wroclaw University of Economics and Business, Wroclaw, Poland, EU

[MANAGEMENT'S GREEN MOTIVATION IN SUPPLY CHAIN MANAGEMENT – A CASE STUDY OF GREEN SUPPLY CHAIN](#)

Co-authors: Anna Baraniecka, Joanna Łyszkiewicz Potaczek

**PA6 KAČMÁRY Peter**

Technical University of Košice, Košice, Slovakia, EU

[Development of public transport use in selected cities within Slovakia](#)

Co-authors: ŠPIRKOVÁ Simona, KLEINOVÁ Kristína, MESAROŠ Maroš

**PA7 KLEINOVÁ Kristína**

Technical University of Kosice, Košice, Slovakia, EU

[Artificial intelligence in logistics: New opportunities for optimization and innovation with ChatGPT](#)

Co-authors: KAČMÁRY Peter, STRAKA Martin

**PA8 KOŁAKOWSKI Tomasz**

Wroclaw University of Economics and Business, Wrocław, Poland, EU

[Pro-environmental behaviour factors in choosing the last mile delivery method. A gender perspective.](#)

Co-authors: JAGODA Agnieszka, MUCOWSKA Magdalena, CHEBA Katarzyna

Collaboration: West Pomeranian University of Technology, Szczecin, Poland

**PA9 KOVALČÍK Jakub**

Technical University of Košice, Košice, Slovakia, EU

[Specific Methodology for Modeling a Logistic System Using an Educational Robot](#)

Co-authors: Martin Straka, Peter Kačmáry

**PA10 WERBINSKA-WOJCIECHOWSKA Sylwia**

Wroclaw University of Science and Technology, Wrocław, Poland, EU

[The role of digital maturity in improving safety and reliability in wood-based supply chains – case study](#)

Co-authors: GIEL Robert, GNACY Natalia

**PA11 GDOWSKA Katarzyna**

AGH University of Krakow, Krakow, Poland, EU

## SELECTED STRATEGIES FOR INTEGRATING HYDROGEN FUEL INTO TRANSPORTATION SYSTEMS

Co-authors: OSIELCZAK Karolina, KSIĄŻEK Roger

### **PA12 RUMIN Rafal**

AGH University of Krakow, Cracow, Poland, EU

[Socioeconomic aspects of Hyperloop Development based on the Central Communication Port \(CPK\).](#)

Co-authors: Dawid Pękała, Mateusz Milczanowski, Klaudiusz Mendrek, Szymon Gach

## **10.30 – 11.00 Coffee break**

## **11.00 – 12.00 Poster session B – part two**

### **PB01 LENORT Radim**

Škoda Auto University, Mladá Boleslav, Czech Republic, EU

[Supply Chain Management and Logistics Megatrends: A Literature Review](#)

Co-author: WICHER Pavel

### **PB02 ONDOV Marek**

Technical University of Kosice, Kosice, Slovakia, EU

[Modelling human interaction with a logistic system](#)

Co-authors: ROSOVA Andrea, SOFRANKO Marian, HORIZRAL Lukas

### **PB03 POTURAJ Honorata**

Wrocław University of Science and Technology, Wrocław, Poland, EU

[Cause-effect analyses in the operation of AGV systems](#)

### **PB04 CHAMIER-GLISZCZYŃSKI Norbert**

Koszalin University of Technology, Koszalin, Poland, EU

[ELECTROMOBILITY AS AN ELEMENT OF THE LOGISTICS SYSTEM](#)

Co-author: Stopka Ondrej

Collaboration: Faculty of Technology, Institute of Technology and Business in Ceske Budejovice

### **PB05 GDOWSKA Katarzyna**

AGH University of Krakow, Krakow, Poland, EU

[ENVIRONMENTAL AND ECONOMIC IMPACTS OF INTRODUCING HYDROGEN BUSES – A CASE STUDY OF KRAKOW'S PUBLIC TRANSPORT](#)

Co-author: OSIELCZAK Karolina

**PB06 RUMIN Rafal**

AGH University of Krakow, Cracow, Poland, EU

[The management of the technological process according to the product lifecycle and circular economy concept.](#)

Co-authors: Stryhunivska Olena, Palienko Olena

Collaboration: State University of Trade and Economics

**PB07 RYDLEWSKI Mateusz**

Wroclaw University of Science and Technology, Wroclaw, Poland, EU

[Transport packaging in the cargo bike delivery sector](#)

Co-author: CZAPKOWSKI Szymon

**PB08 SEMRAU Jakub**

Silesian University of Technology, Zabrze, Poland, EU

[Innovative Applications of Renewable Energy Sources in the Construction Sector – A Review of Current Practices](#)

**PB09 ŠPIRKOVÁ Simona**

Institute of Logistics and Transportation, Košice, Slovakia, EU

[Enhancing Manufacturing Logistics Efficiency Through 3D Simulation in Visual Components](#)

Co-authors: Martin STRAKA, Jakub KOVALČÍK

**PB10 KRAMARZ Marzena**

Silesian University of Technology, Gliwice, Poland, EU

[Resilience of the city's logistics system to disruptions](#)

**PB11 MAZUR Robert**

PPUH AUTOPART Jacek Bąk Sp. z o.o., Mielec, Poland, EU

[The digital maturity level of East Automotive Alliance members - results and challenges in implementing digital innovations in supply chains.](#)

**PB12 FELIKS Jerzy**

AGH University of Krakow, Cracow, Poland, EU

[Technologies and trends in the development of industrial logistics](#)

**12.00 – 13.00 Discussion on the future of the CLC Congress in the context of proposed changes in the evaluation of publications.**

Chairman: Marek Karkula, prof. AGH

Director of AGH University Press

**13.00 Summary, closing of the congress and lunch**

**Contacts**

**Congress Manager**

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