



2024 | CRACOW

CLC 2024

LOGISTICS, DISTRIBUTION, TRANSPORT & MANAGEMENT

CONGRESS PROGRAMME

Carpathian Logistics Congress

November 28th – 29th 2024

**AGH University of Krakow,
Krakow, Poland, EU**



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CONFERENCE REGISTRATION

Nov 28th 2024, AGH Energy Center, Building C6, Czarnowiejska 36 st.,
3rd floor, hall 307–308

9.30 – 10.00

OPENING OF THE CONGRESS

Nov 28th 2024, Main Conference Hall

10.00 – 10.15

Chairman: Prof. Jerzy FELIKS – AGH University of Krakow

PLENARY SESSION A

Nov 28th 2024, Conference Hall 307–308

10.15 – 12.30

PSA1 Lech BUKOWSKI	University of Dąbrowa Górnicza, Dąbrowa Górnicza, Poland, EU
<i>Logistics 5.0: Towards effective collaboration between human and artificial intelligence in supply chains</i>	
PSA2 Jacek KALETA	Samat Poland, Cracow, Poland, EU
<i>Implementation of a dynamic IRP model for the optimization of the LPG routing and delivery process to gas stations</i>	
PSA3 Dariusz OLEARCZUK, Marek KARKULA	Optidata Sp. z o.o., Cracow, Poland, EU, AGH University of Krakow, Cracow, Poland, EU
<i>Transforming Transport Management with AI and IT</i>	
PSA4 Bartosz JÓZEFOWSKI	Krakow Technology Park, Cracow, Poland, EU,
<i>Krakow DIANA Accelerator</i>	

12.30 – 13.30 Lunch

13.30 – 15.30

Chairman:

Prof. Lech BUKOWSKI

PSB1	Patricia MUCHOVÁ	Technical University of Košice, Košice, Slovakia, EU
	<i>Operational transport planning using a heuristic approach</i>	
	Co-author: Marek ONDOV	
PSB2	Emilia SKUPIEŃ	Wroclaw University of Science and Technology, Wrocław, Poland, EU
	<i>Maturity Model for Transport System Assessment</i>	
PSB3	Hasan GÜNEY	Borusan Lojistik, İstanbul, Turkey
	<i>Internal Auditing in Logistics: AI-driven and Advanced Analytics Solutions</i>	
	Co-authors: Ahmet USTAOĞLU, Ahmet Yesevi TÜRKER, Tuğçe ELÇİ, Deniz KANTAR	
PSB4	Dorota BURCHART	Silesian University of Technology, Poland, EU, Katowice, Poland, EU
	<i>Environmental Strategy and Key Indicators Analysis in Sustainability ESG Reporting in Automotive Industry</i>	
	Co-authors: Radim LENORT, Marcin STANIEK, Josef HORAK, Iga PRZYTUŁA	
	Collaboration: Škoda Auto University, Czech Republic, EU	
PSB5	Tomáš MALČIC	Škoda Auto University, Mladá Boleslav, Czech Republic, EU
	<i>Implementation of Unit Load Agv Technology in Streamlining of the In-House Logistics of an Automotive Assembly Hall</i>	
	Co-author: Jiří ZÁRUBA	
	Collaboration: VSB - Technical University of Ostrava, Ostrava, Czech Republic, EU	
PSB6	Cornelius HAKE	Hochschule Karlsruhe – University of Applied Sciences, Karlsruhe, Germany, Stuttgart, Germany, EU
	<i>Evaluation of Artificial Intelligence Methods for Lead Time Prediction in Non-Cycled Areas of Automotive Production</i>	
	Co-authors: Jonas WEIGELE ¹ , Benjamin KRAUSS ¹ , Christian FRIEDRICH ² , Frederik REICHERT ³	
	Collaboration: ¹ Porsche AG, Stuttgart, Germany, EU; ² Hochschule Karlsruhe – University of Applied Sciences, Karlsruhe, Germany, EU; ³ Hochschule Esslingen, Esslingen, Germany, EU	

EXCURSION

Nov 28th 2024, Main Market Square in Krakow

16.45 –

Excursion – Explore Krakow

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.

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

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

9.00 – 9.30 CONFERENCE REGISTRATIONNov 29th 2024, AGH Energy Center, Building C6, 3rd floor, hall 307–308**9.30 – 10.30 POSTER SESSIONS A**Nov 29th 2024, hall 307–308

PA1	Helena FIDLEROVÁ <i>INNOVATION4.0 IN LEAN MANUFACTURING: CASE STUDY OF THE ASSEMBLY WORKPLACE</i> Co-authors: Jarmila BLAHOVA, Helena MAKYŠOVÁ	Slovak University of Technology in Bratislava, Trnava, Slovakia, EU
PA2	Robert GIEL <i>RISK MANAGEMENT IN LOGISTICS: DIGITAL TWINS AND THEIR ROLE IN OPERATIONAL THREAT ASSESSMENT</i>	Wrocław University of Science and Technology, Wrocław, Poland, EU
PA3	Oľga GLOVA VÉGSÖOVÁ <i>EFFECTIVE EVACUATION STRATEGIES IN CRISIS MANAGEMENT LOGISTICS</i>	Technical University of Košice, Košice, Slovakia, EU
PA4	David HOLMAN <i>PURPOSEFUL MINDSET ENHANCED BY ON-LINE IT SOLUTION FOR LONG TERM COMPETITIVE ADVANTAGE IN THE AUTOMOTIVE SUPPLY CHAIN</i> Co-authors: Venuše DOLEJŠOVÁ, Dalibor FIBIŠ	Škoda Auto University, Mladá Boleslav, Czech Republic, EU
PA5	Agnieszka JAGODA <i>MANAGEMENT'S GREEN MOTIVATION IN SUPPLY CHAIN MANAGEMENT – A CASE STUDY OF GREEN SUPPLY CHAIN</i> Co-authors: Anna BARANIECKA, Joanna ŁYSZKIEWICZ-POTACZEK	Wrocław University of Economics and Business, Wrocław, Poland, EU
PA6	Peter KAČMÁRY <i>DEVELOPMENT OF PUBLIC TRANSPORT USE IN SELECTED CITIES WITHIN SLOVAKIA</i> Co-authors: Simona ŠPIRKOVÁ, Kristína KLEINOVÁ, Maroš MESAROŠ	Technical University of Košice, Košice, Slovakia, EU
PA7	Kristína KLEINOVÁ <i>ARTIFICIAL INTELLIGENCE IN LOGISTICS: NEW OPPORTUNITIES FOR OPTIMIZATION AND INNOVATION WITH CHATGPT,</i> Co-authors: Peter KAČMÁRY, Martin STRAKA	Technical University of Kosice, Košice, Slovakia, EU
PA8	Tomasz KOŁAKOWSKI <i>PRO-ENVIRONMENTAL BEHAVIOUR FACTORS IN CHOOSING THE LAST MILE DELIVERY METHOD. A GENDER PERSPECTIVE</i> Co-authors: Agnieszka JAGODA, Magdalena MUCOWSKA, Katarzyna CHEBA Collaboration: West Pomeranian University of Technology, Szczecin, Poland	Wrocław University of Economics and Business, Wrocław, Poland, EU
PA9	Jakub KOVALČÍK <i>SPECIFIC METHODOLOGY FOR MODELING A LOGISTIC SYSTEM USING AN EDUCATIONAL ROBOT</i> Co-authors: Martin STRAKA, Peter KAČMÁRY	Technical University of Košice, Košice, Slovakia, EU
PA10	Sylwia WERBINSKA-WOJCIECHOWSKA <i>THE ROLE OF DIGITAL MATURITY IN IMPROVING SAFETY AND RELIABILITY IN WOOD-BASED SUPPLY CHAINS – CASE STUDY</i> Co-authors: Robert GIEL, Natalia GNACY	Wrocław University of Science and Technology, Poland, EU
PA11	GDOWSKA Katarzyna <i>SELECTED STRATEGIES FOR INTEGRATING HYDROGEN FUEL INTO TRANSPORTATION SYSTEMS</i> Co-authors: Karolina OSIELCZAK, Roger KSIAŻEK	AGH University of Krakow, Krakow, Poland, EU
PA12	RUMIN Rafal <i>SOCIOECONOMIC ASPECTS OF HYPERLOOP DEVELOPMENT BASED ON THE CENTRAL COMMUNICATION PORT (CPK)</i> Co-authors: Dawid PEKAŁA, Mateusz MILCZANOWSKI, Klaudiusz MENDREK, Szymon GACH	AGH University of Krakow, Cracow, Poland, EU
PA13	TUBIS Agnieszka A. <i>Comparative analysis of fashion and military clothing supply chains</i> Co-author: Justyna Świerczek	Wrocław University of Science and Technology

11.00 – 12.00 POSTER SESSIONS B**Nov 29th 2024, hall 307–308**

PB1	Radim LENORT <i>SUPPLY CHAIN MANAGEMENT AND LOGISTICS MEGATRENDS: A LITERATURE REVIEW</i> Co-author: Pavel WICHER	Škoda Auto University, Mladá Boleslav, Czech Republic, EU
PB2	Marek ONDOV <i>MODELLING HUMAN INTERACTION WITH A LOGISTIC SYSTEM</i> Co-authors: Andrea ROSOVA, Marian SOFRANKO, Lukas HORIZRAL	Technical University of Košice, Košice, Slovakia, EU
PB3	Honorata POTURAJ <i>CAUSE-EFFECT ANALYSES IN THE OPERATION OF AGV SYSTEMS</i>	Wrocław University of Science and Technology, Wrocław, Poland, EU
PB4	Norbert CHAMIER-GLISZCZYŃSKI <i>ELECTROMOBILITY AS AN ELEMENT OF THE LOGISTICS SYSTEM</i> Co-author: Ondrej STOPKA Collaboration: Faculty of Technology, Institute of Technology and Business in Ceske Budejovice	Koszalin University of Technology, Koszalin, Poland, EU
PB5	Katarzyna GDOWSKA <i>ENVIRONMENTAL AND ECONOMIC IMPACTS OF INTRODUCING HYDROGEN BUSES – A CASE STUDY OF KRAKOW'S PUBLIC TRANSPORT</i> Co-author: Karolina OSIELCZAK	AGH University of Krakow, Krakow, Poland, EU
PB6	Rafal RUMIN <i>THE MANAGEMENT OF THE TECHNOLOGICAL PROCESS ACCORDING TO THE PRODUCT LIFECYCLE AND CIRCULAR ECONOMY CONCEPT</i> Co-authors: Olena STRYHUNIVSKA, Olena PALIENKO Collaboration: State University of Trade and Economics	AGH University of Krakow, Cracow, Poland, EU
PB7	Mateusz RYDLEWSKI <i>TRANSPORT PACKAGING IN THE CARGO BIKE DELIVERY SECTOR</i> Co-author: Szymon CZAPKOWSKI	Wrocław University of Science and Technology, Wrocław, Poland, EU
PB8	Jakub SEMRAU <i>INNOVATIVE APPLICATIONS OF RENEWABLE ENERGY SOURCES IN THE CONSTRUCTION SECTOR – A REVIEW OF CURRENT PRACTICES</i>	Silesian University of Technology, Zabrze, Poland, EU
PB9	Simona ŠPIRKOVÁ <i>ENHANCING MANUFACTURING LOGISTICS EFFICIENCY THROUGH 3D SIMULATION IN VISUAL COMPONENTS</i> Co-authors: Martin STRAKA, Jakub KOVALČÍK	Institute of Logistics and Transportation, Košice, Slovakia, EU
PB10	Marzena KRAMARZ <i>RESILIENCE OF THE CITY'S LOGISTICS SYSTEM TO DISRUPTIONS</i>	Silesian University of Technology, Gliwice, Poland, EU
PB11	Robert MAZUR <i>THE DIGITAL MATURITY LEVEL OF EAST AUTOMOTIVE ALLIANCE MEMBERS - RESULTS AND CHALLENGES IN IMPLEMENTING DIGITAL INNOVATIONS IN SUPPLY CHAINS</i>	PPUH AUTOPART Jacek Bąk Sp. z o.o., Mielec, Poland, EU
PB12	Jerzy FELIKS <i>TECHNOLOGIES AND TRENDS IN THE DEVELOPMENT OF INDUSTRIAL LOGISTICS</i>	AGH University of Krakow, Cracow, Poland, EU
PB13	Roger KSIAŻEK <i>HYDROGEN REFUELLING STATION LOCATION PROBLEM IN THE RAILWAY SYSTEM – PRELIMINARY STUDY</i> Co-authors: Katarzyna GDOWSKA, Radosław KAPŁAN, Magdalena DUDEK, Andrzej RAŹNIAK	AGH University of Krakow, Krakow, Poland, EU

12.00–13.00 DISCUSSION

Nov 29th 2024, hall 307–308

Discussion on the future of the CLC Congress in the context of proposed changes in the evaluation of publications.

Chairman and moderator:

prof. Marek KARKULA

Director of AGH University Press

Summary and Conference Closing

Chairman:

prof. Jerzy FELIKS

13:00 –

Lunch

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