MANUFACTURING 2026

Poznan University of Technology, Poland

International Scientific-Technical Conference

MANUFACTURING 2026

19–21.05.2026

9th International Scientific-Technical Conference MANUFACTURING 2026

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SPECIAL SESSION ORGANIZING COMMITTEES

Efficiency-Driven Manufacturing: Tools and Trends in the Era of Industry 4.0

Justyna Trojanowska, Poznan University of Technology, Poland
Leonilde Varela, University of Minho, Portugal
Vijaya Kumar Manupati, NITIE Mumbai, India
Thanh Tran, RMIT University, Vietnam
Jozef Husar, Technical University of Košice, Slovakia

Intersecting quality management and mechanical design for manufacturing sustainability

Florin Popișter, Technical University of Cluj-Napoca, Romania
Diana Cristina Dragomir, Technical University of Cluj-Napoca, Romania
Corina Julieta Birleanu, Technical University of Cluj-Napoca, Romania
Mircea Claudiu Fulea, Technical University of Cluj-Napoca, Romania

Human factors in manufacturing

Marcin Butlewski, Poznan University of Technology, Poland
Beata Mrugalska, Poznan University of Technology, Poland
Wiktoria Czernecka, Poznan University of Technology, Poland
Fryderyk Wachowiak, Poznan University of Technology, Poland
Krzysztof Hankiewicz, Poznan University of Technology, Poland

Circularity in advanced production systems: materials, methods, and digital transformation

Marek Kočisko, Technical University of Košice, Slovakia
Lucia Knapčikova, Technical University of Košice, Slovakia
Jakub Kaščak, Technical University of Košice, Slovakia
Jozef Török, Technical University of Košice, Slovakia

Smart Manufacturing & Sustainability:
Interdisciplinary Approaches in the Era of Industry 4.0/5.0

Radosław Maruda, University of Zielona Góra, Poland
Sebastian Saniuk, University of Zielona Góra, Poland
Katarzyna Skrzypek, University of Zielona Góra, Poland
Daria Moskwa – Bęczkowska, Kielce Univerisity of Technology, Poland
Karol Dąbrowski, University of Zielona Góra, Poland

From Additive Manufacturing to Healthcare Innovation through Digital Transformation in Biomedical Engineering

Filip Górski, Poznan University of Technology, Poland
Răzvan Păcurar, Technical University of Cluj-Napoca, Romania
Nikola Vitkovic, University of Niš, Serbia
Michał Rychlik, Poznan University of Technology, Poland

Intelligent adaptive systems in integrated production management processes

Mariusz Piechowski, Merito WSB University in Poznan, Poland
Małgorzata Jasiulewich-Kaczmarek, Poznan University of Technology, Poland
Katarzyna Antosz, Rzeszow University of Technology, Poland
Ryszard Wyczółkowski, Silesian University of Technology, Poland
Arkadiusz Gola, Lublin University of Technology, Poland

Intelligent Solutions for Industry of the Future

Izabela Rojek, Kazimierz Wielki University in Bydgoszcz, Poland
Ewa Dostatni, Poznan University of Technology, Poland
Dariusz Mikołajewski, Kazimierz Wielki University in Bydgoszcz, Poland
Nataša Náprstková, University of Jan Evangelista in Ústí nad Labem, Czech Republic

Grey Systems Modeling for Engineering Solutions and Business Optimization

Magdalena Hryb, Poznan University of Technology, Poland
Agnieszka Kujawińska, Poznan University of Technology, Poland
Naiming Xie, Nanjing University of Aeronautics and Astronautics, China
Liangyan Tao, Nanjing University of Aeronautics and Astronautics, China
Rafał Mierzwiak, Poznan University of Technology, Poland

Intelligent Methods Supporting Manufacturing Systems Efficiency

Anna Burduk, Wroclaw University of Science and Technology, Poland
Damian Krenczyk, Silesian University of Technology, Poland
Dagmara Łapczyńska, Wroclaw University of Science and Technology, Poland
Kamil Krot, Wroclaw University of Science and Technology, Poland

WELCOME ADDRESS

The 9th International Scientific-Technical Conference MANUFACTURING 2026, held in Poznan, Poland, is organized by the Faculty of Mechanical Engineering, Poznan University of Technology, under the scientific auspices of: the Polish Academy of Sciences (PAN) – the Committee on Production Engineering, the Committee on Machine Construction, the Poznan Branch of the PAN, and the Polish Metrological Union.

The primary objective of MANUFACTURING 2026 is to showcase cutting-edge advancements across the broad spectrum of mechanical engineering, providing a dynamic forum for the exchange of innovative ideas and expert opinions. Focused on the theme of the Factory of the Future, the conference serves as a vital platform for dialogue on industrial evolution and science-industry synergy. Its global reach continues to expand, as evidenced by the consistently increasing participation from international research centers. Furthermore, the event fosters the integration of academia with the economic sector, encouraging collaboration with industry leaders and management professionals interested in implementing research results into business practice. The scope encompasses the following areas:

- Mechanical Engineering
- Production Engineering
- Quality Engineering
- Measurement and Control Systems
- Biomedical Engineering.

The global significance of the conference is reflected in the diversity of the submissions – we received 219 contributions from 37 countries. A total of 120 papers were accepted for publication (an acceptance rate of 55%), representing the work of 347 authors from 25 countries. Altogether, 109 articles are published in the proceedings Advances in Manufacturing V, Springer, while 11 selected papers are/ will be published in the journal Management and Production Engineering Review. We also received 28 extended abstracts.

The book Advances in Manufacturing V is organized into five volumes that correspond to the main conference disciplines:

- Advances in Manufacturing V – Volume 1 – **Mechanical Engineering:** Factory of the Future
- Advances in Manufacturing V – Volume 2 – **Production Engineering:** Factory of the Future
- Advances in Manufacturing V – Volume 3 – **Quality Engineering:** Factory of the Future
- Advances in Manufacturing V – Volume 4 – **Measurement and Control Systems:** Factory of the Future
- Advances in Manufacturing V – Volume 5 – **Biomedical Engineering:** Factory of the Future

The final conference programme features 2 plenary lectures, 41 oral presentations, and 105 poster presentations. Over 200 participants from more than 20 countries around the world have registered for in-person attendance.

We especially thank the organizers of special sessions, and members of the international Scientific and Program Committees for their hard work during the reviewing process, and acknowledge all who contributed to the staging of MANUFACTURING 2026: authors, committees, partners and sponsors. We also would like to extend our sincere thanks to the Organizing Committee for their dedication and hard work in preparing the conference. Their involvement and hard work were crucial to the success of the conference.

May, 2026

Adam HAMROL, general chair

Bartosz GAPIŃSKI, chair

Magdalena HRYB, chair

Justyna TROJANOWSKA, chair

GENERAL CHAIR

Adam HAMROL

Professor Adam Hamrol received an Alexander von Humboldt Fellowship at the University of Hannover in Germany. From 1999 to 2005, he served as Dean of the Faculty of Mechanical Engineering and Management at Poznan University of Technology, Poland, and from 2005 to 2012 as Rector of the same university. From 2003 to 2025, he headed the Department of Production Engineering.
His main research interests include production engineering and quality management. Professor Hamrol is the author of several books and approximately 260 scientific articles. From 2015 to 2025, he was the Editor-in-Chief of the scientific journal Management and Production Engineering Review (MPER). He has also collaborated with many industrial companies as a researcher and consultant.
In 2009, he received the Polish Quality Award in the scientific category. In 2023, he was honored with the Individual Award of the Minister of Science and Higher Education. Professor Adam Hamrol has received a honoris causa (honorary doctorate) from Krakow University of Technology. He is a member of the Committee on Machine Construction and the Committee on Production Engineering of the Polish Academy of Sciences (PAN).

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CONFERENCE SPRINGER BOOKS

FREE ACCESS (until June 30, 2026) password: MANU2026! manufacturing.put.poznan.pl/proceedings

Advances in Manufacturing V - Volume 1
Mechanical Engineering: Factory of the Future

Bartosz Gapiński, Poznan University of Technology, Poland
Olaf Ciszak, Poznan University of Technology, Poland
Vitalii Ivanov, Sumy State University, Ukraine
José Machado, University of Minho, Guimarães, Portugal
Anna Karwasz, Poznan University of Technology, Poland

Advances in Manufacturing V - Volume 2
Production Engineering: Factory of the Future

Justyna Trojanowska, Poznan University of Technology, Poland
Agnieszka Kujawińska, Poznan University of Technology, Poland
Naiming Xie, Nanjing University of Aeronautics and Astronautics, China
Jozef Husár, Technical University of Košice, Slovakia
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Advances in Manufacturing V - Volume 3
Quality Engineering: Factory of the Future

Adam Hamrol, Poznan University of Technology, Poland
Marta Grabowska, Poznan University of Technology, Poland
Paulina Rewers, Poznan University of Technology, Poland
Ivan Pavlenko, Sumy State University, Ukraine
Grigore Marian Pop, Technical University of Cluj-Napoca, Romania

Advances in Manufacturing V - Volume 4
Measurement and Control Systems: Factory of the Future

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Jiehan Zhou, Shandong University of Science and Techology, China
Michał Wieczorowski, Poznan University of Technology, Poland
Ewa Dostatni, Poznan University of Technology, Poland
Piotr D. Moncarz, Stanford University, USA

Advances in Manufacturing V - Volume 5
Biomedical Engineering: Factory of the Future

Filip Górski, Poznan University of Technology, Poland
Răzvan Păcurar, Technical University of Cluj-Napoca, Romania
Nikola Vitković, University of Niš, Serbia
Michał Rychlik, Poznan University of Technology, Poland
Michał Jakubowicz, Poznan University of Technology, Poland

Selected articles are published in the journal
Management and Production Engineering Review
Editor-in-Chief: Ewa Dostatni, Poznan University of Technology, Poland
Technical Editor: Marta Grabowska, Poznan University of Technology, Poland

CONFERENCE PROGRAMME

WAWiZ (A-30) Building, Jacka Rychlewskiego 2 Street, Poznan

Day 1 | May 19 (Tuesday)

Time	*Event*	*Room/Info*
10:00–14:00	Registration	Atrium | 0 level
11:00–12:50	**Opening Ceremony, Best Paper Awards, Keynote Speakers**	001 room | 0 level
12:50–13:00	Group Photo	in front of the WAWiZ building
13:00–14:00	Lunch	Atrium/012 | 0 level
13:30–15:30	**The Committee on Production Engineering** (KIP PAN)	101 room | 1 level
13:30–15:30	**The Committee on Machine Construction** (KBM PAN)	132 room | 1 level
14:00-15:30	**Campus & Labs Walking Tour**	Meeting point in front of the WAWiZ building
15:30–16:00	Coffee Break	Atrium | 0 level
16:00–17:30	**Science & Industry & Business Discussion Panel**	001 room | 0 level
18:00–22:00	**Ice Breaker Party – MK Bowling Poznan, MM Gallery**	Święty Marcin 24 street, 61-805 Poznan

Day 2 | May 20 (Wednesday)

Time	*Event*	*Room/Info*
9:00–10:30	Morning Coffee and Snacks	Atrium | 0 level
9:00–10:30	**Poster Session**	Main Hall | 1 level
10:30–11:00	Coffee Break	Atrium | 0 level
11:00–12:30	**Session 1**	001 room | 0 level
12:30–13:30	Lunch	Atrium/012 | 0 level
13:30–15:00	**Session 2**	001 room | 0 level
15:00–15:30	Coffee Break	Atrium | 0 level
15:30–17:00	**Session 3**	001 room | 0 level
18:30–23:00	**Gala Dinner**	Main Hall | 1 level

Day 3 | May 21 (Thursday)

Time	*Event*	*Room/Info*
8:30–9:00	Morning Coffee and Snacks	Atrium | 0 level
9:00–10:30	**Session 4**	001 room | 0 level
10:30–11:00	Coffee Break	Atrium | 0 level
11:00–12:30	**Session 5**	001 room | 0 level
12:30–13:30	Lunch	Atrium/012 | 0 level
13:30–15:00	**Session 6**	001 room | 0 level
15:00–16:00	Coffee Break	Atrium | 0 level
15:15–16:00	**Closing Remarks, Best Poster & Presentation Awards**	001 room | 0 level

ACCOMPANYING EVENTS

Other events organized as part of/in parallel with the MANUFACTURING conference:

■ Committee Meeting:

PAN POLSKA AKADEMIA NAUK | Komitet Inżynierii Produkcji

- **Committee on Production Engineering** of the Polish Academy of Sciences (KIP PAN)
- Place and date: **May 19, 2026, 13:30–15:30**, Building WAWiZ (A30), Room 101
- Note: participation is reserved exclusively for KIP PAN committee members; entry by dedicated invitation only; official language of the event: Polish

■ Committee Meeting:

PAN POLSKA AKADEMIA NAUK | Komitet Budowy Maszyn

- **Committee on Machine Construction** of the Polish Academy of Sciences (KBM PAN)
- Place and date: **May 19, 2026, 13:30–15:30**, Building WAWiZ (A30), Room 132
- Note: participation is reserved exclusively for KBM PAN committee members; entry by dedicated invitation only; official language of the event: Polish

■ Project Meeting:

- **GREENG**: "Data-driven grey system models for reliability engineering", NAWA scientific project
- Place and date: **May 22, May 25–28, 2026, 10:00–15:00**, WIM (A1), Room 326 / WAWiZ (A30), Room 124
- Note: participation is reserved exclusively for GREENG's project members; entry by dedicated invitation only; official language of the event: English

■ Association Meeting:

- The **Polish Scientific Association of Grey Systems**
- GST Workshop: "Industrial Applications of Grey System Theory"
- Place and date: **May 18, 2026, 10:00–15:00**, WAWiZ (A30), Room 124
- Note: entry by invitation only; official language of the event: English

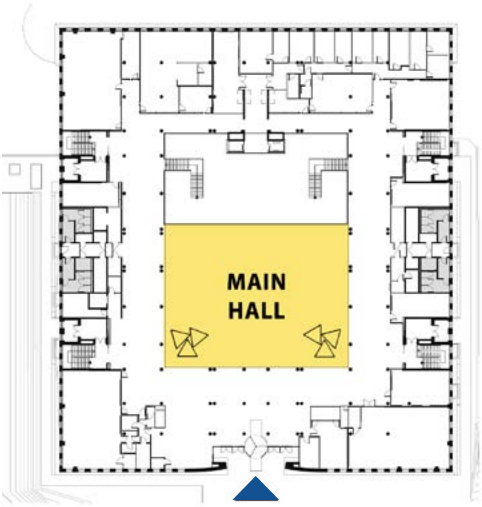
■ Workshop:

- **Horizontal Contact Point Western Poland**
- HPK Workshop: "Międzynarodowa kariera naukowa z Horyzontem Europa. Od planu do realizacji"
- Place and date: **May 21, 2026, 09:00–10:30**, Building WAWiZ (A30), Room 116
- Note: fee-free entry, prior registration required; official language of the event: Polish

CONFERENCE VENUE

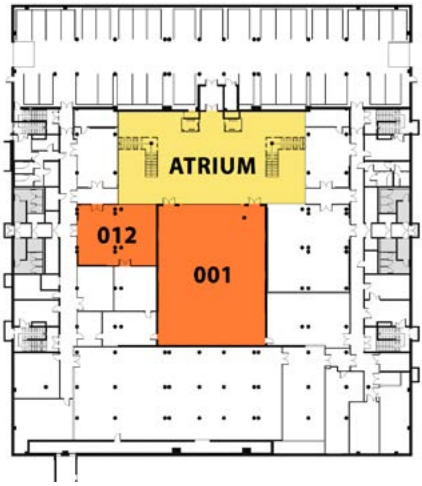
WAWiZ (A-30) • Jacka Rychlewskiego 2 Street, Poznan

WARTA CAMPUS



MAIN ENTRANCE

1 level



0 level

EVENTS & SOCIAL ACTIVITIES

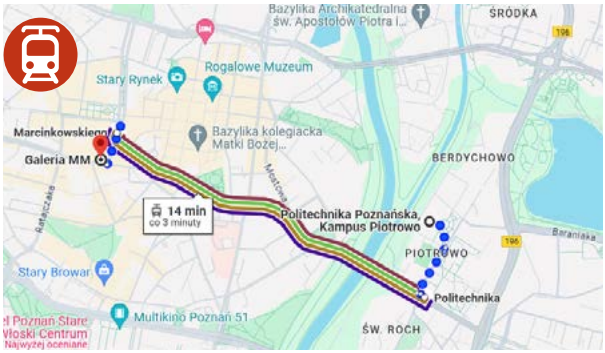
Day 1, May 19 (Tuesday)

2:00 pm | Campus & Labs Walking Tour
Start Point: in front of the WAWiZ building

Jacka Rychlewskiego 2 Street, Poznan

6:00 pm | Ice Breaker Party – MKBowling
Meeting Point: MM Gallery

MM Gallery / Święty Marcin Street 24, Poznan



Day 2, May 20 (Wednesday)

6:30 pm | Gala Dinner
Main Hall in WAWiZ building

Jacka Rychlewskiego 2 Street, Poznan

OSTOJA
catering

KEYNOTE SPEAKERS

Day 1, May 19 (Tuesday)

Naiming XIE

Plenary paper:
Industrial Applications of Grey System Modeling

Nanjing University of Aeronautics and Astronautics, China

A researcher at the College of Economics & Management, Nanjing University of Aeronautics and Astronautics, China, specializing in grey systems theory, industrial engineering, and data analytics.

He has authored 5 books and over 150 SCI/SSCI-indexed journal articles, earning recognition as a Top 2% global scientist (Stanford University). He has led 20+ research projects and holds key editorial roles, including Secretary-in-Chief of the journal Grey Systems Society of China (GSSC) and Assistant Editor of the journal Grey Systems: Theory and Application.

Bożena SKOŁUD

Plenary paper:
Industry 5.0, What is next? Where are we going?

Department of Automation of Technological Processes and Integrated Manufacturing Systems, the Faculty of Mechanical Engineering, the Silesian University of Technology, Poland

She is a specialist in production engineering, organization, and management of production systems. Her research includes production optimization, production scheduling, planning of multi-assortment rhythmic production, production planning for non-heterogeneous products, modeling of discrete systems, and balancing of assembly lines.

She was the supervisor of 6 completed doctoral theses. She is the author of 260 publications. She carried out numerous scientific and research works commissioned by the industry, managed scientific projects, as well as the didactic project Interactive Engineering Education – INTEREDU. She participated in two research internships at the Univ. of Bologna. She repeatedly conducted classes at ICAM Nantes, ICAM Toulouse (France), Trnavská Univerzita Trnava (Slovakia), and the University of Stavanger (Norway).

She held the following positions:

- in 2009, she was elected to the Production Engineering Committee of the Polish Academy of Sciences;
- is a member of the Polish Society of Production Management, in subsequent periods she was a member of the management board, chairwoman of the Gliwice branch, and member of the audit committee;
- since 2010 she has been an expert, and since 2019 is a member of the Polish Accreditation Committee;
- in 2022, she was appointed to the advisory team to evaluate applications and reports under the „Implementation Doctorate" program;
- currently, she is vice-rector for general affairs.

CONFERENCE SCHEDULE

Day 1, Tuesday, May 19

10:00-14:00 | Registration — Atrium, 0 level

11:00-12:50 | **Opening Ceremony, Best Paper Awards, Keynote Speakers** — 001 room, 0 level

Master of Ceremony: **Magdalena Hryb**
Keynote's Session Chair: **Adam Hamrol**
Keynote 1: **Bożena Skołud**, Industry 5.0, What is next? Where are we going?
Keynote 2: **Naiming Xie**, Industrial Applications of Grey System Modeling

12:50-13:00 | **Group Photo** — in front of the WAWiZ building

13:00-14:00 | Lunch — Atrium/012, 0 level

14:00-15:30 | **Campus & Labs Walking Tour** — Meeting point in front of the WAWiZ building

15:30-16:00 | Coffee Break — Atrium, 0 level

16:00-17:30 | **Science & Industry & Business Discussion Panel** — 001 room, 0 level

18:00-22:00 | Ice Breaker Party — Święty Marcin 24 street, 61-805 Poznan

Day 2, Wednesday, May 20

09:00-10:30 | **Morning Coffee and Snacks** — Atrium, 0 level

Poster Session

09:00-10:30 | **Chair: Michał Jakubowicz** — Main Hall, 1 level

POSTER ID:	*Authors:*	*Poster title:*
1	**Emilia Campean** and Crisan Liviu	Process mining for quality prediction in HV cable manufacturing: identifying human error patterns with Alpha algorithm
2	**Rafał Mierzwiak**	A Grey Hybrid Research Methodology for Examining Artificial Intelligence Adoption in Manufacturing Family Businesses: Theoretical and Epistemological Challenges

3	**Jędrzej Smykowski**, Marek Szostak and Kinga Mencel	Development of Modified Polypropylene Composites as a Sustainable Alternative to PC/ABS for Public Transport Applications
4	**Ryszard Gąsiorowski**, Danuta Matykiewicz, Dominika Janiszewska-Latterini and Krzysztof Szymkowiak	Sorghum residues as alternative raw material for particleboard manufacturing
5	**Adam Gąska**, Wiktor Harmatys, Daniel Heißelmann, Lea-Jean Frömel, Katharina Janzen and Ulrich Neuschaefer-Rube	Characterisation of chromatic white light sensors using measurements of material standards and experimental design approaches
6	**Michal Grzelak** and Marek Szostak	The impact of post-consumer recycling (PCR) and repeated industrial recycling (PIR) to – PET bottle properties
7	**Jakub Harabiš**	Experimental development and validation concept of a monolithic recycled-FRP access hatch for bus floor applications
8	Piotr Hoffmann and **Paweł Kłopocki**	Development of high-performance innovative modular floors based on a mineral core with a wooden top layer with their production technology
9	Adam Szczepański and **Marek Magdziak**	Manual Evaluation of the Controlled Radius: Identified Challenges and an Automated Approach
10	**Regita Bendikiene** and Laura Cepauskaite	Advances in Surface Engineering: From Conventional Coatings to Sustainable Laser Surface Texturing
11	**Laura Cepauskaite** and Regita Bendikiene	Engineering Wettability of AW-6082 Aluminium via 3D Bio-Inspired Laser Surface Texturing
12	**Antanas Ciuplys**, Laura Cepauskaite and Regita Bendikiene	AI Generated Modelling for Predicting Wettability of Laser Textured Surfaces
13	**Tomasz Andrzejewski**	A Modular High-Throughput Screen Printing and Hot Stamping Cell Enabled by TSN-Synchronized Motion Control
14	**Jacek Diakun**	Product Modeling for Recycling Assessment Purposes – Case Study
15	**Magdalena Niemczewska-Wójcik**, **Monika Made**j, Danuta Owczarek, Piotr Niesłony, Jolanta Królczyk, Grzegorz Królczyk, Michał Jakubowicz, Michał Wieczorowski, Bartosz Gapiński, Piotr Sosinowski and Kamil Kubiak	Methodology for contact and non-contact measurement the surface texture of polished and sandblasted elements covered with bio-coatings

16	**Kuba Kryszczyński**, Dominik Wilczyński and Krzysztof Wałęsa	Test Stand for Bolted Joint Properties
17	**Karol Gorynia**, Joanna Aniśko-Michalak, Adam Piasecki and Marek Szostak	Impact of preprocessing milling procedures on the structure and mechanical performance of high-density polyethylene (HDPE) rotomolded composites filled with basalt powder (BP)
18	Mateusz Barczewski, Aleksander Hejna, Jacek Andrzejewski, Patryk Mietliński, Joanna Aniśko, Olga Mysiukiewicz, Adam Piasecki, **Karol Gorynia**, Cene Gostičar, Anja Černoša, Ana Gubenšek, Jakub Sandak, Wojciech Pajerski, Polona Zalar, Nina Gunde-Cimerman and Anna Sandak	LIVEMAT: A step towards a paradigm shift in facade products design by applying hybrid living materials (HLM)
19	**Anna Timofiejczuk**	Context-Aware Maintenance in Intelligent Manufacturing Systems
20	**Yuansheng Cheng**, Pawel Gołda and Grzegorz Królczyk	MSSFMNet: A Multi-Scale and Efficient Spatial Frequency Modulation Network for Image Dehazing
21	Leonel Patrício, Leonilde Varela, Zilda Silveira, Marcos Gatti, André Santos, **Justyna Trojanowska** and José Machado	A Sustainable Framework for Digital Automation in Production Management: A Systematic Literature Review and Conceptual Model Proposal
22	**Radek Štohl**, Sona Sediva and Karel Stibor	Machine Learning-Driven Automated Selection of Safety Logic Devices in Industrial Control Systems
23	**Khrystyna Berladir**, Oleksandr Sokolov, Michal Hatala, Yuliia Denysenko and Vitalii Ivanov	Machine Learning Models for Strength Prediction of Carbon Fiber Reinforced Polymers
24	**Kamil Musiał**, Artem Balashov and Anna Burduk	Predictive Maintenance in Serial Production Using Deep Learning: Analysis of Multi-Layered Telemetry Data Streams and Maintenance History
25	Oleg Krol, Vladimir Sokolov, Oleksandr Logunov, **Marin Zhilevski**, Mikho Mikhov	Design Implementation Features of Multi-operation Machine Spindle Head with Integrated Drive and Innovative Belt Transmission
26	Grzegorz Iskierka, Bartosz Poskart, **Kamil Krot**, Paweł Krowicki	Spray painting AMR system
27	**Sławomir Andrzej Nadolny**, Adam Hamrol, Michał Rogalewicz	The influence of controlled atmosphere brazing process parameters of the charge air cooler on the brazing degree and the amount of flux residues

28	Branislav Katrinič, Monika Töröková, **Marek Kočiško**, Jozef Török, Martin Koroľ	Applying reverse engineering techniques for the recreation of a tractor cabin protection grille
29	**Krzysztof Ciecieląg**, Agnieszka Skoczylas, Jakub Matuszak	Comparative characteristics of milling zones for polymer composites and aluminum alloy
30	Michał Wieczorowski, Jacek Bogusławski, Katarzyna Stec, Paweł Fuć, Adam Lewandowski, Wojciech Prus, Rehan Khan	The importance of green hydrogen for a sustainable economy
31	**Tomasz Olszewski**, Danuta Matykiewicz	Adaptive Process Control in Injection Molding Using Cavity Pressure Sensors: Recent Advances and Perspectives
32	**Agnieszka Skoczylas**, Jakub Matuszak, Krzysztof Ciecieląg, Kazimierz Zaleski	The fatigue life of ball burnished objects immersed in oil
33	Piotr Gładysz, Mateusz Mazur, Izabella Kęsy	Systemic resilience as a model of intersectoral cooperation through the prism of the participation of unmanned aerial vehicles in the work of emergency headquarters during the 2024 floods
34	Łukasz Sobaszek, Edward Kozłowski, **Katarzyna Antosz**, Monika Kulisz, Antoni Świć, Sławomir Ordyniec	Comparison of energy consumption by robot due to velocity and motion type
35	Daria Motała, Julia Gumińska, **Katarzyna Ragin-Skorecka**, Agnieszka Krugiełka	Navigating the Energy Transition: Conditions for Effective Renewable Energy Adoption in Polish Enterprises
36	Andrzej Chmielowiec, Adam Błachowicz, **Katarzyna Antosz**	Innovative PLC-Based Architecture for Acquisition and Storage of Analog Sensor Data in Industrial Environments
37	Ján Duplák, Samuel Mikuláško, **Maryna Yeromina**, Róbert Pyteľ	Integration of Robotic Technologies in Modern Heat Treatment Processes
38	Grzegorz Radzki, Grzegorz Bocewicz, **Mariusz Piechowski**, Zbigniew Banaszak, Małgorzata Jasiulewicz-Kaczmarek	Interactive computer-aided balancing of machining lines - a declarative modeling approach
39	Michał Kobielski, **Andrzej Loska**	Physics-Informed Neural Networks for Anomaly Detection: A Mechanical Proof-of-Concept towards IIoT-Enabled Mechatronic Systems
40	**Roman Wdowik**	AI-assisted automation of grinding tools CAD design focused on 2D drawings: two-way CAD design basics

41	Mariam Rajouh, **Szymon Wojciechowski**, El Mehdi Kibbou, Maciej Klosak, Marcin Gołaszewski	Numerical Modeling of Zirconia: A Synthetic Review of Mechanical Behavior and Manufacturing Processes
42	**Bartłomiej Szczupak**, Piotr Paczos, Piotr Szablewski	A Review of Fixturing Design Methodology for Machining Thin-Walled Aerospace Components Considering Complex Stress States
43	**Krzysztof Łukaszewski**, **Anna Karwasz**, Tymoteusz Puchalski	Training application for the operation and selection of parameters of the additive manufacturing process using the FDM method
44	**Anna Karwasz**, Krzysztof Łukaszewski, Roman Wdowik	Increasing the productivity of the work cell
45	**Izabela Rojek**, Nataša Náprstková, Dariusz Mikołajewski	Possibilities of Using Generative AI in AI-based Digital Twins for Industry 5.0/6.0
46	**Olha Kalman**, Martin Kondrat, Jozef Husár, Patrik Fejko	Study of the application of non-contact profilometric methods for analyzing the lateral layers of FDM 3D prints
47	Leonel Patrício, Leonilde Varela, Justyna Trojanowska, Zilda Silveira, Nuno Leal, **José Machado**	A Low-Cost Model for Digital Transformation and Cybersecurity in Production Management
48	Siyuan Sun, Jiehan Zhou, Zhaojia Wang, Jinrui Wang, Anna Burduk, **Damian Krenczyk**	Cognitive Industrial Twin – A Survey
49	**Myroslav Omelianenko**, Jozef Husár, Justyna Trojanowska	Cross Reality for computer control of technical systems in mechanical engineering
50	Gregor Sopko, **Martin Pollák**, Peter Gabštur, Jakub Kaščak	Analysis of additive manufacturing process errors using intelligent monitoring techniques
51	Patrycja Guzanek, Mykola Karpenko, **Anna Borucka**	Time Series Forecasting under Irregular Seasonality and Anomalies
52	Jarosław Ziółkowski, Patrycja Guzanek, Mykola Karpenko	Selecting Transportation Options Within The Distribution Network
53	Dušan Paulišin, Marek Kočiško, Petr Baron, **Denisa Olekšáková**	Analysis of Advanced Digital Technology Applications for Effective Human-Machine-Robot Collaboration in the Production of Precision Mechatronic Systems
54	Thi Bao Chau Huynh, **Paulina Golinska-Dawson**	A Multi-Case Document Analysis of Global AI Tools for Data-Driven Circular Manufacturing
55	**Piotr Kaźmierczak**, Krzysztof Żywicki	Assumptions of the production scheduling model in the smart factory demonstrator
56	**Jakub Kaščak**, Lucia Knapčíková, Martin Pollák, Zuzana Mitaľová, Gregor Sopko, Peter Gabštur	Vision-based supervisory concept for manual assembly operations using TinyML on an STM32 microcontroller

57	**Karolina Bendowska**, Krzysztof Żywicki	Conceptual Use of a Digital Twin in a Smart Factory Model
58	**Bartosz Adamski**, Marta Grabowska	The Evolution of Maintenance Strategies in the Context of Industrial Development and Sustainable Development
59	**Krzysztof Żywicki**, Agnieszka Kujawińska, Jędrzej Iglewski, Magdalena Hryb, Paulina Rewers, Przemysław Łuczak	Digitalization of manufacturing process monitoring and control using Digit.io software
60	**Kinga Kulawik**, **Anna Burduk**	Explainability of Artificial Intelligence Models in Production Management Decision-Making: A Conceptual Model and Implications
61	**Dawid Bogdanowicz**, Anna Woźna	A Preliminary Study on a Proposed Energy Management System Framework for a Progressive Die Stamping SME
62	**Fryderyk Wachowiak**	Ergonomics in the light of ESRS Standards. Analysis of ESG Reports from Selected Wood Based Panel Manufacturers
63	**Darina Dupláková**, Matej Cichý, Ján Duplák, Viktória Tutokyová	Current approaches in software support for industrial ergonomics
64	Nenad Vladić, Damjan Maletič, **Matjaž Maletič**	Mapping Innovation Capability: A Diagnostic Approach for Assessing and Enhancing Organizational Capabilities
65	Hanna Łosyk, Małgorzata Szmołda, **Justyna Patalas-Maliszewska**	Systematic Review of AI-based Models for sustainable machining process
66	**Bohdan Wojciechowski**, Adam Hamrol, Wiesław Kuczko	The influence of additional heat supplied to an FDM-manufactured product on its dimensional accuracy
67	**Katarzyna Ragin-Skorecka**, Marta Banach, Daria Motała, Agnieszka Krugiełka	Risks of AI Over-Reliance in Digital Project Management: Implications for Intelligent Adaptive Systems
68	**Katarzyna Ragin-Skorecka**, Daria Motała, Agnieszka Krugiełka	Big Data Analytics as a tool supporting the sustainable development of manufacturing enterprises
69	Dorota Filipek, **Paulina Golinska-Dawson**	The potential for adopting circular supply chains with PaaS models in the apparel industry
70	**Anna Wencek**, Agnieszka Misztal, Laurentiu Ionescu, Kinga Ratajszczak, Nadia Ionescu	Suggestion platform to develop quality and sustainability - new possibilities and solutions
71	Ewa Dostatni, **Anna Dudkowiak**, Anna Kończal, Nataša Náprstková	Automation of quality data management in a food industry company

72	Lucia Knapcíkova, **Daniel Bobko**, **Maksym Karakai**	Material Circularity of Selected Components in the Context of Modern Enterprise
73	Mateusz Duraj, **Andrzej Loska**	A way for improving the efficiency of energy media use in the propylene glycol production process
74	**Alla Polyanska**, Dariusz Sala, Vladyslav Psyuk	Determinants of Energy Transition Efficiency in the Era of Industry 4.0
75	**Marcin Butlewski**, Fryderyk Wachowiak, Krzysztof Zawodny	Balancing Costs, Productivity and Well-Being: A Multi-Dimensional Assessment of Maintaining Safety Measures in Organizations
76	**Katarzyna Piotrowska**, Jakub Pizoń, Robert Waszkowski	The impact of digital transformation on quality management systems in manufacturing organizations
77	**Agnieszka Kujawińska**, **Wenjie Dong**, Magdalena Hryb, Adrian Czernek	Smart vision system in quality inspection of medical products – Case study
78	Michał Wieczorowski, Andrzej Kurkiewicz, Maxence Bigerelle, Alejandro Pereira, Grzegorz Krolczyk, Francois Berkmans, Bartosz Gapinski	Determinants and Challenges of Metrology 5.0
79	**Karol Grochalski**, Julia Radziejewska, Krzysztof Kupka	Methodology for Assessing the Repeatability of Focal Positioning in Focus Variation Microscopy (FV)
80	**Karol Grochalski**, Julia Radziejewska, Krzysztof Kupka, Michał Wieczorowski	Selected measurement problems related to illumination conditions in the application of the Focus Variation (FV) technique
81	Marcin Moskwa, Bartosz Gapiński, **Michał Jakubowicz**	Precision alignment and geometrical verification of tire building machines using laser tracker systems
82	**Lidia Smyczyńska**, Bartosz Gapiński, Michał Jakubowicz	Application of the LSCI Method for Assessing the Roundness Deviation of Circular Profile Segments with Different Types of Form Deviation
83	**Jakub Matuszak**, Krzysztof Ciecieląg, Agnieszka Skoczylas, Kazimierz Zaleski	Effect of the Tool Lead Angle on the Effectiveness of Surface Defect Removal Using Ceramic Brushes
84	Rabia Sheraz, **Rehan Khan**, Ayesha Maqsood, Michał Wieczorowski	Assessment of Erosive Wear Performance of 3D Printed Industrial Cyclone Preheater
85	Liangyan Tao, Zhao Yang, **Magdalena Hryb**, Agnieszka Kujawinska	An Expert Decision Quality Assessment Model Based on Grey Relational Analysis and Kappa Coefficient

86	**Łukasz Wójcik**, Arkadiusz Gola, Jakub Pizoń	Integration of Digital Inspection Cards with QMS/MES in the Automotive Parts Remanufacturing Process – a Case Study
87	**Danuta Owczarek**, Ksenia Ostrowska, Ilona Jędrzejak, Csaba Felhő, Michał Stoliński	Automation of the cylindrical hole measurement through the application of a multi-criteria tool selection matrix and the extraction of geometric data from the CAD model
88	**Jędrzej Bożek**, Adam Poschwald, Adam Hamrol	Parameterization of the grinding process with abrasive belts for complex surfaces of surgical instruments
89	Ksenia Ostrowska, Danuta Owczarek, **Katarzyna Składanowska**, Izabela Sanetra, Tobiasz Klimczak	Analysis of the impact of resolution and sampling density on the accuracy and repeatability of optical coordinate measurement
90	**Adam Szczepański**, Marek Magdziak	Manual and CMM-Based Inspection Methods for Controlled Radius Evaluation
91	**Krzysztof Smak**, Piotr Szablewski, Stanisław Legutko	Evaluation of surface topography, microstructure and tool wear after turning Inconel 718 alloy with a tool overhang of 10×D
92	**Stefan Bodi**, Amina Vildanova, Zsolt-Levente Buna, Radu Comes, Călin Neamțu, Daniela Popescu, Raul-Silviu Rozsos	A novel method for increasing the accuracy of the WAAM process technology
93	**Diana-Elena Horincar**, Răzvan Păcurar, Petru Berce, Nikola Vitković, Sanja Stojanović and Monica Rău	MAF-Based Workflow for Parametric Modeling of Anatomical Surfaces using NURBS and SubD
94	**Maryna Yeromina**, Jozef Török, Samuel Mikuláško, Darina Dupláková	Simulation Analysis of a Robotic Workplace for Additive Manufacturing of Dental Implants
95	Agata Mrozek-Czajkowska, Wiesław Kuczko, Magdalena Karolak, **Justyna Rybarczyk**	Design and Manufacturing Workflow of a Patient-Specific Head Orthosis: A Case Study
96	**Justyna Rybarczyk**, M. Dolatkowski, Filip Górski, A. Mrozek-Czajkowska, P. Nowak	Design And Investigation Of A Low-Cost, Anatomically Customized Mechatronic Hand Prosthesis
97	**Piotr Niesłony**, Piotr Löschner, Jolanta Krolczyk, Grzegorz Królczyk, Dawid Kucharski, Bartosz Gapinski, Michał Wieczorowski, Łukasz Ślusarski, Natalia Wojciechowska, Katarzyna Nicińska	Integrated assessment of surface geometric structure after various manufacturing processes using optical and contact methods

98	**Bartosz Gapiński**, Michał Wieczorowski, Piotr Niesłony, Grzegorz Królczyk, Rafał Reizer, Kazimiera Dudek, Paweł Pawlus, Andrzej Dzierwa, Dariusz Czułek, Łukasz Ślusarski	Influence of the number of projections on the results of topography evaluation during micro-CT measurements
99	Horea-Ștefan Goia, Corina Birleanu, **Florin Popișter**, Friedemann Schaber, Mihai Dragomir, Paul Ciudin	Multi-modal performance analysis of Harmonic Gearboxes Manufactured Through 3D-Printing technology using PLA and PETG
100	Yanfeng Chu, Lian Xie	Research on Multi-Objective Flexible Job Shop Scheduling Problem Based on Improved NSGA-II
101	**Paul Ciudin**, Marius Pustan, Florin Popișter, Friedemann Schaber, Mihai Steopan, Horea Ștefan Goia	Comparative Mechanical and Tribological Analysis of 3D Printed Harmonic and Cycloidal Gearboxes
102	**Nikola Vitkovic**, Aleksandar Trajkovic, Rajko Turudija, Jovan Arandjelovic, Monica Maria Elena Rauca, Diana Elena Horincar	VR Simulation and Education for Additive Manufacturing in Medicine: A Process-Oriented Engineering Approach
103	**Nikola Vitkovic**, Aleksandar Trajkovic, Jovan Arandjelovic, Rajko Turudija, Milica Barac	Parametric Optimization of Additively Manufactured Proximal Humerus Cloverleaf Plates Using the Method of Anatomical Features
104	Lam Le, Vi Nguyen, **Chuong Chau**, Thanh Tran	Improving Mechanical Performance of FDM-Printed Carbon Fiber-Reinforced PLA via a Novel Infill Pattern
105	Ryszard Ziętek, **Paweł Herbin**, Mirosław Pajor	Self-learning system for predicting muscle torque in real time based on field programmable logic

10:30-11:00 | Coffee Break Atrium, 0 level

Day 2, Wednesday, May 20

Session 1: Sustainable & Smart Manufacturing Systems

11:00-12:30 | Chair: Sebastian Skoczypiec 001 room, 0 level

Submissions:	*Authors:*	*Presentation title:*
1.1	**Lennart Grüger**, Tim Sebastian Tübbicke, Conrad Uwe Lehmann, Ralf Woll	Current challenges in failure mode and effect analysis and general recommendations
1.2	Justyna Patalas-Maliszewska, **Sławomir Kłos**, Michał Bazel, Hanna Łosyk	An approach to quality control of heat-treated parts towards a smart manufacturing

1.3	**Andrzej Milecki**, Arkadiusz Kubacki, Marcin Białek, Dominik Rybarczyk, Daniel Wyrwał and Sławomir Cieślak	Development of a mechatronic ladder and its automated production line
1.4	**Rajesh Patil** and Magnus Löfstrand	Ingenious Island Manufacturing System (I2MS): A Sustainable and Digital Manufacturing Paradigm for Productivity, Circularity, and Low-Carbon Automotive Production
1.5	Wojciech Babirecki, Katarzyna Skrzypek, Karol Dąbrowski, **Małgorzata Śliwa**, Wojciech Śmierski	Artificial intelligence in engineering design, case study
1.6	**Katarzyna Barnuś**, Dorota Stadnicka	Integration of Hydrogen Technologies into Sustainable Energy Management Systems in the Automotive Industry

12:30-13:30 | Lunch Atrium/012, 0 level

Day 2, Wednesday, May 20

Session 2: AI-Driven Manufacturing: From Simulation to Process Control

13:30-15:00 | Chair: Mosè Gallo 001 room, 0 level

Submissions:	*Authors:*	*Presentation title:*
2.1	**Andrzej Chmielowiec**	An Adaptive FEA-Based System for Computationally Efficient Simulation of Cladding in Surface Enhancement Manufacturing Processes
2.2	**Jakub Pizoń**, Lukasz Wojcik and Arkadiusz Gola	Large Language Model Based Digital Twin Expert System for Manufacturing Process Control
2.3	Olaf Ciszak, Przemysław Zawadzki, **Marcin Kasica**	Process of building human-robot communication based on the natural interfaces within XR systems for the use in process automation
2.4	**Oumayma Drissi Yahyaoui**, Erwin Rauch, Matteo De Marchi	Potential Applications of Bio-intelligent Systems in Ceramic Manufacturing Industry
2.5	**Jadwiga Krupnik-Worek** and Sebastian Skoczypiec	The Application Of Supervised Machine Learning Algorithms To Improve The Accuracy Of Prediction The Duration Of Manufacturing Operations

2.6	**Tomasz Bartkowiak**, Jędrzej Gembiak, Jan Dąbrowski, Dariusz Dąbrowski	Modeling the Root Causes of Production Line Stoppages by Leveraging Downtime History and Buffer Dynamics: Simulation-based Evaluation
2.7	Elena Manoli, **Giulio Mattera**, Thao Le Van, Mosè Gallo, Van Canh Nguyen, Luigi Nele	An AI-Driven Slicing Framework for Optimising Energy Consumption and Printing Time in Wire Arc Additive Manufacturing

15:00-15:30 | Coffee Break Atrium, 0 level

Day 2, Wednesday, May 20

Session 3: Advanced Manufacturing & Sustainable Technologies

15:30-17:00 | Chair: Magdalena Niemczewska-Wójcik 001 room, 0 level

Submissions:	*Authors:*	*Presentation title:*
3.1	**Akash Nag**, Prasath Govindaraj, Jan Zelinka, Jana Petrů, Sergej Hloch	Influence of Focusing Tube and Process Variables on Wear Rates in Abrasive Waterjet Machining
3.2	**Karol Dąbrowski**, Katarzyna Skrzypek, Daria Moskwa – Bęczkowska, Agnieszka Stachowiak, Sebastian Saniuk	Monetisation of environmental ESG indicators as a tool for standardising sustainability reporting in small and medium-sized enterprises in the metal and automotive industries – a new approach
3.3	**Aleksander Jawor**, Anna Borucka	A conceptual framework for assessing the readiness and susitability of enterprises for militarization and the fulfillment of state functions in the context of armed conflict
3.4	**Sergej Hloch**, Jakub Poloprudský, Michal Vopálenský, Akash Nag	Minimally Invasive Bone Cement Removal using an Ultrasonic Pulsating Water Jet with Anatomical Nozzle
3.5	**Gabriel Stolárik**, Alice Chlupová, Jakub Poloprudský, Akash Nag, Sergej Hloch	Comparative Erosion Analysis of Ti6Al4V and AISI 304L under different Excitation Frequencies using PWJ
3.6	**Weronika Dylewicz**, Radosław Maruda, Kamila Skoczylas	Influence of Ecological Cooling Methods on Air Pollution Indicators During Turning of Ti6Al4V Titanium Alloy
3.7	**Keyru Salia Suraj**, **Wiktoria Wojnicz**, Klaudia Piwko and Klaudia Hirsch	An approach to design a prototype of lattice structures: a preliminary study

18:30-23:00 | Gala Dinner Main Hall, 1 level

Day 3, Thursday, May 21

08:30-09:00 | Morning Coffee and Snacks Atrium, 0 level

Session 4: Biomedical Engineering & Additive Technologies

09:00-10:30 | Chair: Filip Górski 001 room, 0 level

Submissions:	*Authors:*	*Presentation title:*
4.1	Hector Cruz Martinez, Gabriel Monroy, **Leticia Neira-Tovar**	A proposal model to design an emotional assistance robot to first assistance at health area
4.2	**Răzvan Păcurar**, Cristina Ludusan, Dolores Ojados, Joaquin Roca-González, Emilia Sabau, Cristina Borzan, Cristian Vilău and Ancuţa Păcurar	Research on Structural Design of Mechanically Decoupled Breast Implants Made by Fused Deposition Modeling Technology
4.3	**Bora Kutlu**, Michał Rychlik	Design and Strength Analysis of a Mechanical Wrist Orthosis for Tremor Suppression
4.4	**Monica Rău**, Răzvan Păcurar, Mircea Năsui, Augusta Oros, Eugen Guţiu, Marks Gorohovs, Jurijs Dehtjars, Elizabete Skrebele, Nikola Vitkovic, Dan Sorin Comsa, Ancuţa Păcurar and Diana Horincar	DLP-Printed Titanium Nanocomposite Resin for Bioactive Interfacial Layers Promoting Bone Feeding and Healing
4.5	**Aleksandra Grohs**, Filip Górski, Magdalena, Wiesław Kuczko, Przemysław Zawadzki, Błażej Gabryszewski, Sabina Siwiec-Troszczyńska, Radosław Wichniarek	Study of thermal and mechanical properties of additively manufactured PLA in the context of hand orthosis design
4.6	**Sven Maričić**, Mihael Holi	Next-Generation Biocompatibility: Reviewing the Frontier of Novel Materials in Medical AM
4.7	**Emilia Smolarek**, Dominik Kłak, Błażej Gabryszewski, Magdalena Żukowska, Filip Górski and Anders Nøhr	Additive Manufacturing of Individualized Anatomical Models to Support Otolaryngologic Surgery Planning

10:30-11:00 | Coffee Break Atrium, 0 level

Day 3, Thursday, May 21

Session 5: Grey Systems Theory in Production Engineering

11:00-12:30 | Chair: Rafał Mierzwiak 001 room, 0 level

Submissions:	*Authors:*	*Presentation title:*
5.1	**Camelia Delcea**, Dana-Maria Teodorescu, Gabriel Dumitescu and Gratiela Chelu	Assessing the Relationship Between Industrial Automation and Employment Dynamics: A Grey Relational Analysis Approach
5.2	**Liviu-Adrian Cotfas**, Ioana Ioanas, Andra Sandu and Adriana Cosac	Segmenting the Manufacturing Job Market: Extending a Grey Clustering – Agent-Based Modeling Framework
5.3	**Yihang Qin** and Naiming Xie	Scheduling Method for Autoclave Molding Process of Aerospace Composite with Interval Grey Processing Time
5.4	**Huifen Xu** and Naiming Xie	Leader-Centric Distributed Heterogeneous Hybrid Flowshop Scheduling with Batch Processing Machines: A Case Study in Aerospace Composite Material Manufacturing
5.5	**Jarosław Chrobot**	A Concept of a Production Flow Control IT System for discrete Production of Mechanical Parts – Communication and Database Aspects
5.6	**Hu Mingli** and Lingjie Yu	Research on Maintenance Strategies for Serial Production Line Based on Grey Cluster Evaluation and Opportunity Maintenance
5.7	**Danuta Owczarek**, Piotr Gąska, Michał Jedynak, Wiktor Harmatys, Maciej Gruza	Selection of factors affecting coordinate measurement uncertainty in the context of designing database solutions for uncertainty estimation

12:30-13:30 | Lunch Atrium/012, 0 level

Day 3, Thursday, May 21

Session 6: Digitalization and Intelligence in Modern Manufacturing

13:30-15:00 | Chair: Beata Starzyńska 001 room, 0 level

Submissions:	*Authors:*	*Presentation title:*
6.1	Jakub Brna, **Jozef Svetlík**, Marek Sukop, Juraj Kováč	Load test of the communication between VR and an industrial computer connected to the cloud
6.2	**Weronika Marchewka** and Paulina Golińska-Dawson	Artificial Intelligence in Sustainable Product Design and Manufacturing: A Bibliometric Analysis
6.3	**Pawel Pawlewski**, Patrycja Hoffa-Dąbrowska	Principles of teamwork in digital twin factory projects
6.4	**Damjan Maletič**, Tilen Medved, Matjaž Maletič	Applications of Machine Learning Techniques in Asset Management of Engineering Systems: A Bibliometric Analysis
6.5	**Julia Żmuda**, Maria Rosienkiewicz	Digital Maturity in Poland: Investigating the Level of Digital Transformation and Corresponding Barriers
6.6	**Alexandru Moldovan**, David Chereches, Grigore Pop, Mircea Murar, Mircea Fulea, Cristian Moldovan, Bogdan Mocan	AIRI – A Methodology for Evaluating AI Integrability in Classical Industrial Equipment
6.7	**Julia Olesińska**, Maria Rosienkiewicz	Data-Supported Visual Supervision for Reducing Production Losses in a Semi-Automated Assembly Process: An Automotive Case Study

15:00-16:00 | Coffee Break Atrium, 0 level

15:15-16:00 | Closing Remarks, Best Poster & Presentation Awards 001 room, 0 level

POZNAN CITY

Poznan is the capital of Wielkopolska (Greater Poland)

Poznan is one of the most interesting places on the Polish tourist map. It combines a rich history with an intimate atmosphere. It is also sometimes called the "city of experiences".

Poznan is located in the central-western part of Poland. It is the largest city and the capital of the Wielkopolska region. It covers an area of 261.9 square kilometres, of which 48% is agricultural land and green areas. In terms of size, it is only the eighth largest city in Poland. More than 530,000 people live in Poznan, and almost 700,000 people use the city area. One of Poland's main rivers – the Warta – flows through the capital of the Wielkopolska region. Due to its central-western location, Poznan is well connected and serves as a road, rail and air hub. No less than 7 roads of interregional or international importance pass through the city, including the A2 highway. The Poznan railway junction provides direct connections to major cities in Poland and Europe.

The international airport in Ławica has two modern terminals from which we can fly to world cities such as London, Paris, Rome, Frankfurt, Monachium and Barcelona. More than 2 million tourists use Poznan Airport every year.

Its proximity to other Polish cities, such as Warsaw, Wroclaw and Lodz, makes the capital of the Wielkopolska region easily accessible to tourists not only from Poland. Poznan is a frequent host of international trade fairs and conferences. Poznan is one of the most visited cities in Poland. Its rich history, charming Old Town and numerous monuments attract crowds of tourists from all over the world. (https://www.national-geographic.pl)

POZNAN UNIVERSITY OF TECHNOLOGY

Poznan University of Technology in numbers:

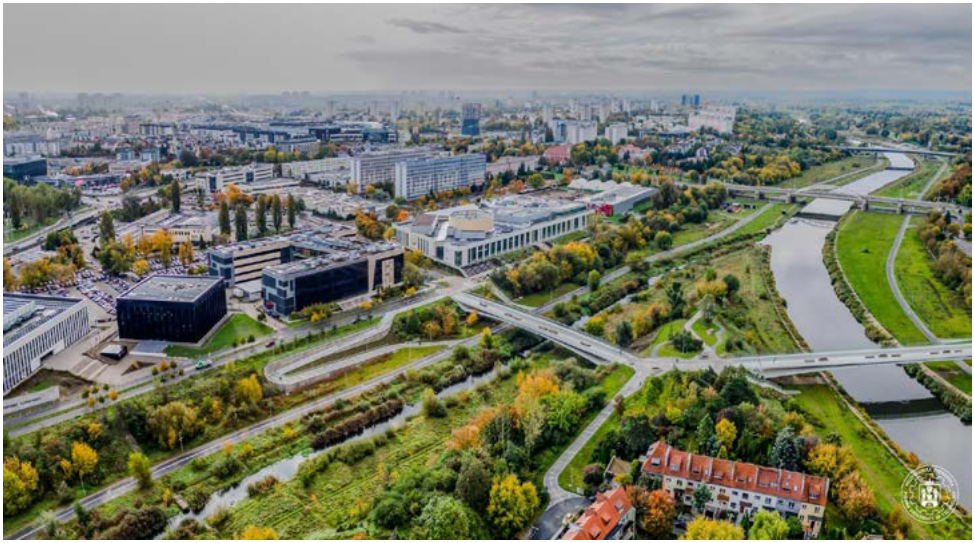
- over 14 thousand students
- more than 1,300 academic Staff
- 9 faculties & 44 fields of study

Most of the PUT faculties' are on Warta Campus. One is located on the Kąkolewo campus in the form of a training hangar, built as part of the Aerosfera project.

The Warta Campus is situated in the center of the city – it takes 10 minutes to get to the Old Market from here and 5 minutes to get to the Malta lake – a favorite place of recreation of the city inhabitants.

Faculty of Mechanical Engineering

The Faculty of Mechanical Engineering was established in 1919 – the first, original faculty in the Higher School of Mechanical Engineering. In accordance with market expectations and in connection with structure modifications, it has changed its name several times. Between 1919 and 1952 it operated as the Faculty of Mechanics. It was then transformed successively into the Faculty of Machine Construction (1952–1967), the Faculty of Mechanics and Technology (1967–1974), again into the Faculty of Machine Construction (1974–1998), and in 1998 into the Faculty of Mechanical Engineering and Management. Since 1 January 2020, its name has been in keeping with the scientific discipline – the Faculty of Mechanical Engineering. The fields of study offered by the Faculty, which include Mechanical Engineering, Management and Production Engineering, Mechatronics and Biomedical Engineering, Product Lifecycle Engineering, allow students to follow degree programmes covering the broadly understood mechanical engineering area – construction, technology, automation, diagnostics and computerization, management and production engineering. The Faculty has the right to confer doctoral and postdoctoral degrees of technical sciences in the discipline of mechanical engineering. There are currently four institutes operating at the Faculty.



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Komitet Budowy Maszyn

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NOTES

International Scientific-Technical Conference

MANUFACTURING 2026

GENERAL CONFERENCE PROGRAMME

WAWiZ (A-30) Building, Jacka Rychlewskiego 2 Street, Poznan

Day 1 | May 19 (Tuesday)

Time	*Event*	*Room/Info*
10:00–14:00	Registration	Atrium | 0 level
11:00–12:50	**Opening Ceremony, Best Paper Awards, Keynote Speakers**	001 room | 0 level
12:50–13:00	Group Photo	in front of the WAWiZ building
13:00–14:00	Lunch	Atrium/012 | 0 level
13:30–15:30	**The Committee on Production Engineering** (KIP PAN)	101 room | 1 level
13:30–15:30	**The Committee on Machine Construction** (KBM PAN)	132 room | 1 level
14:00-15:30	**Campus & Labs Walking Tour**	Meeting point in front of the WAWiZ building
15:30–16:00	Coffee Break	Atrium | 0 level
16:00–17:30	**Science & Industry & Business Discussion Panel**	001 room | 0 level
18:00–22:00	**Ice Breaker Party – MK Bowling Poznan, MM Gallery**	Święty Marcin 24 street, 61-805 Poznan

Day 2 | May 20 (Wednesday)

Time	*Event*	*Room/Info*
9:00–10:30	Morning Coffee and Snacks	Atrium | 0 level
9:00–10:30	**Poster Session**	Main Hall | 1 level
10:30–11:00	Coffee Break	Atrium | 0 level
11:00–12:30	**Session 1**	001 room | 0 level
12:30–13:30	Lunch	Atrium/012 | 0 level
13:30–15:00	**Session 2**	001 room | 0 level
15:00–15:30	Coffee Break	Atrium | 0 level
15:30–17:00	**Session 3**	001 room | 0 level
18:30–23:00	**Gala Dinner**	Main Hall | 1 level

Day 3 | May 21 (Thursday)

Time	*Event*	*Room/Info*
8:30–9:00	Morning Coffee and Snacks	Atrium | 0 level
9:00–10:30	**Session 4**	001 room | 0 level
10:30–11:00	Coffee Break	Atrium | 0 level
11:00–12:30	**Session 5**	001 room | 0 level
12:30–13:30	Lunch	Atrium/012 | 0 level
13:30–15:00	**Session 6**	001 room | 0 level
15:00–16:00	Coffee Break	Atrium | 0 level
15:15–16:00	**Closing Remarks, Best Poster & Presentation Awards**	001 room | 0 level

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