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Erasmus+ Programme Key Action 2 Cooperation
Partnerships for Higher Education (KA220-HED)
Agreement number 2023-1-RO01-KA220-HED-000155412
European Network for Additive Manufacturing in Industrial Design for Ukrainian Context

REPORT – ME 1

MULTIPLIER EVENT ON RESEARCH BASE LEARNING METHOD FOR TEACHING IN ADDITIVE MANUFACTURING FOR INDUSTRIAL DESIGN

hosted by EDIBON International S.A., Madrid, Spain
in cooperation with the AMAZE project consortium partners

Date: 25.04.2024, between 9.00-16.00, c/ Julio Cervera 10, Móstoles Technological Park, 28935, Madrid (Spain)

The First Multiplier Event (ME1) of the project - **Agreement number 2023-1-RO01-KA220-HED-000155412**, **Acronym: AMAZE with the title "*European Network for Additive Manufacturing in Industrial Design for Ukrainian Context*",** Erasmus+ Programme Key Action 2 Cooperation Partnerships for Higher Education (KA220-HED), took place on 2**5 April** 202**4** and were participated **54 participants** (not involved in project and out of Edibon International S.A. company**) - 14 foreigner participants from Norway, Costa de Marfil, Morocco, Uzbekistan, South Sudan,** and other participants from different Spanish institutes. The coordinator from **National University of Science and Technology Politehnica Bucharest, Romania and the employers at Edibon International S.A. company participated at this event too.** The event was hosted **by EDIBON International S.A., company from Madrid, Spain.**

The event was attended by representatives of the 4 partners: National University of Science and Technology Politehnica Bucharest - Romania, Poznan University of Technology (PUT) – Poland (on-line MS Teams), Yuriy Fedkovych Chernivtsi National University – Ukraine (on-line MS Teams) and EDIBON International S.A. Madrid - Spain.

The special guests Mr. Bogdan Bădescu - Economic Counselor from the Romanian Embassy in Madrid, Spain and Prof. Filippo Sanfilippo from the University of Agder, Norway participated at the Multiplier Event (ME1) held at Edibon International S.A. from Madrid, on 25.04.2024.

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The Multiplier Event on *"Research Base Learning Method for Teaching in Additive Manufacturing for Industrial Design"* started at 9.00, having the participants registration, the event opening with Mrs. CEO Mirian Bonilla, EDIBON International S.A. company (https://www.edibon.com/en/), Mr. Bogdan Bădescu - Economic Counselor from the Romanian Embassy in Madrid, Spain and the coordinator of AMAZE project Mrs. Assoc.Prof.Dr.Eng. Diana Băilă that realized the AMAZE project presentation, showing main aims, actions and activities of the project.

The coordinator of AMAZE project, Mrs. Assoc.Prof.Dr.Eng. Diana Băilă from National University of Science and Technology Politehnica Bucharest, Romania presented the Intellectual Output 1 results concerning the e-book publishing, and the two articles accepted for publishing to the International Conference BRAMAT Brasov, Romania, 2024 and to the International Conference KreativEU Targoviste, Romania, 2024. She presents the research in Additive Manufacturing domain on superalloy INCONEL and Ti6Al4V for the 3D printing of industrial parts, that will be published in 2 articles at International Journals.

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Organized by EDIBON International S.A., Madrid, Spain
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Agenda Schedule

Date: 25.04.2024, between 9.00-16.00, c/ Julio Cervera 10, Móstoles Technological Park, 28935, Madrid (Spain)

Hour	Activity
9:00	Registration of participants to the Multiplier Event
9:15	Opening and Welcome ceremony– EDIBON International S.A. company, Madrid, Spain Mrs. Director Mirian Bonilla
9:40	AMAZE Project Presentation Assoc. Prof. Diana Băilă (National University of Science and Technology Politehnica Bucharest, Romania)
10:00	Case Study – Specific Elements in AMAZE Project Assoc. Prof. Diana Băilă (National University of Science and Technology Politehnica Bucharest, Romania)
10:20	Intelligent (Smart) Materials used in Industrial Design - Yuriy Fedkovych Chernivtsi National University, Ukraine Mr. Dean Prof. Ihor Fodchuk/ Mrs. Prof. Mariana Borcha
10:50	Applied research teaching methods for additive manufacturing in industrial design, Poznan University of Technology, Poland Prof. Remigiusz Łabudzki
11:30	Coffee Break
12:00	Visiting of International EDIBON S.A. company
13:00	Intelligent (Smart) Materials used in Additive Manufacturing Prof. Zaharia Cătălin (National University of Science and Technology Politehnica Bucharest)
13:35	Robotics used in Industry 4.0 - Prof. Filippo Sanfilippo (University of Agder, Norway)
14:00	LEYKOM Company, Bucharest, Romania – Presentation (Additive manufacturing and different 3D parts: SLM, SLA, SLS, etc)
14:30	Industrial Design – Vector for Product Meaning Prof. Andrei Dumitrescu (National University of Science and Technology Politehnica Bucharest)
15:00	Q&A with partners comments and discussions on the possibility of joining different projects / EU consortium / Horizon Europe open calls Networks Closing words / ending of Multiplier Event / Press Conference
16.00	Light lunch

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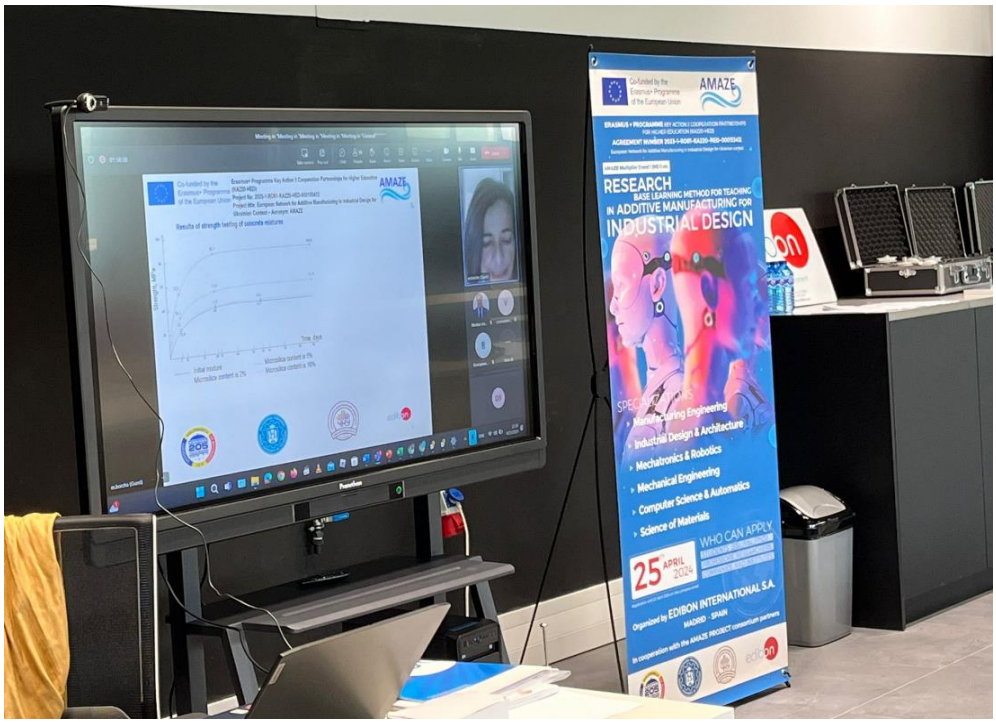

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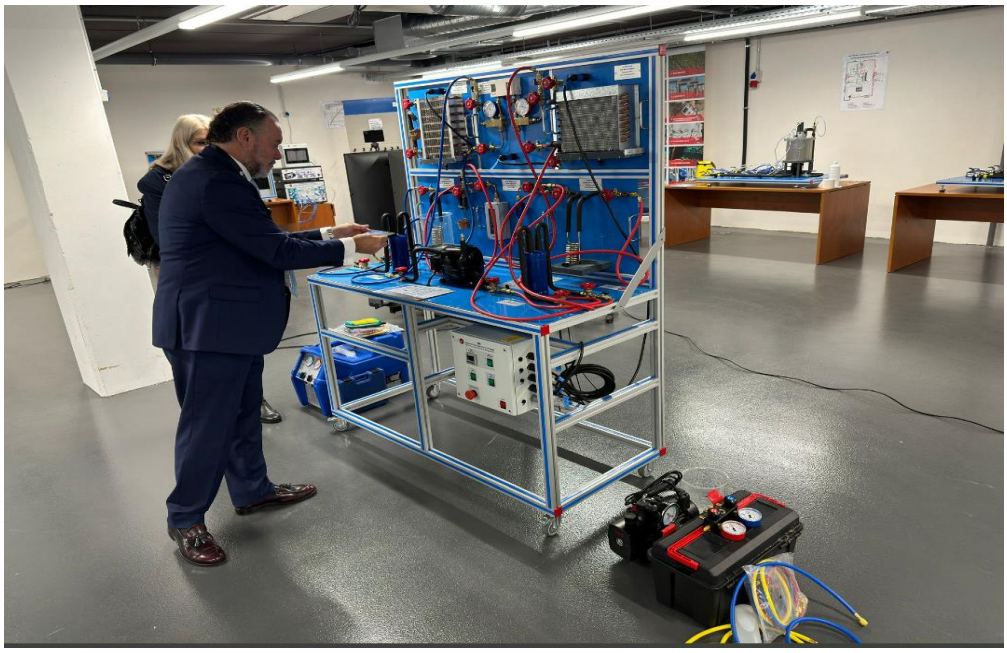

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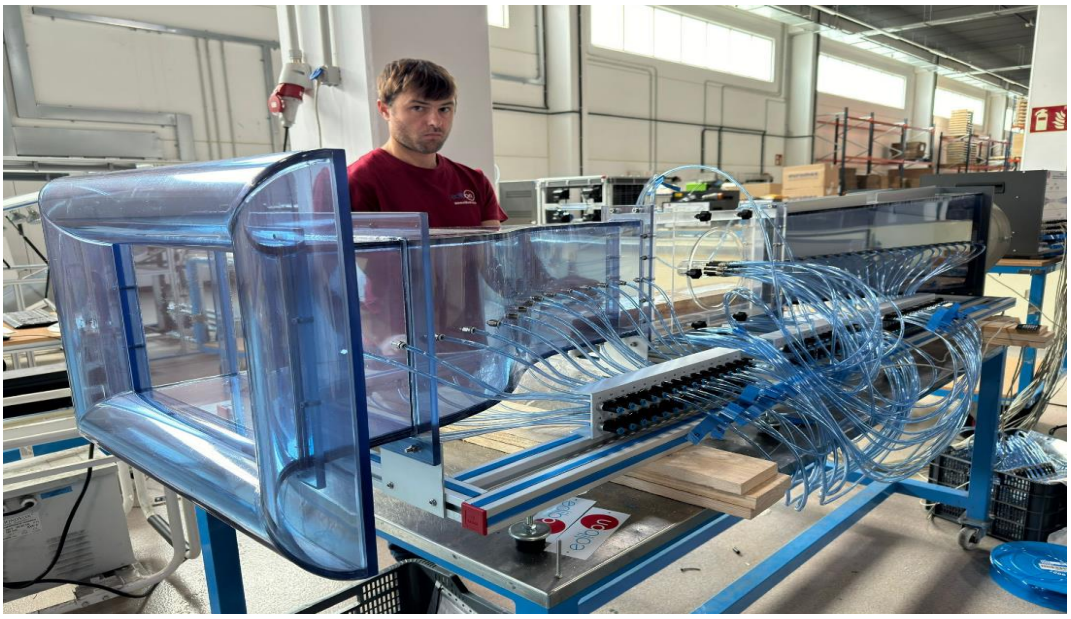

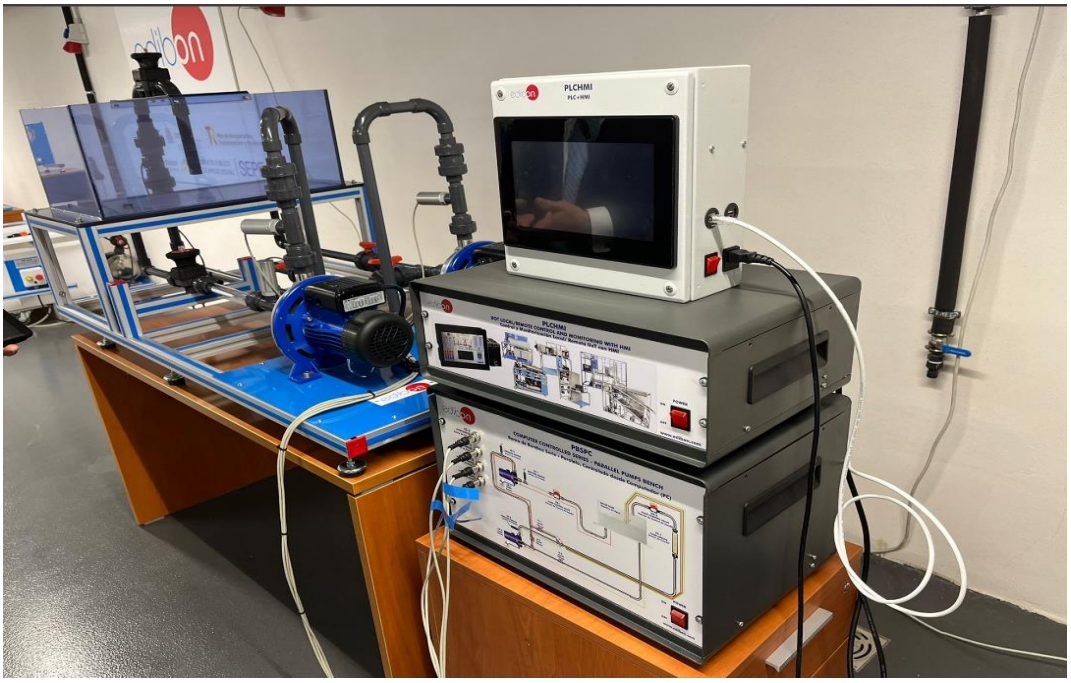

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Mrs. Prof. Mariana Borcha from Yuriy Fedkovych Chernivtsi National University – Ukraine presented her institution and research interests and disseminated the AMAZE project results for IO1 (Intellectual Output 1) concerning the smart (intelligent) materials and CAD/CAM/CAE design for the complex industrial and architectural parts.

Mrs. As.Prof. Natalia Wierzbicka from Poznan University of Technology presented her institution and their research experiences in materials, industrial design, reverse engineering and in additive manufacturing, for Intellectual Outputs 1 (IO1).

At 11.30, was realized a Coffee Break.

Mr. Prof.Dr.Eng. Nicolae Ionescu from National University of Science and Technology Politehnica Bucharest, Romania, presented the researches domains and educational specializations that exist in Politehnica Bucharest.

Our special guest, Mr. Prof.Dr.Eng. Filippo Sanfilippo from University of Agder, Norway presented his institution, the research fields and Robotics used in Industry 4.0.

Two agreements Erasmus+ mobility for students were signed between Edibon International S.A. company and National University of Science and Technology Politehnica Bucharest, Romania for period 2023-2024, respectively between Edibon International S.A. company and University of Agder, Norway, period 2024-2025, grace of AMAZE project dissemination.

At the project final was realized the round table discussions about the future potential collaboration in the Industrial Design, Additive Manufacturing, Robotics, Green Energies, CO_2 emissions control and batteries recovery domain with Mrs. CEO Mirian Bonilla, Mrs.Assoc.Prof.Dr.Eng. Diana Băilă and the event participants.

The students and professors from University Rey Juan Carlos from Madrid, University Francisco de Vitoria in Madrid, but also different foreigner's participants assisted to this impressive Multiplier Event at EDIBON International S.A. company in Madrid. At the final of Multiplier Event ME1 were visited Edibon International S.A. company.

After that were realized the final conclusions.

This multiplier event is intended to serve as a solid foundation for identifying new needs and challenges in the field of industrial design and additive manufacturing by the AMAZE project consortium partners (http://www.amaze2023.eu/Events.html) and other partners coming from higher education institutions or companies that might be interested in continuing the research directions that have been developed within the AMAZE project - **Agreement number 2023-1-RO01-KA220-HED-000155412,** in the future.

More information about AMAZE project - **Agreement number 2023-1-RO01-KA220-HED-000155412** can be found on the following link: www.amaze2023.eu.

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26.04.2024, Madrid, Spain