Co-funded by the European Union

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 4

MULTIPLIER EVENT OF EXPERIENCING OF E-LEARNING PLATFORM FOR ADDITIVE MANUFACTURING IN INDUSTRIAL DESIGN

hosted by Poznań University of Technology – PUT, Poland
in cooperation with the AMAZE project consortium partners

Date: 04.11.2024, between 9.00-16.00, Street Piotrowo 3, 60-965, Poznań, Poland

The Fourth Multiplier Event (ME4) 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 **4 November 2024**, being **hosted by Poznań University of Technology, from Poland**. At the Multiplier Event 4, were participated **25** persons from different institutes (not involved in project and out of Poznań University of Technology), and were invited professors and students from Poznań University of Technology. **Twenty participants were from different Polish institutions such as: WSKIZ, PAM, USNOZ** (not involved in project and out of Poznań University of Technology) and **5 foreign participants from Slovakia (University of Žilina) and Portugal (University of Minho, from Braga and University of Porto).**

At this event, participated students and staff from Poznań University of Technology. Other two romanian students from National University of Science and Technology Politehnica Bucharest participated at this event.

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

The Multiplier Event on *"Experiencing of e-learning platform for additive manufacturing in industrial design"* started at 9.00, having the participants registration, the event opened with Mr. Prof. Remigiusz Łabudzki, the Responsible of AMAZE project, from Poznań University of Technology (PUT) – Poland and was presented the AMAZE project agenda for Multiplier Event ME4, showing main aims, actions, activities and results of the project.

The Opening and Welcome ceremony was realized by Mr. Vice-Dean: Prof. Filip Górski from Poznań University of Technology, Poland, presenting the specializations, the laboratories and the research centers existing in Polish university.

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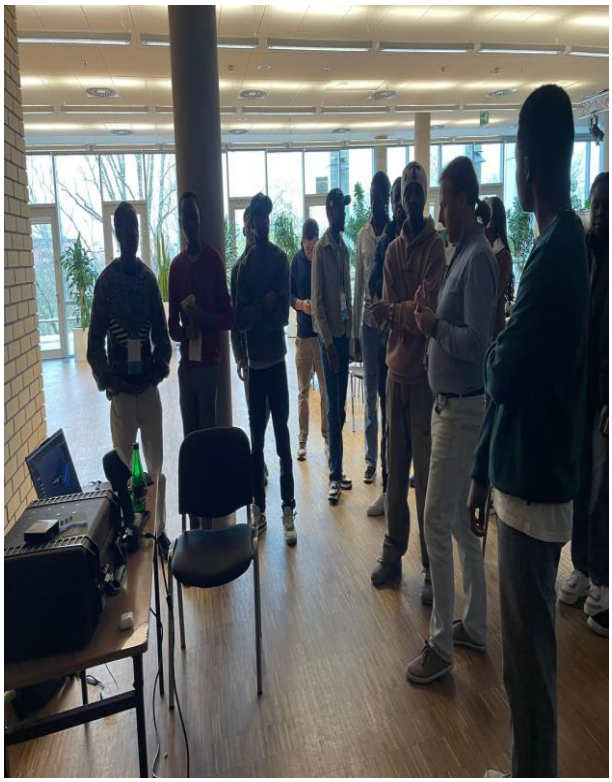


Mrs. Assoc. Prof. Diana Băilă, from Politehnica Bucharest, AMAZE project manager presented the summary of final project results, setting up and clarifying goals of the meeting, the Intellectual Outputs results (IO3) and IO4 and the articles accepted for publishing to the International Conference BRAMAT Brasov, Romania, 2024 and to the International Conference KreativEU Targoviste, Romania, 2024, and the 2 articles accepted for publishing in International Journals (Open Journal of Applied Science, ISSN:2165-3925 and Physics and Chemistry of Solid State, ISSN: 1729-4428).

-The article with the title: *"Wettability characterization of MDF composite materials used for industrial products"* was presented at the International Conference BRAMAT Brasov 2024, and was published in Bulletin of University of Transylvania Brasov, vol. 16(65) No.1, 2023, series 1: Engineering Sciences, ISSN: 2065-2119, https://doi.org/10.31926/but.ens.2023.16.65.1.2.

-The article with the title: *"Experimental research on the fabrication of modular devices for drilling using PLA for model parts"* published in Open Journal of Applied Science, vol.14, pp. 2790-2800, 2024, ISSN:2165-3925, https://doi.org/10.4236/ojapps.2024.1410182.

-The article with the title: *"Accuracy of SLA and material morphology used in architecture"* was presented at the 1st Annual International KreativEU Conference "Heritage, Science, and Technologies for Sustainable Preservation", hosted by the University of Valahia from Targoviste https://www.aosr.ro/wp-content/uploads/2024/05/First-KreativEU-Conference-ProgrammeBook-of-Abstracts.pdf.

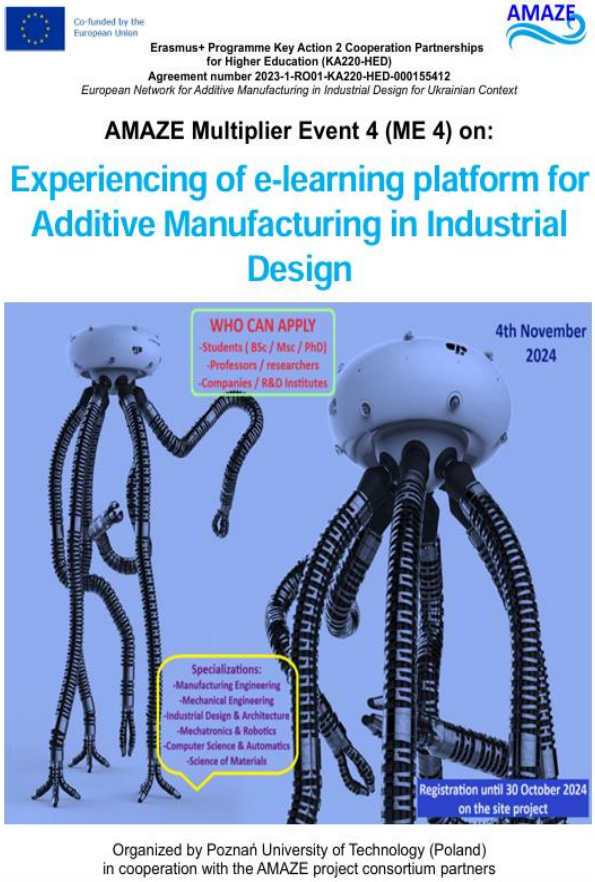
-The article with the title: *"Spatial distributions of local strains in synthesized diamond crystals from the normalized parameters of Kikuchi patterns"* was accepted in Physics and Chemistry of Solid State Journal, ISSN: 1729-4428. The other 2 articles were sent for publishing in 2 International Journals.

The published e-book (IO1), the published e-toolkit (IO2), VR/AR e-learning platform (IO3) and e-case studies (IO4) were presented to the students by each partners involved in AMAZE project.

Mr. Dean Prof. Igor Fodchuk and Mrs. Prof. Mariana Borcha from Yuriy Fedkovych Chernivtsi National University, Ukraine, presented *AMAZE – Applied research methods for Additive Manufacturing in Industrial and Architectural Design* – e-case study of Intellectual Output IO4.

Mrs. Prof. Natalia Wierzbicka, Mr. Prof. Adam Patalas and Mr. Prof. Paweł Zawadzki from Poznań University of Technology, Poland, presented *AMAZE – Experiencing of e-learning platform for Additive Manufacturing in Industrial Design* of Intellectual Output IO3.

Mr. Sergio Vizcaino from Edibon International S.A. company from Madrid, Spain, presented *AMAZE-Experiencing of e-learning platform for Additive Manufacturing in Industrial Design* of Intellectual Output IO3.



At 11.30 o'clock, took place the coffee break. At 12.00 o'clock, the specialized international companies in additive manufacturing were invited to make presentations about professional additive manufacturing techniques and systems. MATERIALISE NV company from Belgium presented the subject of *Rapid Prototyping Development in Choosen Industries.*
The company ViscoTec Pumpen- und Dosiertechnik GmbH (Germany) sustained a presentation concerning *3D Print Heads Solutions for Extrusion -Based Additive Manufacturing.*
The company Omni3D Sp. z o. o. (Poland) presented *Application of industrial 3D printing.*
At 15.00 p.m., the Multiplier Event ME4 was closed with a light lunch.

Finally, some general conclusions were drawn concerning the sustained presentations at Multiplier Event ME4 and all participants at the Amaze Multiplier Event ME4 completed the feedbacks.

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