

## Eveniment de multiplicare – EMERALD

### ***“Metode de învățare bazate pe cercetarea fundamentală folosind metodele de printare 3D cu aplicabilitate în domeniul bio-mecatronic”***

Vineri, 17 februarie, Universitatea Tehnică din Cluj-Napoca va organiza evenimentul de multiplicare privind “Metode de învățare bazate pe cercetarea fundamentală folosind metodele de printare 3D cu aplicabilitate în domeniul bio-mecatronic”, în cadrul proiectului EMERALD 21-COP-0019 finanțat din fonduri norvegiene prin intermediul Mecanismului Financiar al Spațiului Economic European (SEE). Evenimentul va reuni cadre didactice, studenți, cercetători și oameni de știință din instituții de învățământ superior, companii private, institute de cercetare și dezvoltare, clustere, agenții de dezvoltare, ONG-uri sau alte instituții publice și private interesate de domeniul tehnologiilor avansate de fabricație cu aplicabilitate în medicină: printare /bio-printare 3D / IT/ bio-mecatronică/ robotică medicală, etc.

Scopul principal al acestui eveniment este acela de a prezenta conceptul principal al proiectului EMERALD, precum și metodele și soluțiile practice ce au fost dezvoltate privind realizarea unor sisteme mecatronice biomimetice special concepute pentru persoane cu nevoi speciale (brațe amputate), precum și de a crea cadrul necesar dezvoltării unor parteneriate strategice pentru pregătirea și dezvoltarea unor proiecte naționale și internaționale de cercetare și instituționale. Evenimentul are loc pe Bdul Muncii 103 – 105, în Aula Centenar, participarea este gratuită, termenul limită pentru înscriere fiind data de 14 februarie 2023.

Mai multe detalii legate de agenda, respectiv modul de înregistrare în vederea participării, sunt disponibile pe pagina web a proiectului EMERALD la adresa:

<https://project-emerald.eu/>

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Iceland  
Liechtenstein  
Norway grants

**EMERALD project - European Network for 3D printing  
of Biomimetic Mechatronic Systems**



**EMERALD Multiplier Event on:**

# **Applied Research Teaching Methods for 3D printing in bio-mechatronics**

**17  
FEBRUARY  
2023**

**WHO  
can apply**

Students (BSc / MSc / PhD)  
Professors / Researchers  
Companies / R&D Institutes

**SPECIALIZATIONS:**

- Manufacturing Engineering
- Bio-Mechatronics & Robotics
- Mechanical & Bio-Mechanical Engineering
- Computer Science & Automatics
- Science of Materials

**More details**

[www.project-emerald.eu](http://www.project-emerald.eu)

Registration until 14<sup>th</sup> of February 2023

Organized by the Technical University of Cluj-Napoca, Romania in  
cooperation with the EMERALD project consortium partners



**EMERALD: European network for 3D printing of biomimetic mechatronic systems  
EEA & Norway Grant - Contract No. 21-COP-0019**

**MULTIPLIER EVENT on Applied Research Teaching Methods for 3D printing in  
Bio-Mechatronics**

(organized by the Technical University of Cluj-Napoca, Romania) –

b-dul Muncii 103-105, Cluj-Napoca – room: Aula Centenar

– Preliminary agenda-

17<sup>th</sup> of February 2023

Session 1 - Higher Education institutions session	
8:30	Registration of participants to the Multiplier Event
9:00	Opening and Welcome ceremony: Rector prof. dr.eng. Vasile Topa (Technical University of Cluj-Napoca, Romania) Vice rector prof. dr.eng. Dan Mândru (Technical University of Cluj-Napoca, Romania) Dean - Faculty of Industrial Engineering, Robotics & Production Engineering – Prof. Corina Bîrleanu Head of manufacturing Engineering Department, Associate Prof. Adrian Trif City Hall Institution of Cluj-Napoca, Romania
9:20	25 years of success in the field of Additive Manufacturing for Medical Applications in Romania – prof. dr.eng. Nicolae Bâlc and prof. dr.eng. Petru Berce (Technical University of Cluj-Napoca, Romania)
9:30	EMERALD project overall presentation – progress, actions, KPIs, perspectives / details about the event – Associate Prof. Răzvan Păcurar (Technical University of Cluj-Napoca, Romania)
9:40	EMERALD– Applied Research Teaching Methods for 3D printing in Bio-Mechatronics -e-toolkits for supporting people with amputated arms (Prof. Filippo Sanfilippo – University of Agder (Norway) – recorded presentation
9:45	EMERALD– Applied Research Teaching Methods for 3D printing in Bio-Mechatronics -e-toolkits for supporting people with amputated arms (Prof. Filip Gorski – Poznan University of Technology (Poland)
10:00	EMERALD– Applied Research Teaching Methods for 3D printing in Bio-Mechatronics - e-toolkits for supporting people with amputated arms (Associate Prof. Diana Băila – Politehnica University of Bucharest (Romania)
10:10	EMERALD– Applied Research Teaching Methods for 3D printing in Bio-Mechatronics - e-toolkits for supporting people with amputated arms (Branislav Rabara – BIZZCOM Slovakia)
10:20	EuT+ and ERASMUS institutional projects - Ludmila Lutencu (International Relations Office – TUCN, Romania)
10:30	Norwegian grants project calls and opportunities – Ramona Demarcsek (coordinator – TUCN, Romania)
10:40	Coffee break
11:00	3D printing of medical products and bioprinting – University of Cartagena – Spain - Roca Joaquin – Academic Coordinator of the Biomedical Engineering Program at ETSII UPCT - Ojados González Dolores – LIDITEB technical coordinator - Ibarra Berrocal Isidro - Senior Administrative Officer (Head of Administration) - UPCT

11:20	Artificial intelligence for creative engineering and robotics - Prof. Stelian Brad (TUCN, Romania), president of the Cluj IT cluster and coordinator of the European Digital Innovation Hub DIH4Society
11:35	Biomaterials trends and challenges – prof. Popa Cătălin – Dean of the Faculty of Materials and Environmental Engineering (TUCN, Romania)
11:45	Innovations in Medical Robotics - prof. Doina Pişlă – Head of Doctoral School (TUCN, Romania)
12:00	Coffee break
<b>Session 2 – companies session – from evolution to revolution</b>	
12:15	Vice rector Popescu Daniela – TUCN – opening the sessions organized with the companies
12:25	Admasys - (Markforged / Formlabs - representatives in Romania) - company presentation
12:35	Nu Technologies (Stratasys / Materialise / Sisma - representatives in Romania) – company presentation
12:45	CAD Works (3D systems / HP / Markforged - representatives in Romania) - company presentation
12:55	Leykom (DWS Systems / Massivit / 3NTR / BCN3D / Ultimaker) – representatives in Romania) - company presentation
13:05	symme 3D (the biggest Romanian startup 3D printing company in Romania) - company presentation
13:15	DMG Mori Romania – company presentation
13:25	Pro4D Form (envisionTEC bioplotters / Desktop Metal – representatives in Romania) – company presentation
13:35	Lunch break / press conference
<b>Session 3 – demo room / companies exhibition / TUCN laboratories visit</b>	
14:30	Visiting of TUCN laboratories - Demo room / companies exhibition – main hall, B-dul Muncii - National Centre of Innovative Manufacturing - Robotics and Mechatronics laboratories - CESTER
<b>Session 4 – project opportunities /constituting of the EMERALD Network / clusters/ NGO / R &amp;D agencies session</b>	
15:30	Premises of constituting the new EMERALD network for 3D printing in mechatronics Răzvan Păcurar (Technical University of Cluj-Napoca, Romania)
15:35	HORIZON EUROPE open calls – prof. Ovidiu Nemeş (director - Research –TUCN, Romania)
15:50	North West Regional Development Agency, Romania – Lavinia Chiş, INNO Platform Department & Cristian Otgon (Intelligent specialization Department)
16:10	Bianca Muntean – Transylvania IT Cluster - opportunities related to “Health” domain - new project calls
16:30	Oana Buzatu + Mirela Botezan – CREIC + new project calls and perspectives (City Hall Institution of Cluj-Napoca, Romania)
16:40	Q&A with partners comments and discussions on the possibility of joining different projects / consortium / EU Networks
17:00	Closing words / ending of Multiplier Event