Diseminarea rezultatelor proiectului DIGITECH Etapa a II-a de către membrii parteneri în anul 2019

1. Lucrări prezentate:

Influence of the process parameters on mechanical properties of the final parts obtained by selective laser sintering from PA2200 powder	Luciana Laura Dincă (Shamieh), Nicoleta Mirela Popa, Nichita Larisa Milodin, Comsa Stanca and Doina Gheorghiu	Participare conferință și publicare articol: *The 14th International Confererence on Modern Technologies in Manufacturing MTeM* *MATEC Web of Conferences* ISSN:2261-236X	**Status:** Prezentat la conferință. Publicat. **Indexare:** în Web of Science - cotat **ISI**
THE IMPORTANCE OF OPTIMIZATION OF LATTICE STRUCTURES FOR BIOMEDICAL APPLICATIONS	Luciana Laura Dincă (Shamieh), Nicoleta Mirela Popa, Nichita Larisa Milodin, Comsa Stanca and Doina Gheorghiu	Participare conferință și publicare articol: *The 20th International Conference of Nonconventional Technologies* *The Nonconventional Technologies Review* ISSN Print: 2359-8646 ISSN Online: 2359-8654	**Status:** Prezentat la conferință. În curs de publicare în revistă. **Indexare: ICI, Google Scholar,** clasificare **B+** de CNCS

2. Participarea la Work-Shopuri sau simpozioane:

Implementation of additive manufacturing technology for patient specific implants – selective laser sintering of biocompatible metallic powders	Nicoleta Mirela Popa	Participare conferință: *Nanotechnology and advanced materials progress under HORIZON2020 and beyond* La Workshop: *Additive Manufacturing: Industry necessities and research solutions*	**Status:** susținut prezentare la workshop: https://www.euronanoforum2019.eu/workshops-additive-manufacturing/index.html Poate fi accesată aici:
Implementation of additive manufacturing technology for patient specific implants – selective laser sintering of biocompatible plastic powders	Nichita Larisa Milodin	Participare conferință: *Nanotechnology and advanced materials progress under HORIZON2020 and beyond* La Workshop: *Additive Manufacturing: Industry necessities and research solutions*	**Status:** susținut prezentare la workshop https://www.euronanoforum2019.eu/workshops-additive-manufacturing/index.html Poate fi accesată aici:
Integration of Lattice structures in medical devices manufactured by AM (Selective Laser Sintering-SLS)	Luciana Laura Dincă (Shamieh), Nicoleta Mirela Popa, Nichita Larisa Milodin, Comsa Stanca and Doina Gheorghiu	Participare conferință: *The 23th edition of IManEE UPIT* Workshop: *Implementation of additive technologies in the manufacture of complex and overloaded components*	Status: prezentat poster la workshop creat ca indicator pe proiect DigiTech *(PN-III-P1-1.2-PCCDI-2017-0224/77 PCDI/2018 within PNCDI III)*
Cercetări privind implementarea Inteligenței Artificiale în proiectarea componentelor de automobile, în vederea fabricației prin 3D Printing	A-D Rizea, M-D Iordache, D-C Anghel, N-D Stănescu, M-L Bețliu-Gherghescu	Participare conferință: The 23th edition of IManEE UPIT Workshop: Implementation of additive technologies in the manufacture of complex and overloaded components	Status: prezentat poster la workshop creat ca indicator pe proiect DigiTech (PN-III-P1-1.2-PCCDI-2017-0224/77 PCDI/2018 within PNCDI III)
Research on implementation of artificial intelligence in the designing of automobile components for 3D Printing	A-D Rizea, M-D Iordache, D-C Anghel,, N-D Stănescu, M-L, Bețliu-Gherghescu, A-G Plăiașu, E-L Nițu, Ș-L Tabacu, I Vieru, G-M, Sicoe, N-L Ciocîrlan	Participare conferință: The 23th edition of IManEE UPIT Workshop: Implementation of additive technologies in the manufacture of complex and overloaded components	Status: prezentat poster la workshop creat ca indicator pe proiect DigiTech (PN-III-P1-1.2-PCCDI-2017-0224/77 PCDI/2018 within PNCDI III)

CHALLENGES IN USING ADDITIVE MANUFACTURING TECHNOLOGIES IN THE AEROSPACE DOMAIN	Cristian Dobromirecu, Razvan Nicoara, Valeriu Vilag, Jeni Vilag,	Participare conferință: The 23th edition of IManEE UPIT Workshop: Implementation of additive technologies in the manufacture of complex and overloaded components	Status: prezentat poster la workshop creat ca indicator pe proiect DigiTech (PN-III-P1-1.2-PCCDI-2017-0224/77 PCDI/2018 within PNCDI III)

3. Articole publicate în 2019:

Coordonator-INCDMTM			
THE IMPORTANCE OF SUPPORT OPTIMIZATION FOR ADDITIVE MANUFACTURING PROCESS	Nicoleta Mirela Popa, Luciana Laura Dincă (Shamieh), Nichita Larisa Milodin,	Publicare articol: *Romanian Journal of Technical Sciences -Applied Mechanics* ISSN Print: 2601-5811 ISSN Online: 2601-582X	Status: Acceptat Indexare: ICI(IndexCopernicus), clasificată B+ de CNCS, în curs de indexare SCOPUS și Web of Science (ISI)
Influence of the process parameters on mechanical properties of the final parts obtained by selective laser sintering from PA2200 powder	Luciana Laura Dincă (Shamieh), Nicoleta Mirela Popa, Nichita Larisa Milodin, Comsa Stanca and Doina Gheorghiu	Participare conferință și publicare articol: *The 14th International Confererence on Modern Technologies in Manufacturing MTeM* *MATEC Web of Conferences* ISSN:2261-236X	Status: Prezentat la conferință. În curs de publicare în revistă. Indexare: în Web of Science - cotat ISI
THE IMPORTANCE OF OPTIMIZATION OF LATTICE STRUCTURES FOR BIOMEDICAL APPLICATIONS	Luciana Laura Dincă (Shamieh), Nicoleta Mirela Popa, Nichita Larisa Milodin, Comsa Stanca and Doina Gheorghiu	Participare conferință și publicare articol: *THE 20TH INTERNATIONAL CONFERENCE OF NONCONVENTIONAL TECHNOLOGIES* *The Nonconventional Technologies Review* ISSN Print: 2359-8646 ISSN Online: 2359-8654	Status: Prezentat la conferință. În curs de publicare în revistă. Indexare: ICI, Google Scholar, clasificare B+ de CNCS
Bioactive hydroxyapatite thin films synthesized by RF-Magnetron Sputtering on 3D printed cranial implants	D. Chioibasu[1], L. Duta [2], G. Pelin-Popescu[2], **N. L. Milodin, N.M. Popa**, S. Orobeti[1], L. M. Balescu[4], A. C. Galca [4], A. C. Popa[4,5], F. N. Oktar[6,7], G. E. Stan [4,] and A. C. Popescu [1]	Publicare articol: *COATINGS* ISSN 2079-6412	Status: **În curs de publicare în jurnal.** Impact Factor: **2.330 (2018) ; 5-Year Impact Factor: 2.684 (2018)**
P1 – UTCN: UNIVERSITATEA TEHNICA DIN CLUJ – NAPOCA			
Technical queries of a 3D design custom-made implant made from titanium particles for maxillofacial bone reconstruction	G. Armencea (UMF-Cluj),C. Cosma, C. Dinu (UMF Cluj), F. Onisor (UMF Cluj), M. Lazar (UMF Cluj), P. Berce, N. Balc, M. Baciut (UMF Cluj), S. Bran (UMF Cluj)	*Particulate Science and Technology* *ISSN 0272-6351*	Status: Publicat
Sweat glands module with integrated sensors designed for additive manufacturing	I.Turcin (Univ. Stiinte Aplicate Graz, Austria), A. Abdallah (Univ. Stiinte Aplicate Graz, Austria), C. Cosma, D. Zavec (University of Maribor, Slovenia), N. Balc	*Participare conferință și publicare articol:* *The 14th International Confererence on Modern Technologies in Manufacturing MTeM* *MATEC Web of Conferences* *ISSN:2261-236X*	Status: Publicat
Research regarding the design and manufacturing of hand orthosis by using Fused Deposition Modeling technology	Ancuța Păcurar (Univ. Tehn. Cluj-Napoca), Monica Rău (Univ. Tehn. Cluj-Napoca), Răzvan Păcurar, Eugen Guțiu (Univ. Tehn. Cluj-Napoca), Laura Bacali (Univ. Tehn. Cluj-Napoca), Cosmin Cosma	Participare conferință și publicare articol: The 14th International Confererence on Modern Technologies in Manufacturing MTeM MATEC Web of Conferences ISSN:2261-236X	**Status: Publicat**
DESIGN FOR ADDITIVE MANUFACTURING TO PRODUCE COMPLEX METAL PARTS	COSMIN COSMA, BOGDAN ZAHARIA , PETRU BERCE, NICOLAE BALC	Publicare articol: *Romanian Journal of Technical Sciences -Applied Mechanics* ISSN Print: 2601-5811 ISSN Online: 2601-582X	Status: Acceptat Indexare: ICI(IndexCopernicus), clasificată B+ de CNCS, în curs de indexare SCOPUS și Web of Science (ISI)

Challenges of Additive Manufacturing in Production Systems	Angela Luft (Univ. Stiinte Aplicate, Aachen, Germania), Nicolae Bâlc, Andreas Gebhardt	Participare conferință și publicare articol: The 14th International Confererence on Modern Technologies in Manufacturing MTeM MATEC Web of Conferences ISSN:2261-236X	Status: Publicat
Researches on the Design of Customized Femoral Implant	Dan Leordean (Univ. Tehn. Cluj-Napoca), Tatiana Ciobanu (Univ. Tehn. Cluj-Napoca),Mircea Rusu (Univ. Tehn. Cluj-Napoca)	Participare conferință și publicare articol: The 14th International Confererence on Modern Technologies in Manufacturing MTeM MATEC Web of Conferences ISSN:2261-236X	Status: Publicat
Mechanical and Structural Properties of Composites Made from Recycled and Virgin Polyethylene Terephthalate (PET) and Metal Chip or Mesh Wire	Mircea Aurelian Antoniu Rusu (Univ. Tehn. Cluj-Napoca), Adrian Sever Radu (Univ. Tehn. Cluj-Napoca), Cătălin Moldovan, Codruța Sarosi (Univ. Babes-Bolay Cluj-Napoca), Marioara Moldovan (Univ. Babes-Bolay Cluj-Napoca), Laura Rus (Univ. Tehn. Cluj-Napoca)	Participare conferință și publicare articol: The 14th International Confererence on Modern Technologies in Manufacturing MTeM MATEC Web of Conferences ISSN:2261-236X	Status: Publicat
Research on Improving the Accuracy of FDM 3D Printing Process by Using a New Designed Calibrating Part	Răzvan Păcurar, Valentin Buzilă, (Univ. Tehn. Cluj-Napoca), Ancuța Păcurar, (Univ. Tehn. Cluj-Napoca), Eugen Guțiu, (Univ. Tehn. Cluj-Napoca), Sergiu-Dan Stan (Univ. Tehn. Cluj-Napoca), Petru Berce	Participare conferință și publicare articol: The 14th International Confererence on Modern Technologies in Manufacturing MTeM MATEC Web of Conferences ISSN:2261-236X	Status: Publicat
Study on Chip Fragmentation and Hole Quality in Drilling of Aluminium 6061 Alloy with High Pressure Internal Cooling	Ioan Alexandru Popan (Univ. Tehn. Cluj-Napoca), Alina Ioana Popan, Alexandru Cărean (Univ. Tehn. Cluj-Napoca), Domnița Frățilă (Univ. Tehn. Cluj-Napoca), Adrian Trif (Univ. Tehn. Cluj-Napoca)	Participare conferință și publicare articol: The 14th International Confererence on Modern Technologies in Manufacturing MTeM MATEC Web of Conferences ISSN:2261-236X	Status: Publicat
P4 – UPIT: UNIVERSITATEA DIN PITESTI			
Studies on the influence of design parameters on the behaviour at shock of 3D-printed components fabricated by fused deposition modelling	Daniel Constantin Anghel, Alin Daniel Rizea, Daniela Monica Iordache, Maria Luiza Beșliu-Gherghescu	Participare conferință și publicare articol: IOP Conference Series: Materials Science and Engineering ISSN 1757-899X	Status: Publicat
Determination of the shape of a beam obtained by fused deposition material with general loads	Nicolae Doru Stanescu, Maria Luiza Beșliu-Gherghescu, Alin Daniel Rizea	Participare conferință și publicare articol: IOP Conference Series: Materials Science and Engineering ISSN 1757-899X	Status: Publicat