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Habilitation thesis title: Increasing the manufacturing efficiency by creating dedicated software systems and solutions for a better use of materials

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PUBLICATIONS LIST

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NC Milling of 3D surfaces, elaborated under the coordination and supervision of Prof. Ph.D. Eng. Nicolae-Valentin IVAN

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30. Stamate, V. M., Oancea, Gh., Chicos, L.A., **Lancea, C.** Obtaining the Metal Support of Dental Bridges by Electro-Galvanic Deposition The 7th International Conference on Advanced Materials, ROCAM 2012 Brasov, Romania, pp. 52
31. Ivan, N. V., **Lancea, C.**, Ivan C., - Capp Phase, a very Important Bridge in CAD and CAM Integration, Proceedings of the 7th International Conference Modern Technologies in Manufacturing 6th – 8th Octber 2005, Universitatea Tehnică din Cluj-Napoca, p.9-14, ISBN 973-9087-83-3

OTHER PAPERS / RELEVANT ACHIEVEMENTS

a. GRANTS / PROJECTS WON THROUGH COMPETITION OR CONTRACTS WITH THE SOCIAL-ECONOMIC ENVIRONMENT *DIRECTOR / RESPONSIBLE*

1. *Microstructural Analyses on Selective Laser Melted Inconel 718 As-built and Heat Treated*, ESTEEM3 Research and Innovation Grant within a Horizon 2020 project, grant agreement No. 823717, year 2021, **value: 13,206 Euro – DIRECTOR**;
2. *Researches about the Corrosion Resistance of Different Materials used for Building Sustainable Energy Systems*, SFERA International Research Grant, number:

P13042500040296 European Commission, grant agreement No. 228296, **value: 12,003 Euro – DIRECTOR**;

3. *Learning and understanding of manufacturing techniques by Selective Laser Melting (SLM) in order to acquire the skills necessary to operate the SLM250HL machine at an advanced level*, UEFISCDI - PNIII project, contract number: PN-III-P1-1.1-MC- 2017-0391 20172018, **value: 3,610 Euro – DIRECTOR**;
4. *Cost Estimation Software for Highly Customized Industrial Products, Phase I - Manufacturing Time Module*, CNCSIS Research Project No. A1/GR106-19.05.2006, Theme 8, CNCSIS code 428 – **SCIENTIFIC DIRECTOR**;
5. *CAD / CAM systems for turning and milling - phase II, CAM module*, CNCSIS Research Project No. 33253/2003, Theme 12, CNCSIS code: 609 – **TECHNICAL DIRECTOR**

b. GRANTS / PROJECTS WON THROUGH COMPETITION OR CONTRACTS WITH THE SOCIAL-ECONOMIC ENVIRONMENT *TEAM MEMBER*

1. *Microstructural studies on Selective Laser Melting Ti6Al4V heat treated using Concentrated Solar Energy (MiSLMCoSE),* ESTEEM3 Research and Innovation Grant within a Horizon 2020 project, grant agreement No. 823717, year 2020, **value: 20,652.55 Euro**;
2. *Using Concentrated Solar Energy for Heat Treatment of Selective Laser Melted Ti6Al4V*, SFERA International Research Grant, number: P1702060268, 2017, European Commission grant agreement no. 312643, **value:5,680 Euro**;
3. *Behaviour and Lifetime Prediction of Materials for Renewable Energy Systems under Accelerated Reliability Testing*, SFERA International Research Grant, number: P12030800040257, 2012, European Commission grant agreement no. 228296, **value: 12,832 Euro**;
4. *Optimization, testing and manufacturing of automotive parts,* CNCSIS Project with third parties no.16830/30.10.2012;
5. *ESOP-Expert System for Optimization of Technological Processes*, Complex (PC) / PNII-P4 Grant (Partnerships in priority areas) Nr. 71-133/18.09.2007, time period 2007-2010;

6. *Platform for Innovative Technological Developments (PlaDeTino)*, Project type Platforms / laboratories for training and interdisciplinary research, Grant CNCSIS: No. 13/2006/ MEdC, CNCSIS code: 78, **value 1900000 LEI**, having the distinction: Award for research excellence awarded by the TRANSILVANIA University of Brasov;
7. *Information management and local software development in product engineering according to the production concept*, CNCSIS Grant, Theme no. 5, Ministry of Education and Research Order no. 3288/2005, CNCSIS code: 1021;
8. *IMAM – Innovative Manufacturing Network*, CNCSIS - CEEX Grant no. 41 / 07.10.2005 (to Ministry of Education and Research), no. 54 / 3.10.2005 (registred at „TRANSILVANIA" University of Braşov) in collaboration with the Technical University of Cluj-Napoca, „Politehnica" University Timişoara, Medicine and Pharmacy University Iuliu Haţieganu Cluj-Napoca;

c. SOFTWARE SYSTEMS

1. 2014: FASC-2000 System (Computer Aided Milling of Complex Surfaces), dedicated to manufacture any 3D surfaces, on CN milling machines in 3 axes;
2. 2013: FACI-13 - Computer Aided Milling system for CN milling of closed profiles;
3. 2013: Software for applying the concept of simultaneous engineering for CNC turning of fitting parts;
4. 2012: System for Modeling the Physiognomic Surface of the Side Group Teeth;
5. 2006: PASPFiCN-2006 system designed for NC program generation for fitting parts manufacturing by using 2 axes NC machines;
6. 2006: PASPACN-2006 system, designed for NC program generation for shafts manufacturing by using 2 axes NC machines;
7. 2005: FASCoB-2005 system, designed for manufacturing the pockets with complex shapes using 2 ½ axes, respectively 3 axes, NC milling machines.

Date 01.06.2021 Author Conf. dr. ing. Camil LANCEA

Signature,