

Transilvania University of Brasov

Faculty of Materials Science and Engineering

Department of Materials Engineering and Welding

Proposed topic for doctoral studies admission contest – September 2019

Doctoral field – Industrial Engineering

Doctoral coordinator Prof. dr. eng. Dorin-Ioan CATANA

*Researches regarding the performance growing for the materials used to combating of the risk factors from occupational safety and health*

Recommended bibliography:

Cătană D. – Risk assessment in the occupational safety and health, Editura Lux Libris, Braşov, 2013

Darabonţ A., s.a. – Managementul securităţii şi sănătăţii în muncă, Vol. 1, Editura AGIR, Bucureşti, 2001

Darabonţ A., s.a. – Managementul securităţii şi sănătăţii în muncă, Vol. 2, Editura AGIR, Bucureşti, 2001

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*Researches regarding the 3D printing of the multicomponent materials*

Recommended bibliography:

Berce P., s.a. – Fabricarea rapidă a prototipurilor, Editura Tehnică, București, 2000

Gregory I., s.a. – 3D-Printed mechanochromic materials, Applied Materials & Interfaces, Vol. 7 (1), 2015, pp. 577-583

Hofmann M., s.a. – 3D Printing gets a boost and opportunities with polymer materials, Macro Letters, Vol. 3, 2014, pp. 382– 386

Bakarich S. E. s.a. – Three-dimensional printing fiber reinforced hydrogel composites, Applied Materials & Interfaces, Vol. 6, 2014, pp. 15998– 16006

Ruiz-Morales JC, s.a – Three dimensional printing of components and functional devices for energy and environmental applications, Energy & Environmental Science, Vol. 10, 2017, pp. 846-859

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Research thematic for the PhD studies

Field – Industrial Engineering

*Researches regarding the 3D printing of the ceramic materials*

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Berce P., s.a. – Fabricarea rapidă a prototipurilor, Editura Tehnică, București, 2000

Gregory I., s.a. – 3D-Printed mechanochromic materials, Applied Materials & Interfaces, Vol. 7 (1), 2015, pp. 577-583

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