

Transilvania University of Braşov

Faculty of Science and Materials Engineering

Department of Materials Science

**Proposed topic for doctoral studies admission contest – September
2019**

Doctoral field **Industrial Engineering**

Doctoral coordinator **Prof. Ioan MILOŞAN, PhD**

Topic 1. *Technologies and equipment specific to the recovery of industrial waste recycling*

Recommended bibliography:

*** Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives

Mamdouh S. Masoud, Hassan A. Farag, Ahmed A. Zaatout, Hesham M. Kamel, Mohamed H. ElGreatly & Hytham M. Ahmed (2017): *Recovery of some valuable components from industrial waste*, Separation Science and Technology, 52:3, 512-519.


Bilitewski, B., Härdtle, G., Marek, K., Weissbach, A., Boeddicker, H.: *"WASTE MANAGEMENT"* – Springer Edition, 1996.

Pharino, C., *Challenges for Sustainable Solid Waste Management*, Springer Briefs on Case Studies of Sustainable Development, 2017.

Miloşan, I., *Tehnologii curate aplicate în ingineria protecţiei mediului industrial*, Editura Universităţii Transilvania din Braşov, ISBN 973-635-590-X, 2005.

Milosan, I., *Clean Technology Applied To Reducing Losses By Recycling Materials From Metallurgical Industry*, Metalurgia International, V. 15; Issue: 2; P. 73-74; ISSN: 1582-2214, Published: 2010.

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Topic 2. Unconventional technologies for processing biocompatible materials in order to obtain implants and mini orthopedic implants

Recommended bibliography:

Pop Gh., *Biomateriale și componente protetice metalice*, Ed.TEHNOPRESS, Iași, 2004. Mihai Chiriță, M., Poată, I. (2002): *Biomateriale, implantologie și protezare medico -chirurgicală*, ISBN: 973-85012-2-9, Ed. Stef, Iasi.

Popescu, N., Gheorghe, C., Popescu, O. (1990): *Tratamente termice neconvenționale*, ISBN 973-31-0182-6, Ed. Tehnică, București.

Trușculescu, M., Ieremia, A. (1983), *Oțeluri inoxidabile și refractare* (Stainless and refractory steels), Editura Facla, Timișoara.

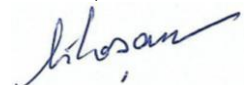
Milosan, I. Cristea, D., Voiculescu, I., Pop, M.A., Balat-Pichelin, ș.a., (2019): *Characterisation of EN 1.4136 stainless steel heat-treated in solar furnace*, International Journal of Advanced Manufacturing Technology, Vol. 101, Issue 9-12, pp. 2955-2962, ISSN: 0268-3768.

Milosan, I., Flamant, G., Voiculescu, I., Geantă, V., Munteanu, D., Bedo, T., Pop, M. A. ș.a. (2018): *Comparative study of heat treatment effects performed with solar energy and electric furnace on Co, W, Cu, and Mo alloyed EN 1.4848 steel*, Revista de Chimie, Vol. 69, Issue 5, p. 1050-1054, 2018, ISSN 0034-7752.

Hryniewicz, T., Rokosz, K., Filippi, M. (2009): *Biomaterial Studies on AISI 316L Stainless Steel after Magneto-electropolishing*, Materials, 2, p. 129-145, ISSN 1996-1944.

Flamant, G.; Ferriere, A.; Laplaze, D. & Monty, C. (1999). *Solar processing materials: Opportunities and new frontiers*, Solar Energy, v. 66, issue 2, p. 117-132, 1999.

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Topic 3. Assessment of the ergonomic risks specific to the industrial field

Recommended bibliography:

Drăghici Anca, *Ergonomie - noi abordări teoretice și aplicative*, Ed. Politehnică, Timișoara, 2006

Dumitrescu Andrei, *Ergonomie*, Ed. Bren, București, 2001

BÂRSAN-PIPU, Nicolae, POPESCU, Ion. *Managementul riscului: concepte, metode, aplicații*. Brașov, Editura Universității Transilvania, 2003, ISBN 9736351807

GHEORGHIU, Alexandru, ORFESCU, Dorina. *Analiza riscurilor în activitatea întreprinderii și strategii de prevenire*. București, Editura ASE, 2006

Bridger S. Robert, *Introduction to Ergonomics*, Ed. Taylor and Francis, Londra, 2005

DOHERTY, Neil A. *Integrated Risk Management: Techniques and Strategies for Reducing Risk*. McGraw - Hill, New York, USA, 2000, ISBN 0-07-135861-7

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