



ADMISSION TO DOCTORAL STUDIES

Session September 2022

Field of doctoral studies: Industrial engineering

Doctoral supervisor: Prof.dr.ing. OANCEA Gheorghe

TOPICS FOR THE ADMISSION TO DOCTORAL STUDIES

TOPIC 1: *Research on remanufacturing of industrial products using innovative technologies*

Recommended bibliography:

1. Matsumoto, M., et al. (2016) Trends and research challenges in remanufacturing, Int. J. of Precis. Eng. and Manuf.-Green Tech. 3: 129. doi:10.1007/s40684-016-0016-4
2. Bagci, E., (2009) Reverse engineering applications for recovery of broken or worn parts and re-manufacturing: Three case studies. Advances in Engineering Software, Vol. 40, pp. 407–418.
3. Buican G. R., Oancea G., Manolescu A., Remanufacturing of Damaged Parts Using Selective Laser Melting Technology, Applied Mechanics and Materials, Vol. 693, pp. 285-290, 2014, doi:10.4028/www.scientific.net/AMM.693.285 .
4. Manolescu, A., Oancea, G., Pescaru, R., Udriou, R. & Bădan I., (2011). Redesigning and Manufacturing of Damaged Gears Using Innovative Technologies, Proceedings of 5th International Conference on Manufacturing Science and Education, pp. 317-321, Sibiu, Romania.
5. Oancea, G.; Manolescu, A.; Bădan, I. & Pescaru, R. (2013). Customized Software Tools Integrated in Reverse Engineering Process of Rectangular Parts with Holes. Journal of Applied Mechanics and Materials, Vol. 371, pp. 473-477.
6. Vinesh, R. & Kiran F.J. (2008). Reverse Engineering – An Industrial Perspective, Springer-Verlag, ISBN 978-1-84628-855-5, London, UK.
7. Gebhardt, A (2012). Understanding Additive Manufacturing, Carl Hanser Verlag, Munich, ISBN 978-3-446-42552-1, Munich, Germany.

Prerequisites / Remarks: *Bachelor's and master's degrees in industrial engineering are an advantage for the candidate(s).*

TOPIC 2: *Research on manufacturing of sheet products using water jet cutting process*

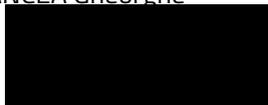
Recommended bibliografy:

1. Kovacevic, R., ş.a, State of the art of research and development in abrasive waterjet machining. J Manuf Sci Eng 119, 776-785 (1997)
2. Momber, AW, Kovacevic, R., Principles of Abrasive Waterjet Machining. Springer London Limited (1998)
3. Wang, J., Abrasive Waterjet Machining of Engineering Materials, Trans Tech Publications, (2003)
4. Olsen J, Zeng J (2006) The state-of-the-art of precision abrasive waterjet cutting. Proceedings of the 8th Pacific Rim International Conference on Water Jet Technology.
5. Folkes J (2009) Waterjet – An innovative tool for manufacturing. Journal of Materials Processing Technology, 209(20), pp. 6181-6189, DOI: 10.1016/j.jmatprotec.2009.05.025.
6. Kong M.C, Axinte D.A (2012) Capability of Advanced Abrasive Waterjet Machining and its Applications. Applied Mechanics and Materials, 110-116, pp. 1674-1682.
7. Korat, M.M., Acharya, G.D., A Review on Current Research and Development in Abrasive Waterjet Machining, Int. Journal of Engineering Research and Applications, Vol. 4, Issue 1(Version 2), January 2014, pp.423-432
8. Supriya, S., Srinivas, S., Machinability Studies on Stainless steel by abrasive water jet – Review, Volume 5, Issue 1, Part 3, 2018, Pages 2871-2876, Elsevier
9. Natarajan, Y., ş.a. Abrasive Water Jet Machining process: A state of art of review, Journal of manufacturing processes, Volume 49, January 2020, Pages 271-322, Elsevier

Prerequisites / Remarks: *Bachelor's and master's degrees in Industrial engineering are an advantage for the candidate(s).*

Doctoral supervisor,

Prof. dr. ing. OANCEA Gheorghe



Coordinator of the field of doctoral studies,

Prof. dr. ing. OANCEA Gheorghe

