



**ADMISSION TO DOCTORAL STUDIES**

**Session September 2022**

**Field of doctoral studies: Industrial Engineering**

**Doctoral supervisor: prof. dr. ing. Stoicanescu Maria**

**TOPICS FOR THE ADMISSION TO DOCTORAL STUDIES**

**TOPIC 1:** *Studies and experimental research on the streamline of the artificial aging process of 7075 alloy sheets in order to improve the physical-mechanical properties.*

**Content / Main aspects to be considered -**

**Recommended bibliography:**

1. Y.Redda, H.M.Yehia, A.M.El-Shamy- Microstructural and mechanical properties of Al-Zn alloy 7075 during RRA and triple aging, Egyptian Journal of Petroleum, Volume 31, Issue 1, March 2022, Pages 9-13
2. Yakun Xu, Xincun Zhuang, Wen Zhang, Qi Li, Zhen Zhao - Mechanical behaviors and microstructure characteristics of W-tempered and peak-aged 7075 alloy sheets under low frequency vibration-assisted tension Materials Science and Engineering: A, Volume 833, 26 January 2022, 142338
3. Jin Ma, Qiang Wang, Tingyan Zhang, Hui Cao, Yongbiao Yang, Zhimin Zhang - Effect of natural aging time on tensile and fatigue anisotropy of extruded 7075 Al alloy, Journal of Materials Research and Technology Volume 18, May-June 2022, Pages 4683-4697
4. Zhihao Du, Zanshi Deng, Ang Xiao, Xiaohui Cui, Hailiang Yu, Zhuangzhuang Feng - Effect of the aging process on the micro-structure & properties of 7075 aluminum alloy using electromagnetic bulging, Journal of Manufacturing Processes Volume 70, October 2021, Pages 15-23

**Prerequisites / Remarks:**

**Doctoral supervisor,**

Prof. dr. ing. STOICANESCU Maria

Signature



**Coordinator of the field of doctoral studies,**

Prof. dr. ing. OANCEA Gheorghe

Signature

