

Transilvania University of Braşov

Faculty of Product Design and Environment

Department of Product Design, Mechatronics and Environment

Proposed topic for doctoral studies admission contest – September 2019

Doctoral field: **Mechanical Engineering**

Doctoral coordinator: *Professor Ileana-Constanţa Roşca, Ph.D.*

Topic: **Researches concerning the guiding systems for implantable components**

Recommended bibliography:

1. Baciu C., Dobre I., Ciobănel P. *Chirurgia și protezarea aparatului locomotor*, Vol.1, Ed. Medicală, Bucureşti 1986
2. Bergmann G., Graichen F., Siraky J., Rohlmann A. *Multichannel strain gauge telemetry for orthopaedic implants*, J. Biomechanics, 1988, 21
3. Bergmann G., Graichen F., Rohlmann A. *Instrumentation of a hip joint prosthesis*, In: Bergmann G, Graichen F, eds. *Implantable Telemetry in Orthopedics*, ISBN 3-927433-45-4, Berlin, 1990
4. Brockett, C., Williams, S., Jin Z., Isaac, G., and Fisher. J. *Friction of total hip replacements with different bearings and loading conditions. Journal of Biomedical Material Research Part B: Applied Biomaterials*, John Wiley and Son, 2007, 81 B
5. Drugă C.N. *Contribuții la studiul comportării în exploatare a elementelor de protezare*, Teză de doctorat, Universitatea Transilvania din Braşov, 2011
6. Graichen F. *Implantierbares telemetrisches übertragungssystem zur in vivo Messung der Belastung kunstlicher Hüftgelenke*, Schile & schon, Berlin, 1990
7. Graham J. D., Walker T.W. *Motion in the hip: the relationship of split line patterns to surface velocities*, in *Perspectives in Biomedical Engineering*, R. M. Kenedi, Ed., University Park Press, Baltimore, MD, 1973
8. Roşca I., Şerban I. *Fundamente de biomecanică*, Editura Universităţii Transilvania din Braşov, ISBN 978-606-19-0559-1, 2015
9. \*\*\* Annual Report of The National Joints Registry (NJR), [www.njrcentre.org.uk](http://www.njrcentre.org.uk), 2003