



# SEMINAR

Monday, 14.10.2019 at 13:00

Kolar's lecture hall

## **Physiologically relevant characterization of biomaterials in biomimetic bioreactors.**

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### ABSTRACT

Two biomimetic bioreactors that we have developed and constructed at the Faculty of Technology and Metallurgy in Belgrade will be described with several examples of functional evaluation of novel biomaterials. The single-use perfusion bioreactor is especially attractive for bone tissue engineering, while the bioreactor with dynamic compression applied in the physiological regime and perfusion imitates native environment in articular cartilage. These two bioreactors were used for evaluation of novel composites based on polymer hydrogels (gellan gum, alginate) and hydroxyapatite precursors (bioactive glass,  $\beta$ -tricalcium phosphate) aimed for osteochondral and bone tissue engineering.

Kindly invited.