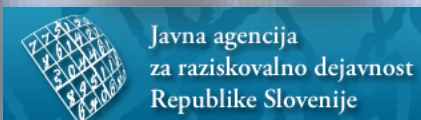


J2-1725
(2019-2022)

PAMETNI MATERIALI ZA BIOAPLIKACIJE

- FAKULTETA ZA KEMIJO IN KEMIJSKO TEHNOLOGIJO UNIVERZA V MARIBORU
- MEDICINSKA FAKULTETA UNIVERZA V MARIBORU
- UNIVERZITETNI KLINIČNI CENTER MARIBOR
- JAVNA AGENCIJA REPUBLIKE SLOVENIJE ZA RAZISKOVANJE



Glavni izziv predlaganega projekta je uporaba naravnih virov in z uporabo nekonvencionalnih zelenih tehnologij razviti pametne materiale kot tudi inovativne izdelke za medicino ter farmacevtsko in živilsko industrijo.

- Uporaba biomaterialov kot vir biološkoaktivnih snovi.
- Testiranje encimskih aktivnosti v subkritičnih in SCF za njihovo morebitno nadaljnjo uporabo.
- Inženiring pametnih materialov s specifičnimi lastnostmi, ki uporabljajo nekonvencionalne tehnike.
- Molekularno modeliranje bioaktivnosti izoliranih substance.
- Izvajanje *in vitro* testov pridobljenih biološko aktivnih izdelkov.



J2-1725
(2019-2022)

SMART MATERIALS FOR BIOAPPLICATIONS

- FACULTY OF CHEMISTRY AND CHEMICAL ENGINEERING UNIVERSITY OF MARIBOR
- FACULTY OF MEDICINE UNIVERSITY OF MARIBOR
- UNIVERSITY MEDICAL CENTRE MARIBOR
- SLOVENIAN RESEARCH AGENCY



The main challenge of the proposed project is to use natural sources and with the use of non-conventional, green technologies, to develop smart materials as innovative products for medical, pharmaceutical and food applications.

Therefore, the main objectives of the proposed program are:

- Using plants and microbial raw materials as a source of bioactive substances.
- Testing enzymatic activities in sub- and SCFs for their possible further use in these media.
- Engineering smart materials with specific properties using non-conventional techniques.
- Molecular modelling on the bioactivities of isolated substances.
- Performing *in vitro* tests of the obtained bioactive products.

