



Vabilo na Preglov kolokvij / Invitation to the Pregl colloquium

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Biopolymers and their potential application in biomedicine

Poly-, oligo- and monosaccharides are ubiquitously found in the living world where they execute functions ranging from energy storage to biochemical recognition. Materials derived from these natural building blocks are therefore of special interest in the areas of sustainability and biomedicine. In this presentation some examples are given on how poly- and oligosaccharides can be chemically modified in yielding products useful for biomedical applications. They can be processed into materials, as coatings, or porous 3D substrates, which allow an exploitation as biomaterials in contact with living systems. Such applications can be in tissue engineering, as developed scaffolds which enables cell attachment, proliferation, migration, transport of body fluids and reconstruction of vessels, etc., while providing a platform for the reconstruction of defects. Scaffolds integrated with all these demanding features can be fabricated by combining polysaccharides and the advanced 3D bioprinting, which is capable of producing custom scaffolds with high structural complexity and design flexibility for soft and hard tissue engineering applications.

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Vljudno vabljeni / Kindly invited