VIELFALT IM ZENTRUM DER FORSCHUNG

„BIOPOLYMERS IN BIOMEDICAL APPLICATIONS“

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Die Ringvorlesung findet auf Englisch und virtuell statt.

Anmeldung unter gudrun.haage@tugraz.at

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Informationen zum Vortrag:

Biopolymer based biomaterials possess many advantages. Among others it is their flexible processability into various shapes employing a broad range of forming methods known for polymers. Understanding interactions of solid biomaterials with living systems or their constituents (proteins, nucleic acids, oligo- and polysaccharide, lipids) is prerequisite for applications in regenerative medicine, as vascular grafts, as biosensors or as low protein fouling layers. Polymeric biomaterials can be shaped into 3D printed, nanofibrous or particulate objects useful for mentioned biomedical applications. This lecture will give an examples on what kind of chemical reactions and surface modifications can be performed with biodegradable or bio-based polymers and how these materials can be processed into various shapes ranging from thin films to 3D printed objects. The usability of processed functional biomaterials in tissue engineering application will be presented.

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