

Session Program

13-17 Sept 2021

**EUROPEAN CONGRESS AND EXHIBITION ON
ADVANCED MATERIALS AND PROCESSES -
EUROMAT 2021**

***F5_Synthetic polymer for medical
applications***

Virtual

Thursday 16 September

16:40

F5_Synthetic polymer for medical applications: F5_1_Syntetic polymers for Additive Manufacturing

Session | **Location:** Room 15

16:40-17:20

High-Throughput Methods for Materials Creation, Selection and Identification for 3D Printed Biomedical Devices (Keynote)

Speaker

Prof. Ricky Wildman

17:20-17:40

Additive manufacturing of resorbable scaffolds for soft tissue applications - how important is the selection of polymer for the result?

Speaker

Prof. Anna Finne-Wistrand

17:40-18:00

Development of thiol-ene photo-crosslinkable poly(ϵ -caprolactone) for light-based 3D-printing

Speaker

Mr Quinten Thijssen

18:00

Friday 17 September

10:10

F5_Synthetic polymer for medical applications: F5_2_Engineering polymers for bone-cartilage tissue regenerationn

Session | **Location:** Room 15

10:10-10:30

Synthetic, biocompatible polymers for additively manufactured tissue regeneration scaffolds

Speaker

Dr Stefan Baudis

10:30-10:50

Fracture Fixations via On-Site Fabrication of Bone Restoration Patches

Speaker

David Eglin

10:50-11:10

Characterization of degradable hydrogels for cartilage regeneration

Speaker

Ms Johanna Meyer

11:10-11:30

3D Bioprinting of a tissue mimetic hyaluronan bioink containing collagen fibers with controlled orientation

Speaker

Prof. Matteo D'Este

11:30

11:50

F5_Synthetic polymer for medical applications: F5_3_Biomaterials for controlling cellular behaviour

Session | **Location:** Room 15

11:50-12:10

Engineering Liquid Interfaces with Viscoelastic 2D Protein Networks - Microdroplet Design for Stem Cell Technologies (Highlight)

Speaker

Prof. Julien Gautrot

12:10-12:30

Biodegradable microscaffolds made by 2PP as novel armamentum for tissue engineering

Speaker

Dr Olivier Guillaume

12:30-12:50

Single and Double network systems based on methacryloyl mucin

Speaker

Dr Andrada Serafim

12:50-13:10

Shape Memory Polymers Enable Dynamic Microcontact Printed Patterns for Altering Cell Morphology

13:10

Speaker

Fred Donelson

14:40

F5_Synthetic polymer for medical applications: F5_4_Nano-, micro-size polymeric system**Session** | **Location:** Room 15

14:40–15:00

Polymer surface functionalization of nanoparticles for biomedical applications - controlling protein interactions (Highlight)**Speaker**

Prof. Erik Reimhult

15:00–15:20

PLA@SPIONs and PLA@HA nanocomposites with controlled interface as enhanced biomaterials for biomedical applications**Speaker**

Prof. Benjamin Nottelet

15:20–15:40

Nanoparticles based on poly(ethylene oxide)-block-polycaprolactone for targeted drug delivery and glioblastoma therapy**Speaker**

Mr Voitto Känkänen

15:40

16:40

F5_Synthetic polymer for medical applications: F5_5_Polymeric materials for controlled release**Session** | **Location:** Room 15

16:40–17:00

Phytotherapeutic nanofiber mats for antibacterial wound dressing (Highlight)**Speaker**

Ms Irem Unalan

17:00–17:20

Bioresorbable bilayered elastomer/hydrogel self-rolling patch for anti-inflammatory delivery**Speaker**

Mathilde Grosjean

17:20–17:40

Nanoparticle Incorporated Electrospun Patches for Dual Drug Delivery Applications**Speaker**

Mr Abdurrahim Can Egil

17:40–18:00

Microfluidic preparation of targeted nanoparticles for oral anti-diabetic peptide delivery**Speaker**

João Pedro Martins

18:00-18:20

Competitive Binding and Molecular Crowding Regulate the Cytoplasmic Interactome of Non-Viral Polymeric Gene Delivery Vectors

Speaker

Prof. Julien Gautrot

18:20