

# **OSTEOMET**

# Innovative surfaces and regeneration of musculoskeletal tissues







Europäische Union Evropská unie

Europäischer Fonds für regionale Entwicklung Evropský fond pro regionální rozvoj



Ziel ETZ | Cíl EÚS

Freistaat Bayern – Tschechische Republik Česká republika – Svobodný stát Bavorsko 2014 – 2020 (INTERREG V)

# **Program**

09:00



# **Coming and registration**

09:30

#### **Opening remarks**



T. Křenek & D. Docheva

**Using Magnetic Instructive Tools in Tendon Tissue Engineering Strategies** 

10:00

#### **Ana Gonçalves**



3B's Research Group University of Minho, Portugal

Unleashing the Potential of Direct Laser Interference Patterning: Enhancing Biocompatibility of Implant Materials through Small-Scale Structures

10:30

#### **Christoph Zwahr**



Gruppenleiter Direkte Laserinterferenzstrukturierung Fraunhofer-Institut für Werkstoff- und Strahltechnik IWS, Dresden

11:00



## Coffee break

Complex responses of diverse cells towards novel laser textured titanium prototypes

11:15

#### Theresia Stich & Girish Pattappa



Clinic and Policlinic for Trauma Surgery UKR, Regensburg

Advanced bioactive nano-micro structured Ti surfaces functionalized by colloidal nanoparticles of bone growth stimulants via laser ablation in liquid

11:40

#### Tomáš Křenek



Chemical Processes and Biomaterials WBU/NTC, Pilsen

#### 12:20



# **Lunch break**

13:20



# Laboratory tour

**Multicomponent Hydrogels: Smart Materials for Biomedical Applications** 

14:40

#### Jagan Mohan Dodda



Chemical Processes and Biomaterials WBU/NTC, Pilsen

Micromorphology and microanalysis of dental materials and hard tissues

15:10

#### **Konstantin Scholz & Fabian Cieplik**



Department of Conservative Dentistry and Periodontology UKR, Regensburg

15:40



## **Coffee break**

MicroCT imaging of bio- and advanced materials

15:55

#### Miloš Svoboda



Engineering of Electrochemical Process WBU/NTC, Pilsen

Virtual human twin in healthcare

16:10

#### Vít Nováček



Biomechanical human body models WBU/NTC, Pilsen

16:25



**Closing remarks**