



Twinning to excel materials engineering for medical devices



Tehnološko-metalurški fakultet Univerziteta u Beogradu

u okviru H2020 projekta:

Twinning to excel materials engineering for medical devices

organizuje specijalizovanu školu

Bioactive hydrogels and hydrogel nanocomposites aimed for wound treatments

15.-20. 01. 2024. g.

Svečana sala Tehnološko-metalurškog fakulteta
Karnegijeva 4, Beograd

**Škola se priznaje kao seminar na doktorskim studijama na TMF,
2 ESPB; jezik škole je engleski**

Učešće u školi je otvoreno za sve studente doktorskih studija ali je obavezna prethodna registracija slanjem elektronske prijave na adresu excellmater@gmail.com sa naslovom: *Registracija za II školu.*

Predavanja organizuju:



Univerzitet Alto,
Finska (AALTO)



Univerzitet Istočnog
Pijemonta „Amedeo
Avogadro“, Italija (UPO)



Research Institute Davos

AO Institut Davos,
Švajcarska (ARI)

Program

Ponedeljak 15. 01. 2024. g. Challenges and approaches

9:00 - 9:10	Otvaranje i dobrodošlica , Petar Uskoković (TMF)
9:10 - 9:20	ExcellMater introduction , Bojana Obradović (TMF)
9:20 – 10:30	Clinical problems and treatment options in skin wounds , Paola Savoia (UPO)
10:30 - 11:00	Pauza za kafu
11:00 - 12:00	Chronic wounds-definition, etiology, clinical aspects. Principles of diagnosis and treatments , Javorka Marković Delić (Health Center “Vizim”)
12:00 – 13:15	The wound healing process and the way to foster it , Paola Savoia , Lia Rimondini (UPO)
13:15 – 14:15	Pauza za ručak
14:15 – 16:00	Homework assignments and student poster session
Utorak 16. 01. 2024. g. Biomaterials for wound treatment applications	
9:00 - 10:15	Designing hydrogels: from basics to composite and hybrid materials , Jacek Wychowaniec (ARI)
10:15 - 10:45	Pauza za kafu
10:45 – 12:00	Natural hydrogels , Melina Kalagasidis Krušić (FTM)
12:00 - 13:15	Immunological responses of biomaterials and their importance in wound healing , Jacek Wychowaniec (ARI)
13:15 – 14:15	Pauza za ručak
14:15 – 15:30	Materials and technologies to fight infections , Andrea Cochis (UPO)



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Sreda 17. 01. 2024. g. Characterizing biomaterials	
9:00 - 10:15	Physico-chemical characterization and testing methods, Michael Gasik (AALTO)
10:15 - 10:45	Pauza za kafu
10:45 - 11:45	Rheology of hydrogels, Katarina Dimić-Mišić (AALTO)
11:45 - 13:00	Biological characterization <i>in vitro</i> , Elena Della Bella (ARI)
13:00 - 14:00	Pauza za ručak
14:00 - 15:15	Preclinical functional characterization methods of nanocomposite hydrogels, Jasmina Stojkovska (FTM)
Četvrtak 18. 01. 2024. g. Translation to practice: wound dressing testing, fabrication, translation and regulatory issues	
9:00 - 10:15	Testing <i>in vivo</i> , Caroline Constant (ARI)
10:15 - 10:45	Pauza za kafu
10:45 - 12:00	Introduction to 3D biofabrication principles, M. Gasik (AALTO)
12:00 - 13:15	3D printing and bioprinting of bioactive bioinks, Vera Todorović (TU Dresden)
13:15 - 14:15	Pauza za ručak
14:15 - 15:30	Regulatory aspects for medical devices (MDR 2017/745), M. Gasik (AALTO)
15:30 - 16:15	How to present your results; work with student teams on homework assignments, Bojana Obradović (FTM)
Petak 19. 01. 2024. g. Regulatory and translation issues	
9:00 - 10:00	Translation to clinic (bench-to-bed), Andrea Montali (ARI)
10:00 - 11:00	Regulatory challenges for ATMP, SoHO and HCTP, M. Gasik (AALTO)
11:00 - 11:30	Pauza za kafu
11:30 - 13:30	Prezentacije domaćih zadataka

Subota 20. 01. 2024. g. Ispit	
10:00 - 11:00	Ispit
11:00 - 12:00	Pauza
12:00	Podela sertifikata i zatvaranje škole

Više informacija na <https://excellmater.tmf.bg.ac.rs/>

