

RISEus2 1st Winter School “Calcium Phosphates and Composites”

Venue:	Onsite at RTU Rudolfs Cimdins Riga Biomaterials Innovation and Development Center, Pulka Street 3
Dates:	27.09.2021 – 29.09.2021
Participants:	Early Stage Researchers
	Valid COVID-19 certificate necessary for participation
Number of participants:	10-20
Language:	English
How to apply:	https://bbcentre.eu/events

AGENDA

27.09.2021

Responsible: Frankfurt Orofacial Regenerative Medicine Laboratory, Goethe University Frankfurt, Germany

10:00-12:00 Lectures	<ol style="list-style-type: none"> 1. Prof. Shahram Ghanaati “The use of biomaterials in head and neck reconstructive surgery” 2. Dr. Sarah Al-Maawi “Cellular reaction to bone substitute materials and its influence on the regeneration process”
12:00 - 13:30	Lunch Break
13:30 – 17:00 Hands on training	Group work. Hands on session on histology slide preparation and analysis. Determination of histomorphological analysis of cells, extracellular matrix and biomaterials-cells interaction

28.09.2021

Responsible: Institut National Polytechnique de Toulouse CIRIMAT, France

10:00-12:00 Lectures	<ol style="list-style-type: none"> 1. Prof. Christian REY “Characterization of calcium phosphates phases and materials by vibrational spectroscopy (FTIR and Raman)” 2. Dr. Jérémy SOULIE “Fabrication processes and characterization techniques of porous biomaterials”
12:00 - 13:30	Lunch Break

13:30 – 17:00 Hands on training	Application of group factor theory to the determination of FTIR and Raman spectra of some calcium phosphate compounds.
29.09.2021	
<i>Responsible: AO Research Institute Davos, Switzerland</i>	
10:00-12:00 Lectures	<ol style="list-style-type: none"> 1. PhD, Research Scientist Andrea Vernengo “Hydrogels and Hydrogel Bioadhesives: Tools for Tissue Repair (Part 1)” 2. Master of Science ETH, Teaching Certificate Health Sciences Nadine Kluser “Hydrogels and Hydrogel Bioadhesives: Tools for Tissue Repair (Part 2)”
12:00 - 13:30	Lunch Break
13:30 – 17:00 Hands on training	<p>Quantification of the effectiveness of different bioadhesives on chamois (leather) versus polylactic acid (PLA). Determination of the parameters and preparation of the bioadhesives and testing samples.</p> <p>Completing of this task will ensure broader knowledge on why certain bioadhesives bond better to a certain class of materials, or why a bioadhesive does not adhere to a particular material, using concepts related to chemistry and physical properties.</p>