



# Nanostructured Bioceramic Materials



## Conference Program

### 1<sup>st</sup> December

Online Conference in MS „Teams“

Time	Presenter	Institution	Title of the Lecture
9:00 – 9:05	<b>Welcome from the Dean of the Faculty of Chemistry and Geosciences Prof. Dr. Aldona Beganskienė</b>		
9:05 – 9:15	<b>Welcome from the President of Lithuanian Science Academy Prof. Dr. Jūras Banys</b>		
9:15 – 9:30	<b>Welcome from Research Pro-Rector of Vilnius University Prof. Dr. Edita Sužiedėlienė</b>		
9:30 – 9:40	<b>Welcome from Vice Dean of the Faculty of Medicine Prof. Dr. Vytautas Kasiulevičius</b>		
9:40 – 10:00	<b>Information from the Head of the Conference Organizational Committee Prof. Dr. Aivaras Kareiva</b>		
10:00 – 11:00	Invited Speaker prof. dr. Pierre <b>Rabu</b>	University of Strasbourg, France	Strategy of Synthesis and Application of Nanostructured Materials
11:00 – 11:30	<b>Coffee break</b>		
<b>Oral session I</b> (Chairman Assoc. Prof. Dr. Ramūnas <b>Skudžius</b> )			
11:30 – 12:30	Invited Speaker prof. dr. Vygandas <b>Rutkūnas</b> , Egidijus <b>Šimoliūnas</b>	Vilnius University, Lithuania	Dental Implantology and 3D Bioprinting. Clinical and Research Perspectives
12:30 – 14:00	<b>Lunch break</b>		
14:00 – 15:00	Invited Speaker prof. dr. Janis <b>Locs</b>	Riga Technical University, Latvia	Nanostructured Calcium Phosphate Biomaterials
15:00 – 16:00	Invited Speaker dr. Aleksej <b>Žarkov</b>	Vilnius University, Lithuania	Synthesis and Investigation of Tricalcium Phosphate Polymorphs
16:00 – 17:30	<b>Poster presentation session I</b> (Chairman Greta <b>Inkrataitė</b> )		



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## 2<sup>nd</sup> December

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Time	Presenter	Institution	Title of the Lecture
<b>Oral session II</b> (Chairman Assist. Prof. Dr. Aleksej <b>Žarkov</b> )			
9:00 – 10:00	Invited Speaker prof. dr. Karlis <b>Gross</b>	Riga Technical University, Latvia	Design and Nanostructuring of Calcium Phosphates for Bone Regeneration
10:00 – 11:00	Invited Speaker dr. Ramūnas <b>Skudžius</b>	Vilnius University, Lithuania	Bioceramic Materials and its Application in Medicine
11:00 – 11:30	<b>Coffee break</b>		
11:30 – 12:30	Invited Speaker Prof. Dr. Vladimir <b>Sivakov</b>	Leibniz Institute of Photonic Technology, Germany	Novel Application Perspectives of Nanostructured Silicon: Green Hydrogen and Biotechnology
12:30 – 14:00	<b>Lunch break</b>		
<b>Oral session III</b> (Chairman Assist. Prof. Dr. Živilė <b>Stankevičiūtė</b> )			
14:00 – 15:00	Invited Speaker prof. dr. Mangirdas <b>Malinauskas</b>	Vilnius University, Lithuania	Optical Mesoscale 3D Printing: from Renewable Organics to Crystalline Inorganics
15:00 – 16:00	Invited Speaker dr. Edita <b>Garškaitė</b>	Lulea University of Technology, Sweden	Synthesis of Nanocrystalline Apatitic Bioceramics for Bone Tissue Engineering and Computed Tomography Studies of Hybrid Organic-Inorganic Biocomposites
16:00 – 17:30	<b>Poster presentation session II</b> (Chairman Dovydas <b>Karoblis</b> )		

## 3<sup>rd</sup> December

Online Conference in MS „Teams“

Time	Presenter	Institution	Title of the Lecture
<b>Oral session IV</b> (Chairman Prof. Dr. Aivaras <b>Kareiva</b> )			
9:00 – 10:00	Invited Speaker Ieva <b>Gendvilienė</b> and dr. Milda <b>Alksnė</b>	Vilnius University, Lithuania	3D Printed Bone: an Innovative Solution for Bone Regeneration
10:00 – 12:00	<b>Poster presentation session III</b> (Chairman Justinas <b>Januškevičius</b> )		
12:00 – 13:00	<b>Lunch break. Review of the results of the conference. Scientific discussions.</b>		



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<b>POSTER SESSION I</b> <b>1<sup>st</sup> December 16:00 – 17:30</b>		
<b>P01</b>	Afonina Anastasija	Low-Temperature Synthesis of Iron Doped Whitlockite Powders
<b>P02</b>	Aukštakojytė Rūta	Synthesis and Structural Characterization of Graphene Oxide and Thermally Reduced Graphene Oxide
<b>P03</b>	Bastakys Lukas	Structural and Tribological Properties of Ceramic Coatings Deposited by Plasma Spraying
<b>P04</b>	Beklešovas Benas	Chromium Oxide Synthesis by Reactive Magnetron Sputtering and Investigation
<b>P05</b>	Bilvinaitė Goda	A Micro-Computed Tomographic Evaluation of Single Cone Root Canal Fillings Performed by Undergraduate Student, Postgraduate Student, General Practitioner and Endodontist
<b>P06</b>	Bodylska Weronika	Bioactive Glass: Comparative Study on Particles with Different Sizes
<b>P07</b>	Budrevičius Darius	The Dependence of the Morphology Of GdPO <sub>4</sub> on Ph
<b>P08</b>	Buzaitytė Eglė	Synthesis of LaPO <sub>4</sub> :1%Eu Nanorods by Hydrothermal Method
<b>P09</b>	Diliautas Ramūnas	Preparation and Characterization of Bi <sub>1-x</sub> GdxFe <sub>0.85</sub> Mn <sub>0.15</sub> O <sub>3</sub> Solid Solutions
<b>P10</b>	Dolmantas Paulius	Modified Maxwell-Garnett Mie Effective Medium Formulation for Investigation of LSPR in DLC:Ag Nanocomposite Thin Films
<b>P11</b>	Drobysch Maryia	The Development of Electrochemical-Based Immunosensor for SARS-Cov-2 Detection
<b>P12</b>	Dukstiene Nijole	Sem/Eds and Xrd Studies of Ag-Cd-Se Thin Films Deposited on Polyamide 6
<b>P13</b>	Gabriūnaitė Inga	Phospholipid Membrane Formation on Fluorine Doped Tin Oxide for Biosensing of Toxins
<b>P14</b>	Gaidamavičienė Giedrė	Various Aqueous Synthesis Methods and Characterization Techniques for Nanocrystalline Calcium Molybdate as a Antimicrobial Component
<b>P15</b>	Griesiute Diana	Hydrothermal Synthesis of Copper-Containing Calcium Phosphate with Whitlockite Structure
<b>P16</b>	Griniuk Evelina	Influence of Synthesis Conditions on Formation Tungsten Oxide Thin Films
<b>P17</b>	Halubek-Gluchowska Katarzyna	Bioactivity and Optical Properties of SiO <sub>2</sub> -CaO Glass Doped with Tm <sup>3+</sup> /Yb <sup>3+</sup> Ions
<b>P18</b>	Yang Chang Jen	Effect of Gamma-Polyglutamic Acid/Nano-Hydroxyapatite (G-Pga/Nano-Hap) Paste on Rehardening and Prevention of Surface Etched Enamel



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<b>POSTER SESSION II</b> <b>2<sup>nd</sup> December 16:00 – 17:30</b>		
<b>P19</b>	Inkrataitė Greta	Determination of Different Garnet Films Characteristics Prepared Using Sol-Gel and Spin or Dip-Coatings Techniques
<b>P20</b>	Ivanets Andrei	Synthesis and Crystal Structure of Magnesium Ferrites Doped by Lanthanids
<b>P21</b>	Jonaitytė Eglė Marija	Evaluation of Microarchitecture and Collagen Coating of Regular and Irregular Structure 3D Polycaprolactone Scaffolds for Dental Pulp Tissue Regeneration
<b>P22</b>	Jreije Antonio	Development of Bone Equivalent 3D Printing Composites for Patient Specific Quality Assurance in Radiotherapy
<b>P23</b>	Jurgilevičius Jurgis	Comparison of 8 Different Impression Copings Splinting Methods
<b>P24</b>	Kalyk Fariza	Synthesis and Evaporation of Gadolinium-Doped Ceria Electrolyte for It-SOFC Applications
<b>P25</b>	Kaminskas Algimantas	A Poly(1,10-Phenanthroline-5,6-Dione), Poly(Pyrrole-2-Carboxylic Acid), Gold Nanoparticles And Glucose Oxidase Nanobiocomposite Based Graphite Electrode as a Potential Anode for Biofuel Cell Powered by Glucose
<b>P26</b>	Kantminienė Kristina	Derivatives of 3-[(4-Methoxyphenyl)Amino]Propanehydrazide: Towards Anticancer and Antioxidant Agents
<b>P27</b>	Kavaliauskaitė Gabija	Ferric Hexacyanoferrate Modified Electrode for Impedimetric Urea Sensing
<b>P28</b>	Kyshkarova Viktoriia	Synthesis of Silica/PIGA Composites by Solution Mixing Method
<b>P29</b>	Kizalaitė Agnė	Synthesis of Zinc Whitlockite by Dissolution-Precipitation Process
<b>P30</b>	Knabikaitė Inga	Al <sup>3+</sup> Influence on the Formation of Calcium Silicates by Using Two Step Synthesis
<b>P31</b>	Kusyak Andrii	Features of Biodegradation of Sol-Gel Bioactive Glass 60s Doped with Ge
<b>P32</b>	Latushka Siarhei	Crystal Structure and Magnetic Properties of Bi <sub>1-x</sub> Sm <sub>x</sub> FeO <sub>3</sub> Compounds Across the Phase Boundary: Effect of External Pressure
<b>P33</b>	Liustrovaitė Viktorija	Phospholipid Bilayer Formation and Characterization Immobilizing Chlorophyll A
<b>P34</b>	Lubinaitė Ernesta	Spectrophotometric Determination of Heparin Based on Aggregation of Gold Nanoparticles
<b>P35</b>	Markevičiūtė Henrieta	Morphological Study of Bio-Nanocomposites Based on Pa6/Selenium Compounds
<b>P36</b>	Matijošius Tadas	Adhesion of Fibroblast Cells to Bioceramic Coatings on Aluminum



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<b>POSTER SESSION III</b> <b>3<sup>rd</sup> December 10:00 – 12:00</b>		
<b>P37</b>	Karoblis Dovydas	Sol-Gel Synthesis and Characterization of SrTiO <sub>3</sub> -BiMnO <sub>3</sub> Solid Solutions
<b>P38</b>	Melnyk Inna	Perspectives of Sol-Gel Silica Particles Loaded with Cu, Eu for Biomedical Applications
<b>P39</b>	Merkininkaitė Greta	Application of Metalorganic Precursors for Laser Fabrication
<b>P40</b>	Michailova Laura	Role of Capping Agent in Formation of Photoelectrochemically Active Tungsten Oxide
<b>P41</b>	Navaruckiene Aukse	Vanillin Derivatives as Resins for Optical 3D Printing
<b>P42</b>	Norkus Mantas	Europium Doped Luminescent Glass Synthesis and Characterization
<b>P43</b>	Pakalniskis Andrius	Characterization of Sm-Doped BiFeO <sub>3</sub> Ceramics Crystal Structure and Magnetization Across the Phase Boundary Region
<b>P44</b>	Parvin Maliha	Bacterial Inactivation Using WO <sub>3</sub> Photoanode for Production of Reactive Chlorine Species in Situ
<b>P45</b>	Poderytė Margarita	Scanning Electrochemical Microscopy as a Tool for Targeted Electroporation Modeling
<b>P46</b>	Povilavičius Ignas	In Vitro Comparison of Different Cement Remnant Removal Efficiency on Dental Implant-Supported Restorations
<b>P47</b>	Prozorovich Vladimir	Design of Manganese Oxide Sorbents for Selective Strontium Radionuclide Removal
<b>P48</b>	Pudule Anna	Carbonate in Amorphous Calcium Phosphate: Influence on Nanolevel Structuring
<b>P49</b>	Ramanavičius Simonas	Formation of Various TiO <sub>2</sub> -X Nanostructures for Application in Biomedicine
<b>P50</b>	Rimkutė Gintarė	Investigation of Thermally Reduced Graphene Oxide and its Application in Amperometric Third Generation Biosensors
<b>P51</b>	Ruginytė Kristina	The Formation and Thermal Stability of Mayenite
<b>P52</b>	Sakalauskienė Laura	Electrochemical Synthesis of Dendritic Gold Nanostructures and Application for the Development of Glucose Biosensor
<b>P53</b>	Sinušaitė Lauryna	Effect of Mn Doping on Hydrolysis of Low Temperature Synthesized Metastable Alpha-Tricalcium Phosphate
<b>P54</b>	Skrudienė Monika	Sol-Gel and Molten Salt Synthesis of Novel Y <sub>3</sub> -2xCa <sub>2</sub> TaxAl <sub>5</sub> -xO <sub>12</sub> Garnet Structure Phosphors
<b>P55</b>	Svazas Ernestas	Comparison of Two Different Healing Abutment Cleaning Protocols
<b>P56</b>	Šerpytis Lukas	Synthesis of NaYF <sub>4</sub> Nano/Micro Particles by Microwave-Assisted Solvothermal Method
<b>P57</b>	Šuopys Airingas	Microstructure and Corrosion Properties of Plasma Sprayed Al <sub>2</sub> O <sub>3</sub> and Al <sub>2</sub> O <sub>3</sub> -TiO <sub>2</sub> Coatings



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<b>P58</b>	Valeikienė Ligita	Sol–Gel Synthesis of Mg <sub>2</sub> –XM <sub>x</sub> /Al <sub>1</sub> (M = Ca, Sr, Ba) Layered Double Hydroxides
<b>P59</b>	Virbickas Povilas	Application of Transition Metals Hexacyanoferrates in Optical Sensing of Hydrogen Peroxide
<b>P60</b>	Zolubas Eimantas	Vesicle Immobilisation on Titanium Foil Nanopores
<b>P61</b>	Žalga Artūras	Aqueous Sol-Gel Synthesis and Characterization of Apatite-Type Materials
<b>P62</b>	Topa Monika	Nanosilica as the Inorganic Filler for Dental Composites Obtained by Photopolymerization