

10th Workshop of Slovak Clay Group

**CLAY MINERALS AND SELECTED INDUSTRIAL MINERALS IN MATERIAL
SCIENCE, APPLICATIONS, AND ENVIRONMENTAL TECHNOLOGY**

24. – 26. 6. 2024
HOTEL KUKUČKA, TATRANSKÁ LOMNICA, SLOVAKIA



PROGRAM

ORGANIZATOR:

Slovak Clay Group, THE INSTITUTE of INORGANIC CHEMISTRY, FACULTY of NATURAL
SCIENCES COMENIUS UNIVERSITY

ORAL PRESENTATIONS

MONDAY, 24.6.	
12:30 – 13:30	LUNCH
14:25 -	OPENING
14:30 – 14:50	THERMALLY TREATED Palygorskite for table olive wastewater treatment C. Lazaratou and D. Vayenas
14:50 – 15:10	Halloysite as sorbent of diclofenac for pharmaceutical and environmental uses E. Gianni et al.
15:10 – 15:30	Mechanical properties of smectite clays and clay-polymer hybrids by DFT-D3 method S. Bashir et al.
15:30 – 15:50	COFFEE BREAK
15:50 – 16:10	Adsorption induced luminescence: insights from theory Š. Budzák et al.
16:10 - 16:30	Antimicrobial surfaces of polymers in the form of thin composite active layers J. Bujdák et al.
16:30 - 16:50	Hydrogel nanocomposites with antimicrobial and photoactive molecules V. George et al.
16:50 – 17:10	Enhanced photofunctional properties of hybrid systems composed of benzothiazole-based dyes and layered silicates V. Planetová et al.
18:00	DINNER

TUESDAY, 25.6.	
07:00 – 09:00	BREAKFAST
09:00 – 11:00	CLOSING MEETING TO PROJECT APVV-19-0487 - BIONANOCOMPOSITES BASED ON ORGANIC POLYCATIONS AND LAYERED SILICATES J. Madejová
12:00 – 13:00	LUNCH
17:00 – 18:00	POSTER SESSION (CONGRESS ROOM)
19:00	BUFFET DINNER

WEDNESDAY, 26.6.	
07:30 – 09:00	BREAKFAST
09:15 – 09:35	Chitosan-based pH-sensitive bionanocomposites with laponite immobilized silver nanoparticles for delivery of sunitinib maleate to breast cancers P. Labib et al.
09:35 – 09:55	Photoactive nanocomposite system based on clay mineral saponite effectively eradicates staphylococcal biofilms K. Bilská et al.
09:55 – 10:15	What can the in vivo model Galleria mellonella provide in the study of nanocomposites based on clay minerals and photosensitizers? H. Bujdáková et al.

10:15 – 10:45 COFFEE BREAK

10:45 – 12:00 FREE DISCUSSIONS ABOUT WORK AND PROJECTS, CLOSING OF WORKSHOP

12:00 - LUNCH

POSTER PRESENTATIONS

TUESDAY, 27.6.

P-1	ADSORPTION-INDUCED EMISSION IN HYBRID SYSTEMS OF PORPHYRINS AND LAYERED SILICATES P. Boháč et al.
P-2	UTILIZATION OF INFRARED SPECTROSCOPY FOR THE STUDY OF HYBRID SYSTEMS BASED ON SMECTITE AND QUATERNIZED CHITOSAN PREPARED BY LBL METHOD V. Kureková et al.
P-3	Application of infrared techniques in clay minerals investigations J. Madejová
P-4	COMPOSITE MATERIALS BASED ON MONTMORILLONITE MODIFIED WITH CATIONIC AND NON-IONIC POLYMERS J. Madejová et al.
P-5	CONFINEMENT-INDUCED SPECTRAL CHANGES OF DICATIONIC NAPHTHALENE DERIVATIVE M. Matejdes and J. Bujdák
P-6	THE ADSORPTION OF Pb(II), Ni(II) AND Cu(II) FROM AQUEOUS SOLUTION BY NATURAL BENTONITE Z. Melichová and M. Šuránek
P-7	INFRARED SPECTROSCOPY OF FUNCTIONAL SURFACES BASED ON ORGANO MODIFIED SAPONITE-PHLOXINE COMPOSITE DEPOSITED ON POLYMERS E. Skoura et al.
P-8	COMPARISON OF ADSORPTION EFFECTIVITY OF LAYERED INORGANIC STRUCTURES FOR BENZETHONIUM CATION BY DFT METHOD E. Scholtzová et al.
P-9	PHYSICOCHEMICAL ASPECTS AND HYDRATION PROPERTIES OF POLY(2-ETHYL-2-OXAZOLINE) AND POLY(DIALLYLDIMETHYLAMMONIUM CHLORIDE) FUNCTIONALIZED MONTMORILLONITE M. Slaný et al.
P-10	ADSORPTION OF HEXAVALENT CHROMIUM BY PENTAMER UNIT OF POLY-(N-BUTYL ETHYLENEIMINE)-MODIFIED MONTMORILLONITE P. Škorňa et al.