



II INTERNATIONAL SYMPOSIUM
CLAYS AND CERAMICS

PROGRAM

UNIVERSITY OF LATVIA,
ACADEMIC CENTRE FOR NATURAL SCIENCES
29-31 JANUARY 2018

PROGRAM IN BRIEF

	29 January	30 January	31 January
9:00		Plenary lecture	Plenary Lecture
10:00	Registration	Scientific lectures	Scientific lectures
11:20		Coffee Break	Coffee Break
11:40		Scientific lectures	Scientific lectures
13:00			Closing of symposium
13:30	Welcome	Lunch	
14:00	Plenary Lecture		
14:30			
15:00	Scientific lectures	Scientific lectures	
16:00	Coffee Break	Riga City Tour	
	Scientific lectures		
18:00			
18:30			
19:00		Dinner	
22:30			

Monday, 29 January

10:30-13:30 **Registration**

13:30-14:00 **Welcome and opening** Prof. **Valdis Segliņš**, Vice-Rector for Exact Sciences, Life and Medical Sciences of University of Latvia

14:00-15:00 **Plenary Lecture** **K. Kirsimäe**, *S. Soomer*, *P. Somelar*.
Weathering tracers of the environmental changes across the Archean and Proterozoic transitions in the Earth history

15:00-18:10 **Session: Clays environmental aspects in geology and modern soils / Ilze Vircava**

15:00-15:20 *P. Somelar*,
K. Kirsimäe,
I. Vircava,
S. Driese Neoproterozoic weathering crust of Baltic Basin

15:20-15:40 *S. Soomer*,
K. Kirsimäe,
A. Lepland,
P. Somelar,
S. Driese Chemical leaching on land at Archean-Proterozoic transition

15:40-16:00 *G. Stinkulis* Middle Devonian clays of the Liepa clay deposit, Latvia: composition, sedimentary environment and deformation structures

16:00-16:30 COFFEE BREAK

16:30-16:50 *V. Puzule*,
G. Noviks The composition and usefulness perspectives of Katlesi geological suite Mednieki deposit clay

16:50-17:10 *Z. Gverić*,
A. Pleša,
D. Tibljaš Comprehensive characterisation of bentonites from Croatia and neighbouring countries

17:10-17:30 *O. Dorzhieva*,
V. Krupskaya,
S. Zakusin,
S. Garanina,
O. Andreeva Clay minerals from Antei-Streltsovskoe uranium deposit (Russia)

17:30-17:50 *L. Zariņa*,
L. Zariņa The significance of clays in agricultural soils in Latvia

17:50-18:10 **Poster session:**

O. Leščinskis, *R. Švinka*, *V. Švinka*:

Characterization of three different Latvian clay minerals from different geological periods.

I. Legzdiņa, *A. Daumanis*, *E. Elstiņš*, *R. Vucāns*, *I. Vircava*:

Soil tillage influence on clay mineral composition and organic carbon accumulation in soil.

Tuesday, 30 January

9:00-10:00	Plenary Lecture	<i>R. Švinka, V. Švinka:</i> New clay ceramic materials
10:00-13:20	Session: Clay-based composite materials / Liva Dzene	
10:00-10:20	<i>R. Guégan</i>	Applications and limits of organoclays
10:20-10:40	<i>S. Bennici, A. Aurou</i>	CaCl ₂ /bentonite composite: water sorption capacity and kinetics for heat storage applications
10:40-11:00	<i>J. Brendlé, E. Brendlé</i>	Inverse gas chromatography as a powerful tool to study the surface properties of synthetic and modified phyllosilicates as well as of modified phyllosilicate/polymer composites
TIME FOR SPONSORS		
11:00-11:20	<i>Martin Ermrich:</i> X-Ray Laboratory / Röntgenlabor Dr. Ermrich	
COFFEE BREAK		
11:40-12:00	<i>A. Bērziņš, A. Morozovs</i>	Wood and Inorganic geopolymer composite
12:00-12:20	<i>S. M. Miron, J. Brendle, L. Limousy, F. Fourcade, A. Amrane</i>	Optimization of carbon fibres coverage by a thin layer of organoclay containing iron
12:20-12:40	<i>Z. Grigale-Sorocina, I. Biks, M. Kalniņš</i>	Hectorite and bentonite effect on water-based polymer coating rheology
12:40-13:00	<i>M. Randers, G. Sedmale, L. Grase, A. Krūmiņa</i>	Functionalizing natural structures by illite nanoparticle deposition
13:00-13:20	Poster session:	<i>R. Ozola, M. Kļaviņš, J. Burlakovs, A. Zicmanis, L. Kļaviņš:</i> Properties and applications of clay minerals modified with different organic/inorganic substances <i>A. Šiškins, J. Peculeviča, H. Agueda, J. Ozoliņš, V. Mironovs:</i> Production and properties of the low temperature glass-ceramic foam based on illite Latvian clay
13:20-14:30 LUNCH BREAK		

14:30-15:50	Session: Clays in archaeology and arts	
14:30-14:50	<i>V. Visocka</i>	Iron Compounds in the Pottery: Temper or Coincidence? A Case Study of Krievu Kalns Hillfort
14:50-15:10	<i>L. Zariņa, A. Kuningas, I. Vircava, K. Kirsimäe</i>	Rehydroxylation method adoption effort on different aged ceramics from Latvia
15:10-15:30	<i>I. Bertašiūtė Grosbaha</i>	Clay materiality and processes happening to it as artistic research
15:30-15:50	Poster session:	
	<i>S. Sarcevičius, V. Kazakauskas, R. Taraškevičius, R. Zinkutė:</i> Geochemical link between building ceramics and its raw material: from 16th century until nowadays, case study of Vilnius, Lithuania.	
	<i>J. Juškevičiūtė, R. Nabažaitė:</i> First Lithuanian steps into applying dactyloscopy in archeology.	
15:50-18:30	RIGA CITY TOUR	
19:00-22:30	SYMPOSIUM DINNER	

Wednesday, 31 January

9:00-10:00	Plenary Lecture	<i>B. B. Zviagina</i> : Crystal-chemical variations in K-dioctahedral micas 1M: distinguishing features and identification criteria from XRD and FTIR data
10:00-13:20	Session: Diffusion, sorption and cation exchange processes involving clay minerals / Anna Trubača-Boginska	
10:00-10:20	<i>E. Ferrage</i> , <i>E. Tertre</i> , <i>F. Hubert</i> , <i>P. Levitz</i> , <i>L.J. Michot</i> , <i>P. Poirion</i> , <i>A. Delville</i>	Anisotropic features of water mobility in swelling clay porous media at mesoscopic scale
10:20-10:40	<i>D. Conka</i> , <i>L. Avotiņa</i> , <i>R. Švinka</i> , <i>V. Švinka</i> , <i>G. Kizane</i>	Studies of the Liepa clays sorption properties with tritium water
10:40-11:00	<i>L. Dzene</i> , <i>H. Verron</i> , <i>A. Delville</i> , <i>L. J. Michot</i> , <i>J.-L. Robert</i> , <i>E. Tertre</i> , <i>F. Hubert</i> , <i>E. Ferrage</i>	Synthetic clays for study of complex soil phenomena: case of caesium desorption process
11:00-11:20	<i>S. Zakusin</i> , <i>Ya. Bychkova</i> , <i>E. Tyupina</i> , <i>P. Belousov</i> , <i>V. Krupskaya</i>	Sorption characteristics of Cs(I) and Sr(II) on bentonites
11:20-11:40	COFFEE BREAK	
11:40-12:00	<i>P. Dutournié</i> , <i>M. Bruneau</i> , <i>J. Brendlé</i> , <i>L. Limousy</i>	Mass transfer modelling in clay-based material: apparent diffusivity estimation of a molecule of interest

12:00-12:20	<i>R. Dohrmann, S. Kaufhold</i>	Cation exchange processes observed in the FEBEX field experiment (Switzerland) and in the prototype repository (PR) experiment (Sweden)
12:20-12:40	<i>D. Svensson</i>	High temperature stability of bentonite in two field experiments: ABM2 (6½ years) and ABM5 (4½ years) at Äspö underground laboratory, Sweden
12:40-13:00	<i>V. Krupskaya, S. Zakusin, O. Dorzhieva, A. Boguslavskiy, O. Shemelina, M. Chernov, A. Zubkov</i>	Transformation of clay minerals due to technogenic processes associated with the disposal of radioactive waste
13:00-13:20	Poster session: <i>A. Stunda-Zujeva, O. Medne, Līga Bērziņa-Cimdiņa:</i> Spray drying - shape and size of illitic clay granules. <i>A. Trubaca-Boginska, A. Eglīte, A. Priksane:</i> Study on Brönsted acidic ionic liquid adsorption in purified illite clays.	
13:20-14:30	CLOSING OF THE SYMPOSIUM	

