

PROGRAM
of the International Scientific Conference
"USE OF NATURAL AND MODIFIED CLAY MINERALS FOR THE ADSORPTION
AND DETOXIFICATION OF CHEMICAL POLLUTANTS"
(November 20, 2025, Tula, Russia)

<https://tsput.ktalk.ru/jb1ky2j8itlc>

9.00 (Moscow time, Russia) 11.30 (Chennai time, India) 14.00 (Beijing time, China)	Opening of the conference. Welcoming speech by - Prof. Romashina Ekaterina Yu., Vice-Rector for Research, Tula State Lev Tolstoy Pedagogical University, Russia - Prof. S. Hemalatha, Dean, School of Life Sciences, B.S. Abdur Rahman Crescent Institute of Science and Technology (India)
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PART I 9.20 (MT), 11.50 (ChT), 14.20 (BT) Conveners: Dr. Leonid Perelomov, Architha Vijayalakshmi			
MT	Speaker	Title of the presentation	Type of presentation
9.40-9.55	Gertsen M.M. , <i>Tula State Lev Tolstoy Pedagogical University, Laboratory of Biogeochemistry</i>	LEAD CATIONS SORPTION BY ORGANOCCLAYS BASED ON BENTONITE AND DIFFERENT TYPES OF SURFACTANTS	Plenary presentation
9.55-10.10	Vijayalakshmi Architha , <i>B.S. Abdur Rahman Crescent Institute of Science and Technology</i>	ENHANCED LEAD REMOVAL FROM CONTAMINATED WATER USING LAURAMINE OXIDE-MODIFIED BENTONITE	Plenary presentation
10.10-10.25	Matichenkov V.V. , <i>Institute of Fundamental Problems of Biology of the Russian Academy of Sciences</i>	MANAGING CADMIUM MOBILITY IN SOIL BY MONOSILICIC ACID APPLICATION	Plenary presentation
10.25-10.40	Hongguang Zheng , <i>Beijing Normal University, College of Water Sciences</i>	CONCENTRATION-DEPENDENT MODULATION OF HORIZONTAL GENE TRANSFER BY IRON OXIDES: MOLECULAR MECHANISMS TARGETING	Plenary presentation

		PLASMIDS AND RECIPIENT BACTERIA	
10.40-10.55	Bocharnikova E.A., <i>Institute of Fundamental Problems of Biology of the Russian Academy of Sciences</i>	SURFACE MODIFICATION OF MINERALS WITH MONOSILICIC ACID TO ENHANCE HEAVY METAL SORPTION	Plenary presentation
10.55-11.05	Kathavarayan Manikandan, <i>B.S. Abdur Rahman Crescent Institute of Science and Technology</i>	ENHANCED ADSORPTION OF ANIONIC DYES FROM AQUEOUS SOLUTION USING CETYLTRIMETHYLAMMONIUM BROMIDE (CTAB) MODIFIED CLAY	
11.05-11.15	Khaidanov I.V., <i>Tula State Lev Tolstoy Pedagogical University, Laboratory of Biogeochemistry</i>	OXYTETRACYCLINE ADSORPTION BY TWO-LAYER AND THREE-LAYER CLAY MINERALS	
11.15-11.30	Kai Yang, <i>Beijing Normal University, College of Water Sciences</i>	ULTRASOUND-ASSISTED ADSORPTION OF CONGO RED FROM AQUEOUS SOLUTION USING MG-AL-CO ₃ LAYERED DOUBLE HYDROXIDE	Plenary presentation
11.30-11.40	Shaik Fariha Kaunain, <i>B.S. Abdur Rahman Crescent Institute of Science and Technology</i>	SYNERGISTIC ROLE OF BIOPOLYMERS AND MODIFIED CLAYS IN THE DETOXIFICATION OF ANTIBIOTIC RESIDUES	
11.40-11.50	Hephziba X., <i>B.S. Abdur Rahman Crescent Institute of Science and Technology</i>	FUNCTIONALIZED BENTONITE-BASED COMPOSITE FOR EFFICIENT DEGRADATION OF BPA	
11.50-12.00	Manasa O N <i>B.S. Abdur Rahman Crescent Institute of</i>	SUSTAINABLE REMEDIATION FOR CONTAMINATED WATER USING BENTONITE-AGROWASTE-NANOHYBRID COMPOSITES FOR HEAVY	

	<i>Science and Technology</i>	METAL AND AZO DYE REMOVAL	
12.00-12.10	Mersiha Abdul Rahim, <i>B.S. Abdur Rahman Crescent Institute of Science and Technology</i>	FABRICATION AND CHARACTERIZATION OF BENTONITE - ORANGE PEEL ADSORBENT FOR THE ELIMINATION OF BISPHENOL A FROM WATER	
12.10-12.20	Rifa Fathima M., <i>B.S. Abdur Rahman Crescent Institute of Science and Technology</i>	DEVELOPMENT AND CHARACTERIZATION OF A BENTONITE-BANANA LEAF POWDER ECO-ADSORBENT TARGETING BPA	
12.20-12.30	Yumna Ayesha, <i>B.S. Abdur Rahman Crescent Institute of Science and Technology</i>	CORN HUSK–BENTONITE COMPOSITE FOR BPA DEGRADATION	
Conference break (12.30-13.00)			
PART II 13.00 (MT), 15.30 (ChT), 18.00 (BT) Conveners: Maria Gertsen, Leonid Perelomov			
MT	Speaker	Title of the presentation	Type of presentation
13.00-13.15	Zubkova T.A., <i>Lomonosov Moscow State University, Faculty of Soil Science</i>	SOIL MINERALS ARE CATALYST XENOBIOTIC DECOMPOSITION	Plenary presentation
13.15-13.30	Kovalev I.V., <i>Lomonosov Moscow State University, Faculty of Soil Science</i>	THE ROLE OF LIGNIN PHENOLS IN ORGANOMINERAL INTERACTIONS	Plenary presentation
13.30 – 13.45	Perelomov L.V. <i>Tula State Lev Tolstoy Pedagogical University, Laboratory of Biogeochemistry</i>	ADSORPTION OF ANTIBIOTICS WITH VARIOUS HYDROPHILICITY OF MOLECULES BY NATURAL CLAY MINERALS	Plenary presentation
13.45-14.00	Bondarevich E.A.,	SORPTION OF PHOSPHATE ANIONS BY	Plenary presentation

	<i>Chita State Medical Academy</i>	MECHANOACTIVATED MINERAL-PLANT SORBENTS (POLYHEPAN-KAOLINITE COMPOSITES)	
14.00-14.15	Iovcheva A.D., <i>Institute of Physico-Chemical and Biological Problems in Soil Science of the Russian Academy of Sciences</i>	ASSESSMENT OF THE ABSORPTION CAPACITY OF SOILS AS NATURAL CLAY CONTAINING SORBENTS FOR COPPER IONS	Plenary presentation
14.15-14.30	Nevedrov N.P., <i>Kursk State University</i>	MODELING STABLE SOIL STRUCTURES IN URBAN ECOSYSTEMS TO IMPROVE THEIR ENVIRONMENTAL SAFETY	Plenary presentation
14.30-14.45	Sokolov A. A., <i>Gelendzhik Branch of the Southern Federal University</i>	THE ROLE OF CLAY MINERALS IN THE IMMOBILIZATION OF HEAVY METALS IN THE RESTORATION OF RECLAMATED TAILING AREAS	Plenary presentation
14.45-15.00	Ostroumov S.A., <i>Lomonosov Moscow State University, Faculty of Biology</i>	ENVIRONMENTAL EDUCATION AND IMPROVEMENT OF TRAINING THE PERSONNEL IN THE FIELD OF REMEDIATION OF CHEMICALLY CONTAMINATED ENVIRONMENTAL OBJECTS, INCLUDING WATER BODIES	Plenary presentation
15.00-15.10	Mindubaev A.Z., <i>FRC KazRC RAS</i>	THE SECOND DECADE OF RESEARCH ON THE BIODEGRADATION OF ECOTOXICANTS	
15.10-15.20	Lasareva E.V., <i>Lomonosov Moscow State University, Faculty of Chemistry</i>	INFLUENCE OF NATURAL MODIFIERS ON THE STABILITY OF BENTONITE DISPERSIONS.	
15.20-15.30	Kaledin Yu.V. <i>Tula State Lev Tolstoy Pedagogical University</i>	ADSORPTION OF CRUDE OIL BY ORGANOMINERAL SYSTEMS BASED ON BENTONITE AND DIFFERENT TYPES OF SURFACTANTS	
15.30-15.40	Lebedev P.V., <i>Tula State Lev Tolstoy</i>	ADSORPTION OF OXYTETRACYCLINE BY NATURAL BENTONITE	

	<i>Pedagogical University</i>		
15.40-15.50	Murentseva V. A., <i>Tula State Lev Tolstoy Pedagogical University</i>	TOXICOLOGICAL EVALUATION OF COMPLEXES OF CLAY MINERALS WITH STREPTOCIDE IN THE RELATION TO DAPHNIA MAGNA	
15.50-16.00	Nikishina M.B., <i>Tula State Lev Tolstoy Pedagogical University</i>	ADSORPTION OF ZINC IONS BY BENTONITE MODIFIED WITH SURFACTANTS AND SILVER COLLOIDS	
CLOSING OF THE CONFERENCE			

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