



The Ministry of Environment of the Slovak Republic and the Slovak Environment Agency is delighted to invite you to the

## **INTERNATIONAL CONFERENCE CONTAMINATED SITES 2018** **BANSKÁ BYSTRICA, SLOVAK REPUBLIC, 8 – 10 OCTOBER 2018**

The conference has been organised as an activity of the SLOVAK PRESIDENCY 2018/2019 OF THE VISEGRAD GROUP.

### **CONFERENCE PROGRAMME**

<b>8 October 2018</b>	12.00 – 15.30	Registration, poster session arrangements, check-in – hotel DIXON****
	15.30 – 18.00	Trip to the Zvolen Castle + welcome drink – Zvolen
	19.00 – 20.30	Dinner – hotel DIXON****
<b>9 October 2018</b> hotel DIXON****	07.30 – 08.45	Registration, poster session arrangements
	08.45 – 13.00	Presentations + Discussion Session 1 and 2
	13.00 – 14.20	Lunch
	14.20 – 18.30	Presentations + Discussion Session 3 and 4
	20.00 – 22.00	Welcome Dinner – The OLD TOWNHALL, Square of the Slovak National Uprising 1 in Banská Bystrica
<b>10 October 2018</b> hotel DIXON****	08.00 – 08.30	Registration
	08.30 – 12.40	Presentations + Discussion Session 5 and 6
	12.40 – 14.00	Lunch
	14.00	Bus transport to Bratislava

*The activity has been implemented within the framework of national project  
**Information and providing advice on improving the quality of environment in Slovakia.**  
 The project is cofinanced by Cohesion Fund of the EU under Operational programme Quality of Environment.*



### CONFERENCE VENUE AND ACCOMMODATION

Accommodation is being provided in the hotel DIXON \*\*\*\*, Svermova 32 in Banská Bystrica, where is the conference venue, too: <https://dixonresort.sk/>

Accommodation expenses are covered by the organizers for 2 nights per registered person (check-in 8 October 2018, check-out 10 October 2018). For further information and for making requests, please contact our event agency staff – [info@agency4academy.sk](mailto:info@agency4academy.sk)

### WELCOME DINNER

is being held in The OLD TOWNHALL, Square of the Slovak National Uprising 1 in Banská Bystrica, Slovakia. Please take your badge, which is a part of your conference kit, with.



<http://eng.banskabystrica.sk/>

### TRANSPORT

Transport costs are not covered by organizers. Transport to and from the conference venue is at conference participants' own expense.

Free bus transport to Bratislava is being provided (on request only) on 10 October 2018 at 14.00 (2. 00 p. m.) – [info@agency4academy.sk](mailto:info@agency4academy.sk)

The bus for Bratislava airport and Bus station Nivy is leaving from the hotel DIXON\*\*\*\*.



The conference is GRATIS for confirmed registered participants – there are fully covered conference expenses such as accommodation for 2 nights, conference kit, scientific programme, conference proceedings, meals and a trip during the conference within its programme.

### CONTACTS

#### MANAGER OF THE CONFERENCE

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#### EVENT AGENCY (transport, accommodation, trip, ...)

AGENCY 4 ACADEMY, s. r. o.  
[info@agency4academy.sk](mailto:info@agency4academy.sk)  
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# AGENDA

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08 – 10 OCTOBER 2018 • BANSKÁ BYSTRICA • SLOVAKIA

<b>09 OKTOBER 2018</b>		<b>7.30 – 8.45</b>	<b>REGISTRATION, POSTERS ARRANGEMENT</b>
		<b>8.45 – 10.40</b>	<b>SESSION 1</b>
<b>CHAIR: Vlasta Jánová</b> <i>Slovak Republic</i> + <b>Richard Přebyl</b> <i>Czech Republic</i>			
<b>Nr.</b>	<b>TIME</b>	<b>Presenter Country</b>	<b>PRESENTATION TITLE</b>
	8.45 – 9.00	<b>WELCOME SPEECH</b> <b>RNDr. Vlasta Jánová, PhD.</b> , Ministry of Environment of the Slovak Republic <b>RNDr. Richard Müller, PhD.</b> , Slovak Environment Agency	
1	9.00 – 9.20	<b>Vlasta Jánová</b> <i>Slovak Republic</i>	CONTAMINATED SITES IN SLOVAKIA – CURRENT RESEARCH AND REMEDIATION PROJECTS
2	9.20 – 9.40	<b>Richard Přebyl</b> <i>Czech Republic</i>	CONTAMINATED SITES IN THE CZECH REPUBLIC – PRESENT STATE AND PERSPECTIVE
3	9.40 – 10.00	<b>Gábor Hasznos</b> <i>Hungary</i>	CONTAMINATED SITES IN HUNGARY – PRESENT STATE AND PERSPECTIVE
4	10.00 – 10.20	<b>Grzegorz Siebielec</b> <i>Poland</i>	CONTAMINATED SITES IN POLAND – PRESENT STATE AND PERSPECTIVE
5	10.20 – 10.40	<b>Soline Mourmant</b> <i>Belgium</i>	DEVELOPMENT OF DATABASE AND PROTOCOLS TO SELECT PHYSICAL, CHEMICAL AND TOXICOLOGICAL PARAMETERS FOR ALMOST 280 POLLUTANTS IN WALLONIA (BELGIUM)
		<b>10.40 – 11.00</b>	<b>COFFEE BREAK</b>
		<b>11.00 – 13.00</b>	<b>SESSION 2</b>
<b>CHAIR: Yuliya Vystavna</b> <i>Czech Republic</i> + <b>Jakub Kostecki</b> <i>Poland</i>			
6	11.00 – 11.20	<b>Marco Falconi</b> <i>Italy</i>	ITALIAN SOIL GAS GUIDELINE 2018
7	11.20 – 11.40	<b>Yuliya Vystavna</b> <i>Czech Republic</i>	TRANSBOUNDARY LOADING OF PRIORITY SUBSTANCES AND EMERGING COMPOUNDS FROM CONTAMINATED WASTEWATERS: RISK FOR FULFILMENT THE REQUIREMENTS OF EU WATER DIRECTIVE
8	11.40 – 12.00	<b>Andrzej Greinert</b> <i>Poland</i>	HISTORICAL AND CONTEMPORARY SOIL POLLUTION IN THE CITY OF ZIELONA GÓRA (POLAND)
9	12.00 – 12.20	<b>Jozef Kobza</b> <i>Slovak Republic</i>	CURRENT STATE OF MAIN RISK ELEMENTS IN AGRICULTURAL SOILS OF SLOVAKIA
10	12.20 – 12.40	<b>Lilit Sahakyan</b> <i>Armenia</i>	CONTAMINATION ISSUES OF ARMENIAN'S MINING SITES
11	12.40 – 13.00	<b>Nosir Shukurov</b> <i>Uzbekistan</i>	DISTRIBUTION, MINERAL FORMS, AND BIOAVAILABILITY OF HEAVY METALS IN SOILS, THEIR IMPACTS ON SOIL BIOGEOCHEMICAL PROPERTIES (ANGREN-ALMALKYK MINING- INDUSTRIAL AREA, UZBEKISTAN)
		<b>13.00 – 14.20</b>	<b>LUNCH</b>

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14.20 – 16.20

SESSION 3

**CHAIR: Claudia Neculau** Belgium + **Karel Waska** Czech Republic

12	14.20 – 14.40	<b>Meshari Almutairi</b> Kuwait	VERMIREMEDIATION STRATEGY FOR REMEDIATION OF KUWAITI OIL CONTAMINATED SOIL
13	14.40 – 15.00	<b>Karel Waska</b> Czech Republic	CHEMICAL AND BIOLOGICAL REMEDIATION OF KUWAIT GROUNDWATER AFTER THE GULF WAR: LABORATORY TESTING
14	15.00 – 15.20	<b>Giovanni Preda</b> Italy	CASE HISTORIES OF CONTAMINATED SITES REMEDIATION AND SEDIMENT MANAGEMENT IN ITALY: TECHNOLOGY AND RESULTS
15	15.20 – 15.40	<b>Marina Gakhutishvili</b> Georgia	ARSENIC MINING POLLUTION IN GEORGIA: REMEDIATION APPROACHES
16	15.40 – 16.00	<b>Claudia Neculau</b> Belgium	POSIDON – POLLUTED SITE DECONTAMINATION PCP
17	16.00 – 16.20	<b>Christoph Noller</b> Austria	REMEDICATION AND REVITALIZATION OF TRACE METAL CONTAMINATED GARDEN SOILS USING A SUSTAINABLE EDTA WASHING TECHNIQUE

16.20 – 16.40

COFFEE BREAK

16.40 – 18.10

SESSION 4

**CHAIR: Katarína Dercová** Slovak Republic + **Gerhard Soja** Austria

18	16.40 – 17.00	<b>Svetlana Sushkova</b> Russian Federation	MONITORING OF PAHs CONTAMINATION IN CONTAMINATED SITES OF ELECTRIC POWER STATION
19	17.00 – 17.20	<b>Zdeněk Suchánek</b> Czech Republic	SPECIFICATION OF THE METHODOLOGY FOR THE REVISION OF CLUES OF CONTAMINATED SITES OBTAINED WITH THE USE OF REMOTE SENSING METHODS, AND PRELIMINARY STATISTICAL DATA ON THE NUMBER AND SPACIAL DISTRIBUTION OF THESE CLUES IN THE CZECH REPUBLIC
20	17.20 – 17.40	<b>Boris Urbánek</b> Czech Republic	INDIRECT METHODS OF POPs CONTAMINATION SPREAD ESTIMATION ON DEPOSITORY SITE NUBARASHEN –ARMENIA
21	17.40 – 18.00	<b>Gerhard Soja</b> Austria	BIOCHAR APPLICATIONS TO SUPPORT SOIL REMEDIATION
22	18.00 – 18.10	<b>Edgars Dimitrijevs</b> Latvia	HIGH RESOLUTION SITE CHARACTERIZATION TOOLS (INCLUDING LIF (LASER-INDUCED FLUORESCENCE)) FOR ASSESSMENT AND REMEDIATION OF CONTAMINATED SITES

18.10 – 18.30

DISCUSSION

20.00 – 22.00

WELCOME DINNER

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<b>10 OCTOBER 2018</b>		<b>8.00 – 8.30</b>	<b>REGISTRATION</b>
		<b>8.30 – 10.10</b>	<b>SESSION 5</b>
<b>CHAIR: Marie Hechelski</b> <a href="#">France</a> + <b>Leonard Mgbеаhuruike</b> <a href="#">United Kingdom</a>			
<b>Nr.</b>	<b>TIME</b>	<b>Presenter Country</b>	<b>PRESENTATION TITLE</b>
22	8.30 – 8.50	<b>Leonid Perelomov</b> <a href="#">Russia</a>	ADSORPTION OF HEAVY METALS BY NATURAL AND MODIFIED HUMIC SUBSTANCES
23	8.50 – 9.10	<b>Leonard Mgbеаhuruike</b> <a href="#">United Kingdom</a>	LEACHING PROFILE OF CONTAMINATED SOIL IN NIGERIA AND ITS POTENTIAL FOR EX SITU REMEDIATION USING DIFFERENT CHELATING AGENTS BY SOIL WASHING
24	9.10 – 9.30	<b>Elena Bocharnikova</b> <a href="#">Russia</a>	SILICON-BASED APPROACH TO DETOXIFICATION AND PURIFICATION OF CONTAMINATED SITES
25	9.30 – 9.50	<b>Marie Hechelski</b> <a href="#">France</a>	AN ORIGINAL APPROACH IN GREEN CHEMISTRY: FROM ASSISTED-PHYTOREMEDIATION OF CONTAMINATED SOIL TO UPCYCLING OF PLANT BIOMASS FOR BIOSOURCED CATALYST PRODUCTION
26	9.50 – 10.10	<b>Tatiana Minkina</b> <a href="#">Russia</a>	COMBINING SELECTIVE SEQUENTIAL EXTRACTIONS AND X-RAY ADSORPTION SPECTROSCOPY FOR Zn SPECIATION IN SPOLIC TECHNOSOLS
		<b>10.10 – 10.40</b>	<b>COFFEE BREAK</b>
		<b>10.40 – 12.20</b>	<b>SESSION 6</b>
<b>CHAIR: Adeline Janus</b> <a href="#">France</a> + <b>Zdeněk Suchánek</b> <a href="#">Czech Republic</a>			
27	10.40 – 11.00	<b>Davit Pipoyan</b> <a href="#">Armenia</a>	RISK ASSESSMENT OF Cu AND Mo EXPOSURE THROUGH CONSUMPTION OF VEGETABLES GROWN UNDER THE IMPACT OF KAJARAN'S MINING COMPLEX
28	11.00 – 11.20	<b>Ivan Alekseev</b> <a href="#">Russia</a>	TRACE ELEMENTS CONCENTRATION IN SELECTED URBAN SOILS OF THE RUSSIAN ARTIC
29	11.20 – 11.40	<b>Adeline Janus</b> <a href="#">France</a>	INFLUENCE OF TWO AMENDMENTS ON PHYTO- AND SANITARY AVAILABILITY OF METALS IN HIGHLY CONTAMINATED SOILS: A GREENHOUSE STUDY
30	11.40 – 12.00	<b>Palaniswamy Thangavel</b> <a href="#">India</a>	ROLE OF HYPERACCUMULATORS IN PHYTO-MANAGEMENT OF METAL CONTAMINATED SITES
31	12.00 – 12.20	<b>Van Xuan Nguyen</b> <a href="#">France</a>	IMPORTANCE OF ENVIRONMENTAL AND TOXICOLOGICAL AVAILABILITIES OF Cd AND Pb IN MANAGEMENT OF DREDGED SEDIMENTS
		<b>12.20 – 12.40</b>	<b>DISCUSSION/CONCLUSION</b>
		<b>12.40 – 14.00</b>	<b>LUNCH</b>

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## POSTER SESSION

1	<b>Elena Antonenko</b> Russian Federation	BENZO[A]PYRENE EFFECT ON HORDEUM SATIVUM DISTICHUM WITHIN ARTIFICIAL SOIL POLLUTION
2	<b>Ademir Sergio Ferreira de Araujo</b> Brazil	BACTERIAL COMMUNITY IN SOIL CONTAMINATED WITH CHROMIUM
3	<b>Agnieszka Baran</b> Poland	THE USE OF CHEMICAL INDICATORS AND BIOASSAYS FOR AN ASSESSMENT OF ECOLOGICAL RISK IN CONTAMINATED BOTTOM SEDIMENTS
4	<b>Tatiana Bauer</b> Russian Federation	CHANGES IN COPPER SPECIATION IN LONG-TERM CONTAMINATED SOIL
5	<b>Jan Bartoň</b> Czech Republic	MONITORING OF GROUNDWATER BODY IN DRINI I BARDHË RIVER BASIN IN KOSOVO
6	<b>Petr Beneš</b> Czech Republic	ELECTRICALLY ENHANCED SUBSURFACE REMEDIATION FULL SCALE APPLICATION
7	<b>Viktorija Bezhovska</b> Macedonia	EXAMINATION POROSITY OF THE SOIL AND ITS PHYSICO-CHEMICAL PROPERTIES
8	<b>Elena Bradiaková</b> Slovak Republic	PROJECTS OF THE SLOVAK ENVIRONMENT AGENCY ON CONTAMINATED SITES
9	<b>Ondrej Brachtýr</b> Slovak Republic	THE IMPACT OF NATURAL AND SUPPORTED ATTENUATION ON PRECIPITATION OF Fe-OXYHYDROXIDES FROM SURFACE WATERS CONTAMINATED BY MINING WATERS
10	<b>Marina Burachevskaya</b> Russian Federation	THE LEAD COMPOUNDS IN THE SOIL IN CONDITIONS OF AIR POLLUTION
11	<b>Blagica Cekova</b> Macedonia	CONSTRUCTION OF PLANT FOR WASTEWATER TREATMENT
12	<b>Gianina Elena Damian</b> Romania	PRELIMINARY INVESTIGATIONS REGARDING THE POTENTIAL OF HUMIC SUBSTANCES TO EXTRACT NICKEL FROM CONTAMINATED SOIL
13	<b>Katarína Dercová</b> Slovak Republic	BIOREMEDIATION OF POLYCHLORINATED BIPHENYLS (PCBs): INTEGRATION OF BIOTECHNOLOGY AND NANOTECHNOLOGY APPROACHES
14	<b>Alexey Fedorenko</b> Russian Federation	MORPHOLOGY AND ULTRASTRUCTURE OF SPRING BARLEY (HORDEUM SATIVUM) GROWN IN CONDITIONS OF CONTAMINATED AND BIOREMEDIATED SOILS
15	<b>Ali Hamidian</b> Iran	APPLICATION OF COMBINED LANDFARMING-PHYTOREMEDIATION FOR THE PURPOSE OF RECLAMATION OF SOILS CONTAMINATED BY PETROLEUM, CASE STUDY OF TEHRAN OIL REFINERY
16	<b>Viktor Chaplygin</b> Russian Federation	THE IMPACT OF TECHNOGENIC POLLUTION ON HERBACEOUS PLANT COMMUNITIES
17	<b>Nora Jantáková</b> Slovak Republic	OBSERVATIONS FROM THE MONITORING OF ENVIRONMENTAL BURDENS OF THE CHEMIKA AND GUMON PLANTS IN BRATISLAVA, SLOVAKIA
18	<b>Filip Jovanovski</b> Macedonia	APPLICATION OF LICHENES IN THE ENVIRONMENT
19	<b>Andrea Kałuża-Haładyn</b> Poland	COMPARISON OF THE DYNAMICS OF SELECTED PHYSICAL AND PHYSICO-CHEMICAL PROPERTIES DURING COMPOSTING OF WASTES PRODUCED FROM SOLID MUNICIPAL WASTES AND BIOMASS PRODUCED FROM ENERGETIC PLANTS

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20	<b>Radovan Karkalic</b> Serbia	STUDY ON THE EFFECTIVENESS OF MICROCLIMATE COOLING SYSTEMS IN A TOXIC ENVIRONMENT
21	<b>Petr Lacina</b> Czech Republic	PORTABLE X-RAY FLUORESCENCE ANALYZER: AN EXCELLENT TOOL FOR PRELIMINARY EXPLORATION AND SCREENING OF CONTAMINATED SITES
22	<b>Aleksandra Loba</b> Poland	CHANGES OF SOIL QUALITY IN THE VICINITY OF THE EUROPE'S LARGEST COPPER ORE TAILINGS IMPOUNDMENT
23	<b>Andrej Machlica</b> Slovak Republic	NEW FACTS AND CONTEXTS FOUND IN THE INVESTIGATION OF THE SPREAD OF POLLUTION NOT ONLY IN THE AREA OF CHZDJ LANDFILL IN BRATISLAVA
24	<b>Jarmila Makovniková</b> Slovak Republic	ACTUAL STATE AND DEVELOPMENT OF PROPERTIES OF SOILS CULTIVATED UNDER ENERGETIC CROPS ON CONTAMINATED SOIL
25	<b>Valer Micle</b> <b>Ioana-Monica Sur</b> Romania	INVESTIGATION CONCERNING EX-SITU BIOREMEDIATION OF PETROLEUM HYDROCARBONS CONTAMINATED SOILS
26	<b>Jiří Mikeš</b> Czech Republic	FIELD HYDROGEOLOGICAL CENTER (THCP) – OPPORTUNITY FOR UNIQUE RESEARCH AND DEVELOPMENT IN ENVIRONMENTAL ENGINEERING
27	<b>Slavomír Mikita</b> Slovak Republic	PROPOSAL OF REMEDIATION OF MORAVA RIVER FLOODPLAIN CONTAMINATED BY CHLORINATED HYDROCARBONS
28	<b>Aikaterini Mitzia</b> Czech Republic	LABORATORY TESTING OF BIOCHAR AND/OR NANO ZERO-VALENT IRON FOR REMEDIATION OF METAL-CONTAMINATED SOIL
29	<b>Dina Nevidomskaya</b> Russian Federation	THE INVESTIGATION OF Zn SPECIATION IN MAN-TRANSFORMED SOILS OF THE ANOMALY ZONES OF THE SOUTHERN URAL AND LOWER DON (RUSSIA)
30	<b>Irina Perelomova</b> Russia	THE EFFECTS OF HUMIC SUBSTANCES ON ADSORPTION OF HEAVY METALS BY CLAY MINERALS
31	<b>Lucie Potočárová</b> <b>Marián Petrák</b> Czech Republic	RISK ANALYSIS OF WASTE DUMP IN AREA OF VOTICE, CENTRAL BOHEMIAN REGION
32	<b>Afrodita Ramos</b> Macedonia	ENVIRONMENTAL REPERCUSSIONS OF HYDROPOWER PLANTS IN THE BALKAN
33	<b>Marek Tarnawski</b> Poland	RECLAMATION OF RESERVOIR SEDIMENTS POLLUTED BY METALS BY CO-MIXING WITH WASTE
34	<b>Zlate Velickovic</b> Serbia	NEW LOW-COST ADSORBENT FROM FISH SCALES CARP MODIFIED BY NANOPARTICLES OF CERIUM DIOXIDE TO REMOVE As(V) IONS FROM WATER
35	<b>Jerzy Wiczorek</b> Poland	HEALTH AND ECOLOGICAL RISK ASSESSMENT OF HEAVY METALS POLLUTION IN MINING REGION: A CASE STUDY FROM MALOPOLSKA (SOUTHERN POLAND)

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