

SEGH2026

41st International Conference on Environmental Geochemistry and Health - SEGH 2026

PRELIMINARY PROGRAMME

Date: 13 – 17 July 2026

Venue: Faculty of Natural Sciences and Engineering, Aškerčeva cesta 12, Ljubljana, Slovenia

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Day 1: Monday July 13

Time	Event	Location
All day	Conference Workshops	Various locations around Ljubljana: 1) Microplastics in sediment, groundwater and wastewater: Geological Survey of Slovenia & Institut Jožef Stefan 2) IUGS-IFG Forensic Geoscience - Soil Sampling Workshop: Geological Survey of Slovenia 3) From the Field to the Map: Applied Methods for Measuring and Mapping Environmental Radioactivity: Faculty of Natural Sciences and Engineering
		Networking event
19:00–22:00	Ice-breaker event	Bistro Švicarija, Pod turnom 4, 1000 Ljubljana

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Day 2: Tuesday July 14

Time	Event	Location
08:00–09:00	Registration	Lobby (ground floor)
09:00–09:30	Opening ceremony	P5 (ground floor)
THEME: Environmental geochemistry and human health in the context of extreme weather events		

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09:30–10:00

Keynote Presentation: Dr Mateja Gosar, Geological Survey of Slovenia

FROM GEOCHEMICAL BASELINES TO ANTHROPOGENIC INFLUENCES AND EXTREME WEATHER EVENT EFFECTS: A CASE STUDY FROM SLOVENIA

P5 (ground floor)

Marine Casetta, Université de Nantes, France

IMPACT OF REPEATED REDOX CYCLES ON METAL REMOBILIZATION AND ECOTOXICITY IN WETLANDS

Federico Floreani, University of Trieste, Italy

RESPONSE OF GASEOUS MERCURY FLUXES FROM SOILS IMPACTED BY PAST MINING ACTIVITIES (IDRIJA, SLOVENIA) TO VARIABLE WEATHER CONDITIONS

10:00–11:00

Farah Tasneem Ahmed, The University of Manchester, United Kingdom

SOURCE APPRAISAL AND PRELIMINARY HEALTH RISK ASSESSMENT OF TRACE ELEMENTS IN URBAN COMMUNITY GARDEN SOILS: A CASE STUDY FOR FOREVER FIELDS, MANCHESTER, UK

P5 (ground floor)

Annika Parviainen, Andalusian Earth Sciences Institute, Spain

THE IMPACT OF MINERALIZATIONS OF THE IBERIAN PYRITE BELT ON EXPOSURE LEVELS AND HEALTH EFFECTS IN THE GENERAL POPULATION

11:00–11:30

Coffee Break & Poster Session

2. floor

THEME: Environmental radioactivity

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	<p>Quentin Crowley, Trinity College Dublin, Ireland EXPLORING SOIL GEOCHEMISTRY AS A PROXY FOR RADON ANOMALIES</p>	
	<p>Anita Eröss, Eötvös Loránd University, Hungary ENVIRONMENTAL RADIOISOTOPES: NATURAL TRACERS IN HYDROGEOLOGICAL STUDIES AND DRINKING WATER QUALITY PARAMETERS</p>	
11:30–12:30	<p>Reyana Dawn Garcia, Eötvös Loránd University, Hungary NATURAL RADIOACTIVITY IN DRINKING WATER: APPLICATION OF ENVIRONMENTAL TRACERS AND REGIONAL GROUNDWATER FLOW ANALYSIS IN NORTHWESTERN HUNGARY</p>	P5 (ground floor)
	<p>Saeed Bidar Kahnamuei, Eötvös Loránd University, Hungary COMPREHENSIVE HYDROGEOCHEMICAL EVALUATION AND MEDICINAL RADIOACTIVITY OF LAKE HÉVÍZ, HUNGARY</p>	
12:30–14:00	Lunch	2. floor
	Fellows lunch	1. floor
<p>THEME: Forensic geology – environmental crimes and the application of geochemical methods in criminal investigations</p>		
14:00–14.30	<p>Keynote Presentation: Prof Duncan Pirrie, University of South Wales, United Kingdom ADVANCES IN FORENSIC GEOSCIENCE; THE ROLE OF GEOLOGY IN THE INVESTIGATION OF SERIOUS CRIME</p>	P5 (ground floor)

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	Andrew Hursthouse, University of the West of Scotland, United Kingdom FLY TIPPING – A GLOBAL CRIME THAT NEEDS LOCAL SOLUTIONS	
	Miloš Miler, Geological Survey of Slovenia PHYSICOCHEMICAL MICROPROPERTIES OF PARTICLES AS POLLUTION SOURCE INDICATORS - PROBLEMATICS	
14:30–15:30	Panagiotis Papazotos, Hellenic Survey for Geology & Mining Research, Greece HYDROCHEMICAL FOOTPRINT OF ACID MINE DRAINAGE FROM THE ABANDONED KIRKI MINES, EVROS, NE GREECE	P5 (ground floor)
	Jadran Faganeli, National Institute of Biology, Slovenia ORIGIN OF Pb IN THE Pb MINE-DRAINING MEŽA RIVER (N SLOVENIA)	
15:30–16:00	Coffee Break & Poster Session	2. floor
16:00–17:30	SEGH AGM & World Caffe	P5 (ground floor)
Networking event		
17.45–20.00	Geological tour of Ljubljana	

Day 3: Wednesday July 15

Time	Event	Location
08:30–09:00	Registration	Lobby (ground floor)

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THEME: Inorganic and organic contaminants in the geosphere

09:00–09:30 **Keynote Presentation:** Dr Manca Kovač Viršek, National Institute of Biology & Geological Survey of Slovenia

P5 (ground floor)

MICROPLASTICS IN GROUNDWATER: A CRITICAL SUBSURFACE SINK AT THE GEOSPHERE–HYDROSPHERE INTERFACE

Nina Mali, Geological Survey of Slovenia

PATHWAYS OF MICROPLASTICS TO GROUNDWATER: FIELD EXPERIMENTS IN THE UNSATURATED ZONE

Elena Pavoni, University of Trieste, Italy

POST-FLOTATION MINE SLUDGES AS A SOURCE OF THALLIUM AND OTHER POTENTIALLY TOXIC ELEMENTS (Zn-Pb RAIBL MINING DISTRICT, NORTHEASTERN ITALY): INSIGHTS FROM SPECIATION AND BIOCHAR MITIGATION EXPERIMENTS

09:30–10:45 Ray Scanlon, Geological Survey Ireland

P5 (ground floor)

AN INVESTIGATION OF URBAN SOIL GEOCHEMISTRY ACROSS FIVE CITIES IN IRELAND

Janja Svetina, Geological Survey of Slovenia

FIELD-SCALE RETARDATION OF CR(VI) IN A HIGHLY PRODUCTIVE ALLUVIAL AQUIFER: AN ANALYTICAL MODELLING APPROACH

Stefano Tomat, University of Trieste, Italy

EFFECTS OF SALINITY AND SOIL IMPROVERS ON MERCURY MOBILISATION FROM POLLUTED SOILS

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10:45–11:15	Coffee Break & Poster Session	2. floor
11:15–11:50	Poster flash presentations	P5 (ground floor)
	Barbara Čeplak, Geological Survey of Slovenia TECHNOLOGY-CRITICAL ELEMENTS IN MURA RIVER SEDIMENTS WITH A PARTICULAR FOCUS ON YREE LEVELS	
11:50–12:50	Ariadne Argyraki, National and Kapodistrian University of Athens, Greece ESTIMATING TOTAL MEASUREMENT UNCERTAINTY IN SEAWATER TRACE ELEMENTS: EVIDENCE FOR THE DOMINANT ROLE OF SAMPLING	P5 (ground floor)
	Elena Alvareda Migliaro, Universidad de la República, Salto, Uruguay HYDROGEOCHEMICAL CONSTRAINTS ON GROUNDWATER AVAILABILITY IN FRACTURED COASTAL AQUIFERS UNDER EXTREME DROUGHT: INSIGHTS FROM CANELONES, URUGUAY	
	LUMEX SPONSOR PRESENTATION	
12:50–14:00	Lunch	2. floor
	ECR Lunch	1. floor
THEME: Emerging technologies and latest challenges in environmental geochemistry, biogeochemistry, medical geology, and toxicology		

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14:00–14.30	Keynote Presentation: Dr Ines Tomašek, Université Clermont Auvergne, France	P5 (ground floor)
	RESPIRATORY HEALTH HAZARD POSED BY GEOGENIC POLLUTANTS IN URBAN AMBIENT AIR	
	Alicja Kicińska, AGH University of Krakow, Poland	
	COMBUSTION OF PLASTICS IN DOMESTIC FURNACES – A THREAT TO PUBLIC HEALTH AND THE ENVIRONMENT	
	Misozi Makangila, The Copperbelt University, Zambia	
14:30–15:30	RISK ASSESSMENT OF INHALABLE BIOACCESSIBLE POTENTIALLY TOXIC ELEMENTS IN AIRBORNE PARTICLES FROM A ZAMBIAN COPPER MINE SITE	P5 (ground floor)
	Mouataz T. Mostafa, Arish University, Egypt	
	MACHINE LEARNING–BASED GEOCHEMICAL FINGERPRINTING OF URBAN SEDIMENTS ACROSS INDUSTRIAL, URBAN CORE, RURAL, AND PERI-URBAN ENVIRONMENTS	
	Ivana Perović, Geological Survey of Slovenia	
	SLOVENIA’S HIDDEN PHARMACY: A DECADE OF TRACKING PHARMACEUTICALS IN OUR GROUNDWATER	
15:30–16:00	Coffee Break & Poster Session	2. floor
	Jamie-Leigh Abrahams, University of the Western Cape, South Africa	
16:00–17:00	PREDICTION OF HEAVY METAL CONTENT IN COALFIELD SEDIMENTS USING GROUND AND AIRBORNE HYPERSPECTRAL DATA	P5 (ground floor)

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Christiana Mystrioti, National Technical University of Athens, Greece

STABILIZATION OF ANTIMONY IN CONTAMINATED SOILS

Maria Clara Zuluaga, National University of Colombia, Colombia

BIOGEOCHEMICAL CYCLE OF LEAD, CASE STUDY OF THE PROVINCE OF HUELVA, SPAIN

Maria Clara Zuluaga, National University of Colombia, Colombia

BIOGEOCHEMICAL CYCLE OF CADMIUM AND LEAD IN CACAO CROPS IN THE MUNICIPALITY OF SAN VICENTE DE CHUCURÍ, COLOMBIA

Networking event

19:00–22:00 Networking dinner

[Vivo catering,](#)
[Dunajska cesta 125,](#)
[Ljubljana](#)

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Day 4: Thursday July 16

Time	Event	Location
08:30–09:00	Registration	Lobby (ground floor)
<p>THEME: Impacts of living environment on human health Dedicated to the memory of Professor Iain Thornton, Emeritus Professor of Environmental Geochemistry, Imperial College London and President, Society for Environmental Geochemistry and Health (1985–1987)</p>		

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09:00–09:30 **Keynote Presentation:** Dr Lucija Perharič, National Institute of Public Health, Slovenia
GEOCHEMICAL RISK ASSESSMENT FOR HUMAN HEALTH P5 (ground floor)

Rita Bonfiglio, University of Rome, Italy

EXPOSOMIC AGENTS IN CHOLANGIOCARCINOMA: IMPACT OF TISSUE TOXIC METAL BIOACCUMULATION ON CANCER PROGRESSION AND IMMUNE ESCAPE

Tanja Rejc, University of Ljubljana, Slovenia

ENVIRONMENTAL RISK FACTORS AND ASTHMA IN SLOVENIAN CHILDREN AND ADOLESCENTS

09:30–10:45 Xia Huo, Jinan University, China
EXPOSURE TO POLLUTANTS AFFECTS CHILDREN'S GUT MICROBIOTA AND INTESTINAL MUCOSAL BARRIER FUNCTION P5 (ground floor)

Valeria Palumbo, University of Rome, Italy

IMPACT OF BIOACCUMULATION OF TOXIC METALS ON PLAQUE INSTABILITY AND CEREBROVASCULAR EVENTS

Janusz Janeczek, University of Silesia in Katowice, Poland

UNEXPECTED HEALTH EFFECTS OF INHALABLE AMBIENT AIR MINERAL DUST

10:45–11:15 Coffee Break & Poster Session 2. floor

THEME: Impacts of living environment on human health

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Paula Marinho-Reis, University of Minho, Portugal

REVISITING INDOOR DUST METRICS: IMPLICATIONS OF METAL LOADINGS FOR CHILDREN'S EXPOSURE AND HEALTH RISK IN KINDERGARTENS

Miguel Izquierdo-Díaz, Universidad Politécnica de Madrid, Spain

LEGACY AND BIOAVAILABILITY OF TRACE ELEMENTS IN URBAN RIVER SEDIMENTS

Teja Čeru, Geological Survey of Slovenia

POTENTIALLY TOXIC ELEMENTS IN HOUSEHOLD VACUUM DUST: SOURCE APPORTIONMENT AND HEALTH RISK ASSESSMENT IN A MINING- AND INDUSTRY-IMPACTED REGION

11:15–12:45

Lindsay Bramwell, Northumbria University, United Kingdom

INDOOR AIR QUALITY, HEALTH, AND WELLBEING FOLLOWING ENERGY EFFICIENCY RETROFITS IN SOCIAL HOUSING: THE IN2AIR STUDY

P5 (ground floor)

Angela Bayona-Valderrama, Northumbria University, United Kingdom

PROTOCOL DEVELOPMENT AND FEASIBILITY STUDY FOR THE ELEVATED CHILDHOOD LEAD INTERAGENCY PREVALENCE STUDY (ECLIPS)

Bo Xie, University of Groningen, Netherlands

ONE HEALTH PERSPECTIVE ON E-WASTE CHALLENGE: A CALL FOR INTERDISCIPLINARY RESEARCH AND POLICY

12:45–14:00

Lunch

2. floor

Zacharenia Kypridou, National and Kapodistrian University of Athens, Greece

14:00–15.30

ASSESSMENT OF GRAIN SIZE EFFECTS ON LEAD CONCENTRATIONS IN CONTAMINATED SOILS: IMPLICATIONS FOR CITIZEN-BASED SCREENING IN LAVRION, GREECE

P5 (ground floor)

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Wilfried Dathe, Heck Bio-Pharma GmbH, Germany

NATURAL CUBAN ZEOLITE — STRUCTURAL PROPERTIES, BINDING AFFINITIES AND BENEFIT FOR HUMAN HEALTH

David Polya, The University of Manchester, United Kingdom

INEQUALITIES AND (IN)ADEQUACIES OF DRINKING WATER ARSENIC REGULATION – REVISITING THE USEPA (2000) COST BENEFIT ANALYSIS

Mariola Jabłońska, University of Silesia in Katowice, Poland

AIR POLLUTION CAUSED BY FIRES OF COAL WASTE HEAPS

Chand Basha Davuljigari, Pathgene Healthcare Private Limited, India

AGE-RELATED SUSCEPTIBILITY TO MANGANESE-INDUCED DOPAMINERGIC NEURODEGENERATION VIA MICROGLIAL-MEDIATED NEUROINFLAMMATION

Nguamo Jessica Angula, University of Strathclyde, United Kingdom

SPATIAL DISCREPANCIES, DATA GAPS, AND ENVIRONMENTAL HEALTH RISKS OF OIL ACTIVITIES IN NIGERIA

15:30–16:00

Closing Ceremony

P5 (ground floor)

Day 5: Friday July 17

Time	Event	Location
08:00 – 17:00	Field trip to the Idrija UNESCO Global Geopark	Idrija

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List of posters

Presenter	Affiliation	Title
COVELLI	University of Trieste, Italy	EFFECTS OF SALINISATION ON MERCURY MOBILITY IN PHREATIC GROUNDWATER OF CONTAMINATED ALLUVIAL SOILS: PRELIMINARY RESULTS
ČERU	Geological Survey of Slovenia	CHILDREN'S LEAD EXPOSURE IN A LEGACY Pb–Zn MINING REGION (UPPER MEŽA VALLEY, SLOVENIA): IEUBK MODELLING VALIDATED BY BIOMONITORING
DENG	Peking University, Beijing, China	SHORT-TERM EFFECTS OF SIZE-FRACTIONED PARTICULATE MATTER ON BLOOD PRESSURE IN COPD PATIENTS: THE KEY ROLE OF INFLAMMATORY PHENOTYPES
FERRI-MORENO	Universidad Complutense de Madrid, Spain	ORAL RISK ASSESSMENT IN ABANDONED MINES BASED ON BIOACCESSIBLE VALUES
GABERŠEK	Geological Survey of Slovenia	SULFUR-FUNCTIONALIZED NATURAL ZEOLITE CLINOPTILOLITE AS A SELECTIVE SORBENT FOR MERCURY IMMOBILIZATION IN THE IDRIJA MINE AREA, SLOVENIA
GOISLOT	Nantes Université, France	EXTREME EVENT-DRIVEN REMOBILIZATION OF TRACE METALS IN WETLANDS OF THE LOWER LOIRE RIVER HYDROSYSTEM (FRANCE)
HRIBLJAN	Geological Survey of Slovenia	STABLE ISOTOPES OF LEAD, ZINC, STRONTIUM AND IRON IN SANDBOX SANDS AND SOILS OF CELJE BASIN
HU	Zhejiang University of Technology, China	COCKTAIL EFFECTS OF PESTICIDE MIXTURE EXPOSURE AMPLIFYING MITOCHONDRIAL DNA DAMAGE FOLLOWED BY HONEYBEE COLONY COLLAOSE
HUDOPIŠK	National Institute of Public Health, Slovenia	PREDICTIVE RISK FACTORS FOR BLOOD LEAD LEVELS IN CHILDREN: A LITERATURE REVIEW
HUMDI	Newcastle University, United Kingdom	ENVIRONMENTAL LEAD EXPOSURE: EVALUATING SOIL CONTAMINATION AND THE TRANSFER OF LEAD INTO DOMESTIC HEN EGGS IN NORTHERN ENGLAND, UK
KICINSKA	AGH University of Krakow, Poland	THE USE OF URBAN SOILS FOR AGRICULTURAL PRODUCTION: THE EXAMPLE OF KRAKÓW (POLAND)

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Presenter	Affiliation	Title
KNEZ	AGH University of Krakow, Poland	CHARACTERISATION OF DEVONIAN SANDSTONE CORE SAMPLES USING SCHMIDT HAMMER AND GEOMECHANICAL PROPERTIES TESTING
KOS	Jožef Stefan Institute, Slovenia	GEOCHEMICAL AND PEDOLOGICAL CONTROLS ON Pb, Zn, AND Fe ORE MINERAL WEATHERING: INSIGHTS FROM SOIL COLUMN LEACHING EXPERIMENTS WITH PARTICLE-SCALE VALIDATION
LIAKOPOULOS	Hellenic Survey for Geology & Mining Research, Greece	OCCURRENCE AND EVALUATION OF POTENTIALLY TOXIC ELEMENTS AND POLYCYCLIC AROMATIC HYDROCARBONS IN POST-FIRE SOILS: A CASE STUDY FROM NE ATTICA, GREECE
LIM	Korea Atomic Energy Republic of Korea	EVALUATION OF UNDERGROUND DISPOSAL STABILITY AND ENVIRONMENTAL SAFETY OF CEMENT WASTE FORMS CONTAINING CARBONIZED SPENT ION-EXCHANGE RESINS
LIM	Korea Atomic Energy Republic of Korea	SUBSURFACE ENVIRONMENTAL STABILITY AND MIGRATION INHIBITION OF RADIOACTIVE CONTAMINANTS THROUGH IMMOBILIZATION OF CARBONIZED SPENT RESINS USING GEOPOLYMER
LIU	Florida International University, USA	PHOTOCHEMICAL, DARK ABIOTIC, AND MICROBIAL MERCURY REDUCTION IN AQUATIC ENVIRONMENTS
LOVRENČIĆ MIKELIĆ	Ruđer Bošković Institute, Croatia	ASSESSMENT OF RADIOLOGICAL HEALTH HAZARDS FROM 40K, 226Ra, AND 232Th IN ROCKS AND SEDIMENTS OF THE KAŠTELA BAY COASTAL AREA (ADRIATIC SEA, CROATIA)
MALENŠEK ANDOLŠEK	Geological Survey of Slovenia	PERSISTENT MERCURY CONTAMINATION IN IDRIJCA RIVER ALLUVIAL SEDIMENTS: LONG TERM MONITORING AND THE ROLE OF EXTREME WEATHER EVENTS
MALI	Geological Survey of Slovenia	GWMicroPlast: MICROPLASTICS IN GROUNDWATER – FROM METHOD DEVELOPMENT TO FIELD EVIDENCE

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Presenter	Affiliation	Title
MARINHO-REIS	University of Minho, Portugal	MICROPLASTIC CONTAMINATION IN URBAN GARDEN SOILS OF THE CÁVADO REGION: OCCURRENCE, CHARACTERIZATION AND ENVIRONMENTAL IMPLICATIONS
MARINOVIĆ	INA – Industrija nafte Plc., Croatia	GEOCHEMICAL INVESTIGATION AND BIOMARKER FINGERPRINTING OF TAR BALLS IN THE MLJET NATIONAL PARK ISLAND (CROATIA)
OLABODE	Adam Mickiewicz University, Poland	THE ROLE OF SOIL PROPERTIES IN MODULATING ARSENIC BIOACCESSIBILITY AND MOBILITY IN URBAN GARDENS
PAPAZOTOS	Hellenic Survey for Geology & Mining Research, Greece	MONITORING POTENTIALLY TOXIC ELEMENTS IN SOILS, SEDIMENTS, AND FLOATATION TAILINGS USING FPXRF MEASUREMENTS AROUND THE ABANDONED KIRKI MINE, NE GREECE
PENTARI	Technical University of Crete, Greece	SUSTAINABLE EXTRACTION OF LITHIUM FROM COAL FLY ASH USING CARBOXYLIC ACIDS
PISONI	University of Trieste, Italy	EFFECT OF EXTREME WEATHER EVENTS ON THE CONTRIBUTION OF MERCURY AND POTENTIALLY TOXIC ELEMENTS ASSOCIATED WITH FLUVIAL SUSPENDED PARTICULATE MATTER IN THE ISONZO RIVER (NE ITALY)
PLACENCIA-GÓMEZ	Geological survey of Slovenia	LABORATORY AND FIELD SCALE GEOPHYSICAL MEASUREMENTS IN SEDIMENTS IMPACTED BY INORGANIC POTENTIALLY TOXIC ELEMENTS (PTE)
PODLOGAR	Jožef Stefan Institute, Slovenia	MICROFIBER RELEASE FROM SYNTHETIC TEXTILES DURING DOMESTIC WASHING AS A SOURCE OF WASTEWATER POLLUTION
POGHOSYAN	Center for Ecological-Noosphere Studies, Armenia	GEOSTATISTICAL AND GEOCHEMICAL INSIGHTS INTO CHROMIUM IN SOILS OF LORI, ARMENIA
SVETINA	Geological Survey of Slovenia	EXTREME RAINFALL AS A DRIVER OF CONTAMINANT REDISTRIBUTION IN THE URBAN WATER CYCLE

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Presenter	Affiliation	Title
YI	South China University of Technology, China	THE EFFECTS OF DOM-COUPLED FNP _s ON THE MIGRATION OF Cu(II) THROUGH DIFFERENT TYPES OF POROUS MEDIA
YI	South China University of Technology, China	COMPOSITIONAL DIFFERENCES OF VARIOUS SORPTION STATES OF Cu AND Cd ON GOETHITE IN THE PRESENCE OF OXYANIONS: A QUANTITATIVE STUDY
ZULUAGA	Universidad Nacional de Colombia, Colombia	UNDERSTANDING THE SOURCES OF Pb AND Cc IN CACAO IN THE EASTERN CORDILLERA OF COLOMBIA