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The 8th International Conference
on Medical Geology



MEDGED 2019 GUIYANG Program Booklet

Medical Geology and Ecological
Civilization Construction

2019 | August 12–15th
Guiyang, China

MEDGEO 2019 GUIYANG

Program Booklet

The 8th International Conference on Medical Geology

Medical Geology and Ecological Civilization Construction



August 12-15th, 2019

Guiyang, China

Institute of Geochemistry, Chinese Academy of Sciences

International Medical Geology Association

<http://www.medgeo2019.com>

Plenary Speakers



Plenary Lecture 1

9:00-9:30, Tuesday, August 13

Prof. Shu Tao

Academician of Chinese Academy of Science

College of Urban and Environmental Sciences, Peking University

Title: Recent Trend of Air Pollution in China - A Sectorially Resolved Emission-Inventory Based Evaluation



Plenary Lecture 2

9:30-10:00, Tuesday, August 13

Prof. Robert Finkelman

Department of Geosciences, University of Texas at Dallas

Title: The Importance of Guizhou Province, P. R. China to Modern Medical Geology



Plenary Lecture 3

10:00-10:30, Tuesday, August 13

Prof. Yan Zheng

School of Environmental Science and Engineering, Southern University of Science and Technology

Title: Lessons learned from Arsenic Mitigation



Plenary Lecture 4

10:40-11:10, Tuesday, August 13

Prof. Jose Centeno

Center for Devices and Radiological Health, Office of Science and Engineering Laboratories, U.S.A. Food and Drug Administration

Title: Health Effects of Natural Dust - Defining the Risk from a Chemical, Medical Geology and Environmental Pathology Perspective



Plenary Lecture 5

11:10-11:40, Tuesday, August 13

Prof. Bing Yan

Guangzhou University

Title: A Systematic Exploration of Structure-Bioactivity Relationship of Fine Particles



Plenary Lecture 6

11:40-12:10, Tuesday, August 13

Prof. Aihua Zhang

Guizhou Medical University

Title: Epidemic factors, Pathogenesis and its Application in the Prevention and Treatment of Arsenicosis : A population-based Study in a Unique Coal-borne Arsenicosis Area in Guizhou, China

Special Symposia

Symposia 1(OS1) (August 13-15; Room 1001)

Environmental geochemistry and human health

Conveners: Aihua Zhang, Chenglong Tu

Symposia 2(OS2) (August 13-14; Room 1004)

Water and human health

Conveners: Yanxin Wang, Yamin Deng

Symposia 3(OS3) (August 13; Room 1005)

Soil pollution and remediation

Conveners: Hua Zhang, Juan Liu

Symposia 4(OS4) (August 14; Room 1005)

Atmosphere pollution and human health

Conveners: Xuewu Fu, Xiaosan Luo

Symposia 5(SS1) (August 14; Room 1005)

Lead in Environment and Public Health

Convener: Xiaoping Li

Symposia 6(SS2) (August 14; Room 1004)

Mercury contamination and Human Health

Conveners: Ligang Hu, Ping Li, Yufeng Li

Symposia 7(SS3) (August 14; Room 1001)

Numerical and Statistical Modeling and its Applications in Medical Geology

Conveners: Yan Zheng, Benjamin Bostick, Jing Sun

MEDGEO 2019 Program at a Glance

August 12		August 13	August 14	August 15
8:00	Short Course (Room 1001)			
8:30		Opening Ceremony	OS1: 4*25 min Keynotes 3*20 min Talks (Room 1001)	OS1: 2*25 min Keynotes 3*20 min Talks (Room 1001)
9:00		Plenary Lectures (6*30min Talks) (Room 3001)	OS2:4*25 min Keynotes 2*20 min Talks (Room 1004)	
9:30			OS4:4*25 min Keynotes 3*20 min Talks (Room 1005)	Closing Ceremony (Room 1001)
10:00				
10:30				
11:00				
11:30				
12:00				
12:30		Lunch & Rest (B 3F)	Lunch & Rest (B 3F)	
13:00				
13:30				
14:00				
14:30		OS1: 4*25 min Keynotes 5*20 min Talks (Room 1001)	SS1: 5*25 min Keynotes 2*20 min Talks (Room 1005)	
15:00		OS2:5*25 min Keynotes 2*20 min Talks (Room 1004)	SS2:4*25 min Keynotes 5*20 min Talks (Room 1004)	
15:30		OS3:4*25 min Keynotes 3*20 min Talks (Room 1005)	SS3:4*25 min Keynotes 5*20 min Talks (Room 1001)	
16:00				
16:30				
17:00				
17:30				
18:00				
18:00-22:00	Registration (10:00-22:00)			

OS1: Environmental geochemistry and human health;

OS2: Water and human health;

OS3: Soil pollution and remediation;

OS4: Atmospheric pollution and human health;

SS1: Lead in Environment and Public Health;

SS2: Mercury contamination and Human Health;

SS3: Numerical and Statistical Modeling and its Applications in Medical Geology.

August 12 (Monday)

**Registration
(10:00-22:00)**

**General Assembly Meeting of International Medical
Geology Association
(20:00-22:00, Room 1006)**

Short Course- An Introduction to Medical Geology

August 12 (Monday)			
	Short Course (8:00-18:00, Room 1001)		
Time	Title	Speaker	Affiliation
8:00-8:30	Introduction and Overview	Syed E. Hasan	University of Missouri-Kansas City
8:30-9:15	Medical Geology Issues in Guizhou Province	Robert Finkelman	University of Texas at Dallas
9:15-10:00	An Overview of Trace Element Toxicology	Jose Centeno	USFDA
Coffee Break (10:00-10:15)			
10:15-11:00	Health Impacts of Climate Change	Syed E. Hasan	University of Missouri-Kansas City
11:00-11:45	Health Impacts of Dust, Soils and Clay	Robert Finkelman	University of Texas at Dallas
11:45-12:00	Questions and Discussions		
Lunch (12:00-13:30)			
13:30-14:15	A Medical Geology Perspective of Arsenic as a Poison and Medicinal Agent	Jose Centeno	USFDA
14:15-15:00	Emerging Trends in Global Health Security and Medical Geology	Syed E.Hasan	University of Missouri-Kansas City
Coffee Break (15:00-15:15)			
15:15-16:00	Integrating Public Health, Earth Science and Policy	Jose Centeno	USFDA
16:00-16:45	Spatial Machine Learning for Environment and Health Data Analytics in the Big Data Era	Chaosheng Zhang	National University of Ireland (Galway)
16:45-17:30	Health Benefits of Rocks and Minerals and the Future of Medical Geology	Robert Finkelman	University of Texas at Dallas
17:30-18:00	Questions and Discussions		

MEDGEO 2019 Plenary Lecture Program

August 13 (Tuesday), Morning				
Opening Ceremony & Plenary Speech (Room 3001)				
Time	Title	Speaker	Affiliation	Chair
8:30-9:00	Opening Ceremony			Xinbin Feng
9:00-9:30	Recent Trend of Air Pollution in China-A Sectorially Resolved Emission-Inventory Based Evaluation	Shu Tao	Peking University	Diego Fridman /Tangfu Xiao
9:30-10:00	The Importance of Guizhou Province, P. R. China to Modern Medical Geology	Robert Finkelman	University of Texas at Dallas	
10:00-10:30	Lessons Learned from Arsenic Mitigation	Yan Zheng	Southern University of Science and Technology	
Coffee Break (10:30-10:40)				
10:40-11:10	Health Effects of Natural Dust-Defining the Risk from a Chemical, Medical Geology and Environmental Pathology Perspective	Jose Centeno	USFDA	Chaosheng Zhang/ Nelly Manay
11:10-11:40	A Systematic Exploration of Structure-Bioactivity Relationship of Fine Particles	Bing Yan	Guangzhou University	
11:40-12:10	Epidemic factors, Pathogenesis and its Application in the Prevention and Treatment of Arsenicosis: A population-based Study in a Unique Coal-borne Arsenicosis Area in Guizhou, China	Aihua Zhang	Guizhou Medical University	
Lunch & Rest (12:10-14:00)				

Parallel Oral Session Program

August 13 (Tuesday), Afternoon

OS1 Environmental Geochemistry and Human Health (Room 1001)

Conveners: Aihua Zhang, Chenglong Tu

NO.	Time	Title	Speaker	Affiliation	Chair
K1	14:00-14:25	Towards Exploration of Spatially Varying Relationships in Environment and Health in the Big Data Era	Chaosheng Zhang	National University of Ireland (Galway)	Xia Huo/ Yue Ba
K2	14:25-14:50	Medical Geology: the Essential and Most Neglected Aspect of Public Health System in Developing Countries-Examples from Ghana	Emmanuel Arhin	University for Development Studies	
O1	14:50-15:10	Aberrant DNA Methylation of Cyclind1, CDK4 and p21 Gene is Associated with Chronic Fluoride Poisoning	Xueli Pan	Guizhou Medical University	
O2	15:10-15:30	Unravelling Extremophiles Diversity in Guizhou Karst Region	Yingqian Kang	Guizhou Medical University	
Coffee Break (15:30-15:50)					
K3	15:50-16:15	Pollutant Trend and Environmental Health Impacts in an E-waste Recycling Area	Xia Huo	Jinan University	Chao-sheng Zhang/ Emmanuel Arhin
K4	16:15-16:40	Medical Geology Study on Typical Physiotherapy Hot Springs in Guizhou, China	Zhengshan Chen	Guizhou University	
O3	16:40-17:00	Azorean Volcanic Soils: Iodine and Cobalt Bioavailability and Health Effects	Armando Rodrigues	University of Azores	
O4	17:00-17:20	Research Progress on Immunological Mechanism of Liver Injury Caused by Arsenic Poisoning	Dapeng Wang	Guizhou Medical University	
O5	17:20-17:40	Hydro-Geochemical Evolution Analysis of Typical Geothermal Water in Southwest Guizhou, China-Using Stable Isotopes and Geochemical Modeling Approaches	Pu Liu	Guizhou University	
Poster Exhibition (17:40-18:00)					
Dinner (18:00-19:30)					

OS2 Water and Human Health (Room 1004)

Conveners: Yanxin Wang, Yamin Deng

No.	Time	Title	Speaker	Affiliation	Chair
K1	14:00-14:25	Medical Geology Approach for Arsenic Studies in Uruguay: Advantages and Difficulties	Nelly Manay	University of the Republic	Yuegang Tang/ Jacques Gardon
K2	14:25-14:50	Enhanced Removal of Thallium from Wastewater by Hypochlorite Oxidation Assisted with Nickel Ferrite-Based Hydrochar Derived from Tannery Wastewater	Huosheng Li	Guangzhou University	
O1	14:50-15:10	Seasonal Distribution, Accumulation and Potential Risk of Heavy Metals in Zam Reservoir on Yarlung Tsangpo River, Tibet	Zhenjie Zhao	Institute of Geochemistry, CAS	
Coffee Break (15:10-15:30)					
K3	15:30-15:55	Investigation of the Potential Pollution of the Hazardous Trace Elements in the Entrained-Flow Coal Gasification By-Products from Northwest China	Yuegang Tang	China University of Mining and Technology (Beijing)	Nelly Manay/ Huo-sheng Li
K4	15:55-16:20	Human Exposure to Arsenic in North Auriferous Regions of Burkina Faso, Africa	Jacques Gardon	University of Montpellier	
K5	16:20-16:45	Paper-origami device for rapid monitoring of microbes and antimicrobial resistance	Zhugen Yang	University of Glasgow	
O2	16:45-17:05	Environmental Geochemical Characteristics and Genetic Model of Shiqian Hot Spring Group in Guizhou Province	Yongkang Li	Guizhou University	
Poster Exhibition (17:05-18:00)					
Dinner (18:00-19:30)					

OS3 Soil Pollution and Remediation (Room 1005)

Conveners: Hua Zhang, Juan Liu

No.	Time	Title	Speaker	Affiliation	Chair
K1	14:00-14:25	Global Change and Forest Fire: How the Burning Bush Impacts upon Environmental and Human Health	Kim Dowling	Federation University Australia	Zeqin Li/ Juan Liu
K2	14:25-14:50	Chromium Isotope Composition of the Upper Continental Crust	Jianming Zhu	China University of Geosciences (Beijing)	
O1	14:50-15:10	Environmental and Health Risks Assessment of Small Scale Gold Mining Activities in Western Part Of Nigeria	Abiodun Odukoya	University of Lagos	
O2	15:10-15:30	Sequestration of Arsenic through Formation of Fe(II, III) Minerals In Reducing Groundwater: Interferences from Manganese and Phosphate	Zengyi Li	University of East Anglia	
Coffee Break (15:30-15:50)					
K3	15:50-16:15	Potential Ecological Risk Assessment Model for Toxic Heavy Metal Contamination Based on Environmental Bioavailability of Agricultural Soils in Mining Areas	Zeqin Li	Chengdu University of Technology	Kim Dowling/ Jianming Zhu
K4	16:15-16:40	Geochemical Fractionation of Natural-Occurring Thallium Pollution in Soils of a Large-Scale Hg-Tl Mineralized Area	Juan Liu	Guangzhou University	
O3	16:40-17:00	Exploring the Extraction Effect of Four Extractants on the Bio-Availability of Mercury in Paddy Soil	Yanxin Hu	Guizhou University	
Poster Exhibition (17:00-18:00)					
Dinner (18:00-19:30)					

August 14 (Wednesday), Morning

OS1 Environmental Geochemistry and Human Health (Room 1001)

Conveners: Aihua Zhang, Chenglong Tu

NO.	Time	Title	Speaker	Affiliation	Chair
K5	8:30-8:55	Toxicological Significance of Methylation and Sulfurization in the Metabolic Process of Inorganic Arsenics: Active Species Caused by Metabolic Redox and Molecular Aspects of Redox Homeostasis in Cell Transformation	Kenzo Yamanaka	Nihon University	Guangqin Fan/ Yingqian Kang
K6	8:55-9:20	The Importance of Natural Beneficial Minerals in Drinking Water for Balanced Diet of Chinese People	Wei qun Shu	The Third Military Medical University	
O6	9:20-9:40	Association and Risk of Arsenic-Related Mirnas with Arsenic-Induced Multiorgan Damage	Qibing Zeng	Guizhou Medical University	
O7	9:40-10:00	Fungi and the Goldfields: Food for Thought	Kim Dowling	Federation University	

Coffee Break (10:00-10:20)

K7	10:20-10:45	Methylation Microarray Analysis in a Cross-Sectional Study of Children with Fluoride Exposure Identifies NNAT as a Novel Candidate Gene for the Development of Intelligence	Yue Ba	Zhengzhou University	Kenzo Yamanaka/ Yan An
K8	10:45-11:10	Mixed Exposure to Low Dose Heavy Metals Impaired Spatial Cognitive Function and the Related Mechanisms	Lu Ouyang	Nanchang University	
O8	11:10-11:30	Preliminary Study on the Changes of Mirna Expression Profiles in Hippocampus of the 2nd Offspring's Rats Exposed to the Fluorine Combined with Aluminum and Its Relationship with Learning and Memory	Chun Xie	Guizhou Medical University	

Poster Exhibition (11:30-12:00)

Lunch & Rest

OS2 Water and Human Health (Room 1004)

Conveners: Yanxin Wang, Yamin Deng

No.	Time	Title	Speaker	Affiliation	Chair
K6	8:30-8:55	Drinking Water Exposure and Human Health – Examples from Denmark	Birgitte Hansen	Geological Survey of Denmark and Greenland	Jesus Manuel Ochoa-Rivero/ Junxia Li
K7	8:55-9:20	Hydrogeochemistry of Co-Occurring Geogenic Arsenic and Iodine in Shallow Aquifer Along the Middle Reaches of Yangtze River	Yamin Deng	China University of Geosciences (Wuhan)	
O3	9:20-9:40	Discussion on the Chemical Characteristics and Genesis of the Metasilicate-Radon Spring in Guizhou Xifeng	Luo Teng	Guizhou University	
Coffee Break (9:40-10:00)					
K8	10:00-10:25	Extraction of Metaloids (As, B, Sb) from Natural Runoff Water Using Filters Packed Mexican Zeolite	Jesus Manuel Ochoa-Rivero	INIFAP, Chihuahua, Mexico	Birgitte Hansen/ Yamin Deng
K9	10:25-10:50	Mechanisms of Iodine Enrichment in the Groundwater System of Datong Basin: Evidence from Batch Experiments on the Natural Sediments	Junxia Li	China University of Geosciences (Wuhan)	
O4	10:50-11:10	Geochemical Characteristics of Hot Spring Water in the Metamorphic Rock Area of Southeastern Guizhou and its Health Care Function	Chao Li	Guizhou University	
Poster Exhibition (11:10-12:00)					
Lunch & Rest					

OS4 Atmospheric Pollution and Human Health (Room 1005)

Conveners: Xuewu Fu, Xiaosan Luo

NO.	Time	Title	Speaker	Affiliation	Chair
K1	8:30-8:55	Personal Air Pollution Exposure in New York City Bicycle Commuters: Evidence from the Biking & Breathing Study	Qiang Yang	Columbia University	Xuewu Fu/ Xiaosan Luo
K2	8:55-9:20	Hypertension Risk from Iron Brake Particulate Matter	Moataz Tarek	Arish University, Egypt	
O1	9:20-9:40	High Radon Concentration in Karst Caves and How to Minimize Their Exposure	Yanwei Wang	Institute of Geochemistry, CAS	
Coffee Break (9:40-10:20)					
K3	10:20-10:45	Isotopic Composition of Atmospheric Total Gaseous Mercury and Particulate Bound Mercury in Remote Areas of China	Xuewu Fu	Institute of Geochemistry, CAS	Moataz Tarek/ Qiang Yang
K4	10:45-11:10	Regional and Seasonal Variations of PM2.5 Toxicity to A549 Cells and the Component Contributions in a Megacity of Eastern China	Xiaosan Luo	Nanjing University of Information Science & Technology	
O2	11:10-11:30	Profiles, Source Identification and Health Risks of Potentially Toxic Metals in Fireworks-Related Road Dust during Chinese New Year	Shaochen Yang	China University of Geosciences (Wuhan)	
O3	11:30-11:50	Distribution and Respiratory Exposure Risks of Heavy Metals in Atmospheric Particles in Urbans of China	Chen Liu	Institute of Geochemistry, CAS	
Poster Exhibition (11:50-12:00)					
Lunch & Rest					

August 14 (Wednesday), Afternoon

SS1 Lead in Environment and Public Health (Room 1005)

Convener: Xiaoping Li

NO.	Time	Title	Speaker	Affiliation	Chair
K1	14:00-14:25	Contemporary Blood Lead Levels of Children Aged 0-84 Months in China—a National Cross-Sectional Study	Chonghuai Yan	Shanghai Jiaotong University	Na Zheng/ Nana Wang
K2	14:25-14:50	In Vitro Bioaccessibility and Geochemistry of Toxic Trace Metal Pb in Urban Soil and Street Dust in Northwestern China	Xiaoping Li	Shaanxi Normal University	
K3	14:50-15:15	RyRs Mediated Calcium Dependent CaMKII α /CERB Signaling Pathway in Lead Exposure Induced Neurotoxicity <i>in vivo</i> and <i>in vitro</i>	Fankun Zhou	Nanchang University	
O1	15:15-15:35	A Fast Method for Nanocomposite Pbs Synthesis: Preparation and Characterization	Hameed Ullah	Shaanxi Normal University	

Coffee Break (15:35-15:55)

K4	15:55-16:20	Assessment of Health Risk from Exposure to Cu, Zn, Cd and Pb Pollution in Urban Street Dust in China between 2006 and 2016	Na Zheng	Jilin University	Xiaoping Li/ Chonghuai Yan
K5	16:20-16:45	Fabrication of the Spongy Microbe-Based Biosorbents and Their Application in Removing Pb(II) from Waters	Nana Wang	Guangzhou University	
O2	16:45-17:05	Environmental and Geochemical Analysis of Lead Contamination: Its Sources and Pathways of Exposure	Chenyin Dong	Shanghai Jiaotong University	

Poster Exhibition (17:05-18:00)

Dinner (18:00-19:30)

SS2 Mercury Contamination and Human Health (Room 1004)

Conveners: Ligang Hu, Ping Li, Yufeng Li

NO.	Time	Title	Speaker	Affiliation	Chair
K1	14:00-14:25	Mercury and the Environment: A Case History from the Goldfield of Victoria, Australia.	Haydn Swan	Federation University Australia	Jie Huang/ Xu Zhou
K2	14:25-14:50	Selenium Modulated Gut Flora and Promoted Decomposition of Methylmercury in Methylmercury-Poisoned Rats	Yufeng Li	Institute of High Energy Physics, CAS	
O1	14:50-15:10	Mercury Risk in Poultry in the Wanshan Mercury Mine, China	Lihai Shang	Institute of Geochemistry, CAS	
O2	15:10-15:30	Mercury, Microcystins and Omega-3 Polyunsaturate Fatty Acids of Farmed-Raised Fish in Eutrophic Reservoir: Risk and Benefit Assessment	Haiyu Yan	Institute of Geochemistry, CAS	
O3	15:30-15:50	Mercury Isotope Fractionations in Different Form of Mercury in Paddy Ecosystems and Environmental Implications	Chongyang Qin	Institute of Geochemistry, CAS	
Coffee Break (15:50-16:10)					
K3	16:10-16:35	Mercury Geochemistry over Western China and Its Potential Environmental Impacts	Jie Huang	Institute of Tibetan Plateau Research, CAS	Haydn Swan/ Yufeng Li
K4	16:35-17:00	NPP-VIIRS DNB-Based Reallocating Intra-Urban Populations to Mercury	Xu Zhou	Xinjiang Institute of Ecology and Geography, CAS	
O4	17:00-17:20	Transportation and Mobility of Mercury in Typical Karst Catchment of Guizhou, China	Jicheng Xia	Institute of Geochemistry, CAS	
O5	17:20-17:40	Mercury Concentration and Speciation in Mine Wastes in Tongren Mercury Mining Area, Southwest China and Environmental Effects	Junyao Yan	Institute of Geochemistry, CAS	
Dinner (18:00-19:30)					

SS3 Numerical and Statistical Modeling and its Applications in Medical Geology

Conveners: Yan Zheng, Benjamin Bostick, Jing Sun (Room 1001)

NO.	Time	Title	Speaker	Affiliation	Chair
K1	14:00-14:25	Development and Applications of Reactive Transport Modeling Approaches for Arsenic Across Multiple Spatial and Temporal Scales	Henning Prommer	University of Western Australia	Yan Zheng/ Benjamin Bostick
K2	14:25-14:50	Arsenic Immobilized <i>in situ</i> through Magnetite Formation under Field Conditions	Jing Sun	University of Western Australia	
O1	14:50-15:10	Numerical Modeling of Arsenic Adsorption and Oxidation on Manganese Oxides	Bhasker Rathi	University of Tuebingen	
O2	15:10-15:30	Modeling the Challenge of Moving toward A Lower Drinking Water Maximum Contaminant Level for Arsenic on Domestic-Well Population in the Conterminous United States	Qiang Yang	Columbia University	

Coffee Break (15:30-15:50)

K3	15:50-16:15	Predicting the Mobility of Lead and Other Metal Ions in Groundwater by Using Site-Specific Sorption Models	Douglas Kent	U. S. Geological Survey	Jing Sun/ Qiang Yang
K4	16:15-16:40	Mineralogical Signatures of Iron Reduction and Arsenic Transport in Pleistocene Aquifers of the Red River Delta, Vietnam	Benjamin Bostick	Columbia University	
O3	16:40-17:00	Model-Based Analysis of Reactive Transport Processes Governing Fluoride and Phosphate Release and Attenuation during Managed Aquifer Recharge	David Schafer	University of Western Australia	
O4	17:00-17:20	The Utility of Models to Predict Contaminants in Groundwater	Joseph Ayotte (Sound Record)	U.S. Geological Survey	
O5	17:20-17:40	Assessing Drought Impacts on Arsenic Exposure from Domestic-Supply Groundwater in the Conterminous United States	Melissa Lombard (Sound Record)	U.S. Geological Survey	

Dinner (18:00-19:30)

August 15 (Thursday), Morning

OS1 Environmental Geochemistry and Human Health (Room 1001)

Conveners: Aihua Zhang, Chenglong Tu

NO.	Time	Title	Speaker	Affiliation	Chair
K9	8:30-8:55	Health Impacts of Waste Management and Medical Geology	Syed E. Hasan	University of Missouri-Kansas City	Syed E. Hasan/ Chenglong Tu
K10	8:55-9:20	Medical Geology in Africa: an Example of a Successful Educational Initiative at the University of Johannesburg, South Africa	Hassina Mouri	University of Johannesburg	
O9	9:20-9:40	Cadmium Relative Bioavailability in Rice: Application to Predict Cadmium Urinary Excretion and Mitigation Using Dietary Mineral Supplements	Hongbo Li	Nanjing University	
O10	9:40-10:00	The Mechanism of Arsenic-Induced Liver Damage Based on Autophagy	Xiong Chen	Guizhou Medical University	
O11	10:00-10:20	A Comparative Study of The Physicochemical Properties of Natural Zeolites from Cuba and Mexico for Oral and Topical Applications in Human Beings	Wilfried Dathe	Heck Bio-Pharma GmbH	

Coffee Break (10:20-10:40)

Closing Ceremony (10:40-12:00)

Poster Program

OS1: Environmental Geochemistry and Human Health			
Poster No.	Abstract No.	Title	Author
E1	OS10006	Radon and lung cancer: The need for national action plans	Fernando Carvalho
E2	OS10026	Biogeochemical assessment of the impact of Ciscarpathian landscape on population health	Georgii Rudko
E3	OS10028	As spatial distribution characters in Mexico, revealed by low density geochemical baseline results	Chunyan Yao
E4	OS10038	Changes of serum NTX and TRACP-5b in adults of coal-burning fluorosis areas in Guizhou Province	Siyuan Liu
E5	OS10044	Study on relationship between fluorine in geological environment and endemic fluorosis in Huai River Basin	Jianshi Gong
E6	OS10050	Contamination and health risk assessment of heavy metals and polycyclic aromatic hydrocarbons (PAHs) in street dusts from Kaifeng, China	Haijing Duan
E7	OS10055	Fluoride levels in soil and vegetables in the vicinity of a phosphating plant	Pan Sha
E8	OS10075	Arsenic levels in drinking water and dietary components and its health effects on the rural residents of west Tibet, China	Lili Xue
E9	OS10080	Effects of bisphenol A on human health and related toxicity mechanisms	Ya Ma

OS1: Environmental Geochemistry and Human Health

E10	OS10090	The toxic effects and possible mechanisms of bisphenols	Phelisters Marwa
E11	OS10096	Quantification of human exposure and public health risks from groundwater arsenic in India: new models and old challenges	Ruohan Wu
E12	OS10106	Effects of prenatal exposure to thallium on cord blood leukocyte mitochondrial DNA copy number	Mingyang Wu
E13	OS10107	The relationship of RUNX2 methylation and bone mineral density in adults: an epidemiological survey from endemic fluorosis areas in China	Minghui Gao
E14	OS10109	Fluoride exposure, calcitonin gene methylation and osteoporosis among female farmers in China	Renjie Sun
E15	OS10110	IQ alterations in children at 7-13 years old: the roles of prenatal and childhood fluoride exposure	Yuhui Du
E16	OS10111	Fluoride exposure and behavior outcomes in children at 7-13 years of age: a pilot study in China	Anqi Wang
E17	OS10121	Hot spring bath therapy can improve bone metabolism and bone mineral density in sub-healthy people	Qibing Zeng
E18	OS10124	MIR-191 is involved in renal dysfunction in exposed populations by regulating inflammatory response caused by arsenic	Yuyan Xu
E19	OS10128	Effect of different geological background on metal concentrations in tea leaves in eastern Guizhou, China: distribution and health risk assessment	Jian Zhang
E20	OS10132	Importance and urgency of safe disposal of rare earth mine associated radioactive waste	Gang Song
E21	OS10140	Correlation between hot spring bathing and sleep disorders among residents aged 30-65 years living and working in typical hot spring areas of Guizhou Province	Ziyun Wang

OS1: Environmental Geochemistry and Human Health

E22	OS10141	Alterations of arsenic level and awareness of its risk factors: A population-based study in a unique coal-borne arsenicosis county in Guizhou, China	Dapeng Wang
E23	OS10145	Association between quality of life and frequency of using hot spring among residents aged 30-65 years living in typical hot spring areas of Guizhou Province	Jingyuan Yang
E24	OS10148	The Influence of hot spring bath on quality of life of patients with chronic disease in hot spring area of Guizhou Province	Jin Hu
E25	OS10151	Using data analytics to improve disease management for geological contamination disease in southwest China	Xi Li
E26	OS10167	Tracking iron mineralogical changes during in situ experiments in a high arsenic reducing aquifer in Yinchuan Plain	Yuqin Sun
E27	OS10172	Effects of MAPK inhibitors on phosphorylation of Smad2/3 in LX-2 cells	Ting Hu
E28	OS10174	Effects of sodium arsenite on lipid metabolism in L-02	Qi Zhang
E29	OS10178	Correlation between hot spring bath and osteoporosis risk among residents aged 30-65 years living in typical hot spring areas of Guizhou Province	Tingting Yang
E30	OS10180	PINK1/Parkin-mediated mitophagy was activated by sodium arsenite in human hepatic L-02 cells	Tianxiao Duan
E31	OS10184	Effects of arsenic-induced oxidative stress on Nrf2 pathway and related proteins in L-02 cells	Xiaozhi Li

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E32	OS10185	Evaluation the physical therapy efficacy of Xifeng and Suiyang hot springs on relieving joint pain with Non-osteoarthritis	Qi Wang
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L5	SS10089	The role of miR-122 in the induction of hepatic cell apoptosis by MC-LR	Rui Wang
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N2	SS30160	Seasonal variations and trend prediction of water quality of Hongfeng Reservoir in Guizhou Plateau	Zhenhui Yuan
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