

# Central and Eastern European Conference on Health and the Environment (CEECHE)

Seeking Solutions for Environmental Exposures and Disease Risks Thessaloniki, Greece - July 15 - 19, 2024

Venue: Aristotle University Research Dissemination Center (KEDEA)
September 3 Campus, Thessaloniki 546 36

### **MONDAY - JULY 15, 2024 PRECONFERENCE WORKSHOPS**

All Preconference workshops will be held in the Aristotle University Research Dissemination Center (KEDEA) September 3 Campus, Thessaloniki 546 36

10:30	Registration
	3

# 11:00 International Opportunities, Career Development Workshop

Moderator: Dr. Angela M. Gutiérrez, University of Kentucky

Presenters:

Dr. Nikiforos Stamatiadis, University of Kentucky Dr. Michael Bloom, George Mason University

# **Panel with Fulbright Scholars**

Dr. Nikiforos Stamatiadis, University of Kentucky

Dr. Michael Bloom, George Mason University

Dr. Bernhard Henniq, University of Kentucky

Adjourn for Lunch at 13:00

#### 13:00 Lunch - 2 minute walk to Café

#### 14:00 Human Health Risk Assessment Workshop

Moderators: Dr. John McKernan, USEPA, and Dr. Kelly G. Pennell, University of Kentucky

14:10 Overview of human risk assessment

Dr. Kyoungju Choi, United States Environmental Protection Agency

14:45 Overview of chemical mixtures risk assessment

Dr. Glenn Rice, United States Environmental Protection Agency

#### 15:30 Coffee Break

Introduction to toxicological dose-response assessment and benchmark dose modeling
15:45

Dr. Shana White, United States Environmental Protection Agency

Principles and application of read-across in human health

16:30 Dr. Lucina Lizarraga, United States Environmental Protection Agency

Adjourn at 17:30



## **MONDAY - JULY 15, 2024**

17:00 Registration

-19:30 Location: Aristotle University Research Dissemination Center (KEDEA), September 3 Campus,

Thessaloniki 546 36

19:00 Opening Reception - 2 minute walk to Café

#### **TUESDAY - JULY 16, 2024**

Main Conference sessions will be held in the Aristotle University Research Dissemination Center (KEDEA) September 3 Campus, Thessaloniki 546 36

### 8:00 Registration (All day)

### 8:30 Opening Remarks and Orientation to the Conference

Welcome to the 2024 Central and Eastern European Conference on Health and the Environment

Dr. Michelle Heacock, Director and Chief of the Hazardous Substances Research Branch at the National Institute of Environmental Health Sciences (via video) (USA)

Professor Kyros Yakinthos, Vice Rector of Research and Innovation, Aristotle University of Thessaloniki (Greece)

Dr. Kelly G. Pennell, Director of the University of Kentucky Superfund Research Center, University of Kentucky, 2024 CEECHE Co-Chair(USA)

Dr. Efstathios Oikonomou, Professor, Aristotle University of Thessaloniki, 2024 CEECHE Co-Chair (Greece)

# 9:10 Session 1: Exposomic Tools and Biostatistical Algorithms for Environmental Health

- Chairs: Iulia Neamtiu (Romania) and Michal Toborek (USA)

- The application of the human exposome in children's health and environment studies.

  Dr. Konstantinos Makris, Cyprus University of Technology (Cyprus)
- 9:40 Development and application of a hybrid solid-liquid express extraction (SLEE) method for profiling the human adipose tissue exposome

Dr. Amith Maroli, Icahn School of Medicine at Mount Sinai (USA)

10:00 Finger-prick blood biomonitoring from home: measuring chemical exposures in a geographically diverse United States preconception cohort

Dr. Lauren Petrick, Sheba Medical Center (Israel)

#### 10:20 Coffee Break

- 10:40 The Cypriot children's health and environment observatory

  Corina Konstantinou, Cyprus University of Technology (Cyprus)
- Health effects of climate change should be a part of medical curriculum presentation of a new project CLIMATEMED

  Or Appa Paldy National Contactor for Public Health and Pharmacy (Hungary)

Dr. Anna Paldy, National Center for Public Health and Pharmacy (Hungary)

11:20 Predicting hypoxia and estimating the interactions of metabolites using machine learning Dr. Jai Woo Lee, Korea University (Korea)



11:40	Coffee	<b>Break</b>
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11:50 Session 2: Emerging Topics in Environmental Health

- Chairs: Eugen Gurzau (Romania) and Kelly G. Pennell (USA)

KEYNOTE Unraveling the interplay of combustion-derived particulate matter, microbiome dysbiosis,

and epithelial repair in influenza severity.

Dr. Stephania Cormier, Louisiana State University (USA)

12:20 Partnering for translation: Stories from the field

Dr. Anna Hoover, University of Kentucky (USA)

12:40 Critical minerals: What are they, why are they critical, and what is EPA's involvement with respect to

them

Dr. John McKernan, United States Environmental Protection Agency (USA)

13:00 Lunch - 2 minute walk to Café

14:00 Session 3: Understanding Environmental and Human Health Impacts of

Complex Legacy and Emerging Contaminant Exposures

- Chairs: Efstathios Oikonomou (Greece) and Michael Petriello (USA)

KEYNOTE PFAS environmental cycling: The role of landfills

Dr. Angela M. Gutiérrez, University of Kentucky (USA)

14:30 Impact of climate change on drinking water quality study of emerging disinfection by-products and

possible health risk

Argyri Kozari, Aristotle University of Thessaloniki (Greece)

14:50 Community air pollution monitoring in the Louisiana industrial corridor

Dr. Slawo Lomnicki, Louisiana State University (USA)

15:10 Indoor VOC emissions influenced by polymer additives in 3D printing

Dr. Souhail Al-Abed, United States Environmental Protection Agency (USA)

15:30 Public health issue: Amoeboid protists and their role in the environment in relation to water quality

in distribution systems

Dr. Katarína Trnková, Matej Bel University (Slovakia)

Adjourn at 15:50 pm

# **WEDNESDAY - JULY 17, 2024**

Main Conference sessions will be held in the Aristotle University Research Dissemination Center (KEDEA) September 3 Campus, Thessaloniki 546 36

#### 8:00 Check-in

8:30 Session 4: Sampling and Analytical Approaches for Legacy and Emerging Environmental Contaminants

- Chairs: Sorin Gurzau (Romania) and Souhail Al-Abed (USA)

KEYNOTE Advanced spectrometric techniques for the analysis of emerging contaminants and transformation products: Target, suspect, and non-target approaches

Dr. Dimitra Lambropoulou, Aristotle University of Thessaloniki (Greece)



#### **Session 4 Continues**

9:00 Suspect screening for occurrence of potentially persistent and mobile organic compounds (PMOCs) in the environment: The case study of Tiamulin - degradability, transformation and toxicity assessment

Kyriaki Anagnostopoulou, Aristotle University of Thessaloniki (Greece)

9:20 Evaluating data processing workflows to enhance non-target analysis revealing emerging contaminants in landfill leachates

Lelouda-Athanasia Koronaiou, Aristotle University of Thessaloniki (Greece)

- 9:40 Exploring environmental insights through high-resolution mass spectrometry: Tracking OPFRs in WWTPs in Thessaloniki, Greece Styliani Petromelidou, Aristotle University of Thessaloniki (Greece)
- Novel sorbent-based sample preparation processes as green alternatives for the extraction of emerging contaminants

Dr. Vasileios Alampanos, Aristotle University of Thessaloniki (Greece)

#### 10:20 Coffee Break

- 10:50 Session 5: Toxic Mechanisms of Legacy and Emerging Pollutants Chairs: Stephania Cormier (USA) and Bernhard Hennig (USA)
- Circadian control of cerebrovascular toxicity of environmental toxicants Dr. Michal Toborek, University of Miami (USA)
- 11:20 Heterocyclic amines disrupt lipid homeostasis in cryopreserved human hepatocytes Dr. David Hein, University of Louisville (USA)
- Exposure of LdIr-/- mice to a PFAS mixture and outcomes related to circulating lipids, bile acid excretion, and the intestinal transporter ASBT

  Dr. Michael Petriello, Wayne State University (USA)
- 12:00 Mechanisms of Cadmium mediated dysfunctional resolution of inflammation Dr. Ranu Surolia, University of Alabama at Birmingham (USA)
- 12:20 Protein misfolding acts via TRIM29 to orchestrate the molecular pathogenesis of Lewisite-induced skin injury in porcine and murine models

  \*\*Dr. Mohammad Athar, University of Alabama at Birmingham (USA)\*\*
- Vascular dysfunction induced by inhalation of environmentally persistent free radicals (EPFRs) is regulated by AhR activation in alveolar cells

  \*Dr. Tammy Dugas, Louisiana State University (USA)

#### 13:00 Lunch - 2 minute walk to Café

14:00 Session 6: Removal of Legacy and Emerging Contaminants from Environmental Systems

- Chairs: Dimitra Lambropoulou (Greece) and Slawo Lomnicki (USA)

- Preventing and reducing exposures to volatile organic compounds from aging sewer systems located near contaminated sites

  Dr. Kelly G. Pennell, University of Kentucky (USA)
- Sulfate radical-based advanced oxidation processes for the removal of pharmaceuticals in aqueous matrices

Angeliki Maliogka, Aristotle University of Thessaloniki (Greece)



#### **Session 6 Continues**

14.50

	Dr. Souhail Al-Abed, United States Environmental Protection Agency (USA)	
15:30	Removal of emerging contaminants by advanced oxidation processes: The case study of	

fluconazole and voriconazole

Periklis Parthenidis, Aristotle University of Thessaloniki (Greece)

15:50 In-situ solidification/stabilization of PFAS-contaminated soils

Dr. John MCKernan, United States Environmental Protection Agency (USA)

16:10 Fabrication of PVDF membranes for contaminant removal from water Rachel Kaplan, University of Kentucky (USA)

16:30 Poster Session - For list of posters, see end of program

Light appetizers and drinks provided at the Café

Adjourn at 18:30

19:30 Student and Postdoc Dinner (on your own)

Bioremediation of mine-influenced waters

Location Announced at Conference

### **THURSDAY - JULY 18, 2024**

Main Conference sessions will be held in the Aristotle University Research Dissemination Center (KEDEA) September 3 Campus, Thessaloniki 546 36

- 8:30 Field Trip (Optional On your own)
- 13:00 Lunch at Café
- 14:00 Session 7: Maternal and Children's Environmental Health
   Chairs: Anna Hoover (USA) and Michael Bloom (USA)
- Maternal exposure to polycyclic aromatic hydrocarbons (PAHs) augments neonatal hyperoxic lung injury and causes dysbiosis of gut and lung microbiome: Role of cytochrome P450 (CYP) 1A1, 1A2, and 1B1

Dr. Bhagavatula Moorthy, Baylor College of Medicine (USA)

- Longitudinal association of prepubertal and pubertal urinary phthalate metabolite concentrations with pubertal onset, pubertal progression, and semen quality

  Dr. Oleg Sergeyev, Moscow State University (Russia)
- 14:50 PFAS exposure is associated with maternal microbiome form and function during pregnancy Dr. Stephanie Morgan, Wayne State University (USA)
- Longitudinal analysis of temporal distribution of melanoma and non-melanoma mortality cases in Hungary

  Agnes Stier Semmelweis University (Hungary)

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# 15:30 Coffee Break



# 15:50 Session 8: Assessing Ecological and Human Health Implications of Micro and Nanoplastics

- Chairs: Oleg Sergeyev (Russia) and Corina Konstantinou (Cyprus)

- Micro-nano plastics detection, characterization and quantification in urban watersheds

  Dr. Souhail Al-Abed, United States Environmental Protection Agency (USA)
- Sampling, pretreatment and identification of microplastics extracted from sand and seawater samples collected from the region of Kavala

Dimitrios Kalaronis, Aristotle University of Thessaloniki (Greece)

16:40 Thermodynamic study on the interplay between radionuclides and microplastics in water, seawater, and wastewater

Dr. Vasiliki Kinigopoulou, Aristotle University of Thessaloniki (Greece)

17:00 Abundance and seasonal variation of microplastics in a wastewater treatment plant: The case of Thessaloniki and Thermaic Gulf

Nina Maria Ainali, Aristotle University of Thessaloniki (Greece)

Adjourn at 17:20

#### 19:30 Gala Dinner

Location to be announced at the conference

# FRIDAY - JULY 19, 2024

# 10:00 Scientific Panel on Understanding Complex Environmental Exposures and Health Effects

Moderator: Dr. Konstantinos Makris, Cyprus University of Technology (Cyprus)

# 10:55 Scientific Panel on Solutions to Prevent Environmental Exposures and Disease Risks

Moderator: Dr. Kelly G. Pennell, University of Kentucky (USA)

#### 11:50 Coffee Break

#### 12:10 Conference Awards Announced

# 12:30 Closing Remarks from Aristotle University of Thessaloniki and University of Kentucky

Dr. Efstathios Oikonomou & Dr. Angela M. Gutiérrez (Scientific Program Chairs) Dr. Kelly G. Pennell & Dr. Nikiforos Stamatiadis (Conference Board Members)

#### 13:00 Lunch - 2 minute walk to Café

# **Lunch and Conference Adjourns**



#### **POSTERS**

- Intervention program for promoting children's health through beneficial physical activity environments: a Kaunas pilot study

  Or Sandra Andrusaityto Kalaronis Vytautas Magnus University (Lithuania)
  - Dr. Sandra Andrusaityte, Kalaronis, Vytautas Magnus University (Lithuania)
- 2 The effect of ethylthiosulfanilate on the antioxidant systems of rats intoxicated with hexavalent Chromium Dr. Ruslana Iskra, Ivan Franko National University of Lviv (Ukraine)
- 3 Governance as an important element in understanding the need for coherence in water security policies Dr. Sorin Gurzau, Babes-Bolyai University (Romania)
- 4 Associations between seminal plasma trace elements and semen quality in men Dr. Michael Bloom, George Mason University (USA)
- 5 Soil pollution with carcinogenic compounds, a risk for the population
  Dr. Olha Lytvychenko, Marzieiev Institute for Public Health of the National Academy of
  Medical Sciences of Ukraine (Ukraine)
- 6 Exploring vapor intrusion as an exposure route for per- and polyfluoroalkyl substances: Assessing physicochemical variability and research needs

  Ariel Robinson, University of Kentucky (USA)
- 7 Isolation of two bacteria strains of Sporolactobacillus spp. and Rhodopseudomonas spp. from compost tea and their potential use for detoxification of olive mill wastewaters

  Angeliki Zavra, Aristotle University of Thessaloniki (Greece)
- 8 Investigating the impact of urban infrastructure and physical activity on health: A Kaunas study Aurimas Rapalavicius, Vytautas Magnus University (Lithuania)
- 9 The effect of relative telomere length on health: Association with air pollution and lifestyle Dagmar Kramna, University of Ostrava (Czech Republic)
- 10 Circadian rhythm-mediated endothelial dysfunction potentiates the risk of breast cancer brain metastasis following phthalate exposure Destiny Tiburcio, University of Miami (USA)
- 11 Exposure to toxic metals/metalloids in the environment and in vitro fertilization outcomes in a population group from Romania

  Dr. Iulia Neamtiu, Environmental Health Center (part of ALS Global) (Romania)
- 12 Remediation approach for reducing exposure risks from the postmilitary sites: case of Kyiv region, Ukraine Dr. Tatyana Stefanovska, National University of Life and Environmental Sciences of Ukraine (Ukraine)
- 13 Assessing Heavy Metal Risks in Public Springs: Romanian Case Study
  Dr. Gabriel Gati, Environmental Health Center (part of ALS Global), Babeș-Bolyai University (Romania)
- 14 Lifetime losses due to cardiovascular and respiratory diseases attributable to air pollution in polluted and unpolluted areas

  Tereza Janulková, University of Ostrava (Czech Republic)
- 15 Hydrogels and Hydrogel Composites for PFAS Remediation in Aqueous Systems and the G.I. Tract Maria Victoria Klaus, University of Kentucky (USA)



### **POSTERS**

- 16 Perfluorooctanesulfonic acid (PFOS) exposure impacts pancreatic islet vascularization during development in zebrafish (Danio rerio)

  Madeline Tompach, University of Massachusetts Amherst (USA)
- 17 The Rights of Poop: A Scoping Review on the Ethics of Monitoring Wastewater for Covid-19 Krystal Ni, University of Rochester (USA)
- 18 Risk Behavioral Survey in the Sample of Slovak Adolescents from Incomplete Families Dr. Ľubica Argalášová, Comenius University Faculty of Medicine (Slovakia)
- 19 Current Issues of Hygienic Risk Assessment of 2.4-D Herbicide for Human and Environments Health in Ukraine Dr. Yuriy Chayka, (Presented by: Iha Lytvychenko), Bogomolets National Medical University (Ukraine)
- 20 Biomarkers of genotoxicity and their relationship with pesticide use in Chiapas, Mexico Fernando Uriel González-Domínguez, The School of Public Health of Mexico (Mexico)
- 21 Assessment of children's exposure to heavy metals and toxic elements through playground dust during children's activities

  Anastasia Koutelidou, Aristotle University of Thessaloniki (Greece)



# The 2024 Central and Eastern European Conference on Health and the Environment

Seeking Solutions for Environmental Exposures and Disease Risks
Thessaloniki, Greece

**20 Year Anniversary** 

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