



# 40<sup>th</sup> International Conference on Environmental Geochemistry and Health

## Programme

**Date:** 15<sup>th</sup>–18<sup>th</sup> July 2025

**Venue:** Riddel Hall (and elsewhere), Queen's University Belfast

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**Day 1: Tuesday July 15<sup>th</sup>**

Time	Event	Speaker/Guest	Location
18:00	SEGHS Board Meeting	SEGHS Board Only	LANOG/054, Lanyon Building
SOCIAL EVENT			
19:00-21:00	Icebreaker Drinks Reception	All delegates/exhibitors welcome!	Canada Room, Lanyon Building

**Day 2: Wednesday July 16<sup>th</sup>**

Time	Event	Speaker /Guest	Location
08:00-09:00	Registration & Breakfast	All delegates/sponsors welcome!	Riddel Hall
OPENING CEREMONY			
09:00-09:10	Welcoming Remarks	Dr Dan Middleton, Conference Chair, QUB	Isdell Courtyard, Riddel Hall
09:10-09:20	SEGH President’s Address	Prof Ariadne Argyraki, SEGH President, National & Kapodistrian University of Athens	
09:20-09:30	Official Opening	Prof Jayne Woodside, Director, QUB Centre for Public Health	
THEME: EMERGING TECHNOLOGIES (Chair: Dr Olivier Humphrey)			
09:30-10:00	Keynote Presentation: Prof Quentin Crowley, Trinity College Dublin <b><i>ADVANCES IN PROTECTION FROM IONIZING RADIATION FOR IMPROVED PUBLIC HEALTH</i></b>		Isdell Courtyard, Riddel Hall
10:00-11:00	Dr Mavro Lučić, Jožef Stefan Institute <b><i>SCREENING OF METALLIC NANOPARTICLES IN SEWAGE SLUDGE BY SINGLE PARTICLE ICP-MS</i></b>		
	Dr Rita Bonfiglio, University of Rome Tor Vergata <b><i>THE HIDDEN ROLE OF TISSUE Pb ACCUMULATION IN SHAPING BREAST CANCER BIOLOGY</i></b>		
	Maria Paola Scioli, University of Rome Tor Vergata <b><i>ELECTRON MICROSCOPY OF POLLUTANT BIOACCUMULATION IN HISTOLOGICAL SPECIMENS</i></b>		
	Dr Wei Chen, China University of Geosciences <b><i>PAHS IN SOILS FROM SHALE GAS EXPLORATION: QUANTITATIVE SOURCES &amp; RISK ANALYSIS</i></b>		
	Dr Lukas Schlatt, Nu Instruments <b><i>REVEALING THE ELEMENTAL DIMENSION WITH ICP-TOF-MS</i></b>		
11:00-11:30	Coffee break		Glass Corridor, Riddel Hall

**THEME: WATER QUALITY & HEALTH ( Chair: Prof Jenny McKinley)**

11:30-12:45	Dr Javier Castro-Larragoitia, Autonomous University of San Luis Potosi <b><i>GEOGENIC SOURCES OF CONTAMINANTS IN MEXICAN GROUNDWATER &amp; ASSOCIATED HEALTH RISKS</i></b>		Isdell Courtyard, Riddel Hall
	Prof Saugata Datta, University of Texas at San Antonio <b><i>As &amp; Fe ASSOCIATION IN SEDIMENT COMPRISING THE HYPORHEIC ZONE OF THE MEGHNA RIVER IN BANGLADESH—AN As IN DRINKING WATER IMPACT STORY</i></b>		
	Hannah Towns, Scottish Association for Marine Science (SAMS) <b><i>ENVIRONMENTAL RISK ASSESMENT &amp; ECOTOXIOLOGICAL IMPACT OF DEEP-SEA TAILINGS PLACEMENT</i></b>		
	Dr Gonzalo Garcia Vargas, Universidad Juarez del Estado de Durango <b><i>FLUORIDE EXPOSURE THROUGH DRINKING WATER IN NORTH-CENTRAL MEXICO</i></b>		
	*Prof Ahmad Zaharin Bin Aris, Universiti Putra Malaysia <b><i>BEYOND THE SURFACE: RISKS OF ENDOCRINE DISRUPTORS &amp; MICROPLASTICS IN A CHANGING ENVIRONMENT</i></b>		
	Dr Javier Castro-Larragoitia, Autonomous University of San Luis Potosi <b><i>RISK COMMUNICATION IN A RURAL MEXICAN COMMUNITY EXPOSED TO As IN TAP WATER</i></b>		
12:45-14:00	Lunch		Glass Corridor, Riddel Hall
	Early Career Researchers Networking Luncheon	SEGH ECRs	Lecture Room 1, Riddel Hall
THEME: ENVIRONMENTAL GEOCHEMISTRY & HEALTH ( Chair: Gillian Gibson)			
14:00-14:30	Keynote Presentation: Dr Alex Stewart <b><i>SO, YOU WANT TO RUN AN INTERNATIONAL CONFERENCE? LESSONS FROM 40 YEARS OF SEGH INTERNATIONAL CONFERENCES</i></b>		Isdell Courtyard, Riddel Hall
14:30-14:45	SEGH Announcement	Prof Ariadne Argyraki	
14:45-16:00	Prof Andrew Hursthouse, University of the West of Scotland <b><i>CURRENT ISSUES IN ENVIRONMENTAL GEOCHEMISTRY &amp; HEALTH: VIEW FROM SEGH FELLOWS</i></b>		

	Prof Alicja Kicińska, AGH University of Krakow <b>BIOAVAILABILITY OF SELECTED POTENTIALLY TOXIC ELEMENTS FROM HOUSEHOLD FURNACE ASHES</b>		
	Dr Martin Gaberšek, Geological Survey of Slovenia <b>GEOCHEMICAL FOOTPRINT OF DENTISTRY IN OUTDOOR ENVIRONMENTS</b>		
	Gillian Gibson, Gibson Consulting and Training <b>'NOW' IS NOT 'NORMAL'</b>		
	Opeyemi Olayemi, University of Ibadan <b>RADIOLOGICAL RISKS ASSOCIATED WITH BASEMENT COMPLEX ROCKS FROM SOUTHWESTERN NIGERIA</b>		
	FREE SPACE (questions or late-breaking talk)		
16:00-17:00	SEGH AGM	All SEGH members welcome	Isdell Courtyard, Riddel Hall
SOCIAL EVENT			
19:00-22:00	SEGH Networking Evening	All delegates/sponsors welcome!	McConnell's Distillery

**Day 3: Thursday July 17<sup>th</sup>**

Time	Event	Speaker/Guest	Location
08:00-09:00	Registration & Networking Breakfast	All delegates/sponsors welcome!	Riddel Hall
THEME: EPIDEMIOLOGICAL APPLICATIONS (Chair: Dr Dan Middleton)			
09:00-09:30	Keynote Presentation: Dr Joachim Schüz, IARC-WHO <b>ENVIRONMENTAL RISK FACTORS &amp; THEIR RELATED CANCER BURDEN</b>		Isdell Courtyard, Riddel Hall
09:30-10:45	Dr Dan Middleton, Queen’s University Belfast <b>SOIL SELENIUM &amp; OESOPHAGEAL CANCER INCIDENCE IN CHINA</b>		
	Rawan Alhattab, Queen’s University Belfast <b>PM2.5 &amp; LUNG CANCER RISK IN NORTHERN IRELAND: A POPULATION-BASED CASE-CONTROL STUDY</b>		
	Dr Sara M. Wallace, Queen’s University Belfast <b>TRIHALOMETHANES IN PUBLIC DRINKING WATER &amp; BLADDER CANCER RISK IN NORTHERN IRELAND</b>		
	Sarah Johnson Griffiths, UK Health Security Agency <b>ENVIRONMENTAL HAZARDS AND REPORTED ISSUES IN NORTHWEST ENGLAND</b>		
	Claire Delargy, Queen’s University Belfast <b>RADON ATLAS METRICS AND LUNG CANCER RISK: A POPULATION-BASED CASE-CONTROL STUDY</b>		
10:45-11:15	Coffee break		Glass Corridor, Riddel Hall
THEME: A CHANGING WORLD			
11:15-11:45	Poster flash presentations	List of posters on Page 9	Isdell Courtyard, Riddel Hall
11:45-12:45	Expert Panel Discussion: <b>ENVIRONMENTAL GEOCHEMISTRY AND HEALTH FOR A CHANGING WORLD</b> Chair: Prof Ariadne Argyraki Panel: Prof David Polya; Dr Ofelia Morton Bermea; Prof Andrew Hursthouse; Hannah Towns (ECR Voice)		

12:45-14:00	Lunch		Glass Corridor, Riddel Hall
	SEGH Fellows Luncheon	SEGH Fellows	Lecture Room 1, Riddel Hall
THEME: A CHANGING WORLD ( Chair: Prof Jenny McKinley)			
14:00-14:30	Keynote Presentation: Prof Ruth Hunter, Queen’s University Belfast <b><i>NO PLANET B: HEALTH AND ENVIRONMENT</i></b>		Isdell Courtyard, Riddel Hall
14:30-15:45	Dr Olivier Humphrey, British Geological Survey <b><i>SEDIMENT &amp; SOIL SOURCE APPORTIONMENT USING GEOCHEMICAL FINGERPRINTING TECHNIQUES IN THE WINAM GULF, LAKE VICTORIA FOR SUSTAINABLE MANAGEMENT OF LAKE-LAND RESOURCES</i></b>		
	Dr Anna Augustsson, Linnaeus University <b><i>MODELLING PROVISIONAL SOIL GUIDELINES FOR THALLIUM</i></b>		
	Cheryl Heard, Institute of Zoology <b><i>INDUSTRIAL METAL POLLUTION &amp; NEUROTOXICITY: BIOACCUMULATION IN GREY SQUIRREL BRAINS</i></b>		
	Dr Ofelia Morton-Bermea, Universidad Nacional Autonoma de Mexico <b><i>CONSEQUENCES OF CONTROL MEASURES FOR ATMOSPHERIC EMISSIONS FROM THE METALLURGICAL INDUSTRY IN NORTHERN MEXICO ON THE HEALTH OF EXPOSED POPULATIONS</i></b>		
	Dr Kiri Rodgers, University of the West of Scotland <b><i>METAL-DRIVEN ANTIBIOTIC RESISTANCE IN ACANTHAMOEBA-ASSOCIATED BACTERIAL COMMUNITIES FROM VASHI CREEK, MUMBAI</i></b>		
	Dr Mateja Gosar, Geological Survey of Slovenia <b><i>GEOCHEMICAL &amp; MORPHOLOGICAL PROPERTIES OF DUST IN THE VICINITY OF A CEMENT PLANT</i></b>		
15:45-17:00	Poster session & refreshments	List of posters on Page 9	Lower Theatre, Riddell Hall
SOCIAL EVENT			
19:00-22:30	Conference Dinner	Ticket required	The Great Hall, Lanyon Building

**Day 4: Friday July 18<sup>th</sup>**

Time	Event	Speaker / Guest	Location
08:00-09:00	Registration & Networking Breakfast	All delegates/sponsors welcome!	Riddel Hall
<b>THEME: GLOBAL FOOD SECURITY (Chair: Dr Rory Doherty)</b>			
9:00-09:30	Keynote Presentation: Prof David Polya, University of Manchester <b>GLOBAL FOOD SECURITY &amp; INORGANIC ARSENIC IN RICE</b>		Isdell Courtyard, Riddel Hall
09:30-10:45	Farah Ahmed, University of Manchester <b>TRACE ELEMENTS IN SOILS &amp; VEGETABLES IN A MANCHESTER COMMUNITY GARDEN</b>		
	Jennifer Newell, Queen's University Belfast <b>THE EFFECT OF DIGESTATE BIOCHAR ON LEAD HUMAN HEALTH INGESTION RISKS IN URBAN NO-CROP, LETTUCE, CARROT, AND GARLIC AGRISYSTEMS</b>		
	Anna Qvarforth, Linnaeus University <b>TECHNOLOGY-CRITICAL ELEMENTS IN VEGETABLES: POTENTIAL RISKS FOR HUMAN EXPOSURE</b>		
	Dr Grace Ogunlade, University of Abuja <b>POP CONTAMINATION OF FLUTED PUMPKIN LEAVES CULTIVATED IN NIGERIA</b>		
	Dr Virgilio Góngora-Echeverría, Autonomous University of Yucatan <b>PERSISTENCE OF AGROCHEMICALS IN LA LAGUNA REGION MEXICO'S SOIL AND THE POTENTIAL RISK FOR RESIDENTS</b>		
10:45-11:15	<b>Coffee break</b>		Glass Corridor, Riddel Hall
<b>THEME: HUMAN BIOMONITORING (Chair: Dr Shay Mullineaux)</b>			
11:15-11:45	Keynote Presentation: Prof Lesley Anderson & Emma Tarburn, University of Aberdeen <b>UNLOCKING INSIGHTS: ICP-MS OF TOENAILS TO ASSESS TRACE ELEMENT CONCENTRATIONS IN MYELOPROLIFERATIVE NEOPLASMS – FINDINGS FROM THEM MOSAICC PILOT STUDY</b>		Isdell Courtyard, Riddel Hall

11:45-12:45	Prof Jane Entwistle, Northumbria University <b><i>PROTOCOL DEVELOPMENT &amp; FEASIBILITY STUDY FOR THE ELEVATED CHILDHOOD LEAD INTERAGENCY PREVALENCE STUDY (ECLIPS)</i></b>	Isdell Courtyard, Riddel Hall
	Dr Alex Stewart <b><i>LEAD POISONING IN CHILDREN IN CHESHIRE &amp; MERSEYSIDE, UK: A CASE SERIES ANALYSIS</i></b>	
	Gillian Gibson, Gibson Consulting and Training <b><i>LEAD: THE GIFT THAT KEEPS ON GIVING - OR NOT</i></b>	
	Dr Virgilio Góngora-Echeverría, Autonomous University of Yucatan <b><i>PESTICIDES IN RESIDENTS' URINE LIVING IN LA LAGUNA REGION MEXICO. A RISK PANORAMA</i></b>	
	FREE SPACE (questions or late-breaking talk)	
12:45-13:00	Closing Ceremony and Prizegiving	Isdell Courtyard, Riddel Hall
13:00-14:00	<b>Farewell lunch</b>	Glass Corridor



## List of posters:

Presenter & title	Board No.
B. Sensuła, <b>TEMPORAL VARIABILITY OF CO<sub>2</sub> &amp; 14C IN URBAN AIR: A CASE STUDY FROM GLIWICE, POLAND</b>	<b>1</b>
B. Sensuła, <b>BIOMONITORING FOSSIL &amp; INDUSTRIAL EMISSIONS WITH PINE NEEDLES IN POLAND</b>	<b>2</b>
A. Santos, <b>ANTHROPOCENE MINERALOGY &amp; GEOCHEMISTRY OF NEARSHORE SEDIMENTS IN URBAN-ADJACENT COASTAL ZONES OF ATHENS &amp; FUJAIRAH</b>	<b>3</b>
A. Kicińska, <b>THE MOBILITY OF METALS FROM MUNICIPAL ASHES AS A RESULT OF CHANGES IN PH</b>	<b>4</b>
A. Argyraki, <b>PHASE COMPOSITION OF RENAL STONES IN GREECE: INSIGHTS FROM X-RAY DIFFRACTION &amp; RAMAN SPECTROSCOPY</b>	<b>5</b>
A. Argyraki, <b>INTERDISCIPLINARY WATER MONITORING IN MULTI-STRESSOR MARINE ENVIRONMENTS</b>	<b>6</b>
A. Kontomichalou, <b>SOIL EXTRACTABILITY OF PTES IN GREECE: RELEVANCE OF AQUA REGIA &amp; DILUTE NITRIC ACID TO THE EU SOIL DIRECTIVE</b>	<b>7</b>
M. Gaberšek, <b>THE IMPACT OF EXTREME FLOODING ON REDISTRIBUTION OF PTES: PRELIMINARY RESULTS FROM A FORMER MINING AREA</b>	<b>8</b>
G. García Vargas, <b>ARSENIC EXPOSURE THROUGH DRINKING WATER IN NORTH-CENTRAL MEXICO</b>	<b>9</b>
G. Ogunlade, <b>HEAVY METAL ACCUMULATION IN PLANTS GROWN ON PAINT-BASED INDUSTRIAL EFFLUENT</b>	<b>10</b>
I. Blanksby, <b>HOW DOES CLIMATE CHANGE IMPACT ON HUMAN HEALTH &amp; WHAT ARE ITS IMPLICATIONS FOR FUTURE HEALTH SERVICE PROVISION?</b>	<b>11</b>
Z. Kyritidou, <b>HOMOGENEITY TESTING OF AN IN-HOUSE REFERENCE MATERIAL FROM A MINING SOIL IN LAVRION, GREECE</b>	<b>12</b>
Q. Yin, <b>FROM SOIL TO BIO-ORE: PHYTOMINING AS A SUSTAINABLE FRONTIER IN CRITICAL METAL SUPPLY</b>	<b>13</b>
R. Montero, <b>CLINICAL AND INFLAMMATORY PARAMETERS DUE TO TOXIC COMPOUNDS IN THE UPPER BASIN OF THE ATOYAC RIVER</b>	<b>14</b>
C. Delargy, <b>RADON ATLAS METRICS AND LUNG CANCER RISK: A POPULATION-BASED CASE-CONTROL STUDY</b>	<b>15</b>
R. Alhattab, <b>PM<sub>2.5</sub> &amp; LUNG CANCER RISK IN NORTHERN IRELAND: A POPULATION-BASED CASE-CONTROL STUDY</b>	<b>16</b>
O. Oladepo, <b>SATELLITE-BASED MAPPING OF GROUNDWATER POTENTIAL ZONES TOWARDS A SUSTAINABLE WATER DEMAND &amp; SUPPLY IN LAGOS</b>	<b>17</b>
R. Wahlen, <b>QUANTITATIVE DETECTION OF TOTAL FLUORINE OF PFAS/EOF IN SOIL BY ICP-MS/MS</b>	<b>18</b>
M. Rostagno, <b>SEEING THE UNSEEN: NEXT-LEVEL ELEMENTAL ANALYSIS FOR ENVIRONMENTAL AND EFFLUENT MONITORING</b>	<b>19</b>
L. Bramwell, <b>IMPACT OF RETROFITTING HOMES FOR ENERGY EFFICIENCY ON POTENTIALLY ADVERSE INDOOR AIR QUALITY &amp; HEALTH OUTCOMES</b>	<b>20</b>
FREE SPACE – Please contact an organizer if you wish to hang a poster.	<b>21</b>
FREE SPACE – Please contact an organizer if you wish to hang a poster.	<b>22</b>