

#EncChem2021 Programme

All times are British Summer Time (BST), 1 hour ahead of Coordinated Universal Time (UTC).

Time	Activity	Chair
10:00 – 10:10	Introduction and opening remarks	Rowena Fletcher-Wood
10:10 – 10:30	Borbála Szabó - The inter-individual variance as an information source in ecotoxicology	Michelle Bloor
10:30 - 10:50	Wojciech Mroziński - Gaseous hazards released from abused automotive lithium-ion batteries	Michelle Bloor
10:50 – 10:55	Introduction to Creative Display Presentations	Tomás Sherwen
10:55 – 11:10	Parallel ‘Creative Display Presentation’ Session A	
11:10 - 11:20	Break	
11:20 – 11:40	Marc Fadel - PM2.5 in two urban industrial sites in the East Mediterranean: chemical characterization and health risk assessment for metals	Tomás Sherwen
11:40 - 12:00	Celeste Felion - Development of a colorimetric aptasensor for rapid monitoring of 17 β -estradiol biodegradation	Tomás Sherwen
12:00 – 13:00	Helena Gomes - Wasted opportunities - how to recover resources from wastes	John Collins
13:00 – 13:40	Lunch Break	
13:40 – 14:00	Albern Tan - Synergistic effects of wollastonite and calcium phosphate mineral seeds in alginate hydrogels on phosphate removal and control	Steve Leharne
14:00 - 14:20	Alex Tait - Investigating the impacts of iron nanoparticles and biostimulation on the chemical speciation and mobility of mercury in sediment and artificial ground water	Steve Leharne
14:20 – 14:25	Introduction to Creative Display Presentations	Tomás Sherwen
14:25 – 14:40	Parallel ‘Creative Display Presentation’ Session B	
14:40 - 14:50	Break	
14:50 – 15:10	Helena Rapp Wright - A year-long study and risk assessment of contaminants of emerging concern in a range of aquatic matrices in Ireland	Laura Newsome
15:10 – 15:15	Introduction to Creative Display Presentations	Tomás Sherwen
15:15 – 15:30	Parallel ‘Creative Display Presentation’ Session C	
15:30 – 16:30	Zhugen Yang - Paper-based device enabling rapid diagnosis for wastewater-based epidemiology	Caroline Gauchotte-Lindsay
16:30 – 16:35	Concluding remarks	Tom Sizmur

Please see next pages for details of the talks to be given in the parallel ‘Creative Display Presentation’ session A, B, and C

Parallel 'Creative Display Presentation' Session A (10:55 – 11:10)

Breakout room	Presenter	Title	Theme
A1	Aaron Schultz	The influence of abiotic factors on developmental and cardiovascular toxicity of metal nanoparticles in zebrafish embryos (<i>Danio rerio</i>).	Ecotoxicology
A2	Benjamin Bálint	Effects of sodium selenate and sodium selenite on the mortality, reproduction, lipid peroxidation and glutathione redox status of <i>Folsomia candida</i> Willem 1902	Ecotoxicology
A3	Friday Ehiguese	Polycyclic musk compounds induced oxidative stress and genotoxicity in <i>Ruditapes philippinarum</i>	Ecotoxicology
A4	Harriet Sleight	Uptake of pharmaceuticals by crops: a systematic review	Emerging contaminants
A5	Hattie Brunning	Environmental exposure and risk of water-soluble polymers found in UK household products	Emerging contaminants
A6	Huan V Doan	Improved photodegradation of anionic dyes using a complex graphitic carbon nitride and iron-based metal-organic framework material	Environmental Processes
A7	Neha Mehta	Evaluating potential of decarbonisation of heat using biomethane	Environmental Processes
A8	Alice Marshall	Single cell mass-spectrometry: A novel approach to evaluating xenobiotic uptake and fate in plants	Novel techniques
A9	Jay Bullen	Detecting Arsenic-contaminated groundwaters in Mexico using low-cost Arduino electrochemistry	Novel techniques
A10	Niall Marsay	Developing a rapid non-invasive tool for assessing the presence and recovery of heavy metals and complex chemical mixtures from brownfield sites using infrared spectrometry.	Novel techniques

Parallel 'Creative Display Presentation' Session B (14:25 – 14:40)

Breakout room	Presenter	Title	Theme
B1	Theodora Nah	Formation of light absorbing secondary organic aerosols from the aqueous-phase nitrate-mediated photooxidation of phenolic compounds	Atmospheric Chemistry
B2	Megan Griffiths	Toxicity and risk of plant-produced alkaloids to <i>Daphnia magna</i>	Ecotoxicology
B3	Shweta Gehlout	Nano-ecotoxicity evaluation of agriculturally relevant iron nanoparticles in zebrafish (<i>Danio rerio</i>) embryos	Ecotoxicology
B4	Alexandra Richardson	Development and application of a miniaturised 3D printed passive sampler device for monitoring of emerging contaminants in river water	Emerging contaminants
B5	Astrid Solvåg Nesse	Confirming the presence of selected antibiotics and steroids in Norwegian biogas digestate: Consequences for circular resource management?	Emerging contaminants
B6	Kerry Sims	Prioritisation and Early Warning System for Chemicals of Emerging Concern - a year of evolution of the Environment Agency's approach	Emerging contaminants
B7	Ahmed Shalan	Ternary hybrid Ag-CdSe/GO@CA heterostructures nanofibrous membrane composites for photocatalytic degradation of malachite green toward wastewater treatment	Environmental Processes
B8	Samantha Richardson	Simple paper microfluidic devices for citizen-led monitoring of phosphates in freshwater systems	Environmental Processes
B9	Celeste Magallanes	Polyelectrolyte assemblies for electrochemistry detection of Pb(II)	Novel techniques
B10	Sophie Purser	Laser dispersion spectroscopy for next generation emissions monitoring	Novel techniques

Parallel 'Creative Display Presentation' Session C (15:15 – 15:30)

Breakout room	Presenter	Title	Theme
C1	Luke Woodliffe	Designing magnetic framework composites for carbon capture	Atmospheric Chemistry
C2	Alejandra Bouzas Monroy	Troubled Waters: Assessing the Risks of Pharmaceutical Mixtures in Rivers	Ecotoxicology
C3	Katie O'Rourke	The acute and chronic effect of a range of environmentally relevant compounds on <i>Daphnia magna</i> .	Ecotoxicology
C4	Mathavan Vickneswaran	Simultaneous determination of pesticides from soils: A comparison between QuEChERS extraction and Dutch Mini-Luke extraction methods	Emerging contaminants
C5	Melanie Egli	Pre- and mid-pandemic Thames and tributary river profiling by rapid direct injection liquid chromatography – mass spectrometry (LC-MS/MS)	Emerging contaminants
C6	Narinj Taghiyeva	Removal of pesticides from aqueous solution by a modified montmorillonite clay	Environmental Processes
C7	Ping-I Chou	Nanoscale investigation of effects of bicarbonate on arsenic mobilization in managed aquifer recharge systems	Environmental Processes
C8	Rachel Little	Mapping the Photodegradation Pathways of Metronidazole	Environmental Processes
C9	Kate Fell	What's the buzz? Optimisation of ultrasound assisted extraction and derivatisation for emerging pharmaceuticals in biosolid samples.	Novel techniques
C10	Yong Zhang	In situ investigation of the distribution and retained amount of benzo[a]pyrene at the micro-zones of mangrove leaf surfaces	Novel techniques