

environ 2018

Oral Presentations Sessions Tuesday March 27th 11.30 – 1.00

	Marine & Coastal T101	Ecotoxicology & Invasive Species T103	Energy T104	Environmental Management T105
11:30 – 11:45	<p>Chair Address: Dr Niall McDonough Marine Institute</p> <p>The application of satellite-borne remote sensors for monitoring coastal erosion and ecosystems in Ireland</p> <p>Daithí Maguire NUIG</p>	<p>Chair: Professor Frances Lucy IT Sligo</p> <p>Investigation of Carbamazepine and Ibuprofen toxicological effects on algae by multifactorial analysis</p> <p>Zaniel Procopio Glasgow Caledonian University</p>	<p>Chair Address: Dr. Lucy Corcoran SEAI</p> <p>Sustainable Energy Authority of Ireland (SEAI) – An overview of research supports and case studies of SEAI supported research from 2007–2017</p>	<p>Chair: Liam Casey, Enterprise Ireland</p> <p>A water resources planning model for Dublin to assess impacts of socio-economic growth and climate change</p> <p>Mohammed Yassin DIT</p>
11.45-12.00	<p>Are Microplastics Disrupting the Biological Pump?</p> <p>A.M. Wiczkorek NUIG</p>	<p>Filter-feeding invertebrates as drivers of the conjugative transfer of antimicrobial resistance in <i>Enterococcus faecalis</i> in aquatic environments</p> <p>Temilola Olanrewaju Ulster University</p>	<p>Interlocked electrodes (ILE) for breaking the limit of cathode specific surface area in microbial fuel cells (MFCs)</p> <p>Dunzhu Li TCD</p>	<p>A real-time alert system for predicting and managing short-term pollution and bathing water quality at Enniscrone beach</p> <p>Wayne Egan IT Sligo</p>
12.00 - 12.15	<p>Trends and Variability in sea water level along the coastline of Ireland: A comparative study</p> <p>Arunima Sarkar TCD</p>	<p>Cold as Ice: a novel eradication and control method for invasive Asian clam, <i>Corbicula fluminea</i>, using pelleted dry ice</p> <p>Neil Coughlan QUB</p>	<p>Developing Principles for a Fair and Inclusive Energy Transition in Europe: Results from an Interdisciplinary Delphi-Panel of Academic Experts</p> <p>Alexandra Revez UCC</p>	<p>Use of an acoustic camera for monitoring seaward spawning migrations of European eel (<i>Anguilla anguilla</i>) in Irish rivers</p> <p>Eamon Lenihan NUIG</p>
12.15 - 12.30	<p>The impact of UV-B radiation on Pacific oyster (<i>Crassostrea gigas</i>) health system</p> <p>Gary Kett UCC</p>	<p>Using citizen science to understand a difficult to study species: the Portuguese man o' war (<i>Physalia physalis</i>)</p> <p>J. L. Headlam NUIG</p>	<p>Smart Meters, Smart Choice?</p> <p>Christine Gaffney UCC</p>	<p>Comparative life cycle assessment of alternative feed in Irish rainbow trout (<i>Oncorhynchus mykiss</i>) production</p> <p>Ronan Cooney NUIG</p>

<p>12.30 – 12:45</p>	<p>European Best Practice for Inland Waterway Maintenance Dredging Works</p> <p>Joe Harrington CIT</p>	<p>Using Innovative Remote sensing techniques to monitor the treatment of Invasive Alien Species</p> <p>Eithne Davis IT Sligo</p>	<p>Upscaling Energy Management from Buildings to Districts</p> <p>Alan McGibney CIT</p>	<p>A methodology for water risk management in the Irish industrial sector</p> <p>Shane Merritt CIT and Central Solutions</p>
<p>12:45 – 13:00</p>	<p>Macroalgal biodiscovery and culture optimization in Ireland: a case study of current research at NUI Galway</p> <p>Marianela Zanolla NUIG</p>	<p>Poster 1 Minute Oral Presentations</p> <p>L Murana-Scoe EI1 A Mateos-Cardenas EI2 E O' Neill EI3 F Cazer EI4 C Quinn EI5 G. Weyman EI6</p>	<p>Poster 1 Minute Oral Presentations</p> <p>B Gunes EN3 P McNama EN6 S. O' Connor EN10</p>	<p>Poster 1 Minute Oral Presentation</p> <p>H Liu EM1 R Nag EM3</p>
<p>13:00</p>	<p>Poster 1 Minute Oral Presentations</p> <p>C Suo MC2 M Ihua MC3 A Long MC4 G Devarapu MC6</p>			

Oral Presentations Sessions
Tuesday March 27th 14.00 – 15.30

	Water Quality & Resources 1	Human Health	Sustainable Land Use & Agriculture 1	Environmental Policy & Communication
14.00 – 14.15	<p>Chair: Dr. Liam McCarton DIT</p> <p>Assessing the optimal calibration data frequency for the GOTM lake physical model</p> <p>Tadhg Moore DKIT</p>	<p>Chair: Chris Finnegan, IT Carlow</p> <p>Effect of abiotic factors on selected microalgae strains for omega-3 PUFA production</p> <p>Justine Aussant NUIG</p>	<p>Chair: Dr. Vesna Jaksic</p> <p>Effect of Soil-set™ on entomopathogenic nematodes in the laboratory and on the growth of tomato plants in the greenhouse</p> <p>Anusha Pulavarty IT Carlow</p>	<p>Chair: Leonard O' Driscall</p> <p>Interventions to reduce or avoid the risk of human disease from contaminated private groundwater systems – A global meta-analysis</p> <p>Simon Mooney DIT</p>
14.15 - 14.30	<p>The study of <i>Asterionella</i> dominated diatom bloom in the drinking water source reservoir, Ireland</p> <p>Yunhong shi ??</p>	<p>Hospital effluent and municipal wastewater in Ireland: reservoirs for carbapenemase-producing <i>Enterobacteriaceae</i></p> <p>N Cahill NUIG</p>	<p>Novel Antimicrobial for Treatment of Bovine Mastitis</p> <p>Conor Larkin NUIG</p>	<p>Sustainable Transition Pathways and the Role of Higher Education Institutions</p> <p>William Horan UL</p>
14.30 - 14.45	<p>Realising the True Value of Water in order to Arrive at a Sustainable Future</p> <p>Brendan Walsh CIT</p>	<p>Recreational water consistently contaminated with carbapenemase-producing <i>Enterobacteriaceae</i>, Ireland, 2016-2017</p> <p>B Mahon NUIG</p>	<p>International Association for Plant Biotechnology – Being hosted in Ireland for the first time in August 2018</p> <p>Barbara Doyle UCC</p>	<p>NUI Galway Sustainability Strategy 2017-2020 LEARN LIVE LEAD</p> <p>M. O'Dowd Lohan NUIG</p>
14.45 - 15.00	<p>Source and pathways of microplastics to freshwater and the environmental consequences</p> <p>Linda Heerey UCD</p>	<p>Use of whole genome sequencing to characterise and compare ESBL producing-<i>E. coli</i> isolated from recreational water and sewage</p> <p>B Mahon NUIG</p>	<p>Eucalyptus survival, growth rates and potential impacts on hydrology and nutrient cycles in blanket peat catchments</p> <p>Mark O' Connor TCD</p>	<p>Applied socio-hydro(geo)logy: Model-based survey on health-related flood risk perception amongst groundwater-reliant Irish population</p> <p>Luisa Andrade UCD</p>
15.00 - 15.15	<p>Quantitative assessment of human exposure to antibiotic-resistant bacteria</p> <p>E. O' Flaherty UCD</p>	<p>Novel Antimicrobial for the Control of Dental Plaque</p> <p>Martin Gordon NUIG</p>	<p>National extent of cattle exclusion from watercourses</p> <p>Paul Kilgarriff Teagasc</p>	<p>Systematic approach for rural community contributions to low carbon transitioning</p> <p>Susan Byrne UL</p>

<p>15.15 - 15.30</p>	<p>Assessing the impacts of cattle access to watercourses on water and sediment faecal contamination in farmland streams</p> <p>Patrícia Antunes DKIT</p>	<p>Environmental pollution with antibiotics and resistant microbial species from the agricultural and veterinary sectors</p> <p>Elaine Meade IT Sligo</p>		<p>Development of a web based decision support aid to facilitate sustainable urban communities in Ireland</p> <p>Anne Bennett UL</p>
<p>15:30 – 15.45</p>		<p>Poster 1 Minute Oral Presentations</p> <p>C Allen HH1 M Ryan HH2</p>		<p>To eco-effectiveness (and beyond)? Sustainability reporting in different types of organisation</p> <p>Aideen O' Dochartaigh UCD</p>

Oral Presentations Sessions
Tuesday March 27th 16.15 – 17.15

	Water Quality & Resources 2	Biodiversity & Ecosystems	Sustainable Land Use & Agriculture 2	Nanotechnology & the Environment
16.15 - 16.30	<p>Chair: Kevin Fitzgibbon</p> <p>Sustainable production of protein-rich <i>Lemna minor</i> on aquaculture wastewater - Preliminary experiments in an Irish perch farm</p> <p>Simona Paolacci UCC</p>	<p>Chair: Dorothy Stewart EPA</p> <p>Biodiversity Citizen Science and Irish National Parks</p> <p>Orla Ní Dhúill DCU</p>	<p>Chair: Denise Barnett</p> <p>Identifying critical source areas of soil phosphorus losses for over 500 farms in the Upper Bann catchment using LiDAR DEMs and big data</p> <p>IA Thomas Agri-Food & BioSciences Institute</p>	<p>Chair: Dr. Garrett O' Sullivan</p> <p>Activated charcoal as a capture material for silver nanoparticles in environmental samples</p> <p>E. McGillicuddy NUIG</p>
16.30 - 16.45	<p>Assessing the efficiency of treatment of alkaline bauxite residue leachate using a constructed wetland</p> <p>G. O' Connor UL</p>	<p>Factors driving Syrphid abundance, diversity, and community composition in arable cropping systems</p> <p>Sarah Gabel TCD</p>	<p>Rhizobacterial Volatile Organic Compounds from Irish Potato Soils Display Potential as Fungal Pathogen Growth-Inhibitors and Plant Growth-Promoters</p> <p>Darren Heenan Daly UCC</p>	<p>Estimating aggregation potential of PVP coated silver nanoparticles to surrogate colloid under environmentally relevant water conditions</p> <p>David Shevlin UCD</p>
16.45 - 17.00	<p>Water Reuse in the Context of the Circular Economy in Ireland</p> <p>Eoin Byrne CIT WSSIC</p>	<p>Modelling species use and functional connectivity of Greenway corridors to enhance their biodiversity corridor function</p> <p>Julien Carlier IT Sligo</p>	<p>Effect of silage harvest date and fertilizer rate on modelled N₂O and total greenhouse gas emissions from pasture based suckler beef systems</p> <p>J Herron Teagasc</p>	
17.00 - 17.15	<p>Poster 1 Minute Oral Presentation</p> <p>J O'Connor WQ3 O Akinsanmi WQ5</p>	<p>Poster 1 Minute Oral Presentation</p> <p>T Gorman BE5</p>	<p>Poster 1 Minute Oral Presentation</p> <p>G Smith SL2 C Griffin SL4 T Hochstrasser SL7 M P Logakrishnan SL8 S Ruas SL13</p>	

Oral Presentations Sessions
Wednesday March 28th 10.00 – 11.00

	Waste Management 1	Air Quality & Urban Development 1	Sustainable Infrastructure	Smart Technology for the Environment
10.00 -10.15	<p>Chair: Dr. Niamh Power</p> <p>Waterboards on the way to recycle phosphorus</p> <p>Marie-Edith Ploteau Emschergenossenschaft/Lippeverband, Germany</p>	<p>Chair Address: Dr Micheal Fogarty Katesone Environmental</p> <p>The use of appropriate dispersion modelling techniques and representative meteorological data for the assessment of odour nuisance at the planning stage of developments in Ireland</p>	<p>Chair: Dr. Mary Moloney</p> <p>Bridge management and climate change</p> <p>Igor Kerin UCC</p>	<p>Chair: Kieran Ruane</p> <p>Development of a lab-on-chip electrochemical immunosensor for detection of Polycyclic Aromatic Hydrocarbons (PAH) in environmental water</p> <p>Shifa Felemban Tyndall Institute</p>
10.15-10.30	<p>Biosorbents produced from waste crab carapace, oyster and mussel shell: Potential for phosphate removal and recovery from wastewater</p> <p>Sabolc Pap University of the Isles & Highlands, Scotland</p>	<p>Source Apportionment of Ambient Fine Particulate Matter (PM_{2.5}) in the Greater Dublin Area: A Focus on Emissions from Diesel Vehicles</p> <p>Meabh Gallagher TCD</p>	<p>The Renewable Engine Project: Supporting Research and Innovation Action in the Renewable Energy Sector</p> <p>Ehizae Ehimen IT Sligo</p>	<p>Separation of Organophosphate Nerve Agents by Capillary Electrophoresis and Microchip Capillary Electrophoresis</p> <p>Xi Cao Tyndall Institute</p>
10.30-10.45	<p>Phos4You - <i>Chlamydomonas acidophila</i> as an alternative for Phosphorous recovery from wastewater</p> <p>Lena-Dorothea Reichelt Glasgow Caledonian University</p>	<p>AmmoniaN2K: Assessing the impact of ammonia emissions from poultry production in Ireland</p> <p>David Kelleghan UCD</p>	<p>Reframing Nature-based Solutions</p> <p>Cian White TCD</p>	<p>A promising process to increase P recovery as mineral fertilizer from sewage sludge by bio-acidification</p> <p>M Saoudi Irstea, France</p>
10.45 -11.00	<p>Valorisation strategies for wastewater treatment sludge</p> <p>L. Fraikin University of Liege</p>	<p>Black Carbon in Ireland; Have we progressed from "the Dark Ages"?</p>	<p>Identification and Mapping of Water-related Infrastructure in Ireland</p>	<p>Associations between mutations responsible for Citrullinemia, Jersey Haplotype 1, Congenital Muscular</p>

	102	Paul Buckley UCC	Eoin Byrne CIT WSSIC	Dystonia 1 and udder health in dairy cattle David Flores AIT
11.00			Poster 1 Minute Oral Presentation C Farrell SI2	Poster 1 Minute Oral Presentation A Lace ST1 M Damaskou ST3

Oral Presentations Sessions
Wednesday March 28th 11.45 – 12.45

	Waste Management 2	Air Quality & Urban Development 2	The Human Built Environment	Climate Change
11.45 -12.00	<p>Chair: Donal O' Dwyer</p> <p>Cost assessment of different routes for phosphorus recovery from wastewater using data from pilot and production plants</p> <p>A. Näförp FNHW Switzerland</p>	<p>Chair: Dr Micheal Fogarty Katesone Environmental</p> <p>Assessing the impact of emissions from diesel vehicles on air quality by using micro-simulation studies</p> <p>Bidroha Basu TCD</p>	<p>Chair: Brian O' Rourke</p> <p>Sponsored by the Cement Manufacturing Industry (CMI)</p> <p>CMI Video Presentations</p>	<p>Chair Address: Dr Conor Sweeney UCD Earth Institute</p> <p>Developing a Collective Vision for Community Led Energy Transition</p> <p>Rosemary Byrne UL</p>
12.00-12.15	<p>Biomethane potential assays to maximise biogas productivity by co-digestion of Grass silage (GS) and Chicken litter (CL)</p> <p>Navodita Bhatnagar IT Carlow</p>	<p>AmmoniaN2K: Monitoring ambient ammonia concentrations on Natura 2000 sites in Ireland</p> <p>Padraig Keating UCD</p>	<p>Institutional properties in Cork county borough</p> <p>Garrett O' Sullivan CIT</p>	<p>Social Acceptance of Renewable Energy: Exploring a Citizen Centric Paradigm</p> <p>Paul O' Brien CIT</p>
12.15-12.30	<p>Food Waste in the Irish Commercial Food Industry</p> <p>Sarah Broderick CIT</p>	<p>Poster 1 Minute Oral Presentation</p> <p>M Fennelly AQ1 L Hung AQ2</p>	<p>A comparative analysis of simulated and measured overheating patterns in an NZEB dwelling using Passivhaus standard protocols</p> <p>Evan Finnegan CIT</p>	<p>The potential and limitations of negative emissions technologies at a small nation scale</p> <p>Alwynne McGeever TCD</p>
12.30 -12.45	<p>Poster 1 Minute Oral Presentation</p> <p>A Fricke WM1 E Walsh WM2</p>		<p>Social Sustainability in the management of Irish construction projects</p> <p>Kevin Coleman CIT</p>	<p>Estimating National Carbon Quotas and Modelling Compatible Emission Pathways at a Small Nation Scale</p> <p>Paul Price TCD</p>
12.45-13.00			<p>Catering for the human (user) experience within the built environment in</p>	<p>ECCO Creating new Energy Community</p>

			<p>the age of information technology</p> <p>Aoife Hayes Arup/CIT</p>	<p>COperations – An overview</p> <p>Gerard Kelly CIT</p>
13.00-13.15			<p>Co-Design for Energy Efficient Buildings</p> <p>Rosmarie MacSweeney UCC</p>	