

### Wednesday, 16 June **General** : Opening 10am **ENVIRON 2021 Opening Ceremony** Stage - Main Campus Chaired by: Dr. Jean O'Dwyer » Mr Liam McCarton Workshop 11am Virtual Coffee & Icebreaker Session Stage - Main Campus Oral 11:30am Energy 1 Stage - The Boole Stage The role of circular economy energy and environmental systems in advanced fuel production » Prof. Jerry Murphy Challenges towards integration of bubble column and photobioreactor for a continuous photosynthetic biogas upgrading » Mr. Archishman Bose, Dr. Richard O'Shea, Dr. Richen Lin, Prof. Jerry Murphy Integrating sensitivity and uncertainty analysis in the development of Marginal Abatement Cost Curves (MACC) for anaerobic digestion systems in Ireland » Mr. lorge Diaz Huerta, Dr. Richard O'Shea, Dr. David Wall, Prof. Jerry Murphy

A low energy demand pathway for Ireland

» <u>Ms. Ankita Gaur</u>, Dr. Hannah Daly

#### A perspective on advanced fuels production by integrating biological, thermo-chemical and power to gas technologies in a circular cascading bio-based system

» <u>Mr. Benteng Wu</u>, Dr. Richen Lin, Dr. Richard O'Shea, Dr. Chen Deng, Prof. Jerry Murphy

### Coupling decentralised biomass with large energy users and optimsing the operational logistics of on-farm AD in Ireland

» <u>Mr. Dónal Ó Céileachair</u>

#### 11:30am Oral

**Environment and Health 1** *Stage - The Butler Stage* Chaired by: Dr. Paul Hynds

## Asthma prevalence and COVID-19 severity based on geographic location in the Republic of Ireland

» <u>Dr. Martin Boudou</u>, Dr. Jean O'Dwyer, Dr. Coilin OhAiseadha, Dr. Paul Hynds

### Engaging with Nature during the Covid-19 Pandemic: A European Perspective based on a Pan-European survey approach

» <u>Ms. Cassandra Murphy</u>, Dr. Tadhg MacIntyre, Dr. Mario Balzan, Dr. Elaine Gallagher, Dr. Aoife Donnelly

### Co-designing solutions to protect our recreational water quality: The PIER Perspective

» <u>Dr. Sinead Duane</u>, Ms. Maeve Louise Farrell, Dr. Christine Domegan, Dr. Liam Burke, Prof. Dearbháile Morris

### Development of lab-on-a-chip detection system for environmental monitoring of Polychlorinated Biphenyls (PCBs) in soil.

» <u>Ms. Samia Alsefri</u>, Dr. Eric Moore



#### Continued from Wednesday, 16 June

### The influence of various starches on the physico-chemical properties and water solubility of thermoset bioplastics

» <u>Ms. Jade Stanley</u>, Dr. Adriana Cunha Neves, Dr. David Culliton, Dr. Jonay Sancho

11:30am Oral

#### **Biodiversity & Ecosystems 1**

Stage - The Kane Stage

#### Management of the invasive Nuttall's pondweed (Elodea nuttallii) using jute matting in Lough Arrow, a Natura 2000 designated lake in Western Ireland

» <u>Mr. Darren Garland</u>, Dr. William Earle, Dr. Joe Caffrey, Dr. Nicolas Touzet, Dr. Sara Meehan, Prof. Frances Lucy

### Rodenticide resistance in rat and mouse populations in Ireland

» <u>Mr. Anthony Murphy</u>

### Lake-dwelling freshwater pearl mussels (Margaritifera margaritifera) - A unique Irish phenomenon?

» Mr. Kieran Cowhig, Dr. Timothy Sullivan, Dr. Simon Harrison

Impact of the landscape on pollinator communities in Europe » <u>Ms. Irene Bottero</u>

### What, where, and how much: the status of invasive marine macroalgae in Ireland

» Dr. Marianela Zanolla, Prof. Dagmar Stengel

#### 11:30am Oral

Marine and Coastal Stage - The Brookfield Stage

# Keynote: SeaRover Evolution – Lifecycle of a large scale offshore reef habitat mapping project

» Mr. Tommy Furey

### Redefining wasted nutrients as a resource in coastal systems with aquaculture using national monitoring data

» <u>Ms. Jennifer Murphy</u>, Prof. Carlos Rocha

### Establishing a seasonal pCO2 baseline in Irish coastal waters using underway pCO2 data from 2020.

» Ms. Aedín McAleer, Dr. Rachel Cave, Ms. Sheena Fennell

### Natural variation in pH in contrasting coastal sites on the west coast of Ireland – implications for adaption and mitigation

» <u>Dr. Rachel Cave</u>, Ms. Aedín McAleer, Ms. Sheena Fennell, Prof. Dagmar Stengel, Dr. Janina Buescher

#### Characterization, replication and testing of designed microtextures, inspired by the Brill fish, Scophthalmus rhombus, for the development of bioinspired antifouling materials.

» Ms. Chloe Richards, Mr. Adrián Delgado Ollero, Prof. Fiona Regan

# Managing blue growth: A qualitative case study on the mechanisms that influence the sustainable development of marine sectors in coastal regions

» Mrs. Jessica Giannoumis, Dr. Lawrence Dooley, Dr. Valerie Cummins

#### 2pm Oral

#### **Circular Economy & Sustainable Waste Management** *Stage - The Boole Stage*

### Keynote Speaker: The circular economy – what it means and its challenges: An Irish perspective

» Prof. Michael Morris

#### Introducing Circular Thinking into a Small to Medium Sized Construction Company in Ireland

» <u>Mr. Keith Burke</u>

### A Literature Analysis of the Barriers preventing Design for Deconstruction in the Construction Industry in Ireland.

» <u>Mr. Feilim O Dowd</u>, Dr. Jan Gottsche



Continued from Wednesday, 16 June Chemical Recycling/Upcycling of Waste Polyester Fabrics		2pm	Oral Climate Change Stage - The Kane Stage
	<ul> <li>» <u>Dr. Karzan Zangana</u></li> <li>Development of real-time control strategies for the optimisation of nitrogen and phosphorus removal in Intermittently Aerated Sequencing Batch Reactor technology</li> <li>» <u>Mr. Peter Leonard</u>, Dr. Sean Mulligan, Dr. Eoghan Clifford, Prof. Xinmin Zhan</li> </ul>		Integrating climate change adaptation and disaster risk in the Irish emergency planning system » <u>Mr. Peter Medway</u> , Dr. Martin Le Tissier, Dr. Dug Cubie Going back to the drawing board: The revision of Ireland's climate law » <u>Dr. Diarmuid Torney</u> , Ms. Sadhbh O'Neill
2pm	Oral Environmental Technology Stage - The Butler Stage		Assessing the impact of exceptional climatic conditions on the net ecosystem carbon balance at Clara Bog » <u>Mrs. Ruchita Ingle</u> , Dr. Shane Regan, Dr. Matthew Saunders
	Simultaneous determination of pesticides from soils: A comparison between QuEChERS extraction and Dutch Mini-Luke extraction methods » <u>Mr. Mathavan Vickneswaran</u> , Dr. James Carolan, Dr. Blánaid White		Daylength-dependent regulation of the TOR signalling pathway modulates plant growth responses » <u>Ms. Ferga Hamilton</u> , Ms. Leah Erwin, Dr. Carolina Monte Bello, Dr. Camila Caldana, Dr. Rossana Henriques
	Moving From the Lab into the Field: A CRISPR-Cas Lateral Flow Approach to Environmental DNA Monitoring. » <u>Ms. Molly Williams</u> , Prof. Fiona Regan, Prof. Anne Parle-McDermott		How can we understand the diffusion of sustainability in an ongoing regional transition project? » <u>Mr. evan boyle</u>
	Development of Multi-Parameter system sensing For Environmental Monitoring » <u>Ms. Ibtihaj Albalawi</u> , Dr. Eric Moore Determination of NSAID drugs by Capillary electrophoresis with capacitively coupled contactless conductivity detection in wastewater » <u>Mrs. Hanan Alatawi</u> , Dr. Anna Hogan, Dr. Eric Moore		<b>Promoting Sustainability in Organisations</b> » <u>Mrs. Raquel de Castro Rodrigues Lima</u> , Dr. Gary Goggins, Dr. Marcus Martin Keane, Dr. Eoghan Clifford
		3:30pm	General Virtual Coffee & Icebreaker Session Stage - Main Campus
	<b>Electrical Detection of Atmospheric Radicals</b> » Prof. Justin Holmes, <u>Ms. Vaishali Vardhan</u> , Dr. Subhajit Biswas, Dr. Stig Hellebust, Prof. John Wenger	4pm	Poster Poster Session 1 Stage - Main Campus



#### Continued from Wednesday, 16 June

Determining the effect of bleaching in corals reefs on fish biodiversity, using secondary data

» Ms. Fiona Carey

The I-SECURE project: screening emerging contaminants in the Irish marine environment

» Dr. Belinda Huerta Buitrago, Dr. Brendan McHugh, Prof. Fiona Regan

### What is the energy balance of advanced transport fuels produced through power-to-fuel integration with biogas facilities?

» <u>Mr. Nathan Gray</u>, Dr. Richard O'Shea, Dr. Beatrice Smyth, Prof. Piet Lens, Prof. Jerry Murphy

### An assessment of the environmental impact of renewable energy systems in developed countries (case study Ireland)

» Mr. Oladipupo Faleye

#### Biofouling studies on marine rated materials and coatings

» <u>Mr. Adrián Delgado Ollero</u>, Ms. Chloe Richards, Ms. Molly Williams, Mr. Sean Power, Dr. Louis Free, Dr. Ciprian Briciu-Burgina, Prof. Fiona Regan

### Integration of Biomethane into the natural gas network in Ireland » <u>Ms. Utkarsha Chavan</u>

Bioindicators of air pollution impacts on plant biodiversity in Ireland

» <u>Ms. Lorna Marcham</u>, Dr. Thomas Cummins

Polyester-degrading enzyme activities in marine bacteria, with potential utility in the hydrolysis of polyethylene terephthalate plastic.

» <u>Ms. Clodagh Carr</u>, Dr. David Clarke, Prof. Alan DOBSON

### Co-benefits for biodiversity and hydrological integrity from a results-based agri-environment scheme, the Pearl Mussel Project

» <u>Ms. poppy.overy@mail.itsligo.ie Overy</u>, Dr. Dolores Byrne, Dr. James Moran, Prof. Frances Lucy, Dr. Patrick Crushell

### Water-Energy-Nutritional Nexus: improving environmental assessment of the seafood sector in the Atlantic area

» Dr. Israel Ruiz-Salmón, <u>Dr. Jara Laso</u>, Dr. Rubén Aldaco, Dr. María Margallo

### Life cycle assessment as a tool to boost eco-innovation and circular economy strategies in the Atlantic Area

» <u>Dr. Jara Laso</u>, Dr. Israel Ruiz-Salmón, Dr. María Margallo, Dr. Rubén Aldaco

### Assessment of the potential of Brewer's spent grain as a valuable source of proteins

» <u>Ms. jiao zhang</u>

Public STEAM: Inventing Transdisciplinary tools and practices for 'Education for Sustainability' in Adult and Community Education Contexts

» Mx. Giselle Harvey

### A critical examination of the practice and sustainability potential of foraging in Ireland

» Ms. Jean Williams

#### Impacts of Extreme Weather Events on Mental Health – Preliminary Results of a Global 'Scoping' Literature Review

» <u>Dr. Carlos Chique</u>, Dr. Paul Hynds, Dr. Marguerite Nyhan, Dr. Jean O'Dwyer

## An analysis of packaging waste generation and measurement » Dr. John Gallagher



Continued fro	m Wednesday, 16 June Keynote Public Keynote Session with Kate Raworth (author of Doughnut Economics) & Roisin Markham Stage - Main Campus		Investigating effects of Alltech® soil health products on plant defence mechanisms against root-knot nematode infestation » <u>Mrs. Anusha Pulavarty</u> , Dr. Karina Horgan, Dr. Thomais Kakouli- Duarte Stakeholder Dimensions of Ireland's Eye: Participation in Conservation Resource Management of the Natura 2000 site » <u>Ms. rebecca flanagan</u>
Thursda	a <b>y,</b> 17 June		Farmers' attitudes towards agricultural plastics – management and disposal, knowledge and perceptions of the environmental impacts. » <u>Ms. Clodagh King</u> , Dr. Caroline Gilleran Stephens, Dr. Joseph Lynch,
10am	Panel Special Guest Q&A Panel Discussion "Healthy Planet, Healthy Communities" Stage - Main Campus Chaired by: Paul Bolger		<ul> <li>Mis. cloudginteng, Dr. curonne dineran stephens, Dr. Joseph Lynen, Dr. Siobhán Jordan</li> <li>Observing and Intervening</li> <li>» <u>Dr. Dermot Foley</u></li> </ul>
		12pm	Oral Environment and Health 2
11:30am	Workshop Virtual Coffee & Icebreaker Session Stage - Main Campus		Stage - The Butler Stage "Trees as teachers: a living tree collection as a teaching, research and engagement tool" » Dr. Eoin Lettice, <u>Ms. Emma Hutchinson</u> , Dr. Barbara Doyle Prestwich
12pm	Oral Environmental Management 1 Stage - The Boole Stage		Nature, Networks and Bridging the Perception Gap between Science and Society: An Action Research Study of the Primary Attention Groups of Urban Citizens » <u>Mr. David Buckley</u> , Dr. Aoife Donnelly, Dr. Lorraine D'Arcy
	Multi-Actor Eco-Sustainability HUBs for supporting community transitioning to low carbon economy and for accelerating Green Innovation – Quo Vadis? » <u>Prof. Neil Rowan</u> , Dr. Sinead Mellett, Dr. Ronan Cooney, Dr. Eoghan Clifford		Benchmarking urban greenspace nationally and subsequently determining the associations between urban greenspace, health and socio-economic variables. » <u>Ms. Anna O'Regan</u> , Dr. Marguerite Nyhan



Continued from <b>Thursday, 17 June</b>			<b>Planning healthy communities for a healthy planet</b> » <u>Mr. Connor McGookin</u> , Prof. Brian O'Gallachóir, Prof. Edmond Byrne
	A Point Prevalence Study of faecal carriage of extended spectrum β-lactamase producing and carbapenem resistant Enterobacterales in Irish water users. » <u>Ms. Maeve Louise Farrell</u> , Dr. Liam Burke, Dr. Louise O' Connor, Dr. Sinead Duane, Ms. Brigid Hooban, Ms. Alexandra Chueiri, Dr. Aoife	12pm	Oral Sustainable Land Use, Agriculture and Food 1 Stage - The Brookfield Stage
	Joyce, Prof. Dearbháile Morris Detection of carbapenemase producing Enterobacterales in sewage and aquatic environments in the Republic of Ireland, 2019-2020 » <u>Ms. Brigid Hooban</u> , Dr. Kelly Fitzhenry, Dr. Aoife Joyce, Dr. Louise O' Connor, Ms. Alexandra Chueiri, Ms. Maeve Louise Farrell, Prof. Martin Cormican, Prof. Dearbháile Morris		Volatile organic compounds from Bacillus, Serratia and Pseudomonas promote growth and alter the transcriptional landscape of Solanum tuberosum in a passively-ventilated growth system. » <u>Mr. Darren Heenan-Daly</u> , Dr. Simone Coughlan, Dr. Eileen Dillane, Dr. Barbara Doyle Prestwich
12pm	Oral Energy 2 Stage - The Kane Stage		Towards a Transformative Food Crop System in Ireland – addressing the Sustainable Development Goals » <u>Dr. Barbara Doyle Prestwich</u> , Dr. chidananda Nagamangala kanchiswamy
	Towards smart energy cities – empowering residential building energy retrofit: An Irish context » <u>Dr. Yonghua Zhu</u> , Dr. Angela Wright		The impact of sward composition and management on the productivity of herbage » <u>Ms. Shona Baker</u> , Dr. Bridget Lynch, Ms. Fionnuala Godwin, Mr. Eugene Brennan, Dr. Alan Kelly, Prof. Tommy Boland, Dr. Helen Sheridan
	<b>Cascading bio-electrochemical systems for biogas upgrading to biomethane in a circular bioeconomy</b> » <u>Ms. Xue Ning</u> , Dr. Richen Lin, Dr. Richard O'Shea, Dr. David Wall, Prof. Jerry Murphy		<b>Carbon sequestration of a native woodland on a cutaway peatland site in Ireland</b> » <u>Ms. Hannah Mealy</u> , Dr. Paul Leahy, Prof. Fiona Cawkwell
	<b>What can more walking and cycling achieve for Ireland's climate targets?</b> » <u>Ms. Vera O'Riordan</u> , Dr. Tomás MacUidhir, Dr. Hannah Daly, Dr. Fionn Rogan		<b>Primary production food waste and losses in Ireland</b> » <u>Dr. Jennifer Attard</u> , Dr. Tracey O'Connor, Dr. Rosanna Kleemann
	<b>Public Participation within Project Authorisation for Renewable Energy Infrastructure</b> » <u>Ms. Alison Hardiman</u>		A carbon budgeting tool to compare Ireland's policy options for agriculture, land use and forestry (AFOLU) in support of effective societal climate action » <u>Mr. Paul R Price</u>



Continued from	m Thursday, 17 June
1:30pm	General Environmental Sciences Association of Ireland AGM Stage - Main Campus
2pm	Oral Air Quality & Urban Development Stage - The Boole Stage
	<b>An Examination of the Non-Traded Residential Solid Fuel Market</b> » <u>Dr. John Eakins</u> , Dr. Gordon Sirr, Dr. Bernadette Power, Dr. Niall Dunphy
	Characterisation and atmospheric reactions of Volatile Organic Compounds emitted by Sitka Spruce » <u>Ms. Hayley Furnell</u> , Dr. Julien Kammer, Dr. Astrid Wingler, Dr. Kieran Kilcawley, Mr. David Mannion, Dr. Dean Venables, Prof. John Wenger
	Online Characterisation of Organic Compounds in Wintertime Air Pollution in Cork » <u>Mr. Niall O'Sullivan</u> , Dr. Julien Kammer, Dr. Elena Gomez Alvarez, Dr. Stig Hellebust, Prof. John Wenger
	Assessing the value of urban trees: lessons from the South Parish » Ms. Maria Young, Ms. Megan Pigott, Ms. Grace Wall, <u>Dr. Eoin Lettice</u>
2pm	Oral Environmental Policy & Communication Stage - The Butler Stage
	<b>Can community engagement in wind energy help to achieve a</b> <b>social license to operate: results from a national survey.</b> » <u>Dr. Ellen O'Connor</u> , Dr. Bernadette Power, Dr. Geraldine Ryan, Dr. John Eakins, Ms. Julia LeMaitre, Dr. Gordon Sirr, Mr. Andrew Fox

The science of the precautionary principle in environmental law » <u>Ms. Rhoda Jennings</u>

### Integration of ecosystem services and natural capital within the Irish policy landscape.

» Mr. Andrew Neill, Prof. Cathal O'Donoghue, Prof. Jane Stout

#### Climate empowerment and participation in Ireland: lessons learned from the National Dialogue on Climate Action

» <u>Dr. Yairen Jerez Columbié</u>, Dr. Barry O'Dwyer, Mr. Padraig Hogan, Dr. Marguerite Nyhan

## A Digital One Stop Shop to Engage Citizens in Sustainable Development

» Ms. Annie Duffy, Dr. Ger Kelly, Dr. Martin Hill

#### 2pm Oral

**Environmental Engineering** Stage - The Kane Stage

### Urea-derived Graphitic Carbon Nitride (u-g-C3N4) Films for Photocatalytic Water Remediation

» <u>Mr. Amit Kumar Singhal</u>

### An Economic Analysis Tool for Assessing Benefits from Dredging Projects

» <u>Mr. Brano Batel</u>, Dr. Joe Harrington, Mr. Ross O'Sullivan, Mr. Alasdair Hamilton

### Phosphorous recovery from Irish municipal wastewater effluent using locally sourced recycled calcium products

 $\times$  <u>Mr. Ciaran O'Donnell</u>, Dr. Joe Harrington, Ms. Denise Barnett, Dr. Niamh Power

### Experimental and numerical investigation on fire performance of cross-laminated timber panels

» <u>Mr. Muhammad Yasir</u>, Mr. Andrew Macilwraith, Mr. Kieran Ruane, Mr. Des Walsh



### Continued from Thursday, 17 June Analysis of factors influencing road transport COD emissions – A case study of Dublin and Stockholm. » Mr. David Demilade Onireti Workshop 3:30pm Virtual Coffee & Icebreaker Session Stage - Main Campus 4pm Poster Poster Session 2 Stage - Main Campus Investigating potential pyrethroid tolerance in Rhopalosiphum padi, an important BYDV vector in arable crop production » Ms. Alison George, Dr. John Carroll, Dr. Louise McNamara, Dr. Michael Gaffney, Dr. Helena Meally The presence of disinfectants in the environment arising from agriculture and the concurrence of antimicrobial resistance: A systematic review » Ms. Meabh Dowler Extending the range of forest yield models to better quality soils » Prof. Maarten Nieuwenhuis, Mr. Charles Harper, Mr. Luke Dowd Influence of recycled dairy processing sludge amendment on soil phosphorus availability and dynamics. » Ms. Olha Khomenko, Prof. J.J. Leahy, Prof. Owen Fenton, Dr. Karen Daly Comparative Analysis of the Environmental Impacts of Varying Dietary Patterns across High-income Countries from a Farm-to-Fork Lifecycle Perspective » Mr. Daniel Burke, Dr. Paul Hynds, Dr. Anushree Privadarshini

#### Biochar as a plant growth substrate amendment

» Mr. Eric Hynes, Dr. Barbara Doyle Prestwich, Dr. Eoin Lettice

#### Impact of soil compaction on plant growth and root architecture

» Ms. Zoe Kampff, Dr. Barbara Doyle Prestwich, Dr. Eoin Lettice

# Ash dieback disease in the island of Ireland: Comparison of treatments to reduce the spread of the pathogen Hymenoscyphus fraxineus on ash tree

» <u>Mrs. Erika Soldi</u>, Dr. Anna Tiley, Mr. Ciaran Duggan, Dr. Brian Tobin, Dr. Rodrigo Olave, Dr. Richard O'Hanlon, Prof. Trevor Roland Hodkinson

### LIFOR - Improving the forecast of forest productivity in Ireland using LiDAR data.

» <u>Mr. Charles Harper</u>, Prof. Maarten Nieuwenhuis, Dr. Daniel McInerney, Mr. Brian Crowley

### MARLSITES Project: Forest growth and root development on calcareous soils

» <u>Ms. Jill Pitcher Farrell</u>, Mr. Nicholas Wragg, Ms. Blair Ruffing, Dr. Saoirse Tracy, Mr. Charles Harper, Dr. Thomas Cummins, Prof. Maarten Nieuwenhuis, Dr. Ken Byrne

#### 7pm General

Social Night: Environmental Quiz Stage - Main Campus

### Friday, 18 June

9am

#### Workshop

**Workshop 1:** Enriching Research and Curricula Through The U.N. Sustainable Development Goals (SDGs) Stage - The Boole Stage



Continued fro	m Friday, 18 June	
9am	Workshop Workshop 2: Collaborating For A More Sustainable Society – Enabling team science and inter/transdisciplinary research for sustainability Stage - The Butler Stage	
11am	Workshop Virtual Coffee & Icebreaker Session Stage - Main Campus	
11:30am	Oral Water Quality and Resources 1 Stage - The Boole Stage Chaired by: Dr. Timothy Sullivan	11:30am
	<b>Assessment of microplastics in Irish freshwater river sediment</b> » <u>Mrs. Loriane Murphy</u> , Dr. Thomais Kakouli-Duarte, Dr. Kieran Germaine, Dr. John Cleary	
	Investigating the association between fluorescent constituents of dissolved organic matter and disinfection byproduct formation in drinking water sources » <u>Dr. Elena Fernandez Pascual</u> , Dr. Jean O'Dwyer, Dr. Connie O'Driscoll, Dr. John Weatherill	

#### Method development and monitoring of Watch List chemicals in Irish surface waters over a three year period

» Ms. Imogen Hands, Ms. Helena Rapp Wright, Mr. Dylan O'Flynn, Mr. Mathavan Vickneswaran, Mr. Matthew Jacobs, Prof. Leon Barron, Dr. Blánaid White, Prof. Fiona Regan

#### Evidence of a 'critical zone' of uptake and transformation of nitrogen, carbon and phosphorus in a contaminated headwater stream

» Dr. Simon Harrison, Dr. John Weatherill

#### Effect-based monitoring approaches for assessment of pharmaceutical occurrence in surface water in Ireland

» Dr. Azeez Yusuf, Mr. Dylan O'Flynn, Dr. Blannaid White, Dr. Linda Holland, Prof. Anne Parle-McDermott, Dr. jenny Lawler, Dr. Thomas McLoughlin, Dr. Denise Harold, Prof. Fiona Regan

#### What are Irish Stakeholders' Opinions of Phosphorous Recovery from Rural Wastewater in Ireland?

» Dr. Aoife Egan, Dr. Joe Harrington, Ms. Denise Barnett, Dr. Niamh Power

#### Oral

#### **Environmental Management 2**

Stage - The Butler Stage

#### **Community Engagement with environmentally sustainable** planning: insights on stakeholder perceptions of implementing geodesign

» Dr. Brenda McNally, Dr. Chiara Cocco

#### **Climate Change in the Irish Mind**

» Mr. Padraig Hogan, Dr. Marguerite Nyhan, Dr. Barry O'Dwyer, Dr. Yairen Jerez Columbié

#### Evaluation of behaviour in early stages of training as an indicator of the success of guide and assistance dogs

» Ms. Jennifer Kenny, Ms. Marinara Marcato, Ms. Susan Turtle, Ms. Allyce Keogh, Dr. Paul Galvin, Prof. Ruth Ramsay



#### Continued from Friday, 18 June

Humanities for the Anthropocene: Report from a new network » Prof. Caitriona Ni Dhuill

Mitigation of private groundwater contamination risk in the face of extreme weather: a decision-tree analysis of maintenance decisions among Irish well users

» <u>Mr. Simon Mooney</u>, Dr. Jean O'Dwyer, Dr. Paul Hynds

#### 11:30am Oral

**Biodiversity and Ecosystems 2** Stage - The Kane Stage

Effect of environmental factors on size and fecundity of field populations of Impatiens glandulifera

» Mr. Calum Sweeney, Dr. Astrid Wingler

#### Marginal abatement costs of farm-based biodiversity enhancement measures using a scorecard approach

» <u>Dr. Andreas Tsakiridis</u>, Prof. Cathal O'Donoghue, Dr. Mary Ryan, Dr. Daire Ó hUallacháin

A genomic assessment of the genetic integrity of Irish Bombus terrestris audax

» <u>Ms. Sarah Larragy</u>, Dr. Joe Colgan, Dr. James Carolan, Prof. Jane Stout

#### Captive-bred Atlantic salmon released into the wild have fewer offspring than wild-bred fish and decrease population productivity

» <u>Mr. Ronan O'Sullivan</u>, Dr. Tutku Aykanat, Dr. Susan Johnston, Mr. Ger Rogan, Dr. Russell Poole, Prof. Paulo A. Prodöhl, Dr. Elvira de Eyto, Prof. Craig R. Primmer, Prof. Philip McGinnity, Dr. Thomas E. Reed

#### An Ecosystem Services Approach Applied to Sediment Management

» <u>Mr. Ross O'Sullivan</u>, Dr. Joe Harrington, Mr. Brano Batel

### Pesticide residues in pollen and nectar of crops and wild plants from agricultural fields in Ireland.

» Ms. Elena Zioga, Dr. Blánaid White, Prof. Jane Stout

#### 11:30am Oral

**Featured Intereg Session: Neptunus Project Sustainable Seafood** *Stage - The Brookfield Stage* Chaired by: Dr. Sinead Mellett

# Multi-Actor Eco-Sustainability HUBs for supporting community transitioning to low carbon economy and for accelerating Green Innovation – Quo Vadis?

» <u>Prof. Neil Rowan</u>, Dr. Sinead Mellett, Dr. Ronan Cooney, Dr. Eoghan Clifford

### NEPTUNUS: Closing the gap in life cycle assessment of Irish seafood

» Dr. Ronan Cooney, Dr. Eoghan Clifford

### Water-Energy-Nutritional Nexus: improving environmental assessment of the seafood sector in the Atlantic area

» Dr. Israel Ruiz-Salmón, <u>Dr. Jara Laso</u>, Dr. Rubén Aldaco, Dr. María Margallo

### Packaging environmental impact on seafood supply chains – A life cycle assessment review

» Dr. Cheila Almeida

#### 2pm Oral

**Environmental Geoscience** *Stage - The Boole Stage* Chaired by: Dr. Jean O'Dwyer

Keynote: The role of Environmental Geoscience in solving global challenges

» <u>Dr. Jean O'Dwyer</u>



#### Continued from Friday, 18 June

Impact of the 2018 European drought on microbial groundwater quality in private domestic wells: a case study from a temperate maritime climate.

» <u>Dr. Jean O'Dwyer</u>, Dr. Carlos Chique, Dr. John Weatherill, Dr. Paul Hynds

### A new tool to resolve heavy metal and sulphur signatures from ombrotrophic peat bogs

» Ms. Lucy Blennerhassett, Dr. Emma Tomlinson

### Tackling Sustainable Development Goal 13 via carbonate precipitation

» Ms. Niamh Faulkner, Dr. Juan Diego Rodríguez-Blanco

### Systematic review of metal contamination in European urban soils: progress and future directions

» <u>Ms. Hannah Binner</u>, Dr. Timothy Sullivan, Prof. Maria E. McNamara

### Spatiotemporal assessment of microbiological contamination in Irish groundwater environments

» <u>Ms. Luisa Andrade</u>, Dr. Paul Hynds, Dr. Martin Boudou, Dr. John Weatherill, Dr. Jean O'Dwyer

#### 2pm

Water Quality and Resources 2 Stage - The Butler Stage

Trace Analysis of Haloacetic Acids in Environmental Water Samples using High Pressure Ion Chromatography-Mass Spectrometry

» <u>Ms. Janine Boertjes</u>, Dr. Elizabeth Gilchrist

#### **Uncharted Waters: UV Filters in the Freshwater Environment**

» Ms. Irene O'Callaghan, Dr. Timothy Sullivan

## Application of a centrifugal microfluidic sensing device to enable near real-time monitoring of phosphate in catchments

» <u>Ms. Joyce OGrady</u>, Dr. Nigel Kent, Prof. Fiona Regan

A Comparative Risk Assessment Framework For Antibiotic Residues In Surface Waters Originating From Human and Animal Administration.

» Mr. Ciaran Monahan, Prof. Enda Cummins

# The application of Natural Water Retention Measures (NWRM) to attenuate flood and water quality issues in agricultural catchments

» <u>Mr. Darragh Murphy</u>, Dr. Simon Harrison, Dr. John Weatherill

Metagenomic and Physico-Chemical Characterisation of a Novel Microbial Biofilm in a Deep Ground Water Well in Ireland » Mr. Rajesh Mali

#### 2pm Oral

Sustainable Land Use, Agriculture and Food 2 Stage - The Kane Stage

### The effect of sowing method on the establishment of swards with increasing species diversity.

» <u>Ms. Jane Shackleton</u>, Dr. Cornelia Grace, Dr. Jean Kennedy, Dr. Bridget Lynch, Prof. Tommy Boland, Prof. Olaf Schmidt, Prof. Ellis Hoffland, Dr. Helen Sheridan

### Greenhouse gas budget of a grassland on drained peat soil extensively managed for silage production in the Irish Midlands

» Ms. Marine Valmier, Dr. Matthew Saunders, Prof. Gary Lanigan

### Low N2O emission associated with deposition of sheep excreta in Irish grasslands

» <u>Ms. Aude Mancia</u>, Prof. Dave Chadwick, Prof. Sinéad Waters, Dr. Dominika Krol

Oral



### Continued from Friday, 18 June Analysis of the Soil Microbiome in Response to the Application of **Recycling Produced Fertilisers (RDFs) under Irish Grassland** Conditions » Ms. Demi Ryan, Dr. Kieran Germaine, Dr. David Dowling, Dr. Patrick Forrestal **Recycling-derived Phosphorus Fertilizers as a Sustainable** Alternative to Triple Superphosphate Fertilizers in Irish Grasslands » Ms. Lea Deinert, Dr. Israel Ikoyi, Dr. Achim Schmalenberger What are the Desired Properties of Recycling-Derived Fertilisers from an End-User Perspective? » Dr. Aoife Egan, Dr. Niamh Power 3:30pm Workshop Virtual Coffee & Icebreaker Session Stage - Main Campus Poster 4pm **Poster Session 3** Stage - Main Campus Using Reconstructed Soil Microbiomes for Improving Soil Bioremediation » Mr. Robert Conlon, Dr. Kieran Germaine, Dr. David Dowling Method development for the determination of emerging pharmaceutical contaminants in surface water environments. » <u>Mr. Dylan O'Flynn</u>, Dr. Blánaid White, Dr. jenny Lawler, Dr. Azeez Yusuf, Ms. Imogen Hands, Dr. Denise Harold, Dr. Linda Holland, Prof. Anne Parle-McDermott, Dr. Thomas McCloughlin, Prof. Fiona Regan

#### A Citizen Science Approach to Microplastics Sampling

» <u>Ms. Angelique Erasmus</u>, Dr. John Cleary, Dr. Adriana Cunha Neves, Dr. Niamh McCrea

## Challenges in Characterising the Carbonate System in Coastal Waters

» Mr. Daniel Kerr, Dr. Brian Kelleher, Dr. Anthony Grey

#### Water Quality, Climate Change and Thermal Stratification in Irish Lakes

» Ms. Rebecca Cole, Dr. Leo Creedon

## A spectroscopic sensor for accurate, real time monitoring of personal exposure to nitrogen dioxide

» Ms. Eibhlin Halpin

#### CURRENT CONCENTRATIONS AND LONG-TERM TRENDS OF TROPOSPHERIC OZONE IN IRELAND, AND THE POTENTIAL FOR DAMAGE TO VEGETATION

» <u>Mr. Keelan McHugh</u>, Prof. Julian Aherne, Dr. Thomas Cummins

Improving the efficiency of a petroleum degrading bacterial consortia to bioremediation soil contaminated with heavy fuel oil at the former Irish Sugar factory site in Carlow

» Mr. Mutian Wang

#### An investigation into the genomic and proteomic effects of heavy metal exposure to the hyperaccumulator plants Eichhornia crassipes and Pistia stratiotes

» <u>Mr. Tapiwa Nyakauru</u>, Dr. David O'Neill, Dr. Catherine O'Reilly, Dr. Orla O'Donovan

### STREAM (Sensor Technologies for Remote Environmental Aquatic Monitoring)

» <u>Mr. Hugh O'Sullivan</u>



#### Continued from Friday, 18 June

### Effects of forestry operations on hydrology and fine sediment in lotic waterbodies in Ireland

» <u>Mr. Rodhraí Crowley</u>, Dr. Joe Harrington, Prof. John O'Sullivan, Prof. Mary Kelly-Quinn, Dr. Jonathan Turner, Dr. Brian Tobin, Dr. Fiachra O' Loughlin

### Estimation of Atmospheric Emissions from Irish wildfires and prescribed burns: A laboratory and field-based study

» <u>Ms. Clara Felberbauer</u>, Ms. Emma Chalençon, Mr. Thedmer Postma, Dr. Beatriz Martin, Dr. Juan Arevalo, Dr. Guy Serbin, Dr. Ned Dwyer, Dr. Dean Venables, Dr. Stig Hellebust, Prof. Fiona Cawkwell

# Tracking dynamic time-dependent groundwater vulnerability using satellite scatterometer observations and land-use stochastic models

» <u>Mr. Arghadyuti Banerjee</u>, Dr. Leo Creedon, Dr. Noelle Jones, Dr. Salem Gharbia

#### 4:30pm General

Student Prize Giving Best in Conference & Close of Conference & handover to Environ 2022 Hosts Stage - Main Campus

### On Demand

29 May	Bundle: 0 Sessions released on-demand
2pm	Untitled Bundle