



## Low-cost alternative water treatment for removal of PPCPs in Lagos wastewater, Nigeria

Abudu, L. A., Adeyemi, D., Oluseyi, T., Adams, L., Coleman, H. M., Tretsiakova-McNally, S., & Arnscheidt, J. (2022). *Low-cost alternative water treatment for removal of PPCPs in Lagos wastewater, Nigeria*. 43. Poster session presented at 32nd Irish Environmental Researchers Colloquium, Belfast.

[Link to publication record in Ulster University Research Portal](#)

### Publication Status:

Published (in print/issue): 01/12/2022

### Document Version

Publisher's PDF, also known as Version of record

### General rights

Copyright for the publications made accessible via Ulster University's Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

### Take down policy

The Research Portal is Ulster University's institutional repository that provides access to Ulster's research outputs. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact [pure-support@ulster.ac.uk](mailto:pure-support@ulster.ac.uk).



## Monday, 20 June

- 10:30am **REGISTRATION**  
*Registration desk, BD Building, Main Entrance, Ground Floor*
- 11am **Day Trip to Giants Causeway inc. lunch & Visitors Centre Experience**  
-  
**Walking with Giants**  
*Registration desk, BD Building, Main Entrance, Ground Floor*
- 1:30pm **REGISTRATION**  
*Registration desk, BD Building, Main Entrance, Ground Floor*
- 2pm **Citizen Science Workshop**  
*Room BD-02-009 (Second Floor), BD Building*
- 2pm **Our Place in Space**  
*10km trail along Divis and the Black Mountain*
- 6pm **REGISTRATION**  
*Registration desk, BD Building, Main Entrance, Ground Floor*
- 7pm **Public Session Panel - Ireland Towards the Net Zero Challenge**  
*Conor Lecture Theatre (Room BA-01-009, First Floor), Birley Building*
- 8pm **Drinks Reception**  
*Room BD-01-014 (First Floor), BD Building*

## Tuesday, 21 June

- 8:30am **REGISTRATION**  
*Registration desk, BD Building, Main Entrance, Ground Floor*
- 9:15am **Environ2022 Opening Session**  
*Conor Lecture Theatre (Room BA-01-009, First Floor), Birley Building*
- Opening ceremony**  
» Deputy VC of Ulster University, Prof Paul Seawright, Director of Research and Impact, Ulster University, Prof Tim Brundle, ENVIRON2022 Convenors, Ulster University, Prof Tony Byrne and Dr Pilar Fernandez, ESAI Chairperson, Mr Liam McCarton
- 9:30am **Plenary Lecture 1**  
*Conor Lecture Theatre (Room BA-01-009, First Floor), Birley Building*
- Climate Change and Biodiversity in Ireland**  
» Prof. Jane Stout
- 10:15am **Refreshments, Poster Session and Meet The Exhibitors**  
*Room BD-01-014 (First Floor), BD Building*
- 11:15am **S1-Water for the Global South**  
*Room BD-02-009 (Second Floor), BD Building*  
Chaired by: Prof. Tony Byrne
- 11:15am **Solar Water Disinfection: There's a Time and Place for It?**  
» [Prof. Kevin G. McGuigan](#)
- 11:45am **Water and sanitation in Brazil**  
» [Dr. Ester Guimaraes](#)



Continued from **Tuesday, 21 June**

12:15pm **The triad of Global Nutrition Security, Safe Water and Planetary Health: Can the 'Mobile Teaching Kitchen' initiative be a 'vehicle' for transformation?**

» [Prof. Sumantra \(Shumone\) Ray](#)

11:15am **S4 - Marine and Coastal**

*Room BD-02-008 (Second Floor), BD Building*

Chaired by: Dr. Jane Kilcoyne

11:15am **Reducing environmental impacts of marine biotoxin monitoring: a laboratory case study**

» [Dr. Jane Kilcoyne](#)

11:30am **Post-harvest stability of key biomolecules in seaweed biomass.**

» [Dr. Keelan C. Lawlor](#), Dr. Dilip K. Rai, Prof. Dagmar B. Stengel

11:45am **Community led approaches for sustainable coastal adaptation and coastline management**

» [Mr. Paul Lawlor](#)

12pm **Microplastic abundances in Nephrops norvegicus and its surrounding sedimentary environment**

» Ms. Haleigh Joyce, Dr. João Frias, Dr. Fiona Kavanagh, Ms. Rachel Lynch, Dr. Elena Pagter, Dr. Jonathan White, [Dr. Róisín Nash](#)

12:15pm **Beach littering: Putting the user at the centre of environmental policy**

» [Ms. Rachael Singleton](#), Dr. Susann Power, Dr. Marian McLaughlin, Prof. Una McMahon-Beattie

11:15am **S7- Environmental Policy & Communication**

*Room BD-00-011A (Ground Floor), BD Building*

Chaired by: Dr. Trudy McMurray

11:15am **Recycling Derived Fertilisers Market Demand in the Horticulture and Recreational Sectors in Ireland**

» [Dr. Aoife Egan](#), Dr. Niamh Power

11:30am **Local communities and nature stewardship: Involvement, encouragement and establishment**

» [Dr. Farshad Amiraslani](#)

11:45am **Qualified support: Understanding citizens' preferences for co-investment into commercial wind farms**

» [Ms. Julia le Maitre](#), Dr. Geraldine Ryan, Dr. Bernadette Power, Dr. Gordon Sirr

12pm **Water governance reforms in the Republic of Ireland: A historical perspective towards a sustainable water future**

» [Mr. Sarpong Hammond Antwi](#), Dr. Suzanne Linnane, Dr. Alec Rolston, Prof. Jill Slinger

12:15pm **Unlocking blue growth: Balancing dialectic tensions of environmental protection and economic development**

» [Mrs. Jessica Giannoumis](#), Dr. Lawrence Dooley, Dr. Valerie Cummins

12:30pm **Environmental outcomes and the Porter hypothesis: The impact of environmental regulations and compliance on company performance in Ireland**

» [Ms. Maria del Pilar Cespedes Davalos](#), Dr. Bernadette Power, Dr. Geraldine Ryan, Dr. John Eakins, Prof. Eleanor Doyle, Dr. Ellen O'Connor

11:15am **S10 - Water Quality Monitoring**

*Room BD-00-011B (Ground Floor), BD Building*

Chaired by: Prof. Derek Jackson

11:15am **HIGH SHIGA TOXIN DETECTION RATIO IN E. COLI CONTAMINATED PRIVATE GROUNDWATER SOURCES IN WESTERN IRELAND**

» [Dr. Liam Burke](#), Dr. Carlos Chique, Dr. Louise O'Connor, Ms. Alexandra Chueiri, Ms. Brigid Hooban, Ms. LOUISE REILLY, Ms. Emma Sullivan, Prof. Dearbháile Morris, Prof. Paul Hynds, Dr. Jean O'Dwyer



Continued from **Tuesday, 21 June**

- 11:30am **Development of CZE methods for the monitoring of pharmaceuticals in wastewater.**  
» [Ms. Emma O'Sullivan-Carroll](#), Dr. Anna Hogan, Dr. Stewart Howlett, Dr. Carmel Pyne, Dr. Paul Downing, Ms. Marguerite Lynch, Dr. Eric Moore
- 11:45am **A novel method of Electrochemical an Immunosensor for Detection Polychlorinated biphenyls (PCBs) for Environmental Analysis**  
» [Ms. Samia Alsefri](#), Dr. Eric Moore, Ms. Thanih Balbaied
- 12pm **Improving freshwater contaminant quantification by drawing upon intrinsic bioaccumulative properties**  
» [Ms. Irene O'Callaghan](#), Dr. Dara Fitzpatrick, Dr. Timothy Sullivan
- 12:15pm **Miniaturized Raman probe based real time water quality monitoring system.**  
» [Ms. Madhumidha Murugan](#), Dr. Patricia Loren, Dr. Ganga Chinna Rao Devrapu, Dr. Liam O'Faolain
- 12:45pm **Lunch**  
*Room BD-01-014 (First Floor), BD Building*
- 1:45pm **S2-Water for the Global South**  
*Room BD-02-009 (Second Floor), BD Building*  
Chaired by: Prof. Kevin G. McGuigan
- 1:45pm **GCRF SAFEWATER**  
» [Prof. Tony Byrne](#)
- 2pm **Design of household drinking water disinfection systems for rural settings of Colombia and Mexico**  
» [Dr. Pilar Fernandez](#)

- 2:15pm **Device automation to assist with water quality monitoring for fecal contamination**  
» [Dr. Jeremy Hamilton](#), Dr. James Mclaughlin, Dr. Shashidran Raj, Dr. Alessio Morelli
- 2:30pm **Household slow sand filter: efficiency, configurations, limitations and perspectives**  
» [Prof. Lyda Patricia Sabogal Paz](#)
- 2:45pm **Behaviour Analysis applied to Water, Sanitation & Hygiene (WASH) Research**  
» [Dr. Samuel Ginja](#), Dr. Stephen Gallagher, Prof. Mickey Keenan
- 3pm **Health Indicators and Water**  
» [Dr. Santosh Gaihre](#), Dr. Ruth Price, Prof. Helene McNulty
- 1:45pm **S5 - Climate in the Balance**  
*Room BD-02-008 (Second Floor), BD Building*  
Chaired by: Dr. Caterina Brandoni
- 1:45pm **Health and Climate Change - Communication and action through tree-planting**  
» [Dr. Christie Godsmark](#)
- 2pm **Integrating business carbon accounting with target-aligned national emissions reduction pathways**  
» [Dr. Aideen O'Dochartaigh](#), Mr. Paul Price, Prof. Barry McMullin
- 2:15pm **Weather drives divergence in honeybee and bumblebee activity in Ireland**  
» [Mr. Arrian Karbassioon](#), Dr. Dara Stanley
- 2:30pm **Decarbonisation of Whiskey Distilleries in a Circular Economy**  
» [Mr. Anga Hackula](#), Dr. David Wall, Dr. Richard O'Shea
- 2:45pm **Motivated reasoning in the willingness to pay for carbon capture and storage: a contingent valuation experiment**  
» [Ms. Tanisha Waring](#), Prof. Alberto Longo, Prof. George Hutchinson



Continued from **Tuesday, 21 June**

- 3pm **Disruptive technologies, drones, deliveries and Life Cycle Assessment**  
» [Ms. Juliana Steinbach](#), Dr. Sinead Mitchell
- 1:45pm **S8 - Air Pollution**  
*Room BD-00-011A (Ground Floor), BD Building*  
Chaired by: Dr. John Gallagher
- 1:45pm **Agricultural Ammonia and Human Health: Impacts and Future Solutions**  
» [Ms. Katie Wyer](#), Dr. David Kelleghan, Dr. Thomas Curran
- 2pm **Reducing Energy Consumption in Air Filtration Systems (RECAFS)**  
» [Mr. Brian Considine](#), Prof. Aonghus McNabola, Dr. John Gallagher, Prof. Prashant Kumar
- 2:15pm **CONTROLLING STREET CANYON VENTILATION USING A ROOF-TOP DEFLECTOR SYSTEM**  
» [Mr. Madhavan Vasudevan](#), Prof. Aonghus McNabola, Dr. Bidroha Basu, Dr. Francesco Pilla
- 2:30pm **Associations between Urban Greenspace and Particulate Matter Air Pollution**  
» [Ms. Anna O'Regan](#), Ms. Rósín Byrne, Dr. Stig Hellebust, Dr. Marguerite Nyhan
- 2:45pm **Evaluating and Enhancing the Impact of Urban Parks on Local Air Quality Conditions**  
» [Ms. Mengyi Jin](#), Mr. Kiran Apsunde, Dr. John Gallagher, Prof. Zhongren Peng
- 3pm **Impacts Of Atmospheric Ammonia from Diffuse Sources**  
» [Ms. Katie Wyer](#), Dr. David Kelleghan, Dr. Thomas Curran

- 1:45pm **S11 - Water and Wastewater Treatment**  
*Room BD-00-011B (Ground Floor), BD Building*  
Chaired by: Prof. Piet Lens
- 1:45pm **Floating Treatment Wetlands to purify Primary Treated Domestic Wastewater**  
» [Prof. Piet Lens](#)
- 2pm **Photoelectrocatalytic disinfection of water and determination of the radicals produced**  
» [Dr. Stuart McMichael](#), Prof. Tony Byrne, Dr. Pilar Fernandez
- 2:15pm **Pathways to private well management: A structural equation modelling approach**  
» [Mr. Simon Mooney](#), Dr. Martin Boudou, Dr. Jean O'Dwyer, Prof. Paul Hynds
- 2:30pm **Cost-Effective Solution to Reducing Vancomycin Concentration in Wastewater**  
» [Mr. Benjamin Delmond](#), Dr. Svetlana Tretsiakova-McNally, Dr. Dr Brian Solan, Dr. Rodney McDermott, Mr. Alexandre Audoin
- 2:45pm **Safe, simple, sustainable and affordable water treatment for developing regions**  
» [Mr. Kris O'Dowd](#), Prof. Suresh Pillai, Prof. Prof. Javier Marugan Aguado, Dr. Inmaculada Polo Lope, Ms. Ángela García Gil, Dr. Isabel Oller Alberola
- 3pm **Removal of vancomycin from the aqueous environment by granular activated carbon**  
» [Mr. Hamed Rasouli Sadabad](#), Dr. Joerg Arnscheidt, Dr. Heather Coleman, Prof. James Dooley
- 3:05pm **Low-cost alternative water treatment for removal of PPCPs in Lagos wastewater, Nigeria**  
» [Mr. Lekan Abudu](#), Mr. David Adeyemi, Prof. Temilola Oluseyi, Prof. Luqman Adams, Dr. Heather Coleman, Dr. Svetlana Tretsiakova-McNally, Dr. Joerg Arnscheidt



Continued from **Tuesday, 21 June**

3:15pm **Refreshments, Poster Session and Meet The Exhibitors**  
*Room BD-01-014 (First Floor), BD Building*

3:15pm **ESAI College Liaison Meeting (restricted)**  
*Room BD-02-009 (Second Floor), BD Building*

4:15pm **S3 - Water for the Global South**  
*Room BD-02-009 (Second Floor), BD Building*  
Chaired by: Dr. Ester Guimaraes

4:15pm **Drinking water sustainable systems at Colombia, field data and experiences**  
» Dr. Margarita Hincapie, Dr. Luis Javier Montoya, Dr. Laila Galeano, Dr. Liliana Botero, Dr. Gloria Carvajal

4:30pm **Safewater Project Impact In Two Communities In Colombia**  
» Mrs. Catalina Herrera, Mrs. Durys Esther Rios, Mr. Freddy Vahos, Mrs. Sandra Patricia Castro

4:45pm **SAFEWATER project: Household Water Treatment Systems in Mexico**  
» Dr. Fermín Reygadas, Ms. Ane Galdos Balzategui

5pm **SAFEWATER project: Behaviour and Health Analysis in Mexico**  
» Ms. Ane Galdos Balzategui, Dr. Fermín Reygadas

4:15pm **S6 - Wetland & Peatland Management**  
*Room BD-02-008 (Second Floor), BD Building*  
Chaired by: Dr. Farshad Amiraslani

4:15pm **Ireland's Saltmarsh Soil Carbon Stock: A Climate Relevant Carbon Pool**  
» Ms. Shannon Burke, Dr. Elke Eichelmann, Dr. Grace Cott

4:30pm **Methane Emissions from Irish Saltmarshes**  
» Ms. Lisa Jessen, Dr. Andrea Fuchs, Dr. Grace Cott

4:45pm **Below ground growth of forests on peatlands with a high pH subsoil or marl layer**  
» Ms. Jill Pitcher Farrell, Mr. Nicholas Wragg, Ms. Blair Ruffing, Ms. Saoirse Tracy, Mr. Charles Harper, Mr. Thomas Cummins, Mr. Maarten Nieuwenhuis, Mr. Ken Byrne

5pm **Demand-driven energy and biochemical production from a two-stage anaerobic digestion reactor**  
» Mr. Rajas Shinde, Prof. Jerry Murphy, Dr. Susanne Barth, Dr. David Wall

4:15pm **S9 - Environmental Challenges**  
*Room BD-00-011A (Ground Floor), BD Building*  
Chaired by: Prof. Frances Lucy

4:15pm **Assessing Mercury-Added Product Stocks in the Built Environment**  
» Dr. Yvonne Ryan, Prof. Colin Fitzpatrick

4:30pm **Spatio-temporal evolution, environmental and socio-demographic patterns of COVID-19 in Ireland**  
» Dr. Martin Boudou, Dr. Coilín ÓhAiseadha, Dr. Jean O'Dwyer, Dr. Paul Hynds

4:45pm **Time for a Nappy Change: controls affecting families' nappy choices**  
» Mrs. Nicola Watson, Dr. Sara Benetti, Dr. Suzanne Beech

5pm **Greenspace and COVID-19 in Ireland: A modelling study**  
» Mr. Shivam Khandelwal, Dr. Martin Boudou, Dr. Coilín ÓhAiseadha, Dr. Jean O'Dwyer, Dr. Paul Hynds

4:15pm **S12 - Water Pollution and Risks**  
*Room BD-00-011B (Ground Floor), BD Building*  
Chaired by: Dr. Svetlana Tretsiakova-McNally



Continued from **Tuesday, 21 June**

4:15pm **FAECAL CARRIAGE OF ANTIMICROBIAL RESISTANT ENTEROBACTEREALES ASSOCIATED WITH RECREATIONAL WATER USE**

» [Ms. Maeve Louise Farrell](#), Ms. Alexandra Chueiri, Dr. Louise O'Connor, Dr. Sinéad Duane, Dr. Liam Burke, Prof. Dearbháile Morris

4:30pm **Risk ranking of antibiotic resistance development in healthcare and agricultural settings**

» [Mr. Ciaran Monahan](#), Dr. Suvi Harris, Prof. Dearbháile Morris, Prof. Enda Cummins

4:45pm **Source water protection and vulnerability in complex catchments**

» [Mr. Kevin Atcheson](#), Prof. Philip Jordan, Dr. Rachel Cassidy

5pm **METAL BIOACCUMULATION THROUGH WATER AND FEEDS IN NIGERIAN FISH**

» [Mrs. CHINELO ANULIKA NZEKWE](#), Dr. DEBBIE CHAPMAN, Dr. Timothy Sullivan

5:15pm **Detection of mobile colistin resistance genes in the Irish environment.**

» [Ms. Niamh Cahill](#), Ms. Brigid Hooban, Dr. Louise O'Connor, Dr. Georgios Miliotis, Dr. Deirdre Prendergast, Dr. Montserrat Gutierrez, Prof. Finola Leonard, Dr. Kaye Burgess, Prof. Martin Cormican, Prof. Dearbháile Morris

5:30pm **ESAI AGM & Postgraduate Researcher 2022 Award Winner**

*Conor Lecture Theatre (Room BA-01-009, First Floor), Birley Building*

7pm **Prosecco Reception & Live music**

*Lagan Suite, Hilton Hotel Belfast*

8pm **Conference Dinner - DJ & Dancing**

*Lagan Suite, Hilton Hotel Belfast*

**Wednesday, 22 June**

8:45am **REGISTRATION**

*Registration desk, BD Building, Main Entrance, Ground Floor*

9:15am **Plenary Lecture 2**

*Conor Lecture Theatre (Room BA-01-009, First Floor), Birley Building*

**Emerging Technologies Towards Net Zero**

» Professor Neil J Hewitt

10:15am **S13 - Water-Energy Nexus**

*Room BD-02-009 (Second Floor), BD Building*

Chaired by: Dr. Pilar Fernandez

10:15am **Water-energy nexus: research trends**

» [Dr. Nathan Skillen](#)

10:30am **Adsorption of urea from human urine and subsequent hydrogen production**

» [Mr. Ruben Asiain-Mira](#), Dr. Patricia Zamora, Dr. Victor Monsalvo, Dr. Laura Torrente-Murciano

10:45am **WO3 photoanodes for the oxidation of urea in wastewater and hydrogen production**

» [Ms. Adriana Rioja Cabanillas](#), Dr. Pilar Fernandez, Mr. Rene Hauser, Prof. Tony Byrne

11am **Novel electro-assisted UVA-photocatalytic reactor based on rGO-TiO2 composite photoanode for wastewater treatment**

» [Mr. Salem Alkharabsheh](#), Dr. Patricia Zamora, Dr. Victor Monsalvo, Dr. Pilar Fernandez, Prof. Tony Byrne

11:15am **Removal of emerging contaminants by UVC and UVB-LEDs driven AOPs**

» [Ms. Raffaella Pizzichetti](#), Dr. Cristina Pablos, Dr. Ken Reynolds, Mr. Simon Stanley, Dr. Eric Moore, Prof. Prof. Javier Marugan Aguado





Continued from **Wednesday, 22 June**

10:15am **S15 - Sustainable Land Use, Agriculture and Food**  
*Room BD-02-008 (Second Floor), BD Building*  
 Chaired by: Prof. John Breen

10:15am **Pesticides and bees; hazard, exposure and potential solutions**  
 » [Dr. Dara Stanley](#), Ms. Alison O'Reilly, Ms. Linzi Thompson, Mr. Arrian Karbassioon, Dr. Ed Straw

10:30am **Developing a dairy energy rating for identifying inefficient energy users throughout Ireland's dairy farm population**  
 » [Dr. Philip Shine](#), Dr. John Upton, Dr. Eleanor Murphy, Dr. Michael D. Murphy

10:45am **The abundance and characteristics of microplastics in Irish agricultural soils**  
 » [Ms. Clodagh King](#), Dr. Siobhán Jordan, Dr. Caroline Gilleran Stephens, Dr. Joseph P. Lynch

11am **Gathering sustainable IPM advice for leatherjackets in Irish agriculture**  
 » [Ms. Aisling Moffat](#), Dr. Michael Gaffney, Dr. Lorna Cole, Dr. Gail Jackson, Dr. Fiona Brennan, Dr. Louise McNamara

10:15am **S17- Net Zero Challenge**  
*Room BD-00-011A (Ground Floor), BD Building*  
 Chaired by: Prof. Neil Hewitt

10:15am **Blended feedstock for improving downdraft gasification: A Circular Economy Example**  
 » [Dr. Oisín de Priall](#), Dr. Caterina Brandoni, Prof. Neil Hewitt, Mr. Chris Johnston, Dr. George Onofrei, Prof. Ye Huang

10:30am **Marginal abatement cost curves for biogas in Ireland: Assessing on-farm anaerobic digestion through the use of an environmental economic calculation tool.**  
 » [Mr. Jorge Diaz Huerta](#), Dr. Richard O'Shea, Dr. David Wall, Prof. Jerry Murphy

10:45am **Dark fermentation of Macroalgae biomass in production of biofuels**  
 » [Mr. James Lawrence](#), Prof. Piet Lens, Prof. Jerry Murphy

11am **Dedicated large-scale floating offshore wind to hydrogen**  
 » [Mr. Omar Ibrahim](#), Dr. Alessandro Singlitico, Dr. Shane McDonagh, Dr. Roberts Proskovics, Dr. Cian Desmond, Prof. Jerry Murphy

10:15am **S19 - Flash Presentations**  
*Room BD-00-011B (Ground Floor), BD Building*  
 Chaired by: Dr. Fermín Reygadas

10:15am **BlueBio MINERVA: Sustainable valorisation of macroalgae using a biorefinery approach**  
 » [Dr. Fanny Lalegerie](#), Ms. Sofiiia Tretiak, Dr. Stephen Jackson, Prof. Alan Dobson, Dr. Sarah Hotchkiss, Mrs. Rósa Jónsdóttir, Dr. Mattias Berglin, Dr. Zoë A. Popper, Prof. Dagmar B. Stengel

10:20am **Environmental variability and sustainable protocols for seaweed valorisation in BlueBio MINERVA**  
 » [Dr. Fanny Lalegerie](#), Prof. Dagmar B. Stengel

10:25am **Evaluating nutrient and sediment inputs from riverbank cattle access points.**  
 » [Ms. Alison Scott](#), Dr. Rachel Cassidy, Prof. Philip Jordan

10:30am **Associations between environmental knowledge, socio-demographic profiles, and the Irish diet**  
 » [Mr. Daniel Burke](#), Dr. Paul Hynds, Dr. Anushree Priyadarshini

10:35am **Sustainable Kitchens**  
 » [Mr. Cathal Pendred](#), Ms. Samantha Fahy





Continued from **Wednesday, 22 June**

- 10:40am **SURICATES: Sediment Management with application to the La Rance Estuary, France**  
» Ms. Igra Rehman, Dr. Joe Harrington, Mr. Branislav Batel, Ms. Valérie Foussard
- 10:45am **In-situ electrochemical determination of 2,5-diformylfuran from the photocatalytic oxidation of 5-hydroxymethylfurfural.**  
» Mr. Pádraig McDonagh, Dr. Nathan Skillen, Prof. Peter Robertson, Dr. Denis Mc Crudden
- 10:50am **Costing the Public Health Impact of Climate Change in Ireland**  
» Mr. Giacomo Di Capua, Dr. Paul Hynds, Dr. Anushree Priyadarshini
- 10:55am **Wild trout as a spreader of *Cryptosporidium parvum* zoonotic subtypes**  
» Dr. Seila Couso-Pérez, Dr. Elvira Ares-Mazás, Dr. Hipólito Gómez-Couso
- 11:15am **Refreshment, Poster Session and Meet the Exhibitors**  
*Room BD-01-014 (First Floor), BD Building*
- 12:15pm **S14 - Water-Energy Nexus**  
*Room BD-02-009 (Second Floor), BD Building*  
Chaired by: Prof. Tony Byrne
- 12:15pm **Phosphate capture by atomic layer deposition-based materials**  
» Ms. Marina Avena Maia, Mr. Rene Hauser, Dr. Laura Torrente-Murciano
- 12:30pm **Bacterial community composition in a pilot-scale wastewater treatment plant**  
» Ms. Shabila Perveen, Dr. Cristina Pablos, Dr. Ken Reynolds, Mr. Simon Stanley, Prof. Prof. Javier Marugan Aguado

- 12:45pm **Synergistic effect of 3 wavelengths for inactivation of *E. coli***  
» Mr. Adithya Pai Uppinakudru, Mr. Miguel Martin Somer, Dr. Ken Reynolds, Mr. Simon Stanley, Prof. Prof. Javier Marugan Aguado, Dr. Cristina Pablos
- 1pm **Photoelectrocatalytic removal of *E. Coli*, MS2, and methanol using nanostructured WO<sub>3</sub>/BiVO<sub>4</sub>**  
» Mr. Conor Reddick, Dr. Carlos Sotelo Vázquez, Dr. Ken Reynolds, Mr. Simon Stanley, Dr. Cristina Pablos, Prof. Prof. Javier Marugan Aguado
- 12:15pm **S16 - Sustainable Land Use, Agriculture and Food**  
*Room BD-02-008 (Second Floor), BD Building*  
Chaired by: Dr. Dara Stanley
- 12:15pm **Potential of multi-species mixture in reducing enteric methane emissions in vitro**  
» Mr. Ali Sultan Khan, Ms. Dominika J. Krol, Mr. John A. Finn, Mr. Alexandre B. De Menezes, Ms. Emily Roskam, Mr. Stuart Kirwan, Ms. Sinead M. Waters
- 12:30pm **Can multispecies grasslands simultaneously improve herbage productivity and micronutrient uptake?**  
» Ms. Omotola Odetayo, Ms. Jane Shackleton, Dr. Cornelia Grace, Dr. Jean Kennedy, Dr. Ron De Goede, Prof. Ellis Hoffland
- 12:45pm **Biorefinery from Rhododendron residue for the production of antioxidants, hydrogels and nanocellulose**  
» Ms. Tielidy Lima, Dr. Gabriel Goetten de Lima, Dr. Michael Nugent
- 1pm **Waste recovered compost: a sustainable source of fertilizer in Bangladesh**  
» Dr. Paul Williams, Mr. MD RAIU AHMAD, Dr. Jason Chin, Dr. S M Ashekuzzaman, Dr. Mahmud Hossain Sumon
- 12:15pm **S18 - Biodiversity, Ecosystems and Ecotoxicology**  
*Room BD-00-011A (Ground Floor), BD Building*  
Chaired by: Dr. Thomaé Kakouli-Duarte



Continued from **Wednesday, 22 June**

- 12:15pm **Impact of recycling derived fertilisers application on nematode communities in Irish grassland**  
» [Dr. Thomaé Kakouli-Duarte](#), Ms. Anna Karpinska
- 12:30pm **Microbial Source Tracking of Antimicrobial Resistance in Bathing Waters in Northern Ireland.**  
» [Ms. cathy brooks](#), Ms. Elaine Mitchell, Ms. Sinéad O'Donovan, Mr. James Brown, Mrs. Kelly-Anne Carnaghan, Mr. Eoin Bleakney, Ms. Kelly Westley, Mrs. Elke Johns, Mr. Jeorg Arnscheidt
- 12:45pm **Mapping vegetation communities on Irish raised bogs using PlanetScope imagery and Google Earth Engine**  
» [Mr. Wahaj Habib](#), Mrs. Ruchita Ingle, Dr. Matthew Saunders, Dr. John Connolly
- 1pm **The Role of Urban Trees in the Improvement of Urban Biodiversity**  
» [Ms. Caoimhe Marron](#), Dr. Eoin Lettice, Dr. Barbara Doyle Prestwich
- 1:05pm **Development of Novel Molecular Indicators of Emerging Contaminants in Freshwater and Marine Environments**  
» [Ms. Enya Cody](#), Dr. Andrew Reynolds, Prof. Gordon Chambers, Prof. Orla Howe, Dr. Michelle Giltrap
- 1:10pm **The impact of indomethacin and ibuprofen on daphniids**  
» [Ms. Hannah Moynihan](#), Ms. Anna Michalaki, Dr. Konstantinos Grintzalis
- 12:15pm **S20 - Flash Presentations**  
*Room BD-00-011B (Ground Floor), BD Building*  
Chaired by: Prof. Lyda Patricia Sabogal Paz
- 12:15pm **Investigation of a novel algal-based biostimulant against RLS on barley**  
» [Ms. Wendy DELPONT](#), Dr. Zoë A. Popper

- 12:20pm **Cross-Laminated Timber: A sustainable solution for building construction**  
» [Mr. Muhammad Yasir](#), Mr. Andrew Macilwraith, Mr. Kieran Ruane
- 12:25pm **Exploring the use of plant growth regulators on hemp.**  
» [Ms. Grace Pender](#), Dr. Susanne Schilling, Dr. Rainer Melzer
- 12:30pm **Assessing Agricultural Biocide Usage Patterns in Ireland**  
» [Ms. Meabh Dowler](#), Mr. Daniel Burke, Dr. Jean O'Dwyer, Dr. Paul Hynds
- 12:35pm **Irish Faba Beans as a sustainable food source**  
» [Ms. Laura Mc Daid](#), Dr. Denis McCrudden, Dr. Sheila Alves
- 12:40pm **Temporal microplastic contamination of cockles from Dundalk Bay, Republic of Ireland**  
» [Mr. Stephen Kneel](#), Dr. Suzanne Linnane, Dr. Caroline Gilleran Stephens, Dr. Alec Rolston

1:15pm **Lunch**  
*Room BD-01-014 (First Floor), BD Building*

2pm **Prize Giving & Environ 2022 Closing Ceremony**  
*Conor Lecture Theatre (Room BA-01-009, First Floor), Birley Building*