# SETAC 13TH YOUNG ENVIRONMENTAL SCIENTISTS MEETING

11–14 AUGUST 2025 | YORK, UNITED KINGDOM | SETAC.ORG/YES2025

*BETWEEN GRINDING GEARS - STUDENTS AND EARLY CAREER SCIENTISTS UNDER PRESSURE*

# PROGRAMME BOOK

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SCAN ME

## WIFI

**STEMGuestWiFi**
Charm&Quarks2024

# Welcome to SETAC YES 2025

Welcome to SETAC YES 2025!

On behalf of both the current and former members of the SETAC Student Advisory Council (SAC), as well as the local organising committee (LOC) here in York, we are thrilled to welcome you to the 13th SETAC Europe Young Environmental Scientists (YES) Meeting.

It has been nearly two years since the last YES meeting in Landau in der Pfalz, and we are delighted to bring SETAC to York in 2025. This promises to be an inspiring week filled with engaging keynotes, hands-on skills workshops, and, of course, outstanding science presented by you, our student and early-career attendees.

The YES meeting is, at its core, a conference organised by students, for students and early-career environmental scientists. With over 120 attendees from around the world, it offers a chance to experience an international scientific conference in a friendly, supportive setting, to begin building networks with peers, and to showcase the groundbreaking work being carried out by the next generation of environmental scientists.

SETAC promotes Environmental Quality Through Science®, grounded in the development and communication of research in environmental chemistry. Through an active global community, SETAC brings environmental challenges to the forefront and works collaboratively to develop scientific solutions. The YES meeting is an introduction to this wider society and a steppingstone to larger SETAC events such as the SETAC Europe Annual Meeting. It opens opportunities to get involved in the environmental toxicology and chemistry community, whether through interest groups, student networks or joining committees like the SAC.

For some of you, this may be your first conference. For others, one of many. Either way, we hope the YES meeting gives you the space to share your work, meet others, and connect with fellow early-career scientists. There's something valuable about speaking with people at a similar stage in their careers, asking the same kinds of questions and doing science that genuinely matters.

The connections you make here can last. Many of the people you meet this week may cross paths with you again through future collaborations or shared research interests. So, start those conversations now. Be curious, be open, and enjoy the YES meeting's by-students-for-students spirit. Most of all, have fun.

All the best,

**Micha Wehrli**
*SETAC Europe Student Advisory Council* Chair

**Nahum Ashfield**
*Local Organising Committee Chair & SAC Member*

**Isabel Navarro Law**
*Local Organising Committee Co-Chair*

# Sponsors

Thank you to our meeting supporters for their generous contributions!

# Programme Committee

## Scientific Committee

- Jana-Sophie Appelt, *University of Southampton, UK*
- Nahum Ashfield, *University of York, UK*
- Angel Ceballos, University of York, UK
- Bianca Dechent, *Goethe University, Germany*
- Zheng Fang, *University of York, UK*
- Eilidh Garden, *Health & Safety Executive Chemicals Regulation Division, UK*
- Stella Jennes, *Goethe University, Germany*
- Hiba Khalid, *Certara, UK*
- Frederik Meyer, *RPTU Kaiserslautern-Landau, Germany*
- Sophie Oster, *RPTU Kaiserslautern-Landau, Germany*
- Victor Misev, *University of Applied Sciences and Arts Northwestern Switzerland, Switzerland*
- Roisin Murphy, *University of York, UK*
- Katie Plaisted, *University of York, UK*
- Johannes Raths, *Swiss Federal Institute of Aquatic Science and Technology (Eawag), Switzerland*
- Janika Reineccius, *Leibniz-Institute for Baltic Sea Research, Germany*
- Georgie Savage, *University of Exeter, UK*
- Marius Schmitt, *Ghent University, Belgium*
- Markus Schmitz, *Goethe University, Germany*
- Harriet Sleight, *University of York, UK*
- Bianca Stadelmann, *University of Amsterdam, Netherlands*
- Drew Szabo, *University of York, UK*
- Micha Wehrli (SAC Chair), *Swiss Federal Institute of Aquatic Science and Technology (Eawag), Switzerland*
- Fabian Whitfield, *University of Applied Sciences and Arts Northwestern Switzerland, Switzerland*
- Kai Wilschnack, *University of Portsmouth, UK*
- Adam Wronski, *Baylor University, USA*

## Local Organising Committee

- Nahum Ashfield (LOC Chair), *University of York, UK*
- Isabel Navarro Law (LOC Co-Chair), *University of York, UK*
- Jana-Sophie Appelt, *University of Southampton, UK*
- Bianca Dechent, *Goethe University, Germany*
- Stella Jennes, *Goethe University, Germany*
- Sophie Oster, *RPTU Kaiserslautern-Landau, Germany*
- Frederik Meyer, *RPTU Kaiserslautern-Landau, Germany*
- Marius Schmitt, *Ghent University, Belgium*
- Markus Schmitz, *Goethe University, Germany*
- Drew Szabo, *University of York, UK*
- Micha Wehrli, *Swiss Federal Institute of Aquatic Science and Technology (Eawag), Switzerland*

## About York

York, a historic city in northern England, is renowned for its stunning medieval architecture, charming cobblestone streets, and rich cultural heritage. Home to the iconic York Minster and encircled by ancient city walls, it offers a perfect blend of history and vibrant modern life. From cosy tea rooms to busy markets, York is a city full of character and charm, making it an unforgettable destination.

## The University of York

The University of York is a prestigious institution, consistently ranked among the top universities in the UK. Known for its beautiful campus set in parkland, cutting-edge research, and commitment to sustainability, it fosters an inclusive and dynamic academic environment. With a strong focus on innovation and collaboration, the university attracts students and researchers from all over the world.

## About the National STEM Learning Centre

The SETAC 13th Young Environmental Scientists Meetings will be held at the National STEM Learning Centre in York. The National STEM Learning Centre is a hub for advancing science, technology, engineering, and mathematics education. It provides world-class training, resources, and support to educators and students, promoting STEM excellence across the UK. Housed in state-of-the-art facilities, it's a vibrant space for fostering innovation, curiosity, and the future of STEM learning.

**National STEM Learning Centre**
Siwards Way, University of York,
Heslington, York, YO10 5DD,
United Kingdom





## Badges

Badges must be worn to gain access to the meeting.

## Emergencies and First Aid

If you need medical attention, ask any of the local volunteers. For emergencies, call 999.

## Wifi Information

Wifi: STEMGuestWiFi
Password: Charm&Quarks2024

## SETAC Policies

SETAC provides open, safe forums for the purpose of exchanging ideas and information on the study, analysis and solution of environmental problems, the management and regulation of natural resources, promotion of scientific research and the development of strong environmental education.

Attendees of SETAC meetings are expected to adhere to all SETAC policies, including SETAC Participant Policies.

Learn more at **www.setac.org/learn-about-setac/policies.html**.

## Conduct

Participants in SETAC activities are expected to adhere to the highest standards of integrity and professionalism and comply with the SETAC Code of Conduct. Attendees are reminded to observe SETAC's principles and values and to maintain an atmosphere of civil and constructive scientific exchange.

# About SETAC

The Society of Environmental Toxicology and Chemistry (SETAC), with offices in North America and Europe, is a not-for-profit, worldwide professional organisation composed of more than 16,000 researchers, students, and expert practitioners from universities, institutions, governmental authorities, businesses, and nongovernmental organisations as well as 85 partner organisations in more than 90 countries dedicated to advancing environmental science and environmental management.

Specific goals of the society are:

- Promote research, education and training in the environmental sciences
- Promote the systematic application of all relevant scientific disciplines to the evaluation of chemical hazards
- Participate in the scientific interpretation of issues concerned with hazard assessment and risk analysis
- Support the development of ecologically acceptable practices and principles
- Provide a forum (meetings and publications) for communication among professionals in government, business, academia and other segments of society involved in the use, protection and management of our environment

These goals are pursued through the conduct of numerous activities, which include:

- Conduct meetings with study and workshop sessions, platform and poster presentations, and achievement and merit awards
- Publish peer-reviewed scientific journals, *Environmental Toxicology and Chemistry (ET&C)* and *Integrated Environmental Assessment and Management (IEAM)*, as well as electronic newsletters and special technical publications
- Provide funds for education and training through the SETAC grants programme
- Organise and sponsor chapters and branches to provide a forum for the presentation of scientific data and for the interchange and study of information about local and regional concerns
- Provide advice and counsel to technical and nontechnical persons through a number of standing and ad hoc committees

For further information, visit setac.org or contact us at **setac@setac.org**.

# SETAC Global Partners

Thank you to the SETAC Global Partners for helping ensure our goal of Environmental Quality Through Science®.

# Programme Overview

| | Monday | Tuesday |
|---|---|---|
| 08:30 | | Poster Set Up |
| 09:00 | | Workshop **Introduction to Reproducibility with R** / Workshop **Environmental Consultancy** |
| 09:30 | | |
| 10:00 | | |
| 10:30 | | |
| 11:00 | | |
| 11:30 | | |
| 12:00 | | Lunch Break |
| 12:30 | | |
| 13:00 | Registration Open | |
| 13:30 | | **Session 1** (Aquatic Ecotox.) / **Session 3** (One health) |
| 14:00 | | |
| 14:30 | | |
| 15:00 | Workshop **High Throughput and Non-Target Analytics** / Workshop **Presenting with Confidence** | Poster Sessions & Coffee Break |
| 15:30 | | **Session 1** (Aquatic Ecotox.) / **Session 4** (Computional) |
| 16:00 | | |
| 16:30 | | |
| 17:00 | Coffee Break | |
| 17:30 | **Opening Ceremony** & Opening Keynote: **Laura Carter** | |
| 18:00 | | |
| 18:30 | Drinks Reception | |
| 19:00 | **Pub Quiz & and Get-Together** (at Brew York, Unit 6, Enterprise Complex, Walmgate, York YO1 9TT) | |
| 19:30 | | |
| 20:00 | | **Student Party** (The Clubroom, Revolution York) |
| 20:30 | | |
| 21:00 | | |
| 21:30 | | |
| 22:00 | | |



Programme Overview

| | Wednesday | Thursday |
|---|---|---|
| 08:30 | | |
| 09:00 | | **Session 1** (Aquatic Ecotox.) / **Session 9** (Analytical challenges) |
| 09:30 | | |
| 10:00 | | |
| 10:30 | | Coffee Break & Poster Social |
| 11:00 | **Session 2** (Terrestrial Ecotox.) / **Session 7** (Multiple stressors) | **Session 1** (Aquatic Ecotox.) / **Session 5** (NAMs) |
| 11:30 | | |
| 12:00 | | |
| 12:30 | Lunch Break | Lunch Break |
| 13:00 | | |
| 13:30 | | |
| 14:00 | **Session 2** (Terrestrial Ecotox.) / **Session 7** (Multiple stressors) | **Session 6** (Applied Ecotox.) / **Session 8** (Micropastics) |
| 14:30 | | |
| 15:00 | | |
| 15:30 | Coffee Break & Poster Social | Coffee Break & Poster Social |
| 16:00 | | |
| 16:30 | Industry Keynote: **Elizabeth Collison** | **Closing Ceremony** & Closing Keynote: **Sabine Apitz** |
| 17:00 | | |
| 17:30 | | |

## Sessions

1 Aquatic Ecotoxicology
2 Terrestrial Ecotoxicology
3 One Health
4 Computational Ecotoxicology & Environmental Modelling
5 New Approach Methodologies: Advancing Chemical Safety Assessment and Reducing Animal Harm
6 Applied Ecotoxicology, Including Life Cycle Assessment, Science to Policy & Regulation
7 Multiple Stressors in a Changing World
8 Exploring the Role of Microplastics as Environmental Contaminants
9 Analytical Challenges in Environmental Sciences

| Time | Programme | Location |
|---|---|---|
| 12:00–14:00 | Registration open | Reception |
| 14:00–17:00 | Workshop: High Throughput and Non-Target Analytics<br>Workshop: Presenting with Confidence | Psych. Depart. PS/A/203<br>Teaching Rooms 4/5 |
| 17:00–17:30 | Coffee break | Atrium |
| 17:30–18:30 | Opening Ceremony & Keynote **Laura Carter** | Lecture Theatre 1 |
| 18:30–19:00 | Drinks Reception | Atrium |
| 19:00–23:00 | Pub Quiz and Get-Together | Brew York |

## Plenary Speaker (Lecture Theatre 1)

### Laura Carter

*University of Leeds*

Laura Carter a Professor of Environmental Chemistry at the University of Leeds. Laura's research focuses on understanding the risks of emerging contaminants in the environment, with particular interests in chemical fate in soil-plant systems and the role of the environment in the development of antimicrobial resistance. In 2019 Laura was acknowledged as an Emerging Investigator, by the Royal Society of Chemistry publication, Environmental Science Processes and Impacts and in 2020 Laura was awarded a prestigious £1.2M UKRI Future Leaders Fellowship to investigate the risks of pharmaceuticals in agricultural systems, following land application of sludges and wastewater. Laura's work on contaminants in the environment has led to a number of external appointments including editorial roles (Reviews of Environmental Contamination and Toxicology and ES&T Letters) and advisory positions including the Hazardous Substances Advisory Committee (HSAC) to advise Defra on how to protect the environment, and human health via then environment, from potentially hazardous substances.





## High Throughput and Non-Target Analytics

**Drew Szabo** 14:00–17:00 BST | Psych. Depart. PS/A/203

In this workshop, you will learn the basic principles of non-targeted and suspect screening for environmental samples. This workshop will focus on the detection, identification and prioritisation of small molecules (<2000 Da) and metabolites acquired by high-resolution mass spectrometry (HRMS). You will be provided with sample data and R scripts to work through in this session. PC is preferred but most of the software is also compatible with Mac. Previous knowledge of sample preparation, instrument acquisition parameters and R programming language is preferred but not required.
Hyphenated HRMS is a powerful analytical technique that can detect tens of thousands of chemicals from a single sample. This large quantity of data requires unique and novel approaches to filter the chemicals of high interest. This may include banned or regulated substances; persistent, mobile, or toxic substances (PBTs); or even chemicals with increasing or decreasing concentrations over time.

## Presenting with Confidence

**Helen Goulding** 14:00–17:00 BST | Teaching Rooms 4/5

Do you ever feel anxious about presenting your research? Would you like some tips on engaging your audience effectively? Would you like help with answering audience questions? This interactive, face-to-face workshop aims to boost your confidence and enhance your presentation skills. Through small group exercises, we will explore how to get your language and body language right, how to design relevant content and engaging key messages, and how to handle tricky Q&A sessions, performance anxiety and other common problems.

Your trainer is Dr Helen Goulding of Quercus Training Ltd www.quercustraining.com . Helen has been helping researchers build their confidence and professional skills for over 20 years. She works with universities across the UK and Europe, running fun and practically useful training workshops for researchers at all levels. She is excited to work with SETAC YES and looks forward to meeting you.

| Time | Programme | Location |
|---|---|---|
| 08:30–09:30 | Poster Set Up | Atrium |
| 09:00–12:00 | Workshop Introduction to Reproducibility with R<br>Workshop Environmental Consultancy | Psych. Depart. PS/A/203<br>Teaching Rooms 4/5 |
| 12:00–13:30 | Lunch Break | Quarks Restaurant |
| 13:30–15:00 | Aquatic Ecotoxicology<br>One Health | Lecture Theatre 1<br>Teaching Rooms 4/5 |
| 15:00–15:30 | Coffee Break & Poster Social | Atrium |
| 15:30–17:00 | Aquatic Ecotoxicology<br>Computational Ecotoxicology & Environmental Modelling | Lecture Theatre 1<br>Teaching Rooms 4/5 |
| 20:00–... | Student Party | The Clubroom, Revolution York |

# **Workshop** Descriptions

## Environmental Consultancy Workshop

**Liz Hart** 09:00–12:00 BST | Teaching Rooms 4/5

This workshop will use a real case study of a remediation project to consider how the conceptual site model is developed from a range of data sources, how this can be used to identify critical risks which then inform sustainable remediation design. Delegates will help build the conceptual site model in an 'escape room' style workshop, using different challenges to access key information to help understand the complexities of the site.

The workshop will consider the importance of conceptualising a site and understanding risk in relation to due diligence and how this is incorporated into key UK and EU legislation.

We will also consider other national and European environmental policies and Directives to highlight how these interact with land quality assessments and discuss the importance of a good understanding across policy areas when working on projects in environmental consultancy.



## Introduction to Reproducibility with R

**Emma Rand** 09:00–12:00 BST | Psych. Depart. PS/A/203

An increase in the complexity and scale of data means scientists are increasingly required to develop the data skills needed to design reproducible workflows for the simulation, collection, organisation, processing, analysis and presentation of data. Developing such data skills requires at least some coding, also known as scripting. This makes your work (everything you do with your raw data) explicitly described, totally transparent and completely reproducible. However, learning to code can be a daunting prospect for many! That's where Reproducibility with R comes in!

R is a free and open source language especially well-suited to data analysis and visualisation and has a relatively inclusive and newbie-friendly community. R caters to users who do not see themselves as programmers, but then allows them to slide gradually into programming.

This workshop will introduce you to R and RStudio, the most widely used interface for working with R. You will learn how to import data, manipulate it, summarise it and plot it. You will learn how to use an organised project-oriented workflow with well commented scripts so that you can understand your work in the future, and share it with others. In addition, you will learn what a working directory and a file path are - these are key concepts in computing generally but ones which are often not taught to biologists.

Philosophy and approach:
It is impossible to cover everything you might ever need! Different people will use different methods and tools. Topics have been chosen because they are: foundational, widely applicable and transferable conceptually.

Learning outcomes:
After this workshop the successful learner will be able to:

- Find their way around the RStudio windows
- Create and plot data using ggplot
- Explain the rationale for scripting analysis
- Know how to load packages
- Understand what is meant by the working directory, absolute and relative paths and be able to apply these concepts to data import
- Summarise data in a single group or in multiple groups
- Develop highly organised analyses including well-commented scripts that can be understood by future you and others

# **Tuesday** Platform Presentations

## **Afternoon Sessions I** (13:30-15:00)

**Aquatic Ecotoxicology** | Sofia Sangiorgi, Judith Mugambi, Carolina Rocha, Shaleen Glasgow

### Lecture Theatre 1

13:00-13:15 **Reproductive Effects of Arsenic-Contaminated Natural Diet in Zebrafish (Danio rerio) during Chronic Exposure**
Sravan Kumar Putnala, *Univeristy of Saskatchewan*

13:15-13:30 **Alteration in Biomarker Response Pattern and Target Gene Expression in Zebrafish (Danio rerio) Embryos Exposed to River Water Extracts from the Holtemme River, Germany**
Tim Freitag, *Goethe University Frankfurt*

13:30-13:45 **Do Urban Contaminants Affect the Decomposition of Leaf Litter in Streams?**
Hajar Bourassi, *Rhineland-Palatinate Technical University Kaiserslautern-Landau (RPTU)*

13:45-14:00 **Sources and Fate of Nitrate in a Tropical Crystalline Basement Aquifer: An Assessment Using Environmental Isotopes, Hydrochemistry and a Bayesian Mixing Model**
Louisa Preko Agyekumwaa, *IHE Delft Institute for Water Education/Ghana Atomic Energy Commission*

**One Health** | Roisin Murphy, Adam Wronski

### Teaching Rooms 4/5

13:00-13:15 **Tropical Mesopredator Ecology And The Impacts Of Heavy Metals In The Environment**
Tyler Cuddy, *Cardiff University*

13:15-13:30 **Non-Steroidal Anti-Inflammatory Drug (NSAID) Use and Avian Scavenger Contamination Risk in South America: A Survey of Livestock Veterinarians in Argentina**
Kane Colston, *University of Bristol*

13:30-13:45 **Geospatial Analysis for Monitoring and Assessing Oil Spills in Nigerian**
Nguamo Jessica Angula, *University of Strathcylde*

13:45-14:00 **Novel Sorbents for Remediation of Crude Oil and Refined Product Spills in Aquatic Systems**
Alamin Khamis, *University of Strathclyde*



# **Tuesday** Platform Presentations

## **Afternoon Sessions II** (15:30-17:00)

**Aquatic Ecotoxicology** | Sofia Sangiorgi, Judith Mugambi, Carolina Rocha, Shaleen Glasgow

### Lecture Theatre 1

15:30-15:45 **Differences in the Bioconcentration Kinetics of Human Pharmaceuticals Among Two Fish Species With Different Tolerance to Environmental Pollution**
Daniela Perez, *National University of La Plata (UNLP) - CONICET*

15:45-16:00 **The Effect Of Endocrine Disrupting Compounds On Neurodevelopment In Zebrafish Early Life Stages**
Ellen Vandeputte, *University of Antwerp*

16:00-16:15 **Keeping It Real: Investigating the Impact of Neuroactive Pharmaceuticals on the Functional Role of a Freshwater Ecosystem Engineer, Gammarus pulex**
Joseph D'Souza, *Cardiff University*

16:15-16:30 **Tracking Metal Handling Responses in Liver's Subcellular Fractions Across Five Estuarine Fish Species Under Metal Exposure**
Luana Hainzenreder Bauer, *Groupe de recherche interuniversitaire en limnologie (GRIL), Université du Québec à Montréal (UQAM)*

**Computational Ecotoxicology & Environmental Modelling** | Drew Szabo, Angel Ceballos

### Teaching Rooms 4/5

15:30-15:45 **Extrapolating the Effects of Chlorpyrifos from Lab to Field Using Time-Variable Mean Species Abundance Relationships**
Venja Schoenke, *Radboud University*

15:45-16:00 **Risk Assessment of Pesticides in French Surface Waters Within Protected Areas**
Danisa Lione, *Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau*

16:00-16:15 **Evaluation of Metal Bioavailability in Aqueous Media by Mechanistic Analysis of the Time-Response of Luminescent Metal Biosensors: Theoretical Concepts and Case Study**
Lorenzo Maffei, *University of Lorraine (UL)*

16:15-16:30 **Modelling the Role of Antarctic Krill in the Vertical Transport of Microplastics in the Southern Ocean**
Elizabeth Candish, *University of Cambridge*

# **Schedule** | Wednesday, 13 August

| Time | Programme | Location |
|---|---|---|
| 11:00–12:30 | Terrestrial Ecotoxicology<br>Multiple Stressors in a Changing World | Lecture Theatre 1<br>Teaching Rooms 4/5 |
| 12:30–14:00 | Lunch Break | Quarks Restaurant |
| 14:00–15:30 | Terrestrial Ecotoxicology<br>Multiple Stressors in a Changing World | Lecture Theatre 1<br>Teaching Rooms 4/5 |
| 15:30–16:30 | Coffee Break & Poster Social | Atrium |
| 16:30–17:30 | Industry Keynote **Elizabeth Collison** | Lecture Theatre 1 |

## **Plenary Speaker** (Lecture Theatre 1)

### Elizabeth Collison

*Corteva Agriscience*

Following her PhD studies investigating the effects of neonicotinoid pesticides on honey bee and bumble bee health based at the Food Environment Research Agency (Fera), Liz has worked as a regulatory ecotoxicologist for the last ten years, with roles in consultancy prior to joining Corteva in 2021. She supports global regulatory submissions for plant protection active substances and products, including monitoring ecotox studies and conducting environmental risk assessments for all non-target organism groups.

In her keynote titled "When I grow up I want to be a regulatory ecotoxicologist", Liz will share insights from her career experiences to date, from tagging whales in New Zealand to tagging bees in York and lessons learnt along the way.



# GET INVOLVED!

## EXPLORE SETAC TO THE FULLEST.

**Discover our Future Events**
Explore upcoming SETAC events. Save the date and plan to participate.
**setac.org/events**

**Connect with Fellow Students**
Join a SETAC student affinity group and stay informed about student-focused activities.
**setac.org/students**

**Explore the SETAC Awards Programme**
Learn more about the SETAC Awards programme and consider applying or nominating a fellow student or recent graduate!
**setac.org/awards**

**Join a SETAC Europe Regional Branch**
Get involved at a more local level. Connect, share knowledge and make a difference close to where you live.
**setac.org/branches**

**Participate in a SETAC Europe Committee**
Help shape the future of SETAC Europe. Volunteer your time and expertise in a commitee!
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# **Wednesday** Platform Presentations

## **Morning Sessions** (11:00-12:30)

**Terrestrial Ecotoxicology** | Harriet Sleight, Eilidh Garden

### Lecture Theatre 1

11:00-11:15 **Plants on Prescription: Long Term Effects on Fertility of Diclofenac and 17B-Estradiol Plants on Prescription: Long Term Effects on Fertility of Diclofenac and 17B-Estradiol**
Andrea Garduno Jimenez, *University of Leeds*

11:15-11:30 **Pharmaceutical Pollution in Terrestrial Habitat: Investigating Effects of Antibiotic Pollution on Microbial Functioning and Modelling Scenarios for Antibiotic Pollution in S/Western Nigeria**
Oluyemi Ojo, *University of York*

11:30-11:45 **Prochloraz Affects the Toxicokinetics of Azoxystrobin in Enchytraeus crypticus (Annelida)**
Kevin Noort, *UK Centre for Ecology & Hydrology*

11:45-12:00 **Dual Impact of Organochlorine Pesticides on the Nutritional Integrity of Plantains and Bananas**
Emmanuel Onche, *Joseph Sarwuan Tarka University, Makurdi*

**Multiple Stressors in a Changing World** | Katie Plaisted, Johannes Raths, Micha Wehrli

### Teaching Rooms 4/5

11:00-11:15 Withdrawal

11:15-11:30 **Temperature Effects on Species Sensitivity Distributions Across Aquatic Taxa**
Lea Grenc, *Radboud University Nijmegen*

11:30-11:45 **Bioaccumulation Studies With Aquatic Invertebrates – Exploring the Role of Receptor Binding and Temperature**
Johannes Raths, *Eawag*

11:45-12:00 **Temporal Dynamics of Sorption/Desorption Interactions: Microplastics Modulate Phenanthrene Bioavailability and Toxicity in Parhyale hawaiensis**
Ibrahim Lawan, *Heriot-Watt University*



**Wednesday** Platform Presentations

## **Afternoon Sessions** (14:00-15:30)

**Terrestrial Ecotoxicology** | Harriet Sleight, Eilidh Garden

### Lecture Theatre 1

14:00-14:15 **Unearthing Plastic: A Global Review of Microplastic Contamination**
Kelly O'Shea, *University of Leeds*

14:15-14:30 **Evaluating the Impact of Cassava Mill Effluent Discharge on Soil Quality in Selected Agricultural Areas of Abia State, South Eastern Nigeria**
Precious Emole, *Abia State University Uturu*

14:30-14:45 Withdrawal

14:45-15:00 **The Impacts of Gaseous and Particulate Air Pollution on the Moth Species Spodoptera littoralis**
Rachael Haw, *University of Sheffield*

**Multiple Stressors in a Changing World** | Katie Plaisted, Johannes Raths, Micha Wehrli

### Teaching Rooms 4/5

14:00-14:15 **Assessing Impact of Pesticides on Benthic Diatoms in the Context of Multiple Stressors: A Mesocosm Approach**
Sarah Descloux, *Eawag*

14:15-14:30 **Insights Into the Toxicity and Subcellular Partitioning of Platinum (Pt) and Palladium (Pd) in Chironomus Riparius Under Mixture Exposures**
Alice Carle, *University of Quebec in Montreal (UQAM)*

14:30-14:45 Withdrawal

14:45-15:00 **Investigating the Allergenic Potential of Different Pollen Species and Their Chemical Modifications on Exposure to Air Pollutants**
Dimple Pathania, *Deakin University, Coventry University*

# **Schedule** | Thursday, 14 August

| Time | Programme | Location |
|---|---|---|
| 09:00–10:30 | Aquatic Ecotoxicology<br>Analytical Challenges in Environmental Sciences | Lecture Theatre 1<br>Teaching Rooms 4/5 |
| 10:30–11:00 | Coffee Break & Poster Social | Atrium |
| 11:00–12:30 | Aquatic Ecotoxicology<br>New Approach Methodologies: Advancing Chemical Safety Assessment and Reducing Animal Harm | Lecture Theatre 1<br>Teaching Rooms 4/5 |
| 12:30–14:00 | Lunch Break | Quarks Restaurant |
| 14:00–15:30 | Applied Ecotoxicology, Including Life Cycle Assessment, Science to Policy & Regulation<br>Exploring the Role of Microplastics as Environmental Contaminants | Lecture Theatre 1<br>Teaching Rooms 4/5 |
| 15:30–16:30 | Poster Social & Networking | Atrium |
| 16:30–17:30 | Closing Keynote **Sabine Apitz** & Conference Closing | Lecture Theatre 1 |

## **Plenary Speaker** (Lecture Theatre 1)

### Sabine Apitz

*SEA Environmental Decisions Ltd*
*SETAC Europe Immediate Past President*

Dr. Apitz is an oceanographer and environmental marine geochemist with over 40 years of experience in environmental research and consultancy in the academic, government, and business sectors. Sabine specializes in developing various conceptual tools, including Ecosystem Services, Sustainability and other ecosystems-based framings, to link what we can measure as scientists to what we want to achieve in society, to support environmental management, policy and decision-making. With a BS in Chemistry (CSUF, 1983) and a PhD in Oceanography/ Marine Geochemistry (UCSD/SIO, 1991), she worked for 10 years as a senior marine environmental scientist for the US Navy, advising and representing the US Government on sediment and dredged material assessment and management issues. For over 20 years, she has been the Director of SEA Environmental Decisions, an independent consultancy. A SETAC fellow and Immediate Past President of SETAC Europe, she is Editor in Chief of its journal, Integrated Environmental Assessment and Management (IEAM).

# **Thursday** Platform Presentations

## **Morning Sessions I** (09:00-10:30)

**Aquatic Ecotoxicology** | Sofia Sangiorgi, Judith Mugambi, Carolina Rocha, Shaleen Glasgow

### Lecture Theatre 1

09:00-09:15 **Testing the SPEARpesticides Index for Pesticide Risk on Macroinvertebrates in Swiss Streams**
Anthony Fow Esteves, *Eawag*

09:15-09:30 **Current Regulatory Approaches for Assessing Aquatic Community Level Studies**
Eilidh Garden, *Chemicals Regulation Division, Health & Safety Executive*

09:30-09:45 **Challenges in Regulating Botanical Active Substances in the UK: An Ecotoxicology Perspective**
Harriet Kelynack, *Health And Safety Executive*

09:45-10:00 **Assessing the Environmental Hazard of Synthetic Phenolic Antioxidants**
Cleo Soldini, *University of Zurich*

**Analytical Challenges in Environmental Sciences** | Kai Wilschnack, Jana Appelt

### Teaching Rooms 4/5

09:00-09:15 **Pharmaceuticals and Personal Care Products in Estuarine Systems Across a Gradient of Effluent Contributions to Base Flow: Influences of Grab and Time Weighted Composite Sampling**
Adam Wronski, *Baylor University*

09:15-09:30 **Development of an Ultrahigh Resolution Mass Spectrometry-Based Method for Nontarget and Suspect-Screening of Nitroaromatic Compounds in Atmospheric Particulate Matter (PM2.5)**
Sergi Grebenyuk, *Goethe University Frankfurt*

09:30-09:45 **Assessment of Physico-Chemical and Microbial Variability in Poultry Litter and the Impact on Veterinary Medicine and Feed Additive Degradation**
Bethany Adams, *University of Leeds*

09:45-10:00 **Advancing Analytical Tools for High-Throughput Assessment of Polysaccharide Biodegradation**
Prabodhi Preethika Dehiwalage Dona, *Newcastle University*

## Morning Sessions II (11:00-12:30)

**Aquatic Ecotoxicology** | Sofia Sangiorgi, Judith Mugambi, Carolina Rocha, Shaleen Glasgow

### Lecture Theatre 1

11:00-11:15 **From Biochemistry to Demography: New Prospects for Aquatic Biomonitoring**
Chloé De Vernisy, *University of Lorraine (UL)*

11:15-11:30 **Optimizing Passive Sampling of PFAAs in Wastewater: Sorbent Selection and Evaluation**
Kristina Mraz, *University of Chemistry and Technology Prague (UTC)*

11:30-11:45 **Glacial Meltwater as a Source of Semi-Volatile Organic Contaminants to High-Altitude Alpine Lakes**
Evah Peard, *Utah State University*

11:45-12:00 **Toxicity of Green Marine Fuels on Lower Trophic Levels: Preliminary Findings From a Mesocosm Experiment With Ammonia**
Julie Svensgaard, *Aarhus University*

**New Approach Methodologies: Advancing Chemical Safety Assessment and Reducing Animal Harm** | Hiba Khalidi, Bianca Stadelmann

### Teaching Rooms 4/5

11:00-11:15 **Proteomics-Based Evaluation of the Zebrafish PAC2 Cell Line as a Model to Study Molecular Mechanisms of Chemical Toxicity in Fish**
Mihai-Ovidiu Degeratu, *Swiss Federal Institute of Aquatic Science and Technology (Eawag)*

11:15-11:30 **Immune Cell-Based Bioassay Approaches for Examining the Immunotoxic Effects of Oil Sands Process Waters and Naphthenic Acids**
Sunanda Paul, *University of Alberta*

11:30-11:45 **The Rainbow Trout Gill at Single-Cell Resolution: Cellular Diversity Underlying Toxicological Response**
Owen Trimming, *Cardiff University*

11:45-12:00 **Towards Streamlined Environmental Persistence Assays for Trace Organic Contaminants: Findings from High-Throughput Method Optimization and Biodegradation Testing**
Chiel Kaal, *University of Zürich*





## Afternoon Sessions (14:00-15:30)

**Applied Ecotoxicology, Including Life Cycle Assessment, Science to Policy & Regulation** | Victor Misev, Fabian Whitfield

### Lecture Theatre 1

14:00-14:15 **Non-Standard Toxicity Endpoints: Regulatory Challenges for Integration in the Environmental Risk Assessment Framework for Plant Protection Products**
Sofia Sangiorgi, *Health and Safety Executive (HSE) - Chemicals Regulation Division*

14:15-14:30 **Reevaluating New and Existing Challenges That Early Career Researchers Face Across Regulatory Ecotoxicology**
Dylan Asbury, *University of Sheffield*

14:30-14:45 **Potential Indoor Sources of Aromatic Amines in Dust: Implications for Indoor and Environmental Exposure**
Özge Edebali, *Masaryk University*

14:45-15:00 **Challenges in Using Scientific Results in Regulatory Risk Assessment of Plant Protection Products**
Sonja Schaufelberger, *RWTH Aachen University*

**Exploring the Role of Microplastics as Environmental Contaminants** | Georgie Savage, Janika Reineccius, Zheng Fang

### Teaching Rooms 4/5

14:00-14:15 **Understanding the Impacts of UV-Weathering and Plastic Additives on Microplastic Toxicity to Ammonia-Oxidizing Bacteria**
Mara Walters, *Virginia Institute of Marine Science*

14:15-14:30 **Breakdown of Plastic Waste Into Microplastics During an Industrial Composting: A Case Study From a Biowaste Facility**
Noora Risku, *University of Jyväskylä*

14:30-14:45 **Sustainable Cellulase Biosynthesis Valorizing Post-consumer Textile Waste**
Etini Etuk, *University of Huddersfield*

14:45-15:00 **Multifaceted Effects of Microplastics on Soil-Plant Systems: Exploring the Role of Particle Type and Plant Species**
Zhangling Chen, *University of Leeds*

**Aquatic Ecotoxicology** | Sofia Sangiorgi, Judith Mugambi, Carolina Rocha, Shaleen Glasgow

**Addressing Emerging Contaminants in Sewage Sludge: Anaerobic Digestion Challenges and Remediation Strategies** | Ogemdi Chinwendu Anika, *De Montfort University; University of York; Yorkshire Water*

**Individual and Binary Exposure of Short- And Long-Chain Phthalate Esters Decreases Viability and Inhibits Cellular Respiration in Human Lung Cells** | Cristian Ryan Argamino, *Coventry University and Deakin University*

**Disentangling the Web: The Impacts of Binary Chemical Mixtures on Consumer-Resource Feeding Interactions** | Dylan Asbury, *University of Sheffield*

**Effect-based Ecotoxicological Risk Assessment of Hazardous Chemicals Entering Surface Waters from Water Recycling Centre and Constructed Wetland Treatment** | Joseph Beaney, *University of Bath*

**Toxic Legacies: A Blueprint for Multilevel Ecotoxicological Investigation of Phenylarsenical Chemical Warfare Agents and Their Transformation Products** | Alischa Helena Becker, *Goethe University Frankfurt*

**Mechanism-Specific Toxicity of Road Pollutants in Snow: A Case Study of Norwegian Roads using a Zebrafish Embryo Multi-Endpoint Bioassay Battery** | Laura Behnstedt, *Goethe University Frankfurt*

**Towards Harmonised Test Methods for Ecotoxicity Testing of Nanomaterials: Adaptations of the OECD Test No. 202** | Fábio Chen, *University of Aveiro (UA)*

**Ecotoxicological Assessment of Groundwater in a Key Region of Drinking Water Supply** | Christian Forberg, *Goethe University Frankfurt*

**Temperature-Dependent Bioconcentration of Metals in Aquatic Organisms** | Lea Grenc, *Radboud University Nijmegen*

**First Flush and Seasons: The Influence on Dioxin-Like Activity and Endocrine Potential in a Small Urban Stream** | Jan Halaunia, *Goethe University Frankfurt*

**Analysis for Endocrine Effects and Genotoxicity of Sediment Samples from the Weser River via CALUX® Bioassays** | Daniel Hennig, *Goethe University Frankfurt*

**European Monitoring Data Reveal Temporally Extended Pesticide Occurrence Over Time** | Larissa Zoe Herrmann, *Rhineland-Palatinate Technical University Kaiserslautern Landau (RPTU)*

**Spatiotemporal Patterns of Lead Exposure in English Wildlife: A Comparative Study of Otters and Buzzards** | Holly Hulme, *Cardiff University*

**Specific Endpoints of Textile Wastewater at the Cellular and Organism Level** | Stella Jennes, *Goethe University Frankfurt*

**Development of a Semi-Static Algal Growth Inhibition Test Method** | Georgia Lees, *Labcorp*

**Assessing Environmental and Endocrine Risks of Diclofenac Liposome Encapsulation and Its Byproducts** | Carolina Machado, *University of Aveiro (UA)*





**Impact of Antimicrobial Substances in Bottom Up regulated Food Webs** | Frederik Meyer, *Institute of Environmental Science; RPTU Kaiserslautern Landau*

**The Impact of Caffeine on Freshwater Ecosystems: Behavioral and Physiological Effects on the Gastropod Physella acuta** | Ahlam Mohamed-Benhammou, *National University of Distance Education (UNED)*

**Identification and Mapping of Priority Freshwater Ecosystem Services (ES) Across England's River Catchments to Inform Chemical Risk Assessment** | Judith Mugambi, *University of Exeter*

**Indirect Effects in Mudsnails Through Dietary Uptake?** | Sophie Oster, *Rhineland-Palatinate Technical University Kaiserslautern-Landau (RPTU)*

**Investigating Aquatic Chemical Exposure Across the Galapagos Archipelago, Using Rapid Assessment Techniques** | Georgie Savage, *University of Exeter*

**In Vitro Toxicity of Road Runoff From Different Road Types Using Reporter-Gene Assays** | Jennifer Schmidt, *Goethe University Frankfurt*

**Toxicity of Tire Rubber Leachate to Daphnia magna and Temporal Trends of Additive Leaching** | Onni Sirkiä, *University of Eastern Finland*

**Integrated Assessment of Groundwater Ecosystems: Acute and Mechanism-specific Effects of Groundwater Samples from the Urban Area of Hanover, Germany** | Sarah Wohlmann, *Goethe University Frankfurt*

**Terrestrial Ecotoxicology** | Harriet Sleight, Eilidh Garden

**Herbicide Atrazine Act as a Long-Term Endocrine Disruptor in Drosophila Melanogaster** | Estefania Arroyo Jilote, *National Autonomous University of Mexico (UNAM)*

**The Soil Behind the Oil: Heavy Metal Contamination of an Oil Palm Plantation** | Nicholas Porter, *UK Centre for Ecology and Hydrology / Cardiff University*

**Insect Frass as a Sustainable Alternative to Conventional Fertilizers: Enhancing Soil Health and Agricultural Productivity** | Ana Eduardo Rodrigues, *University of Aveiro (UA)*

**Heavy Metals Bioaccumulation in Urban and Rural Conspecific Ants** | Antonia Smolić, *Ruđer Bošković Institute*

**One Health** | Roisin Murphy, Adam Wronski

**Addressing the Global Data Imbalance of Contaminants of Emerging Concern in the Context of One Health** | Andrea Garduno Jimenez, *University of Leeds*

**Novel Sorbents for Remediation of Crude Oil and Refined Product Spills in Aquatic Systems** | Alamin Khamis, *University of Strathclyde*

**Human Health Risk Assessment of Heavy Metals in Locally Grown Vegetables** | Muhammad Saleem, *University of North Dakota*

**Polycyclic Aromatic Hydrocarbons in the Breast Milk of Selected Nigerian Lactating Mothers and Implications for Carcinogenic Risk in Newborns** | Oluwafemi Sarumi, *Rhineland-Palatinate Technical University Kaiserslautern-Landau (RPTU)*

**Computational Ecotoxicology & Environmental Modelling** | Drew Szabo, Angel Ceballos

**Modeling Chemical Bioaccumulation in Black-Tailed Godwits: Analyzing the Extra Risk for Migratory Birds and Identifying High-Risk Sites Along Migration Routes** | Eva Alexandri, *University of Osnabrueck*

**Does Cytochrome P450 Inhibition Lead to Synergy? A Mechanistic Study of Azole-Pesticide Mixtures in Enchytraeus crypticus (Annelida)** | Kevin Noort, *UK Centre for Ecology & Hydrology*

**Are French Surface Waters at Risk From Chronic Pesticide Exposure?** | Veronica Rodriguez Careaga, *Rhineland-Palatinate Technical University Kaiserslautern-Landau (RPTU)*

**To Which Extend Can the Fungicide Azoxystrobin Affect the Uptake and Elimination of Copper in Daphnia Magna?** | Marius Schmitt, *Ghent University, GhEnToxLab*

**Addressing Data Gaps for Safe and Sustainable by Design: A Substance-Function Dataset to inform on Functional Alternatives for PMT/vPvM Chemicals** | Bianca Stadelmann, *University of Amsterdam*

**Recommend Economic, Environmental and Social Consideration for Cereal Production socio-eco-efficiency evaluation and predictive optimisation** | Hamza Taoumi, *Sidi Mohamed Ben Abdellah University*

**Mechanistic Modelling for Aquatic Mesocosms with Endectocide Treatments** | Chuxinyao Wang, *Swiss Federal Institute of Aquatic Science and Technology (Eawag)*

**Predicting the Presence of Pyrethroids: Spatio-Temporal Distribution in Agricultural Environments in Germany** | Katharina Wifling, *iES Landau*

**New Approach Methodologies: Advancing Chemical Safety Assessment and Reducing Animal Harm** | Hiba Khalidi, Bianca Stadelmann

**Assessment of the In Vitro Test Guideline OECD 455 for Detecting Estrogenic Activity using Animal Free Conditions and Animal-Free Metabolization Systems** | Denise Horte, *Goethe University Frankfurt*

**Fish Cell Lines in Chemical Risk Assessment: Temperature and Species Sensitivity Influence** | Kehinde Olajide, *Swiss Federal Institute of Aquatic Science and Technology (Eawag)*

**The Regulation of Essential Metal Toxicity: Assessing Mechanisms Driving Metal-Nutrient Interaction Responses** | Eleanor Phillips, *University of Sheffield*

**Leveraging Genomics and Artificial Intelligence to Develop Predictive Pesticide Risk Assessment Frameworks for Wild Pollinators** | Chung Tsui, *University of Exeter*

**Applied Ecotoxicology, Including Life Cycle Assessment, Science to Policy & Regulation** | Victor Misev, Fabian Whitfield

**The Role of Spices in Modulating Polycyclic Aromatic Hydrocarbon Formation in Suya** | Favour Agboola, *Kwara State University Malete, Nigeria*





**Multiple Stressors in a Changing World** | Katie Plaisted, Johannes Raths, Micha Wehrli

**Urban Forests as Hotspots for Novel Insect-Host Interactions: Alder Leaf Beetle Expansion onto Birch** | Safia El-Amiri, *University of Sheffield*

**Beyond the Individual: Modelling the Effects of Contamination on Food Web Structure and Invasibility** | Laura Landon Blake, *University of Sheffield*

**Integrating Transcriptomic Points of Departure (tPODs) with Bio- and Chemical Analyses for Hazard Assessment of Road Runoff in Zebrafish** | Markus Schmitz, *Dpt. Evolutionary Ecology and Environmental Toxicology (E3T), Goethe University, Frankfurt am Main, Germany*

**Evaluating Osmia bicornis as a Model Organism in Ecological Risk Assessment: A Comparison to Other Pollinator Species** | Dominika Twaróg, *Institute of Nature Conservation Polish Academy of Sciences*

**Toxic Heatwave: Chemical Pre-Exposure Alters Springtail Survival in Rising Extreme Temperatures** | Micha Wehlri, *Swiss Federal Institute of Aquatic Science and Technology (Eawag)*

**Exploring the Role of Microplastics as Environmental Contaminants** | Georgie Savage, Janika Reineccius, Zheng Fang

**Assessing the Microplastic Contribution From Sewage Sludge to Agricultural Soils With Regular Sludge Application** | Thilakshani Atugoda, *University of Exeter*

**Tracking Microplastics in the Marine Environment: Methodological Obstacles and Advances** | Janika Reineccius, *Leibniz Institute for Baltic Sea Research Warnemünde*

**Toward Standardized Microplastic Uptake Assessments in Bivalves: Experimental Trials in Exposure System Design and Particle Quantification** | Venecia van Balla, *Cape Peninsula University of Technology (CPUT)*

**Analytical Challenges in Environmental Sciences** | Kai Wilschnack, Jana Appelt

**Developing Innovative Techniques to Monitor Chemical and Microbial Pollution** | Charley Clayton, *University of York*

**Towards Quantitative Method Development Using Pyrolysis–Gas Chromatography–High-Resolution Mass Spectrometry: Estimating Phthalate Ester Emissions From E-waste Pyrolysis** | Amoluck Eluri, *Coventry University*

**Next Generation Passive Samplers for Monitoring of Organic Contaminants in Water at Increased Time Resolution** | Kai Wilschnack, *University of Portsmouth*

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Floorplan

## Ground Floor

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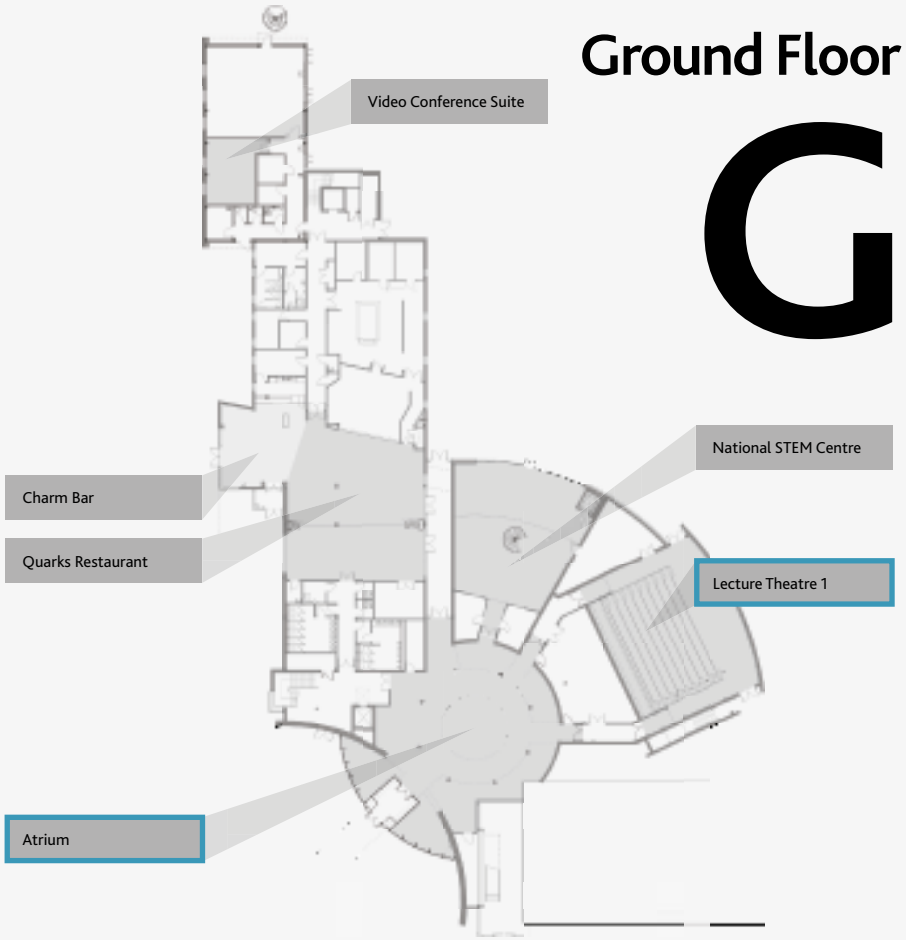


## First Floor

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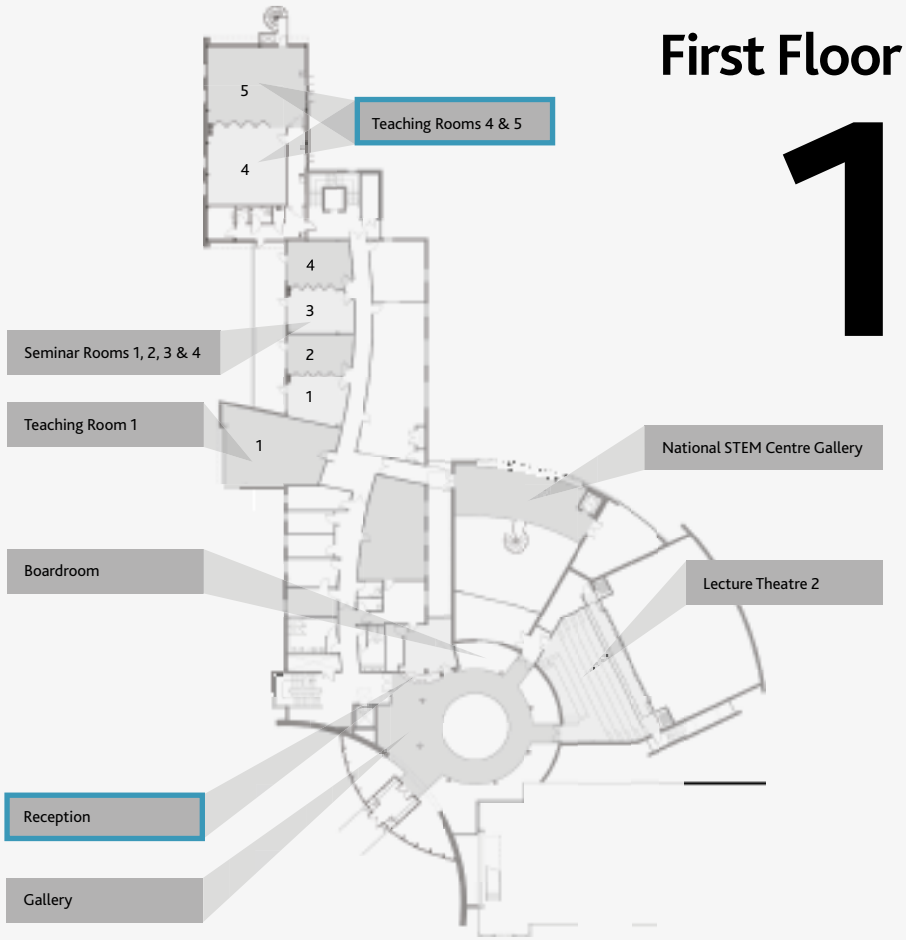


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