



ESAI ANNUAL REVIEW 2023

ESAI Chairpersons Address from Dr. Niamh Power



The Environmental Sciences Association of Ireland (ESAI) has been involved in a number of activities throughout 2023. This end of year report summarises some of the key events and activities throughout the year.

The highlight of the year was our Environmental Researchers Colloquium (Environ). The 2023 Environ conference was hosted in collaboration between the ESAI and Atlantic Technological University (ATU) on their Donegal campus. This Environ focused on the theme of "Evidence and Plans Towards Transitions to a Sustainable Future". The event took place from the 3rd to 5th of April 2023, slightly earlier than the 2022 conference returning it to its pre-covid calendar slot of the Easter timeframe. Environ 2023 commenced on the afternoon of Monday 3rd of April with a series of interactive workshops on Training Analysis & Career Development and Getting Ready to be a Sustainability Professional. Monday also saw a field trip to the beautiful Glenveagh National Park, which showcased the beauty of the environment we want to protect. Later that evening saw a lively Panel Debate on 'The Implication and Solution of Future Climate Change Actions on Agriculture', which was open to the public. The question and answer session which followed gave the audience an insight into the complexity and level of change required. The following two days saw a wide variety of presentations showcasing the best of environmental research on the Island of Ireland. I would like to acknowledge Dr Denis McCrudden & Christopher McElemey and their team for hosting Environ 2023 at ATU. The colloquium in Donegal was a huge success and extremely well organised.

Over the summer period we saw the return of the ESAI undergraduate of the year. In 2023 we saw 12 students nominated by 10 universities. These students excelled in environmental engineering at undergraduate level. It is wonderful to see the width and breath of projects undertaken in the environmental field. The future of environmental research looks bright. We would like to extend our special thanks to all the college liaison officers who worked with us and organised the Level 7 and Level 8 nominees for their university.

Thanks to Dr Liam McCarton, Dr John Gallagher and Dr Sara Meehan for co-ordinating the "ESAI Postgraduate Researcher of the Year Award". The applications from postgraduates were evaluated according to the criteria: [1] Scientific excellence and originality; [2] Impact economic/environmental/ societal) and; [3] Dissemination (conferences, outreach, media). Congratulations to the winner Adrienn Maria Szucs, TCD. Adrienn's project is entitled "Advancing Rare Earth Element Science: Mimicking Nature for Sustainable Solutions and a Greener Tomorrow". This year the standard was extremely high, so much so that we wanted to recognize another postgraduate researchers work with a "Highly Commended" award. Congratulations to Sarpong Hammond Antwi, DKIT with their project entitled "Water Governance and Management Practices in the Republic Of Ireland: Past, Present and the Future".

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A key ESAI meeting was held in November 2023 to decide on future strategy. We would like to be the association of choice for environmental researchers on the island of Ireland and to improve the knowledge transfer between the research community and society at large. We also aim to provide the best networking opportunities for environmental science research. From this we hope to research out to those who work in industry, policy, local government and government agencies to help us to promote the excellent research work that is undertaken on the Island of Ireland.

ENVIRON 2023

On behalf of all the team at the ESAI we would like to acknowledge and sincerely thank Environ 2023 conference co-convenors Dr Denis McCrudden and Christopher McElerney and all the ATU team on the Donegal campus for hosting Environ and for assembling a very comprehensive programme, which provided an excellent platform for Environmental Researchers to showcase their work. We also wish to thank Ms Sinead Macken for providing excellent administrative support to the event as always.



One of the highlights of the Environ conference is the panel discussion open to the public, where the science community gets to discuss environmental issues pertinent to the region. In 2023, this event was again, well supported by the scientific community and wider public. The Panel discussion was on 'Climate Smart Agriculture' and the panel consisted of Dr James Moran ATU Galway, Mr Colm Markey MEP, Paul O'Brien, IFA and Dr. Douglas MacMillan, Green restoration Ireland. The panel session and debate was chaired by Dr Edna Curley, Head of Centre at Mountbellew Agricultural College. Presentations from the panel were followed by a lively debate on the current and future implications of climate change on Irish agriculture in the context of reduction of greenhouse gas emissions.



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ESAI Prizegiving

The quality of research presented at Environ 2023 was exceptional with 70 oral presentations, 44 poster presentations, 114 abstracts and 215 delegates over the three days. The fact that the vast majority were delivered by young scientists and engineers bodes well for the future of environmental sciences in Ireland. Congratulations to all the winners in the ESAI Environ Student Presentation competition which featured ten awards this year. Special mention to Mathew Cole, ATU Donegal for winning the ESAI Best Oral Presentation for his work on the 'Development of a low-cost portable system for the simultaneous detection of soil pH and potassium' and to Silvia Cascone, University of Galway for winning the ESAI Best Poster Presentation for her work on 'Coastal Dune Vulnerability Assessment as a Proxy for Nature-based Solution in Ireland'.



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Early Careers Network

In September 2023 the Postgraduate Network changed its name to the Early Careers Network. The Early Careers Network will include researchers and those in industry and the cut-off point is 5 years post PhD and Masters. This change was brought about through the dedication of two of our council members Nicola Watson and Pdraig McDonagh. This change is in recognition of the role of post-docs and early career researcher's in mentoring and guiding postgraduate students, it also stems from a need to feel part of a research community. Under the ESAI this Early Careers Network will bring together researchers under the umbrella environmental theme. The need of researchers to come together to take part in inter-disciplinary and multi-disciplinary teams is more important now than ever. And this multi-disciplinary aspect is very strong within the ESAI. A meeting of the Early Career Network will take place at Environ2024, to include a short Q&A with a "later stage" researcher followed by short breakout session in small groups. The aim being to highlight the benefit of being within the network, and what members would like to see from it.

ESAI HEI Undergraduate of the Year Award 2022/23

Commencing in 2017 and now in its 7th Year, the ESAI Undergraduate of the Year Award continues to be significant on the Island of Ireland. In 2023 we received 14 nominations from 12 universities and 3rd level institutes across the Island. Well done to all the students who received nominations for excelling at environmental research at undergraduate level. The future looks bright. The ESAI would like to thank the college liaisons for their support in running this initiative each year. The following students were awarded ESAI Undergraduate of the Year: Lizzy Armah Amakwa (Level 8, ATU Donegal), Adrian Leddy (Level 8, ATU Sligo), Jack O' Brien (Level 8, Dundalk Institute of Technology), Eoin Corbett (Level 8, MTU Cork), Michael Buckley (Level 7, MTU Cork), Shauna Mallowney (Level 8, SETU Waterford), Philip Brennan (Level 7, SETU Waterford), Taylor Vereecken (Level 8, SETU Carlow), Anna Morrison (Level 8, Trinity College Dublin), Lauren Woods (Level 8, TUS Thurles), Isabel Gogarty-Meade, (Level 8, University College Cork), Niamh Gurrin (Level 8, University College Dublin), Rachel Stewart (Level 8, Ulster University), Charlene Watters (Level 8, ATU Galway).



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ESAI Grassroots Award Scheme

The grassroots award, sponsored by the Environmental Protection Agency (EPA), has funded a total of eight successful workshops since 2015. The ESAI are delighted to announce that the EPA have announced that they are to support another four workshops under this scheme. Special thanks to the EPA for their continued support. Details of the scheme can be accessed on our website www.esaiweb.org. You can also access videos from previous winners. The first award of this funding stream was allocated to Brakemi Egbedi of SETU Waterford entitled "Fostering collaboration between research and industry for shell waste utilization towards the realization of a circular blue economy". There will be a rolling call for future grassroots workshops so if you have an idea for a workshop consider applying.

Communications

ESAI members are the core of the organisation, and the communications team is lead by Dr. John Gallagher, TCD. We welcome your input and participation through our social media channels whether through our Listserver, LinkedIn, Facebook, Twitter or by subscribing to our Newsletters. At the end of 2023 the ESAI had 807 members, comprising of 187 full members and 620 student members. Social media reach has increased marginally on social media platforms during 2023 now with >10,000 connections and an increase of 2.3% (+222) LinkedIn connections in 2023, 3.5% (+118) Twitter followers, and maintaining similar numbers of Facebook friends, Newsletter readers and Listserver mailees.

A review of communications and the ESAI website is continuing, with costs to revamp and streamline systems and processes is proving to be expensive. A recent website crash, issues with payment system etc will result in a thorough review of communications post Environ 2024.

ESAI Council Meeting and AGM

The ESAI had a busy year in 2023, with three Council meetings, one special Council Meeting, one AGM and a strategy day. The AGM was convened to coincide with Environ 2023 and therefore held in ATU Donegal Campus. This AGM saw the stepping down of our previous Chairperson Dr. Liam McCarton, Liam was Chair of the ESAI for three years and his dedication to the role is without fault. Liam was Chair during Covid when it is safe to say that he steadied the ship, when the Environ Conference, which was due to be hosted in April 2020, had to be rescheduled at short notice, his support to pivot the conference to an online conference later that year was truly invaluable. During this time Liam took all issues, Covid, the knock-on financial issues in his stride and has provided the ESAI on-going support through his experience and wisdom. We would like to take this opportunity to thank Liam for his contribution and on-going support.



Dr. Niamh Power, ESAI Chairperson

Niamh is a Principal Investigator within in Sustainable Infrastructure Research & Innovation Group and an Academic Developer with the N-TUTORR project.