



**ESAI ANNUAL REVIEW 2018**

## ESAI Chairpersons Address from Dr. Frances Lucy

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The Environmental Sciences Association of Ireland has had a busy year. The highlights are as follows:

- Environ 2018 – 28th Irish Environmental Researchers Colloquium hosted by Cork Institute of Technology, 27th -29th March
- ESAI Postgraduate Researcher of the Year Award
- ESAI Graduate awards at Universities and Institutes of Technology throughout Ireland
- ESAI Grassroots Workshop competition
- Education with Sustainability Conference at IT Sligo, Supported by the ESAI

We had a large attendance at Environ 2018 and this is reported separately. I would like to acknowledge Dr. Joe Harrington and Dr. Niamh Power (joint convenors) and their team of staff and students for hosting Environ 2018 at Cork IT.

The colloquium in Cork was a huge success and extremely

well organised. Thank you to all the sponsors of the Cork colloquium. The theme for 2018 was 'Arriving at a Sustainable Future'. Congratulations to all the winners in the ESAI Student Presentation competition which featured ten awards this year with a special mention to Cian White, Winner of the Best Oral Presentation at Environ 2018'. Congratulations to Conall Holohan, the winner of the 'ESAI Postgraduate of the Year Award'. He is a postgraduate student at NUI Galway in the final year of his studies. Conall's entry based on his PhD research project on 'The Anaerobic Digestion of Fats: exploring microbial technological solutions' was of an extremely high standard. Thank you to all the entrants for the 'ESAI 2018 Postgraduate of the Year Award' – all entries were of a very high standard. Thanks also to ESAI council members Drs. Liam McCarton and Tasman Crowe for co-ordinating the judging. We encourage MSc and PhD researchers, in the final year of their research study, to apply for the ESAI Postgraduate Award in 2019. Please come along to see Conall present his research during Environ 2019 at the ESAI AGM in the Lecture Theatre L117 Haughton Building on Tuesday April 16th at 5.30pm.

One of our major initiatives in the past few years is to reach out to colleges more than we have done in the past. As part of this, we are fortunate to have an ESAI Liaison in each college. These staff members act as a contact point for ESAI activities and information flow. We are also offering free membership to all undergraduates in relevant courses in each college. The list of third level environmental education programmes on our web site has been updated as part of this process. This year we have recruited 112 new undergraduate members. We see this is a good sign of increased interest in early stage researchers and the growth of the ESAI.

In 2018, ESAI again provided an undergraduate research award to the best graduates in many Environmental programmes in Irish HEIs. This was carried out with the help of the college liaisons who worked with their colleagues to identify the best students within their own environmental courses. Many students throughout Ireland were delighted to get their certificate and prize of ESAI membership. They looked great in their graduation photos holding their awards on the ESAI Twitter feed!

In August 2018, ESAI partnered with CERIS IT Sligo and Mid Sweden University, to host an International Conference entitled 'Education with Sustainability (EwS)' held at IT Sligo. The conference focussed on the challenges facing all aspects of education in teaching for a sustainable future. EwS opened with a lively public Q and A event entitled 'Fake News and Impacts'. Presentation topics at the two-day conference included sustainability aspects at preschool, second level and higher education and outreach initiatives. These were very diverse and ranged from a talk on a Bolivian Andean community to a Swedish case study of sustainability in graphic design education. The conference ended with workshops on Life Cycle Analysis, Corporate Social Responsibility and Design and the provocatively titled, How Unsustainable are the Sustainability Goals. Irish delegates included representatives from eight Higher Education Institutes, highlighting the national importance of the conference.

Please consider the ESAI Grassroots workshop scheme. The Grassroots Workshop Support Scheme was established in 2016 to assist researchers, particularly postgrads and postdocs at hosting specialist workshops. We are grateful to the EPA for providing funds for four more workshops in 2017-2019. This is a great opportunity to organise an event independent of your postgrad research project, which adds to your knowledge, networking and competence in project management.

The ESAI has also signed up to the voluntary Code of Governance. We see this as an important self-assessment of how we carry out our role as an Association, with oversight and fair process.

Where there is no Engineer" is a design initiative funded by the European Union DEAR program and Irish Aid. It is delivered in partnership with DIT, Engineers without Borders Ireland, Habitat for Humanity, Engineers Ireland and the ESAI. ESAI Researchers who think their work may have an application within a developing country are invited to enter the competition. Research is grouped under six global themes; Climate Resilient Infrastructure, Self Supply Water and Sanitation, Health, Off Grid Energy Systems, Food Security and Smart Data in the Community. This year's competition will focus on the scientific and social challenges of forced migration. Selected entrants will be invited to participate in the National Finals where they get the opportunity to pitch their research in a dragons den style format. The winning team will be awarded a "Davies Travel Scholarship" to travel to work with Habitat for Humanity and EWB. Four research concepts will also be selected for funding under our "Arup Trust Innovation Award". This will fund researchers who need to further testing to develop their concept to a practical stage. This is an opportunity for researchers to bring their research into a practical real world environment. Anyone interested to apply can discuss further at the EWB Ireland stand at the environ conference or email [liam.mccarton@dit.ie](mailto:liam.mccarton@dit.ie) for more information.

## ESAI Chairpersons Address from Dr. Frances Lucy *Cont.*

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ESAI depend on the voluntary efforts of our members, so as always, we welcome your input. We are keen to partner with relevant environmental events you may be organising, e.g. conferences, workshops and outreach events. Remember to keep in touch with ESAI through social media on Twitter, Facebook and LinkedIn. We produce a bi-annual newsletter [mail chimp] to keep you up to date with our activities and your participation in ESAI. The ESAI listserver continues to be very effective in terms of spreading news on events and jobs to our network.

On the ESAI Council front, we are actively seeking new members for the council to get involved in a range of new and existing activities. This is a great experience for both early stage [PhD and Post Doc] and more mature researchers and also research supervisors. Please attend the ESAI AGM on if you wish to become involved.

On behalf of the ESAI, I wish to say a sincere thanks to all members of the ESAI Council who are always enthusiastic and willing to get involved in various activities. For example this year we will be revamping our website. I particularly want to thank those who are stepping down from their roles. Many thanks to the ESAI college liaisons each of whom play a pivotal role in promoting Environ and in other activities.

The Council wish to sincerely thank ESAI administrator, Sinead Macken, for her excellent work, dedication and support over the past year with all our diverse activities.

Best wishes to all for research in the year ahead.

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Prof Frances Lucy is Head of Department of Environmental Science at IT Sligo. She has been on ESAI Council since 2013 and was the convenor at the 2015 ENVIRON in IT Sligo.

## ESAI Goals and Objectives 2018

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**The ESAI (Environmental Science Association of Ireland), founded in 1995, as a not for profit organisation.**

The membership is drawn from all sectors and disciplines, ranging from biology and ecology to engineering, hydrology and management and from professors to amateur naturalists. The goals and objectives of the organisation are to:

- Provide a forum to facilitate exchange of specialist information and advice amongst environmental researchers, policy makers, environmental management practitioners and other stakeholders, within Ireland and elsewhere.
- Promote a fuller awareness of the role that higher-level education institutions may make in finding solutions for the urgent environmental problems confronting contemporary society.
- Provide a forum for networking amongst environmental researchers both at national and international scales.
- Facilitate an annual conference aimed at providing postgraduate and other researchers with an opportunity to learn about each other's work, and for postgraduates to present and publish papers within a supportive community.
- Promote high professional standards amongst environmental researchers and professionals.
- To ensure a platform for science-based research on the environment in Ireland.
- Provide a Code of Ethics for Environmental Professionals in Ireland through its membership.
- To maintain growth in the membership base.



**Lough Gill: Photo Frances Lucy**

## Benefits of Membership

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By becoming a member of ESAI, you will also have access to:

- Discounted rates at Environ, the annual Irish Environmental Researchers Colloquium, one of the major activities of the Association. It is now one of the largest national scientific meetings in Ireland attracting over 300 delegates each year.
- Discounted rates for selected workshops, seminars, further education courses and conferences.
- Access to ESAI listserver
- Eligibility to apply for ESAI Postgraduate Researcher of the Year Award
- Eligibility to apply for ESAI Undergraduate of the Year Award
- Eligibility to apply for ESAI Grassroots Workshop Funding
- Learn from others and absorb best practice
- Raise the profile of you and your business
- Stimulate new business opportunities
- Innovate and commercialise new products and services

### **Raise your Profile**

- Members of ESAI will receive free-of-charge E-Newsletters, Environews.
- Sponsorship opportunities

## Keeping you informed

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The ESAI website ([www.esaiweb.org](http://www.esaiweb.org)) is kept up to date with the latest news from the association about our upcoming events, competitions and funding opportunities.

We circulate a quarterly newsletter summarising our work throughout the year. We also coordinate an email Listserver, which facilitates a community of over 500 subscribers to exchange information about environmental events and career opportunities in Ireland. To sign up to these services, please visit our website

We are also very active on a number of social media platforms including Facebook, Twitter and LinkedIn.

[http://twitter.com/esai\\_environ](http://twitter.com/esai_environ)

<http://www.facebook.com/esaiweb>

<http://www.linkedin.com/in/esaiweb>

## Contact details

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Website: [www.esaiweb.org](http://www.esaiweb.org)

## 2018 Events

Date	Event
January 1 <sup>st</sup>	<b>ESAI Grassroots Workshop Support Scheme</b> Sponsored by EPA – Rolling Call
February 28 <sup>th</sup>	<b>ESAI Grassroots Workshop Support Scheme</b> Sponsored by EPA – Rolling Call
March	<b>ESAI Environews Spring Edition available online <a href="http://www.esaiweb.org">www.esaiweb.org</a></b>
March 26 <sup>th</sup> -28 <sup>th</sup>	<b>Annual Conference</b> Environ 2018 co-hosted by Cork Institute of Technology 28th Annual Irish Environmental Researchers Colloquium, Cork Institute of Technology, Cork.
March 26 <sup>th</sup>	<b>Field Trip @ Environ 2018</b> 14:00-17:00 Haulbowline Island Remediation Project Haulbowline Island, Cork
March 26 <sup>th</sup>	<b>Workshop @ Environ 2018</b> 14:00-17:00 Bringing research to the next level – Commercialisation, Code of Conduct, IP & Technology Transfer Cork Institute of Technology
March 26 <sup>th</sup>	<b>Workshop @ Environ 2018</b> 14:00-17:00 Statistical analysis for research – using SPSS statistical software Cork Institute of Technology
March 26 <sup>th</sup>	<b>Launch</b> ESAI Postgraduate Researcher of the Year Award Launch
March 28 <sup>th</sup>	<b>ESAI AGM</b> 7:30-18:00, Cork Institute of Technology All members welcome
March 28 <sup>th</sup>	<b>ESAI Student Competition Prize Giving Ceremony</b>
June 30 <sup>th</sup>	<b>ESAI Undergraduate of the Year Award Nominations Closes</b>
August 20 <sup>th</sup> -22 <sup>nd</sup>	<b>ESAI Collaboration on 1st International Education with Sustainability (EwS) Conference</b> 20% Discount for members IT Sligo, Sligo
August 31 <sup>st</sup>	<b>ESAI Grassroots Workshop Support Scheme for Postgraduate and Postdoctoral Researchers</b> Sponsored by EPA – Rolling Call
September 1 <sup>st</sup>	<b>Undergraduate Membership Offer</b> Free Membership for all Undergraduate Members Scheme Rolled Out
September 30 <sup>th</sup>	<b>ESAI Postgraduate of Year Award</b> Nominations close

## 2018 Events *Cont.*

Date	Event
October 9 <sup>th</sup> -10 <sup>th</sup>	<b>ESAI Event Partners ARC2018 – Achieving Resilient Cities &amp; Communities</b> DIT, Grangegorman, Dublin
October 31 <sup>st</sup>	<b>ESAI Grassroots Workshop Support Scheme for Postgraduate and Postdoctoral Researchers</b> Sponsored by EPA – Rolling Call
October / November	<b>ESAI HEI Nominated Undergraduate of the Year Award Winners Graduate</b> Presentations taking place at HEI's nationwide
December	<b>ESAI Postgraduate Researcher of Year Award Winner Announced</b>
December 7 <sup>th</sup>	<b>Annual Conference – Call for Papers</b> Environ 2019 co-hosted by Institute of Technology Carlow 29th Annual Irish Environmental Researchers Colloquium
December 30 <sup>th</sup>	<b>Free Membership for Undergraduate Members</b> Offer Closes
December 31 <sup>st</sup>	<b>ESAI Grassroots Workshop Support Scheme for Postgraduate and Postdoctoral Researchers</b> Sponsored by EPA – Rolling Call

# envi ron 2018



**Public Engagement Event: Mr. Ken Leahy, Ms. Claire Nash, Dr. Joe Harrington, Mr. Ezra MacManamon, Dr. Mary O' Connor, Mr. Jonathan Healy, Professor Frances Lucy**

Two hundred and eighty five delegates registered for the hugely successful three day 28th Irish Environmental Researchers Colloquium, Environ 2018 in Cork Institute of Technology which was organised by Dr. Joe Harrington and Dr. Niamh Power (Conference Joint Convenors), Sinead Macken (Environmental Sciences Association of Ireland – ESAI Liaison) and ESAI council members. The theme of the conference was “Arriving at a Sustainable Future”.

88 oral papers and 75 posters were presented at the conference which was divided into seventeen themes:- Water Quality & Resources, Waste Management, Energy, Climate Change, Invasive Change, Invasive Species, Environmental Policy

& Communication, Human Health, Ecotoxicology, Environmental Management, Air Quality & Urban Development, Marine & Coastal, The Human Built Environment, Sustainable Infrastructure, Sustainable Land Use & Agriculture, Biodiversity & Ecosystems, Nanotechnology & the Environment and Smart Technology for the Environment.

Delegates from The Netherlands, France, Germany, Belgium, the UK, Northern Ireland and Ireland attended the conference.

Highlights of the conference included a public engagement debate entitled “Flooding in the Cork Region – Impacts and Solutions” which was attended by over 100 people. This public engagement event focused on a matter of local, national and indeed international importance, the debate was lively and informative with very positive feedback on the event. Speakers included from the Office of Public Works (OPW), Arup Consulting Engineers and the local business community. The invited speakers were given eight minutes to outline their position. This was followed by a very vibrant and informative question and answer session that was skilfully chaired by Mr. Jonathan Healy (Newstalk). The different sides of the argument were fully aired and the debate went on past 10pm due to the number of questions from the audience.



### Public Engagement Event

Kieran Ruane, CIT and Dr. Cormac O'Suilleabhain, Cork County Council), 'Bringing Research to the next level – Commercialisation, Code of Conduct, IP & Technology Transfer' (Mr. Ronan Coleman, CIT and Mr. Kevin Fitzgibbon, CIT WSSIC) and 'Statistical analysis for research – using SPSS statistical software' (Dr. Catherine Palmer).



### Conference Opening & Plenary: Mr. Michael Loftus, Mr. Eamon Ryan, Dr. Jonathan Derham, Professor Frances Lucy, Dr. Joe Harrington



The debate was previewed on the local Evening Echo newspaper and announced on local radio stations.

The public engagement debate was preceded by a cheese and wine reception in the Berkeley Building on the CIT campus.

The conference began on the afternoon of Monday 26th March with three education and training workshops on offer to delegates: 'Field Trip to Haulbowline Island Remediation Project' (Mr

At 9.15am Tuesday 28th March, the conference was officially opened with a ceremony held in the CIT Tourism and Catering Building. The speakers included: Michael Loftus, CIT Head of Faculty of Engineering and Science, Dr. Joe Harrington, Conference Co-Convenor and Professor Frances Lucey, ESAI Chairperson. This opening event was followed by a plenary session with keynote addresses from Dr. Jonathan Derham, EPA Director and Mr. Eamon Ryan, Green Party. Both speakers gave thought provoking addresses on science and its communication and dissemination.

Over the course of the next two days 88 oral papers were presented in four parallel sessions. 75 academic posters were exhibited in Room T136 of the Tourism and Catering Building. This arrangement worked particularly well as it allowed delegates to mingle with exhibitors/sponsors and to view the posters on display.



**Some of the CIT Staff involved at Environ**



**Environ Delegates at the Closing Event**



**Environ Delegates attending Poster Sessions**

The college hosted the Environmental Science Association of Ireland AGM on Tuesday evening which was very well attended and included an oral presentation by Philip Shine the Postgraduate Research of the Year Award Winner for 2017.

Proceedings then moved to the Clayton Hotel Silver Springs for the Environ 2018 conference dinner. The evening began with a drinks reception in the Tivoli Suite with entertainment from a quartet of CIT's very talented School of Music students. A buffet dinner was then served in the Tivoli Suite with music afterwards from Ted Dunne Entertainment, a good night was had by all.

Wednesday began with registration opening at 9.15am. A keynote address was given by Josien Ruijter of NV HVC, The Netherlands at a Plenary Session at 9.30am on the Dutch Experience of Wastewater Sludge Incineration and Phosphorous Recycling. This informative keynote address was very well attended. Ms. Ruijter is a member of the EU Interreg Phos4You Project Team. 9 papers and posters were presented by the Phos4You Partners at the Environ 2018 Conference, the attendance and presentation by the Phos4You partners (CIT is a partner on this EU-funded project) was a feature and a highlight of the Conference. The conference then continued with oral presentations taking place throughout the morning alongside the poster presentations.

This was followed by lunch and then the important business of the day, the Environ 2018 prize giving.

A huge thank you to everyone, both staff and students, who made the conference such a success.

## ESAFINCO/2018 INCOME AND EXPENDITURE ACCOUNT 2018

For the year ended 31 December 2018		
	€	€
<b>Opening balance as 01/01/18</b>		<b>19,916.41</b>
<b>Income</b>		
Membership	3,080.96	
Environ 2017 - Delegate Fee	(140.00)	
Environ 2018 - Delegate Fee	33,061.64	
Environ 2018 - Sponsorship	18,093.69	
Environ 2018 Prizes	1,500.00	
Rebates	(100.00)	
<b>Total Income</b>	<b>55,496.29</b>	
<b>Expenditure</b>		
Environ 2018 (inc prizes)	37,871.52	
Environ 2019	408.00	
Environ 2018 Refunds	45.00	
Website	6,046.21	
Administration	9,852.50	
Travel	522.28	
Postage/Stationary	641.23	
Bank Charges (inc. Merchant banking)	1,452.10	
Insurance	1,153.17	
Workshop Grassroots	2,388.62	
Postgrad Prize	500.00	
Admin	227.93	
<b>Total Expenditure</b>	<b>61,108.56</b>	
		-5.612.27
		<b>14,304.14</b>

## ESAI Council Members 2018

<b>Chairperson</b>	<b>Regular Members</b>
<b>Dr Frances Lucy</b>	
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<b>Honorary Secretary</b>	Dr Dorothy Stewart
<b>Dr Kevin Ryan</b>	
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<b>Honorary Treasurer</b>	Prof Tasman Crowe
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