



Sent on behalf of Professor Perumal Nithiarasu, Associate Dean for Research, Innovation and Impact

Dear Colleagues,

Please read below about some of the Faculty's most recent success stories. We would particularly like to see more from our Professional Services staff for the next email!

Staff News

Leverhulme Trust Research Fellowship

[Professor Vitaly Moroz](#) (Mathematics) has been awarded a Leverhulme Trust Research Fellowship, starting in September. The title of the research proposal is Modified self-gravitating Bose-Einstein condensates. The project will develop a mathematical framework for the study of a new class of models where dark matter galactic halos are described as self-gravitating Bose-Einstein condensates - a macroscopic quantum state of ultra-light particles - with dynamics governed by principles of classical and modified Newtonian gravity.

Keynote at the American Museum of Natural History, New York



[Professor Richard Johnston](#) was recently invited to deliver a keynote lecture at the iconic American Museum of Natural History in New York. His talk explored the intersection of biology, microscopy, and engineering in advancing our understanding of the natural world, and how these insights can be applied to improve human-made systems and designs through bioinspiration.

The keynote formed part of the *Tomography for Scientific Advancement (ToScA) North America Conference* and the *Nocturn Meeting*, which brought together researchers from across the global microCT community. The programme featured a broad range of contributions—from inspiring early career researchers to leading experts—highlighting innovation in X-ray imaging and open science.

The Centre for Sustainable Aquatic Research



The Centre for Sustainable Aquatic Research – CSAR, has scooped a prestigious prize at the 2025 Aquaculture awards held in Inverness. CSAR won in the category ‘Animal Health and Welfare’ for their impactful and far-reaching research developing tools to improve welfare in aquaculture. CSAR’s welfare research

includes work on fish and crustaceans and resulted in 10 peer-reviewed papers and one REF impact case over the last few years.

Paul Howes, CSAR's Manager, received the award on behalf of the research team led by CSAR's Director Prof. [Carlos Garcia de Leaniz](#), [Prof. Sonia Consuegra](#), [Dr. Tamsyn Uren-Webster](#) and supported by Isla Monaghan, Jack Van Eker, the university NACWO [Dr Rebecca Stringwell](#), the University Named Veterinarian Richard Lloyd and a dedicated team of technical staff ([Robert Smith](#), Jake Maddocks, [Paul Deacon](#), Steffan Lewis). CSAR is an internationally recognised Centre of Excellence in aquatic research and continues to deliver impactful research and an enhanced student experience to hundreds of undergraduate and postgraduate students across the University.

[The Aqua Culture Awards](#)

Swansea University Space Research Symposium



On the 17th June the Aerospace Engineering Department hosted the 2nd 'Swansea University Space Research Symposium in ESRI on the Bay Campus, organised and hosted by Dr Dan Lamb and [Prof Ben Evans](#). The event attracted over 70 delegates from academia and industry showcasing the breadth of space related research and industry collaboration going on across the University. It was also an opportunity for the PGT students on the brand new Space Engineering MSc to share their experiences and also for our University rocketry society, SwanSEDs, to give an insight into their many successes over the past academic year. The event is set to return in 2026 so watch this 'space'!

Student News

Samual Ngombe – 2nd Place in Prestigious Lecture Competition



Samual Ngombe, a COATED M2A CDT researcher, achieved second place in the UK final of the Institute of Materials, Minerals and Mining (IOM3) Young Persons' Lecture Competition. After winning the South West and South Wales regional heat, Samual progressed to the UK final held at Armourers Hall London where he delivered an outstanding lecture on Next Generation Solar Technology and picked up the prize for second place.

Well done, Samual – an incredible achievement and a bright step forward for sustainable innovation!

About the lecture competition

Organised by IOM3, sponsored by The Worshipful Company of Armourers & Brasiers, Henry Royce Institute, Lucideon and East Midlands Materials Society (EMMS), the Young Persons' Lecture Competition invites students and early career professionals (from 18 up to the age of 28) to deliver a short lecture (12 to 15 mins) on a materials, minerals, mining, packaging, clay technology, wood science or engineering related subject.

A Marvellous May for Materials Science & Engineering and COATED M2A



Pictured from left to right: Cati Steed, Niamh Fagan, Ffyon Moody & Meg McNamee

May kicked off with great momentum for research engineers at the **EPSRC Centre for Doctoral Training (CDT) in Functional Industrial Coatings**, setting the stage for an inspiring month ahead.

On the 1st May the CDT held its **COATED M2A Annual Conference**. This event, held in the Great Hall, brought together a dynamic community of research engineers, academic leaders, industry partners, funders and alumni. Research engineers from [COATED M2A](#) and the FSE [Materials and Manufacturing Research Institute \(M2RI\)](#) presented their work through posters, concise 60-second pitches, and platform presentations before networking at an evening reception.

At this year's conference the CDT celebrated a significant milestone: for the first time, women engineers involved in a platform presentation outnumbered their male counterparts. This powerful shift not only highlights the growing presence and influence of women in engineering but also reflects the impact of achieving gender parity in our cohorts. As we mark this achievement, we also celebrate **International Women in Engineering Day 2025** on 23rd June supporting the theme of 'Together we engineer'.

Congratulations to the Conference award winners:

- **Best Presentation:** Meg McNamee (COATED M2A) – '*Stereo-DIC for the Characterisation of Microneedle Insertion*' (KLA)
- **Best Poster:** Cerys Cormican (M2RI) – '*Environmentally Green Bioinspired Engineering Solutions for Replacing Plastics*'
- **Best Poster (Research Engineer/Student Vote):** Ehsan Akbari Kharaji (COATED M2A) – '*Coating Network and Barrier Property Design Strategies for Protection Against Hydrogen Embrittlement*' (AkzoNobel)



Pictured from left to right: Professor Matt Carnie, Professor Cinzia Giannetti and our winners, Meg McNamee, Cerys Cormican and Ehsan Akbari

PGR Festival and Showcase 2025

Research Engineers from the **EPSRC CDT in Functional Industrial Coatings** contributed to the **FSE PGR Conference** on the 15th May and won a couple of awards.

- **Best Presentation Award:** Ffyon Moody provided a compelling talk titled '*Advanced packaging for a sustainable future*'
- **Top Poster Award:** Ehsan Akbari Kharaji impressed the judges and secured a place in the PGR Showcase event.



Plus, the CDT that sits within [Materials Science and Engineering](#), received further recognition at the PGR Showcase Day at the Taliesin on the 21st May.

- **Three Minute Thesis (3MT) Final Winner:** congratulations to Anna Voytyukova, sponsored by Becker Industrial Coatings Ltd., for her enthusiastic presentation on '*A fresh coat on paint recycling*'. She advances to the [Vitae Three Minute Thesis \(3MT®\) Competition](#) Quarter Final.
- **Community and Culture Award (Professional Services) and Nominee:** Rebecca White, administrator at COATED M2A received an award for her impactful contribution to the PGR community and [Becky Waldram](#) was recognised for her contribution to the wider engineering community, having organised some wonderful events.
- **PGR Poster Competition Finalist:** Ehsan Akbari Kharaji produced a creative poster featuring a novel spinning element, offering an innovative approach to display research figures.
- **Public Engagement Award Nominees:** Megan Kendall developed a circular economy workshop for Welsh learners and recently represented the University at the [Eisteddfod yr Urdd Dur a Môr 2025](#). Meanwhile, Ffyon Moody and Meg McNamee have dedicated their time to outreach events with energy and purpose and designed a sustainable buildings workshop aligned with the [United Nations Sustainable Development Goal 11](#)



Pictured from left to right: Ffyon Moody, Dr Becky Waldram, Anna Voytyukova, Rebecca White, Meg McNamee, Megan Kendall, Dr David Warren (COATED M2A Operations Manager), Dr Liz Sackett (academic supervisor & former member of COATED M2A) & Ehsan Akbari Kharaji

UK Research and Innovation Policy Internship



Freya Hamblin, a final year research engineer with the **EPSRC Centre for Doctoral Training (CDT) in Functional Industrial Coatings**, has recently completed a successful [UKRI Policy Internship](#). The scheme “provides opportunities for doctoral students funded by Research Councils of UK Research and innovation to gain training and experience for 3 months in a highly impactful organisation relevant to UK policy” (UKRI Policy Internships Scheme 2024/25 Guidance). Hosted by the Department for Energy Security & Net Zero, Freya contributed a 92-page internal report on alternative technology for iron ore reduction to lower carbon emissions and delivered a 45-minute presentation to the Science and Innovation for Climate and Energy (SICE) team followed by a Q&A session. This opportunity will certainly have enhanced her career prospects.

Alan Turing Institute



Chanju Park, a PhD student with the AIMLAC CDT based in the Department of Physics, recently organised a workshop at the Alan Turing Institute in London.

As part of his Enrichment Placement at the Turing, which runs from September 2024 to July 2025, Chanju brought together researchers for an informal workshop on June 20th to explore the "theory of hyperparameter tuning from neural network training dynamics".

The event featured talks by Antonio Sclocchi (Gatsby Unit, UCL Theory of Learning Lab) and Gert Aarts (Swansea), along with a tutorial by Diego Granzio (Mathematical Institute, Oxford).

Discussions focused on the stochastic nature of learning and its parallels with non-equilibrium physical systems involving many fluctuating degrees of freedom. A key insight that emerged was the concept of a phase diagram for neural networks, located in the space of hyperparameters. This phase diagram helps practitioners in selecting parameter regimes where learning is most effective.

[Visit the workshop website for more information](#)

**MSc Environmental Drone Remote Sensing - CAA GVC
remote pilot achievements**



Very many congratulations to Sam, Macsen, Josh, Stephane, Jake, Calvin and Tyler for passing the theory and flight tests to achieve the Civil Aviation Authority General Visual Line of Sight Certificate and become drone remote pilots.

They received very high praise from the examiner, as the best group that he had seen. Four students were *faultless* in their flight test, the others receiving only 1 or 2 minor points – an exceptional achievement!

He particularly highlighted the thoroughness of their risk assessments and pre-site surveys (advance flight planning, site assessment and emergency preparation) and their 'verbalisation' during their test (communication with/from their observer, and responses to questions on legislation, safety awareness and flight/ground management).

As well as gaining external CAA accreditation, the students learn mission planning and flight management to collect data for photogrammetry, multispectral and thermal analysis in preparation for their dissertation projects.

Very many congratulations again to our new drone remote pilots!

REF2029 Canvas Hub

A reminder that a new Canvas hub has been published. Developed by the REF Officers team, this is a central repository for the REF2029 documentation, guidance, resources and news.

The joining link is <https://canvas.swansea.ac.uk/enroll/BDY36G>. Please enable notifications as this site will be updated with guidance, news, consultations etc as they are received.

Keep in Touch!

If you are aware of any recent achievements to share, either for yourself or for any members of your team, we would love to hear about them! We're interested in stories from academic and professional services communities. Please email any news to **FSE Research** (fse-research@swansea.ac.uk). **Deadline for submissions: 15th of each month.**

If you would like to promote a research event on the FSE Events webpage, please contact fse-reception@swansea.ac.uk

- [Research Support Hub](#)

- [Research at the Faculty of Science and Engineering](#)
- [Exploring Global Problems Podcast](#)
- [Upcoming Events](#)
- [Past Esteem Newsletters](#)