



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



Funding success for the World's fastest facility

The most powerful high energy electron microscope in the world [RUEDI](#) will be the first UK based EPSRC National Facility for Relativistic Ultrafast Electron Diffraction & Imaging.

[Dr Will Bryan](#), Department of Physics, represents Swansea University as a partner in the £125m project together with Leeds with the University of Liverpool leading. Will is the Quantum Materials and Processes Scientific Theme Lead, which will look at the intersection of condensed matter physics, quantum optics and laser physics.

RUEDI will enable researchers to directly observe and measure fundamental dynamic structural and chemical processes in materials as they happen in real time rather than static before and after structure.



Academic invited to deliver TEDx Talk

[Dr Denise Hill](#), Associate Professor from Sports and Exercise Sciences, was invited to deliver a TEDx Talk in the University of St Andrews on the topic Choking in Golf: It's no choke!

[TEDxUniversityofStAndrews](#) is a grassroots initiative that brings people together to share a TED-like experience. These events are organized by passionate individuals who seek to uncover new ideas and to share the latest research in their local areas that spark conversations in their communities.

Denise is a BPS Chartered Psychologist and HCPC registered Practitioner Psychologist. She is also a Fellow of the British Association of Sport and Exercise Psychology and has been an Accredited Sport and Exercise Scientist for over 20 years.

This will provide unprecedented new insights and understanding to deliver transformative innovations.



Chemical Engineer awarded Overseas Travel Grant

[Dr Francesco Del Giudice](#), Associate Professor within the Department of Chemical Engineering, has been awarded the EPSRC Overseas Travel Grant to undertake research on 'Soft matter and microfluidics for the next generation of applications in engineering and healthcare (ukri.org).'

Francesco will visit the Universities of Tokyo and Illinois to establish new collaborations and learn state-of-the-art techniques spanning the fields of artificial intelligence applied to microfluidics and passive 3D flow control of objects in Stokes flow.

These new collaborations will further the development of new technologies aimed at transforming healthcare.

Swansea Complex Fluids Day

The Complex Fluids Research Group, led by [Dr Bjornar Sandnes](#), [Dr Dan Curtis](#) and [Dr Francesco Del Giudice](#) were pleased to welcome Prof Jeff Giacomini (Editor-in-chief, Physics of Fluids), Prof Gerry Fuller (Stanford) and Prof Marco Ellero (Basque Centre for Applied Mathematics) to the Bay Campus as part of the first 'Swansea Complex Fluids Day'. The event included lab tours, experimental demonstrations and presentations from the visitors as well as talks from both the academics and students of the Complex Fluids Research Group.

The event was a great success with Professor Fuller remarking, *'I certainly came away impressed with the scope and depth of research into complex fluids. I learned a lot, which is my primary gauge of quality. Fascinating problems and results.'*

The visitors also commended the 'impressive research culture that has been established' in Complex Fluids.



Academic awarded prestigious Research Chair

Congratulations to [Professor Mike Jennings](#), Department of Electronic and Electrical Engineering, who has been awarded the prestigious Royal Academy of Engineering Research Chair.

The Academy's Research Chairs and Senior Research Fellowships programme enhances the links between academia and businesses with each of the prestigious five-year positions co-sponsored by an industrial partner. Mike's partner is Vishay Intertechnology Inc for the project Advanced Semiconductors for Electric Vehicle Drives.

[More about the awards](#)

Academic shortlisted for the University Engineering Team of the Year

Congratulations to [Dr Jennifer Thompson](#), who has been shortlisted for the University Engineering Staff Member of the Year, in the [Engineering Talent Awards 2024](#), for her outstanding work as PI for the [50% for the Future](#) project.

Jennifer's continued dedication to the project, alongside her existing roles as Mechanical Engineering Senior Lecturer, Admissions Tutor and SACEME ED&I Lead, has resulted in this well-deserved recognition.

The 50% for the Future project, is a longitudinal study focussed on developing an iterative, collaborative process to improve representation and experience of females studying Mechanical Engineering at Higher Education level



Academic receives the Murchison Award

Congratulations to [Professor Stefan Doerr](#), Department of Geography, for being awarded the prestigious Murchison Award for pioneering research influencing policy and management of environmental risks from wildfires.

The award from the [Royal Geographical Society](#) with IBG (Institute of British Geographers) is in acknowledgement of Stefan's outstanding contribution to geographical sciences with particular impact in the fields of geomorphology, hydrology, soil and wildfire science.

Stefan said: 'I'm thrilled to receive this award on behalf of the whole wildfire community and especially [Cristina Santin](#) who co-wrote the key paper leading to it.'

Research in Residence Fellowship awarded

Congratulations to [Dr Ye Yuan](#), Department of Aerospace Engineering, who has recently been awarded the Research in Residence fellowship awarded by the [Innovation Launchpad Network+](#) (ILN+) for the project 'Advancing UAV Technology for Offshore Wind Turbine Monitoring'.

This collaborative project between Swansea University and ORE Catapult, aims to develop a state-of-the-art aerodynamics-autonomous solution to improve the feasibility of UAVs inspecting wind turbine blades whilst 'operational'.

Ye has over 10 years of experience in modelling and safety research for rotorcraft, including >30 publications in world-leading journals and conferences, and research collaborations with industry and air safety bodies.





Cancer Research Wales grant awarded

A 150k research grant from [Cancer Research Wales](#) has been awarded to [Dr Martin Gill](#), Department of Chemistry. The Pritchard and Moore Scholarship will be employed to develop small molecules that enhance the effects of ionising radiation used in radiotherapy. Such 'radiosensitising' strategies are already in use, though these involve the use of traditional non-selective chemotherapies first employed decades ago.

This work aims to develop new, potent radiosensitizers with selective activity towards aggressive cancers, such as triple-negative breast cancer. By utilising a molecular design principle that incorporates all the criteria required for successful radiosensitization, it is hoped that detailed biological analysis of these compounds in combination with radiation will identify compounds with clinical promise.

Academic selected as Advisory Board Member

Congratulations to [Emeritus Professor Carole Llewellyn](#), Department of Biosciences, who has been selected as an Advisory Board member for one of the UKRI's strategic themes: [Building a Green Future](#) (BAGF). BAGF is one of the five themes at the heart of the UKRI five-year strategy (2023-2029). Through BAGF, the UKRI are working to limit and adapt to climate change by:

- Reducing the demand for carbon-intensive activities in areas such as agriculture, transport and construction
- Increasing the sustainability and resilience of public services and infrastructure
- Protecting biodiversity and reducing waste
- Growing the green economy evenly across the UK



'Rewilding Mathematics' seminar success!

The Department of Biosciences and Centre for BioMathematics were recently invited to host the latest seminar in the International Centre for Mathematical Sciences "Rewilding Mathematics" programme. The aim of this programme is to explore and address challenges around quantification and analytical rigour in Rewilding (the reintroduction of species – or functionally similar species – to ecosystems they have previously been lost from), by building new partnerships between the mathematical sciences and ecologists.

Along with a guest lecture by Professor Liesbeth Bakker (Wageningen University, Netherlands), [Dr Chiara Bertelli](#) and [Professor Mike Fowler](#) were invited to contribute presentations to the seminar series, based on their research modelling Seagrass ecosystems, conducted at Swansea University.

Academic invited to Japan as part of the visiting scholars programme

[Professor Mike Fowler](#), Department of Biosciences and Centre for BioMathematics, was invited to participate in the Theoretical Sciences Visiting Programme "The Future of Response Diversity and Ecosystem Stability" at the [Okinawa Institute of Science & Technology](#) (OIST), Japan, during March 2024. Mike spent a month collaborating with international and local experts at OIST as part of the visiting scholars programme and an associated workshop towards the end of March.

Watch the presentation



Team shortlisted for the University Engineering Team of the Year

Congratulations to the [50% for the Future](#) team within Mechanical Engineering (ME), who have been shortlisted for the University Engineering Team of the Year 2024, @EqualEngineers Engineering Talent Awards 2024, in partnership with @RAEngNews and @MetroUK.

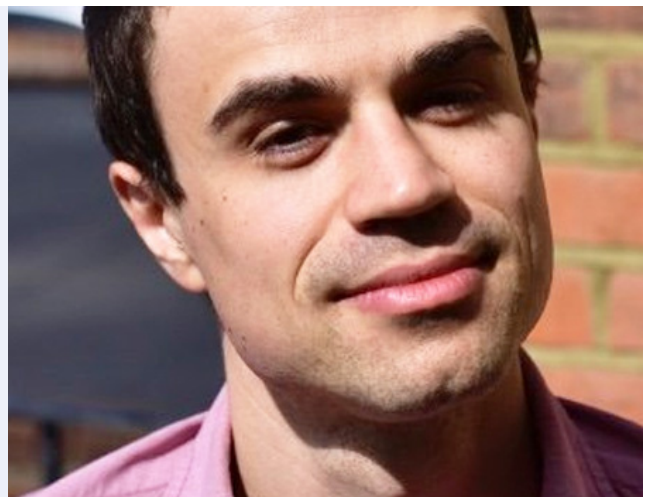
50% for the Future is a longitudinal study focussed on developing an iterative, collaborative process to improve percentage representation and experience of females studying ME at Higher Education level.

The success of the project to-date can be attributed to the development of a clear vision around addressing the problems or issues identified via the acquisition of survey and focus group data. In the development of all interventions throughout the project, the voice and skills of the project team has been harnessed; and most importantly, their beneficiaries, female ME students, both current and future have been heard.

IEEE Editor in Chief Appointed

Congratulations to [Dr Troy Astarte](#), Department of Computer Science, who has been appointed as Editor-in-Chief of IEEE Annals of the History of Computing. Founded in 1979 and the Annals is long established as the world's primary scholarly journal dedicated to the history of computing, from ancient to modern times.

The Annals enjoys a broad readership of scholars and practitioners in computing, science, technology, and humanities. Along with the University's History of Computing Collection, Troy's editorship of the top venue in the field of computing history is helping to make Swansea the best-known University centre in the UK for research in history of computing and its impact.





Academic elected to the Learned Society of Wales

Congratulations to [Professor Antonio Gil](#), Department of Civil Engineering, who is one of four new Swansea academics to be elected Fellow to the [Learned Society of Wales](#).

Antonio has over 20 years of research experience and a vast track record of publications, funding and impact within industry and his contributions have led to fundamental discoveries in the fields of mechanics and robotics. His work has been recognised with prestigious awards such as The UK Leverhulme Prize and The ECCOMAS Olgierd Cecil Zienkiewicz award.

[More about the awards](#)

Go Green Week at the University

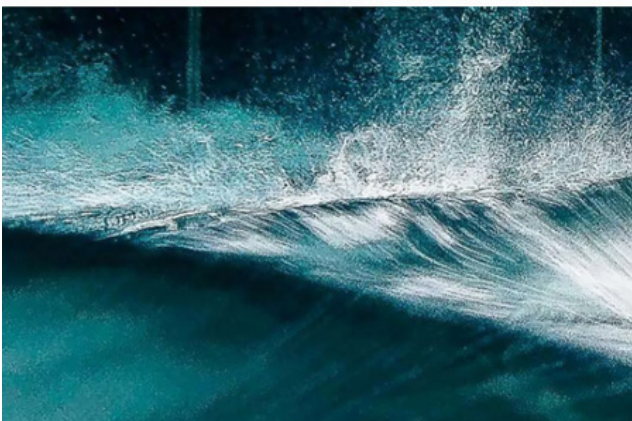
[Professor Mary Gagen](#), Department of Geography, recently gave a talk for the University's [Go Green Week](#), with [Iolo Williams](#) at the Taliesin Arts Centre.

Mary, a specialist in climate change and how it impacts on our planet's forests joined Iolo who gave a talk on 'What can we do to help wildlife?'. Iolo is a Welsh naturalist, broadcaster, public speaker and writer who has worked in conservation for over 30 years and has used his knowledge and experience to address the Welsh Assembly.

Go Green Week was organised by the University's Sustainability Team.



UK FLUIDS CONFERENCE 2024



UK Fluids Conference 2024 comes to Swansea!

The prestigious 'UK Fluids Conference' is coming to Swansea's Bay Campus in September 2024. This conference brings together the UK's leading experts in fluids research and it will be the first time the conference has been hosted in Wales. The organising committee is chaired by [Professor Ben Evans](#) (Aerospace Engineering) and the conference will take place between 8th and 11th of September.

[Find out more](#)



Collaboration for
Environmental
Evidence

Honorary Professor publishes commentary paper

[Kathryn Monk](#), Honorary Professor in Biosciences and an independent member of Swansea University Council has recently published a commentary paper entitled [Enhancing environmental policy through evidence synthesis: a review of the Environmental Evidence for the Future \(EEF\) Initiative](#) in the open-access journal *Environmental Evidence*.

The paper explored the implications and challenges arising from a unique funding collaboration between NERC and a non-profit, the [Collaboration for Environmental Evidence](#). Having liaised with NERC staff on this commentary, they said that, from NERC's perspective, it was really helpful to have this summary of the EEF and why systematic evidence mapping is so important, and that they are now drawing on the recommendations to help make the case for NERC/UKRI doing more in this space.

Collaboration for Environmental Evidence Training Opportunities

[Honorary Professor Kathryn Monk](#) is chair of the non-profit [Collaboration for Environmental Evidence](#) (CEE), promoting the use of rigorous repeatable unbiased evidence synthesis in environmental research and management. She and CEE work closely with the much more established Cochrane (health evidence) and Campbell Collaboration (social science evidence).

NERC has fully funded a series of Collaboration for Environmental Evidence Training Opportunities (CEETOP), each four-day course comprising two independent elements: a taught training course and mentoring. Kathryn is part of the delivery team of evidence synthesis specialists from the University of Exeter and Harper Adams with experience of producing information for stakeholders including policy makers and business. Priority is being given to ECR and PhD students funded by NERC or working in NERC relevant topics. The next course is on 3rd-6th June 2024 at St Lukes Campus, Exeter University, Exeter, Devon, EX2 4TH. For enquiries, please email Kathryn: kathryn.monk@swansea.ac.uk

New paper on the future of solar cells

[Dr Ershad Parvazian](#), a postdoctoral researcher in SPECIFIC, in collaboration with [Professor Trystan Watson](#), Department of Materials Science and Engineering, has recently had an article published in *Nature Communications* on ['The roll-to-roll revolution to tackle the industrial leap for perovskite solar cells'](#).

The article discusses the role of perovskite solar energy as a potentially viable and sustainable industrial technique provided that materials are continuously topped up.



[Read the article](#)



Further Mathematics programme recognised by Welsh Government

In recognition of the work of the [Further Mathematics Support Programme Wales](#) (FMSPW), the Welsh Government has renamed the scheme which is now officially the Mathematics Support Programme Wales.

The programme has been running since 2010 and funded by the Welsh Government, aims to improve mathematics education in Wales. [Dr Sofya Lyakhova](#), Associate Professor in Mathematics and Programme Lead for MSPW, has an extensive background in teaching mathematics at both school and university levels, as well as in teacher professional development, curriculum design, assessment in mathematics, and public engagement in mathematics.

[Find out more about the scheme](#)

PROFESSORIAL INAUGURAL LECTURES 2024

Upcoming Lectures:

[Professor Daniel Thompson](#) and [Professor Ian Mabbett](#) - Wednesday 11th September 2024

[Save your spot](#)

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 Anna Ratcliffe (a.c.ratcliffe@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](#)
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