



## Faculty of Science and Engineering Cyfadran Gwyddoniaeth a Pheirianeg



### 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

### Awards



#### Engagement Lead of the Year Award winner

Congratulations to [Dr Richard Butterfield](#), Chemical Engineering, who has received the "Engagement Lead of The Year Award" from the Student Union. This is an annual Awards Event to recognize students and university staff for going above and beyond in their efforts over the year to enhance the student experience and the student community within Swansea University.

Richard's role as Student Engagement and Inclusivity Partner (SEIP) for the School of Engineering & Applied Sciences (SEAS) involves working extensively with the subject and school reps within SEAS to try to enhance the student experience/community within the school.

Richard said: "I'm really grateful to our FSE Student Experience Team for their support, and to the Student Reps and Societies that engaged with me over the past year."

#### Excellence in Learning and Teaching Award winners

Congratulations to [Dr Wendy Harris](#) (Biosciences), [Dr Andrew Rees](#) (Mechanical Engineering), [Dr William Bennett](#) (Civil Engineering) and [Dr Mark Coleman](#) (Materials Science and Engineering) who have won the

student nominated Excellence in Learning and Teaching Award.

These awards recognise and celebrate excellent teaching and as such are highly respected across the University.

Other nominees were [Dr Angharad Closs Stephens](#) (Geography), [Prof. Carlos Nunez](#) (Physics), [Dr Emilia Urbanek](#) (Geography), [Dr Keith Halfacree](#) (Geography), [Dr Kevin Arbuckle](#) (Biosciences), [Dr Konstans Wells](#) (Biosciences), [Dr Rhian Meara](#) (Geography) and [Dr Sophie Hocking](#) (Biosciences).



## OTHER NEWS



### Biosciences academic nominated for the Science Breakthrough of the Year Award 2023

Congratulations to [Professor Carlos Garcia de Leaniz](#), Department of Biosciences and Director of [CSAR](#), who has been nominated by the [Falling Walls Foundation](#) for the [Science Breakthrough of the Year Award 2023](#).

Carlos's nomination for the [Science and Innovation Management](#) category is in recognition of his ground-breaking research on the [AMBER](#) project which sought to achieve the effective and efficient restoration of stream connectivity across Europe.

In 2022, AMBER won the 'Outstanding International Impact of Research and Innovation Award'.

The Falling Walls Science Summit (previously Falling Walls Conference) is an annual science event in [Berlin, Germany](#), which takes place between 7 and 9 November and coincides with the anniversary of the [Fall of the Berlin Wall](#).

The Science Summit aims to showcase scientific breakthroughs, foster a dialogue between science and general public and connect global leaders from science, business, and media to develop solutions for the greatest challenges of our time.

### Swansea University leads £250k UK Space Agency project

Congratulations to [Dr James Bateman](#), Department of Physics, who has won a £250k UK Space Agency grant to work on Levitated Optomechanical Technologies in Space (LOTIS). In collaboration with colleagues at the Universities of Strathclyde and Warwick, James will develop key technologies including nanoparticle sourcing, conditioning, and optical trapping to enable levitated optomechanics for large mass fundamental quantum mechanics experiments and inertial and space environment sensing.

James said: *"I am thrilled to lead this UKSA project, which will create the necessary technologies to establish*



*a functioning sensing platform for both space and terrestrial applications. Our team is comprised of experts in nanosatellites, quantum sensing, and experimental optomechanics, and this project will help to make levitated optomechanical sensors a reality."*

[Read more](#)



## SAMSEC23 International Conference

[Dr Ardalan Armin](#), Department of Physics, and colleagues proudly hosted the inaugural international conference on Sustainable Advanced Materials for Solar Energy Conversion (SAMSEC). This event attracted esteemed researchers and thought leaders in the field of organic electronics from the UK, Europe and Australia. The meeting aimed to foster collaboration, facilitate knowledge exchange, and tackle crucial challenges in the field of solar energy conversion.

## Academic part of leadership team of £31M AI programme

[Professor Matt Jones](#), Department of Computer Science, is part of the leadership team on a £31m programme aimed at ensuring that future AI is responsible and trustworthy.

The UK-wide collaboration is funded by the [UKRI](#), and aims to make the UK a global destination and leader in AI that works for the benefit of humanity.

[Read more](#)



## New innovation in heat storage material

Researchers from the [SPECIFIC](#) Innovation and Knowledge Centre and [COATED M2A](#) programme at Swansea University have collaborated with the University of Bath to make a ground-breaking advancement in thermal storage research, developing a new efficient material that is easily scalable and can be sized and shaped to fit multiple applications.

The beads which can store heat, are made from a new material consisting of alginate, an inexpensive, abundant and non-toxic seaweed derivative.

[Read more](#)





## Professor receives the Menelaus Medal

[Professor Kenneth Morgan](#), Civil Engineering, received the [Menelaus Medal](#) (2022) from the [Learned Society of Wales](#) for his work on computer models for engineering analysis.

Kenneth has worked for many decades on developing computer models for engineering analysis, which has had particular impact on the way in which aerospace industries use computer simulation for design and analysis.

[Read more](#)

## Paris Air Show success

[Professor Amit Mehta](#), Electronic and Electrical Engineering, together with Research Assistant [Ben Falkner](#), recently attended the Paris Air Show where they showcased their research on smart antennas and formed new industry collaborations.

They are pictured with Vaughan Gething, Minister for the Economy of Wales.

[Find out more about the Smart Antenna and Communications Lab](#)



## Coastal Engineering Research featured on Wales This Week

Andrea Byrne recently conducted an interview with [Professor Dominic Reeve](#), Civil Engineering, for a Wales This Week programme focusing on the consequences of climate change for coastal areas and the communities residing there. In the discussion, Dominic emphasizes the necessity of finding affordable alternatives to conventional coastal defence methods, given the high costs associated with materials like concrete and rock.

The program also features PhD student [Kristian Ions](#), who explains the findings of wave height simulations conducted in the [coastal engineering laboratory](#). These simulations demonstrate the substantial wave reduction achieved through the implementation of nature-based solutions like seagrass, mangroves, and salt marshes.

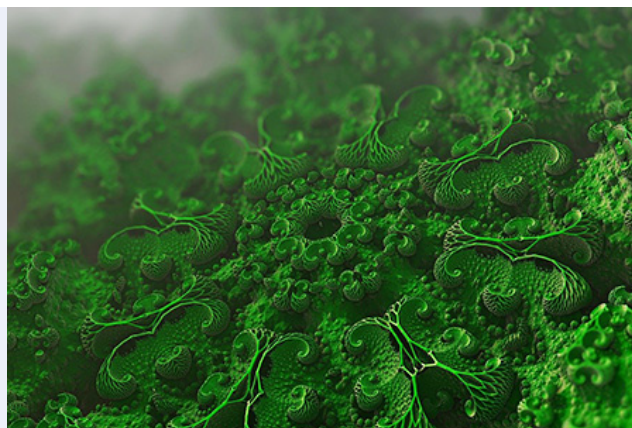
[Watch the programme](#)

## STUDENT NEWS

### Student wins prestigious scholarship

Congratulations to Hongli Wang who has won a prestigious Chinese Scholarship Council award to join Swansea University as a PhD student. She will be supervised by [Dr Eva Sonnenschein](#) and [Dr Claudio Greco](#), Biosciences, to explore the function and impact

of microbial communities on the cultivation of microalgae using omics-based approaches.



## AeroDoodle at Oriel Science

PhD student [Carlos Baptista De Lima](#), Computer Science, in collaboration with [Professor Ben Evans](#), Aerospace Engineering, [Dr Sean Walton](#) and [Dr Tom Owen](#), Computer Science, currently has an exhibition in [Oriel science](#) show-casing the [AeroDoodle](#) 3D project.

AeroDoodle is a wind tunnel simulation on a smart phone. The original development was undertaken by MSc Computer Science student [Saskia Davies](#) and was funded by an IAA grant as part of her CDT social good project.



## It Flies competition winner

A team of high-flying Swansea students soared to victory in a unique challenge designed to celebrate the talents of future aerospace engineers.

This year's It Flies competition was hosted for the third time by Swansea University and it was one of the two home teams who took part which eventually lifted the trophy after a gruelling day in front of industry experts.

The competition, held annually in the UK and USA, sees university students having to come up with a design for a whole aircraft. Their designs are then put to the test by a professional test pilot, using one of the University's MP521 simulators, which have been supplied by competition organisers [Merlin Flight Simulation Group](#).

[Read more](#)

## 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](mailto: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](mailto:fse-reception@swansea.ac.uk)

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