

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!

STUDENT NEWS



Merlin IT FLIES competition success for Swansea team

Congratulations to the Swansea team who won first prize in this year's [Merlin's IT FLIES](#) competition for their hybrid electric turboprop design for a new regional aircraft. The participating students were **Abdulqadir Rashid, Anish Pradhan, Thomas Edwards, Oscar Johnstone, Akash George, Ashin Anil, Rohith Sreedharan, Gobin Rai and Ed Keeley**.

The IT FLIES aircraft design competition was hosted this year by Swansea University and is the only student aircraft design competition where test pilots fly and assess the entries in a Merlin academic flight simulator. The 2023 event welcomed teams from the UK, Europe and the USA and the runners-up were from Manchester and Amsterdam.

Institute of Physics prize for PhD student

Congratulations to Physics PhD student **Dimitrios Bachtis**, who has recently won an **Institute of Physics thesis prize**. Dimitrios explores the derivation of neural networks from quantum field theories and utilizes machine learning techniques to study phase transitions. [Professor Gert Aarts](#) and [Professor Biagio Lucini](#) were the PhD supervisory team.

[Find out more about the award](#)

STAFF NEWS

Vasileios Samaras appears in IMEchE podcast

During the summer, [Dr Vasileios Samaras](#), Senior Lecturer in Mechanical Engineering, had the privilege of taking part in a podcast hosted by the Institution of Mechanical Engineers (IMEchE). The podcast, titled *"Equipping Young Engineers with Essential Management Skills,"* was centred around the theme of "Impulse to Innovation." During this podcast appearance, Vasileios had the valuable opportunity to showcase the impactful initiatives we're advancing at Swansea University, specifically highlighting our MSc Engineering Leadership Management programme and the Year in Industry schemes.





Ben Evans awarded Going Global Partnerships Industry Academia Grant

[Professor Ben Evans](#), Aerospace Engineering, in collaboration with Professor Kamath and Mr Tiwari, has been awarded a British Council 'Going Global Partnerships' grant of £55K to support collaborations with [IIT Kanpur](#) (India) and [Datum Advanced Composites Ltd](#) to develop novel hydrogen storage solutions for the aerospace industry.

The award for the application titled '*Development of Structural heAlth Monitored Advanced Recyclable & Transportable Hydrogen Tanks for High-Performance Aerospace Applications - Technology and training for a sustainable aerospace future (SAMARTH)*' was announced at the India UK Higher Education Conference, Delhi.

"Biohybrid Systems in Animal Behaviour" workshop success

[Associate Professor Andrew King](#) and [Dr Marina Papadopoulou](#), Department of Biosciences, hosted an [Association for the Study of Animal Behaviour](#) (ASAB) Interdisciplinary Workshop in the Wallace Building, Park Campus on 6-8 September. Biosciences PhD and undergraduate students Marco Fele, Grace Balchin, and Beth Lygo were workshop volunteers.

The workshop "Biohybrid Systems in Animal Behaviour" was a free event attended by 50 biologists, neuroscientists, computer scientists, and engineers from all over Europe. The workshop had three invited and three contributed talks each day, with discussions and explored biohybrid systems from three perspectives – Cooperation (day 1), Control (day 2), and Coexistence (Day 3).

Feedback from attendees was outstanding, and the workshop resulted in some exciting scientific and karaoke collaborations and participants will publish a special issue on Biohybrid systems in the journal *Animal Behaviour* next year.



BioMedEng23 Conference success

[Dr Raoul van Loon](#) and [Dr Hari Arora](#), Biomedical Engineering, recently organised a highly successful major [BioMedEng23](#) conference at Swansea Arena, which has been the UK's largest gathering of Biomedical Engineers, Medical Engineers, and Bioengineers since the conference began in 2019.

Over the two days, the conference attracted over 300 delegates, exhibitors and workshop staff and many exciting topics were discussed, including Artificial Intelligence, Biomedical Imaging, Digital Health Engineering, and more.

Glaciologist awarded American Geophysical Union fellowship

Congratulations to [Professor Tavi Murray](#), Department of Geography, who has been elected a fellow of the [American Geophysical Union](#). This is a prestigious achievement, which recognises individuals who have made exceptional contributions to Earth and space science.

Tavi is a world-leading environmental scientist and was awarded a CBE in the New Year's Honours list in 2022 for services to glaciology and climate change research.



Antarctica calves giant iceberg the size of Greater London

[Professor Adrian Luckman](#), a remote-sensing expert, is currently monitoring the abrupt recent rapid ice movement in Antarctica under the UK polar base Halley station located on the Brunt Ice Shelf. This movement has caused cracks to extend across the entire ice shelf causing the giant iceberg to break free and may have the future potential to impact on the research station.

In a recent BBC news article, Adrian said: *'The Brunt has lost contact with this pinning point, known as the McDonald Ice Rumples, and, as a consequence, it has speeded up and is thinning.... How this will play out is anyone's guess'.*

A report on the status of the Brunt Ice Shelf has been submitted to the online journal [The Cryosphere](#).

Image courtesy of the British Antarctic Survey: Jan De Rydt

[Read more about the Brunt Ice Shelf](#)

Sports scientists study effects of endurance events on runners

[Dr Nick Owen](#) and [Dr Laura Mason](#) from the sports science department, recently had the rare opportunity to study runner Professor Ben Garrod (@bengarrod) in the [Montane Dragon's Back Race](#) and were able to take a wide range of measurements to track the changes a runner's body undergoes when taking on a challenge of this nature.

The multi-day endurance event takes place in Wales' uniquely wild, trackless, and remote mountainous terrain and is considered to be the toughest mountain race in the world.

[Watch the video](#)





EJSS Best Paper Runner-Up

Congratulations to [Dr Elisabeth Williams](#) whose paper '*Sex differences in neck strength and head impact kinematics in university rugby union players*' has been voted as runner up for the BEST PAPER for the [European Journal of Sport Science](#) (EJSS) for 2022!

Elisabeth is a Senior Lecturer in Sport and Exercise Sciences.

Juno Practitioner award success

Congratulations to [Dr Sarah Roberts](#), [Professor Daniel Thompson](#) and [Professor Dirk van der Werf](#), Department of Physics, for leading the successful application for the departments' [Juno Practitioner](#) award which has been renewed for another 3 years.

Juno is the Institute of Physics's gender equality award for university physics departments.



Computer Science academic chairs AESIN Conference 2023

Earlier this month, [Professor Siraj Shaikh](#), Department of Computer Science, chaired a panel of leading experts to talk about the future of automotive-enabled mobility at the Annual Conference of AESIN - Automotive Electronics Systems Innovation Network at the National Motorcycle Museum.

The conference featured an impressive line-up of esteemed speakers who brought their expertise and insights to the forefront of automotive innovation. Renowned industry leaders, academic researchers, and technical visionaries also took to the stage, captivating the audience with their profound knowledge and thought-provoking presentations.

Computer Science promotions

Congratulations to [Jen Pearson](#) and [Simon Robinson](#), Computer Science, who have both recently been promoted to Professor. Well done!



Natural Products BioHub awarded funding

Congratulations to [Professor Tariq Butt](#), [Professor Dan Eastwood](#) and [Dr Farooq Shah](#) for securing a UK Government Shared Prosperity Fund to further develop the [Natural Products BioHUB](#) project. In partnership with Swansea Council, the project will widen the use of natural products in the agricultural, pharmaceutical and manufacturing industries to promote a healthier and more sustainable city and region.

ALPHA collaboration at CERN Confirms Antimatter Falls in the Same Way as Matter for the First Time



Swansea University physicists, as leading members of the [ALPHA \(Antihydrogen Laser Physics Apparatus\)](#) collaboration at CERN, have demonstrated that atoms of antihydrogen fall to Earth in the same way as their matter equivalents for the first time.

Published in [Nature](#), this study's groundbreaking results rule out the possibility of antimatter being accelerated upwards in Earth's gravity and brings researchers one step closer to unravelling one of the most high-profile problems in physics.

Niels Madsen said: *'It's exciting to see Swansea University play a part in the first direct observation of the effect of gravity on antimatter, setting the stage for future*

much more detailed measurements sought by multiple collaborations'.

Pictured: [Professor Niels Madsen](#), [Professor Stefan Eriksson](#), [Professor Mike Charlton](#), [Dr Chris Baker](#)

[Read more](#)



Event Highlights



Zienkiewicz Lecture 2023

Swansea University's Faculty of Science and Engineering will host its seventh Zienkiewicz Lecture on 22 November, 6pm at the National Waterfront Museum.

The guest speaker will be **Professor Lord Darzi**, OM, KBE, PC, FRS, who will deliver a lecture entitled '*Health Care Transformation through Science and Technology*'. He is a Consultant Surgeon at Imperial College NHS Trust and the Royal Marsden NHS Foundation Trust.

[Find out 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). **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

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