



### 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**



### Protection for the giant trees of the Amazon

In 2018, giant trees discovered in the Amazon rainforest have now been granted protected status and restricted access by the Brazilian government. Previously classified under 'sustainable management,' their new designation ensures greater conservation efforts. This decision follows public consultation and the establishment of the "Park of the Giant Trees" in Pará State, Brazil, as a direct outcome of research and scientific expeditions carried out by geographer Dr Jackie Rosette, along with teams from Brazil and the UK.

While the tallest of these trees remained untouched due to their remote location, others faced threats from advancing logging activities, with some situated just 5 km from a logging road.

**Read more** 

## Study reveals 60% increase in global CO2 emissions from forest fires

A major new study co-authored by <u>Professor Stefan</u> <u>Doerr</u>, Director of the <u>Centre for Wildfire Research</u>, at Swansea University reveals that carbon dioxide (CO2) emissions from forest fires have surged by 60 per cent globally since 2001, and almost tripled in some parts of the northern boreal forests.

The study, led by Dr Matthew Jones, previously a research officer at Swansea now at the Tyndall Centre for Climate Change Research of the University of East Anglia, (UEA) has been published in <a href="Science">Science</a>.

Dr Matthew Jones said: "Our findings underscore the urgency for policymakers and environmental agencies to prioritize climate mitigation and proactive forest management strategies to protect these critical ecosystems from the accelerating threat of wildfires."

**Read more** 





### Success at this year's IPM symposium!

The 2024 New IPM Symposium, co-hosted by IBMA UK and Swansea University's Natural Products BioHUB, successfully gathered over 200 delegates from across the globe. This year's event fostered an environment of innovation in integrated pest management (IPM), bringing together academics, industry leaders, and government officials for three days of networking and collaboration. Attendees engaged in vibrant discussions aimed at advancing the future of IPM research, sharing insights and ideas to inspire new approaches in the field. The symposium highlighted the importance of cooperation among diverse stakeholders to drive progress in sustainable pest management solutions.

# Groundbreaking project to develop corrosion-resistant alloys

The MACH1 (Materials Characterisation) Centre at Swansea University has launched an ambitious new research project FATHOM (Future Alloys Through High Output Metallurgy) funded by the DSTI - Defence Materials Centre of Excellence DMEx to develop the next generation of advanced materials systems for the Defence of the UK. The project will develop High Entropy Alloys (HEAs) with superior corrosion resistance and mechanical properties tailored for marine applications. The project, leveraging MACH1's advanced Rapid Alloy Prototyping (RAP) techniques, seeks to address key challenges in the metallurgical field, offering potential strategic advantages for naval and maritime platforms.







### ARCS at Circular Economy Hotspot Cymru!

In October, the ARCS team had an eventful three days at the Circular Economy Hotspot Cymru. Their packed schedule included panel discussions, a local business exhibition, and a site tour of the Swansea Bay Campus. Professor Gavin Bunting led the first panel on 'Front End Circular Innovation', highlighting research from Welsh Universities, while Maxwell Green participated in the second panel on 'Achieving Circular Economies.'

It was a fantastic event, and they look forward to engaging with their new connections. Want to learn more about their work? Contact them at <a href="mailto:Arcs@swansea.ac.uk">Arcs@swansea.ac.uk</a>.

#### STUDENT NEWS

## Swansea Chemistry achieves ACS Student Communities Award

Congratulations to the Department of Chemistry's <u>Student ChemSoc</u> for achieving 'Outstanding ACS Student Communities Award' for the 2023-2024 academic year! The chapter submitted their annual report and received special recognition on the basis of their programs and activities.

Swansea Chemistry ChemSoc is the only group in the UK affiliated with the <u>American Chemical Society</u> (ACS) which has previously paid for students to travel to the US for leadership courses and conferences.

The report feedback from reviewers stated: "Your chapter has certainly solidified its presence in the chemistry community, and you have many good programs in place to continue being successful. You have good connections with your university, your students, and your community, as well as a solid mission that is in alignment with the ACS Core Values."

The Chemistry undergraduate programme is also the only one in the UK that is recognized by the ACS as one that aligns with their international guidelines.







### Student develops energy harvesting prototype

PhD student Zaid Haymoor, Electronic Engineering, has developed a prototype as part of the EPSRC ATIP project (Application Targeted and Integrated Photovoltaics) for an Energy Harvesting Air Quality Monitor, "Air-sense-IQ".

Powered by Epishine's flexible and highly efficient organic printed solar cells, AIR-sense-IQ has been developed in conjunction with the Centre for Integrative Semiconductor Materials at Swansea University. The device is intended for use within working environments such as offices where high levels of CO2 can lead to poor decision making, slower reaction times, and increased tiredness among employees.

The casing was developed using IAA funds won by <u>Dr</u> <u>Greg Burwell</u>, Department of Physics for which it won a <u>European product design award</u> with Zaid's supervisor being <u>Professor Matt Carnie</u> from Materials Engineering.

#### **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 <a href="https://canvas.swansea.ac.uk/enroll/BDY36G">https://canvas.swansea.ac.uk/enroll/BDY36G</a>. 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 (<a href="mailto:fse-research@swansea.ac.uk">fse-research@swansea.ac.uk</a>). Deadline for submissions: 15th of each month.

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

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