Esteem Newsletter | April 2025



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

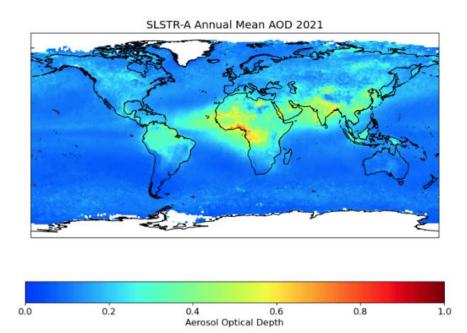
Swansea University at NERC Explore our Planet, Cardiff



<u>Dr Jackie Rosette</u> and <u>Professor Peter North</u> in Geography supported the NERC outreach event held at Techniquest, Cardiff in October 2025. The event had over 2000 visitors, and was aimed at schools and families, promoting awareness of the environment and NERC Centre research. Their contribution focussed on understanding and detecting plastic waste, with hands on samples of plastics, microscopy and spectrometry. Swansea was invited due to North and Rosette's participation in the NERC National Centre for Earth Observation (NCEO). North and Rosette also discussed Swansea research with the Huw Irranca-Davies

MS, Deputy First Minister and Cabinet Secretary for Climate Change and Rural Affairs.

Atmospheric aerosol measurements from the ATSR-SLSTR series of dual-view satellite instruments 1995–2022



A map of the average aerosol optical depth measured by SLSTR-A during 2021

Swansea University Academics have recently published an article detailing Global aerosol mapping advances. The new dataset, supported by ESA's Climate Change Initiative, enhances understanding of aerosols' cooling effect on Earth. The paper shares crucial insights for predicting climate change.

To read the article written by <u>Dr Kevin Pearson</u>, <u>Professor Peter North</u>, et. Al, <u>please click here</u>.

To read more on the subject, <u>please click here</u> to read a blog post published by Dr Kevin Pearson on NERC EOCIS.

Mr Obinna Ogbonnia Otuu and Dr Deepak Sahoo Win Best Paper Award at CHI 2025



Computer Science PhD student Obinna Ogbonnia Otuu and his supervisor Dr Deepak Sahoo have won a Best Paper Award at the CHI Conference on Human Factors in Computing Systems (CHI '25), held in Yokohama, Japan from 26 April to 1 May 2025. Founded in 1982, the ACM (Association for Computing Machinery) CHI conference is the premier international conference on Human-Computer Interaction (HCI). The Best Paper recognition has been awarded to papers in the top 1% of submissions. The title of their paper is "How should we design technology with diverse stakeholders who wish not to attend design activities together?"

The team research in improving community policing through the design and use of digital technologies, and this work is partly funded by Nigeria's Tertiary Education Trust Fund (TETFund). They faced a unique challenge where the citizens wished not to attend design activities together with the police because they felt uncomfortable due to mistrust or fear. The team proposed a novel co-design methodology, "conflict-sensitive design", a six-phase approach to address this, and carried out a series of iterative design activities with the citizens and police using different mediation techniques, i.e., 'separated meetings', 'tension reduction', 'levelling', 'common-ground reminder' and 'formalising agreements'.

The team engaged with over 1200 people from all six geopolitical zones of Nigeria, working with citizens from different demographic backgrounds and police officers of different ranks. The citizens and police ultimately agreed between themselves on designs for wearable hardware and software applications for community policing in various indoor and outdoor scenarios, without ever attending design sessions together. The designs were validated through low-fidelity prototypes and focus group interviews. This work has laid the foundation for designing technology where stakeholders are uncomfortable designing together and freely expressing themselves, which is common in society and different workplaces.

National Recognition for CORE at Swansea!

<u>Dr Muneeb Ahmad</u>, a senior lecturer in Computer Science, was recently invited to share his thoughts on motivating individuals from underrepresented communities to apply for REF 2029 panel membership. He has authored a blog post titled "A Call to Inspire and Encourage Everyone to Join Us in Delivering REF 2029." The purpose of this blog is to encourage participation.

In the post, Muneeb highlights the award-winning efforts of the CORE group that he leads in the Computer Science department, emphasizing their significant contributions towards PCE and support for early career researchers.

Learn More Here!

Academic Staff member from the Complex Fluids Research Group secures a Royal Society International Exchange Grant

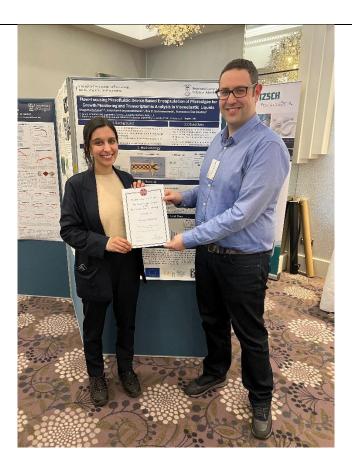
<u>Dr. Francesco Del Giudice</u>, from the Complex Fluids Research Group, Department of Chemical Engineering, secured £5,995 for an exchange research visit with Prof. Gianluca Cidonio from Universita' di Roma La Sapienza. The project will enable knowledge exchange between the two institutions to develop an optimised 3D printing strategy based on using viscoelastic fluids to manufacture biomedical tissues.

Spinout from the Complex Fluids Research Group is successfully registered

Dr. Anoshanth Jeyasountharan (postdoctoral research assistant) and Dr. Francesco Del Giudice (associate professor), from the Complex Fluids Research Group, Department of Chemical Engineering, are the co-founders of Siora Ltd, a spin-out from Swansea University aimed at the commercialisation of a new microfluidic technology for improved single-cell analysis, vaccine development and improved diagnostics. The technology is based on the research funded by EPSRC. The company features a strong industrial presence, with the CEO and the Chairman of the Board having significant business leadership experience in other Biotech companies.

Student News

PhD visiting research student awarded the Best Poster Award at the INNFM/BSR Rheology Meeting in Liverpool



Shagufta Rehmat, PhD student at Universita' di Napoli Federico II, visiting the Complex Fluids Research Group as part of the CRESCENDO project funded by the European Union, was awarded the Best Poster Award for her poster titled "Flow-Focusing Microfluidic Device Based Encapsulation of Microalgae for Growth Monitoring and Transcriptomic Analysis in Viscoelastic Liquids". The project results from an active collaboration between Dr. Eva Sonnenschein from the Department of Biosciences and Dr. Francesco Del Giudice from the Complex Fluids research Group, Department of Chemical Engineering. The work began thanks to a BBSRC-funded project led by Dr. Eva Sonnenschein on the study of interkingdom interactions using microfluidic technologies.

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 (<u>fse-research@swansea.ac.uk</u>). **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