



## 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

#### Dr Helen Chadwick awarded UKRI Future Leaders Fellowship

Congratulations to [Dr Helen Chadwick](#) from Chemistry who has been awarded an 4 year [UKRI Future Leaders Fellowship](#).

Helen will spearhead an ambitious research initiative which will explore the interaction of gas phase hydrogen molecules with surfaces at a very fundamental level. Collisions of hydrogen with surfaces plays a pivotal role in many applications, from the formation of stars and the safe storage of rocket fuel, to hydrogen fuel cells and industrial catalysis, meaning there is great value in understanding these interactions at a molecular level.

On receiving her fellowship, Helen said: *"I am really excited to have been given a Future Leaders Fellowship which will allow me to establish an ambitious research programme and attract a team to deliver it".*



[More about Helen's research](#)



## New international collaboration to research renewable fuels

[Dr Mariolino Carta](#), Department of Chemistry, is PI from Swansea University in a new international collaboration aimed at investigating possible ways to convert the carbon dioxide emitted by industries into renewable fuels.

The project Double-Active Membranes for a sustainable CO<sub>2</sub> cycle (DAM4CO<sub>2</sub>) is one of eight projects funded by the European Innovation Council as part of its EIC Pathfinder Challenge: Carbon dioxide and nitrogen management and valorisation. Mariolino will lead the synthesis work package, looking for new polymers and additives to improve the membrane performance, both from the carbon capture and the catalysis points of view.

[More about the project](#)

## Coastal flooding project secures major funding boost

[Professor Harshinie Karunaratna](#) from the Department of Civil Engineering, in association with [Dr Alma Rahat](#), of the Department of Computer Science, and [Dr John Griffin](#), Department of Biosciences has been awarded a grant of £307,445 from the Leverhulme Trust for the project 'Artificial Intelligence-assisted saltmarsh flood mitigation assessment'.

The 36-month interdisciplinary project will utilise emerging AI techniques to address this need and support the design and development of sustainable nature-based coastal flood mitigation solutions (NbS) which can offer significant benefits to the environment and society.

Professor Karunaratna said: "I am delighted to direct this truly interdisciplinary project funded by a prestigious Leverhulme Trust research grant".

[More about the project](#)



## Physics Christmas Lecture success

The Department of Physics recently delivered another successful Christmas Lecture, with over 600 pupils from 13 schools attending over a two-day period!

Pupils were treated to exciting and inspirational talks by [Professor Andy Newsham](#) (Liverpool John Moores) on Astrophysics plus research talks by the departments' PhD students Bill Atkins (Gravitational Wave Astronomy), Austin Kay (Semiconductors), Naeem Anwar (Particle Physics), Lewis Cole (Symmetries in Physics) and Dr Sarah Roberts (Stardust Hunting).

The annual lecture was organised by the faculty MRI team, lead by Lijie and Rhian with help from student ambassadors Mihai and Mona!

## Engineering a Sustainable World

[Dr Shirin Alexander](#) and Dr James Courtney from the Department of Chemical Engineering recently participated in an ITN/IChemE programme “Engineering a Sustainable World” presented by Lukwesa Burak.

The news-style program is a collaboration between IChemE and ITN Business to raise awareness and understanding of the role that chemical engineers play in addressing climate change, and will explore the vital collaboration between industry and academia, and the mission to inspire the next generation of engineers.



[Watch the programme](#)

## Professorial Inaugural Lectures 2024

Upcoming Lectures:

[Professor Gibin Powathil](#) and [Professor Grigory Garkusha](#) - Wednesday 28th February 2024. [Register](#)

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

## STUDENT NEWS

### Geography viva success!

Congratulations to PhD student Sarah Foster, Department of Geography, who recently passed her viva for her thesis '*Practices of welcome with refugee and asylum-seeking migrants in rural Wales: 'literacies of doing' and the (re)writing of place*'.

Sarah's thesis was supervised by [Professor Sergei Shubin](#) and [Dr Angharad Closs Stephens](#) with support from Vicki Squire and [Dr Keith Halfacree](#) and [Dr Kath Ficken](#) who chaired the viva.

## 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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