UNIVERSITY of LIMERICK
OLLSCOIL LUIMNIGH

FACULTY OF

Science + Engineering

Newsletter

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In this issue:

Inaugural UL / ESB Invited Lecture

Science & Engineering hosted the inaugural UL / ESB Invited Lecture on Thursday November 15th, a lively and thought-provoking talk by Prof. Jim Fenton, the Director of the Florida Solar Energy Center at the University of South Florida. The ESB has funded three scholarships at UL, as part of its commitment to lead Ireland's transition to a low carbon future.

The talk addressed the challenges of electricity generation to 2030 and beyond, with a specific focus on the interrelationship between solar generation and electric vehicles: *In Florida, Photovoltaic Panels on Your Roof Are Your Best Investment, along with Electric Vehicles, Energy Storage & Energy Efficiency*

The event was very well attended, drawing a 'standing room only' audience from engineering practitioners, faculty, researchers and students. Detailed case studies from a range of locations worldwide were considered, including the specific case of an Irish domestic dwelling.

Kevin A Hayes Memorial Medal

Fiona Neylon, BSc. Industrial Biochemistry was awarded the Kevin A Hayes Memorial Medal for the outstanding student in LM123 after year 1. The award was presented by Kevin's father James Hayes. Also pictured is Prof. Tewfik Soulimane, Head, Chemical Sciences Department.

Athena SWAN Bronze Medal

Congratulations to UL's Physics Department who received the Athena SWAN Bronze Medal. The award was presented by Minister Mary Mitchell O'Connor, Minister of State for Higher Education on the 14th November 2018 at the Athena SWAN Awards Ceremony in Dublin.

Pictured (l-r) – Professor Ursel Bangert, Cian McKeown, Dr. David Corcoran (HoD & Self Assessment Team Chair); Minister Mitchell O'Connor, Dr. Deirdre NiEidhin (SAT lead), Josephine Hogan, Elora McFall, Dr. Catherine Lenihan, Dr. Marie Connolly, Dr. Ian Clancy. Other SAT Members include; Maria Quinn, Dr. Andrew Stewart, Sarah Markham.

Irish Industry Pharma Awards

The Pharmaceutical Manufacturing Technology Centre (PMTC) together with Cork Institute of Technology (CIT) and Pfizer Ireland won the Irish Industry Pharma Award 2018 for Partnership Alliance of the Year. The winners were revealed at the gala awards ceremony on Tuesday, October 23rd, at the Clayton Hotel Burlington Road, Dublin. Congratulations to all involved.

Bernal composites paper wins at AIAA SciTech Forum

A team of researchers from Professor Paul Weaver's, Composites Materials group won the Collier Research HyperSizer/AIAA Structures Best Paper at the AIAA SciTech Forum and Exposition in Florida. AIAA SciTech Forum is one of the largest Aerospace conferences in the world with 4,000 participants from almost 1,300 institutions in nearly 40 countries and more than 2,000 technical papers reporting the latest innovations in aerospace. Bernal Institute now joins NASA Langley Research Centre, The DLR – German Aerospace Centre, US Airforce Research Laboratory & University of Bristol as previous recipients of the Collier Research HyperSizer/AIAA Structures Best Paper. "Steering of Carbon Fiber/Thermoplastic Pre-preg Tapes using Laser-Assisted Tape Placement" is the title of the winning paper, the authors are Gearóid Clancy, Daniël Peeters, Vincenzo Oliveri, David Jones, Ronan O'Higgins & Paul Weaver.

Fame Lab

Chris Barrett, a 4th year Product Design and Technology student, won a regional heat of the International Fame Lab science communication competition on the 15th November. FameLab participants explain a scientific concept to a general audience in just three minutes. Presentations are judged according to FameLab's golden rules – the three Cs: Content, Clarity and Charisma. Chris presented on the positive benefits of rock climbing on mental health. Chris will now represent the region at the FameLab Ireland national final in April 2019. FameLab Limerick is delivered in partnership with the University of Limerick: Faculty of Science and Engineering, Bernal Institute and the Postgraduate Association, and SFI Research Centre: Lero, MACSI and SSPC.

Art-Science collaboration for "Uisce Salach (Dirty Water)"

The art-science duo Softday (Dr. Mikael Fernström from UL and Mr Sean Taylor from the Limerick School of Art and Design has received a major project award from *CREATE Ireland* to develop "Uisce Salach (Dirty Water)", a collaborative sound art project about contested water issues in Ireland.

Softday is initiating a collaborative art process, creating a significant citizen's art-science project inspired by water analyses from domestic water supplies from the River Liffey its tributaries in Dublin City and from Dublin Port. The concepts behind the project were originally developed during Softday's residency at the Hyde Park gallery in Chicago in 2016 and at the Sirius Arts Gallery in Cobh, Co. Cork in 2017. It was then prototyped at Science Gallery Dublin in a workshop in January 2018. In 2019, Softday will hold public workshops and do *acouscenic sound walks* along the Liffey, leading up to the world premier of Uisce Salach (Dirty Water) performed live by the *Irish Chamber Orchestra* and a publicly constituted *Citizen Scientist Scratch Ensemble*.

Consultant Urologists Endorse the TUC Safety Valve Device

Medical device company – Class Medical – a University of Limerick spinout company have secured seed funding of €550,000 from investors including iHPSU match funding from Enterprise Ireland. Class Medical was founded in 2016 by Dr. Rory Mooney (CEO), Prof. Michael Walsh, Dr Niall Davis and Dr Eoghan Cunnane. Class Medical's initial product offering is a patent protected device that eliminates the risk and complications associated with the treatment of painful urinary problems.

Transurethral catheterisation (TUC) is the most common method of bladder drainage widely used in hospitals, nursing homes and home-care settings but is also notorious for its discomfort. The current approaches for performing TUC cause injuries in more than 1.3% of male cases leading to extended hospital stays or long-term damage of the urethra. Approximately 130 million catheters are placed annually with an estimated 845,000 incidences of urethral injury due to the catheter balloon being inflated in the wrong location. The preventable injuries result in significant healthcare and insurance cost for healthcare providers.

Class Medical's devices known as Trans Urethral Catheter Safety Valve (TUCSV) uses an innovative patented safety pressure relief valve to ensure that balloon inflation is minimised in the urethra, while inflation in the bladder is still possible. The technology was developed with the support of both the Bernal Institute and the Health Research Institute at the University of Limerick. The initial research for the TUCSV was undertaken with funding support from the Enterprise Ireland Commercialisation Fund after winning the inaugural Enterprise Ireland Cleveland Clinic Clinical Innovation Award. Prof. Michael Walsh was the Principal Investigator on the EI grant. www.classmedical.ie

IRC Alumnus of the Year Award

Brian Egan, a graduate of Aeronautical Engineering at UL, recently won the IRC Alumnus of the Year Award. Brian obtained a PhD from UL for his research in the area of modelling and testing of composite fuselage joints, supervised by Prof. Conor McCarthy and Prof. Michael McCarthy. The Alumnus of the Year Award from the Irish Research Council recognises Brian's work in carrying out engineering analysis on highly challenging projects for clients in the oil and gas industry. Brian has worked with Wood since 2014, as part of the Advanced Analysis and Technology Team based in Galway. Wood is a global leader in providing engineering services to the energy sector and has a large presence in the offshore oil and gas industry.

Prof Jane Ohlmeyer, IRC, Dr. Brian Egan, Prof Conor McCarthy, and Mr. Peter Browne, IRC

Johnson and Johnson WISTEM2D Scholarships

Ten female students were presented with bursaries by global healthcare company Johnson and Johnson (J&J) as part of its WiSTEM^{2}D Award Programme at a ceremony in UL on 12th November. The acronym WiSTEM^{2}D refers to Women in Science, Technology, Engineering, Mathematics, Manufacturing and Design, and is part of J&J's commitment to developing and implementing high-impact strategies to support female students undertaking STEM^{2}D degree courses at UL and in universities around the world. This is the healthcare company's third year partnering with the University. UL is one of 13 universities worldwide to participate in the programme, with University College Cork joining earlier this year.

The ten winning students are: Aisling Greaney, Biomedical Engineering, Alannah Aherne, Bioscience, Cliodhna O'Shea, Financial Maths, Ellen Liu, Aeronautical Engineering, Fiona Neylon, Industrial Biochemistry, Iva Gregovic, Design and Manufacturing Engineering, Jiale Ryan, Financial Maths, Maya Brennan, Product Design & Technology, Niamh Munday, Product Design & Technology, Siobhán Regan, Chemical & Biochemical Engineering.

The three runner-up students were: Jane Quigley, Technology Management, Emer O'Brien, Mechanical Engineering and Ruth Butler, Mechanical Engineering

The students were selected for the programme following a rigorous application process and one-to-one interviews. They will be assigned a J&J female role model who will support and mentor them as well as affording them the opportunity to visit Johnson and Johnson sites across the country and develop their STEM networks in the industry.
The WiSTEM^{2}D programme is unique in terms of offering young women studying STEM2D courses the opportunity to engage with women working in those careers. First-hand experience of site tours, mentoring, project and career workshops enable students to visualise exactly what it is like to have a career in STEM. Anna Rafferty, Head of External Affairs at Janssen the pharmaceutical company of J&J, said, "At J&J, we recognise that women are greatly under-represented in the STEM workforce here in Ireland, The mentoring element of the programme is designed to combat potential isolation among female students and to provide support for them as they continue their third level studies. As we look to building the workforce of the future, we are committed to supporting women in STEM, allowing us to develop the talent pipeline by nurturing and mentoring our future female STEM leaders."
Professor Merrilyn Goos, Ireland's only professor of STEM education and the Director of EPI*STEM at the National Centre of STEM Education said, "A key aim of the WiSTEM^{2}D programme is to inspire young women to bring diversity of ideas and opinions to typically male-dominated STEM careers. We recognise that STEM is traditionally a masculine environment, therefore collaborations between industry and third level institutions are critically important in order to drive change, expanding the reach and quality of STEM education in Ireland. We look forward to a continued partnership with J&J to help mentor, support and encourage young women in STEM education."

Speaking on behalf of WiSTEM2D students, Ciara Olsthoorn said, "Being part of this programme has been an incredible experience for me and all of the students. One of the most positive aspects of the collaboration has been the opportunity to develop connections within our peer network. This resulted in the students setting up the WiSTEM^{2}D Society to support women in STEM, where we can share our experiences and support each other which is incredibly positive and rewarding."
Professor Ita Richardson, presented the students with their bursaries at the ceremony. Also in attendance were the award winners' family members, J&J mentors and UL academic STEM staff including Dr Teresa Curtin, faculty of Science and Engineering and MC Tracey O'Connell of EPI*STEM .

Bernal Professor Mike Zaworotko ranked among the world's top 1% of the world's most highly cited researchers

Clarivate Analytics, the global leader in providing trusted insights and analytics to enable researchers to accelerate discovery, recently published its annual Highly Cited Researchers (HCR) list. Now in its fifth year, the citation analysis identifies influential researchers as determined by their peers around the globe – those who have consistently won recognition in the form of high citation counts over a decade. The *Web of Science* serves as the basis for the regular listings of researchers whose citation records position them in the top 1% by citations for their field and year.

Bernal Chair of Crystal Engineering, Mike Zaworotko, and Co-Director of SSPC, a Science Foundation Ireland Research Centre, made the list in two categories: **Chemistry** and **Pharmacology & Toxicology**. Professor Zaworotko was previously listed as being among the top 20 cited research chemists in the world from 2000-2010. In addition, in 2013, Professor Zaworotko secured the first award under the re-launched Science Foundation Ireland (SFI) Research Professor programme.

Speaking on the HCR ranking Professor Zaworotko said " This honour is an individual award but it could not have been achieved without the right chemistry between people. In particular, it reflects the hard work and talent of the researchers who have been part of my group since I moved to UL in 2013 and the collaborative culture of the Bernal Institute". Bernal Institute Director Professor Luuk van der Wielen said, "Phenomenal scientists as Mike Zaworotko are a true inspiration to the Bernal Institute's students and staff alike. His sustained focus on connecting great science to solving global Grand Challenges in Health, Energy and the Environment underlines the ambitions of 'Bernal' as a translational research institute. We are privileged to have him as a colleague, and expect his impact in the institute, in science and in society to continue growing".

Irish Composites Centre welcome visitors from Airbus and Hexcel

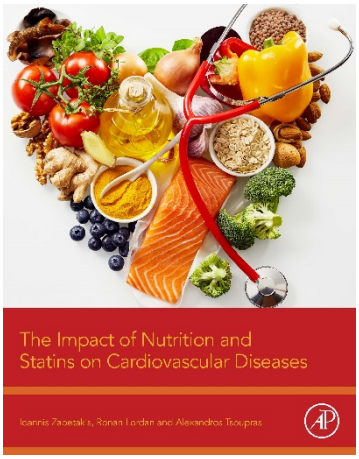
The Irish Composites Centre (IComp) welcomed the following VIP visitors from Airbus and Hexcel, world-leading companies in aerospace and composites technology, in a one-day open event held on 01 August 2018 in the Bernal Institute in UL:
Dr José Sánchez, Composite Materials Executive Expert, Airbus
Mr Tom Cook, Head of A350 Structures Architecture and Integration Team, Airbus
Dr Enzo Cosentino, Senior Composite Stress Engineer, Airbus
Prof Ian Lane, Senior Expert Composite Analysis, Airbus
Mr Luis Rubio, Senior Expert Manufacturing & Engineering, Airbus
Dr Paul Mackenzie, Senior Vice President and Chief Technology Officer, Hexcel
The event offered unprecedented insights into the global composites market and technology trends, with presentations by Dr José Sánchez and Dr Paul Mackenzie. Further presentations were given by IComp industry members and associated companies, as well as by IComp Principal Investigators from UL and UCD, on a wide range of topics relevant to Composites Science & Technology. The event was attended by more than 40 participants from academia, industry and Enterprise Ireland, in a very vibrant networking & industrial interaction day.

Thermosetting Resins Conference 2018

The 7th international conference on thermosetting resins took place in Berlin from the 25-27 of September 2018. Dr Terry McGrail (IComp Director and Technology Leader) is a co-organiser of the conference with Professor Monika Bauer (Director Fraunhofer Research) and Professor Jean-Francois Gerard (President EPF European Polymer Federation). The topics covered as part of the conference included; chemistry, processing, characterisation, modelling and simulation of thermosetting resins, new and sustainable chemistries, repair, recycling and applications e.g. fibre-reinforced thermosets, adhesives, coatings and 3D printing. The event was sponsored by; Huntsman, Henkel, Hexcel, Specific Polymers, Brandenburg Invest, Applied Sciences Journal, Cluster Kunststoffe, Chemie Brandenburg and the European Regional Development Fund.
Presenters included representatives from Huntsman, Henkel and Hexcel. Five members of IComp were present at the conference, and two postdoctoral researchers presented some work currently being carried out at the IComp facilities in University of Limerick.

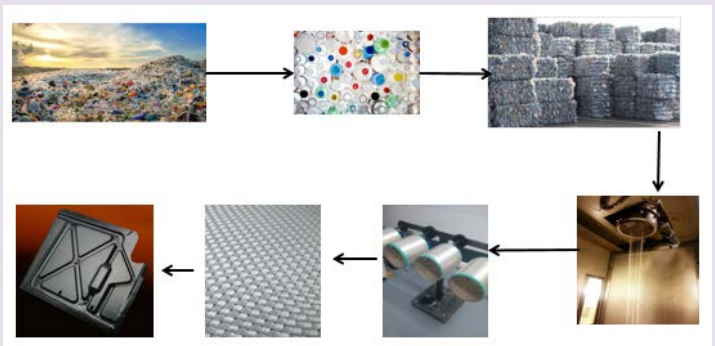
New book to be published

The Impact of Nutrition and Statins on Cardiovascular Diseases, edited by Ioannis Zabetakis, Ronan Lordan and Alexandros Tsoupras, Department of Biological Sciences will be published in January 2019. The book presents a summary of the background information and published research on the role of food in inhibiting the development of cardiovascular diseases. Written from a food science, food chemistry, and food biochemistry perspective, the book provides insights on the origin of cardiovascular diseases, an analysis of statin therapy, their side effects, and the role of dietary intervention as an alternative solution to preventing cardiovascular diseases. It focuses on the efficacy of nutrition and statins to address inflammation and inhibit the onset of disease, while also providing nutrition information and suggested dietary interventions.
Key Features: Includes a bioscience approach that focuses on inflammation and revisits the lipid hypothesis; Presents the view that nutritional interventions have considerable value, not only for reducing cardiovascular risk for CVDs patients, but also acting as the best precaution for otherwise healthy people; Advocates that nutritional habits that are formed at a young age are the best way to tackle the global epidemic that is CVDs



Recycling Plastic Bottles into High Performance Composites

In 2017, the world used 20 million tonnes of polyethylene terephthalate (PET) in water and soft drinks bottles, equivalent to 3 kg for every man, woman and child on the planet! The bulk of post-consumer PET bottles go to landfill. Those collected for recycling become recycled PET (rPET) and it is economically viable to use this to manufacture fibres for relatively low value applications such as nappies and the filling for duvets. The Irish Composites Centre (IComp) at the



University of Limerick has however developed the technology, patent pending, to convert rPET into high performance self-reinforcing polymer composite materials (SRP). Here, the reinforcing high tensile fibre is rPET and the matrix is rPET, making the composite parts themselves fully recyclable. These IComp SRPs are rapidly processable by low energy heating using microwave and radio frequency and potentially have high added-value applications in automotive, off-the-road vehicles, electronics, leisure goods, construction, etc. IComp has validated this technology on the research scale and is now proceeding to the development scale. To scale this up to production requires industrial-scale fibre spinning and weaving capabilities and IComp is looking for suitable industrial partners, preferably in Ireland, to exploit this technology to put UL and Ireland at the forefront of the fight against the highly topical plastic pollution of the planet.

Cloughjordan Eco Village, Co. Tipperary

SAUL Year 4 & 5 Utopian Studies Elective module alongside SAUL Year 3 Design Studio were based in Cloughjordan, Co. Tipperary this Autumn Semester. The Utopian Studies Elective module focuses on utopianism as it is manifested in the planning and practices of lived intentional communities. In this regard, the students considered the ecovillage movement through the principles of the utopian vision and method of permaculture. The focus was on the specific development of the Cloughjordan Ecovillage and Community Farm in County Tipperary and its project of what Kathleen Eull (a meditation trainer) calls "collaborative, conscious place-making." To this end, the module was conducted in residence in the Cloughjordan Ecovillage/Community Farm, with a collective Final Project of creating a policy and design document for a Community Barn, or a Free-Barn Civic. Proceeding with the module, elective students were asked to respond by drawing on their own knowledge and experience of architecture; and were asked to translate/transfer the substance of the module into an architectural framework. Class time was comprised of lectures, discussions, group work, screening, reading, writing, and final project design and production.

SAUL students in discussion with local community stakeholders

Year 3 Design Studio is collectively designing a free-barn civic. They are figuring out how the society in Cloughjordan works, understanding the means available (trees / forests to lumber / details connections / fabrication techniques / foundations / walls / roofs / insulation / energy / moisture / load path / lateral stability). For the first four weeks, six works of architecture was the subject of analysis for the first part of the semester. Essential drawings at three concurrent scales (1:200, 1:50 and 1:10) were produced exploring pertinent concepts focusing on spatial analysis, sequential organization and intent. For the fifth week each group have made site analysis drawings of found survey aspects of Cloughjordan. Students are now making a large context model of the town and eco-village that will be used as a design tool and that will enable design discussions for the remainder of the semester.

Open House Limerick

Hidden Limerick: This three-hour walking tour of Limerick City Centre - led by SAUL Senior Lecturer and Architect Peter Carroll - aimed to shed light on the multitude of hidden public rooms within Limerick City's Georgian, Victorian, Edwardian and contemporary fabric.

Irish Independent 'Going to College' Supplement

Bachelor of Architecture student, Fiona McLernon presented her story in the August 2018 issue of the Irish Independent 'Going to College' Supplement. Fiona would 'like to make cities better environments for people to live in'. Her years in UL have been a great journey for Fiona and, in fourth year, she took the option of a placement abroad and spent seven months in The Netherlands. Fiona was award the School of Architecture's Best Thesis Prize 2018. The project was among those featured in the annual Design@UL exhibition that showcases top designs from final year architecture and product design students. A big interest of Fiona's is how people live in cities and that was the theme of her prize-winning project.

GOI International Academic Mobility Programme

SAUL's lecturer Javier BuronGarcia is one of the recipients of Government of Ireland International Academic Mobility Programme 2018. For this mobility programme and during the autumn semester Javier has directed a workshop at UFPI School of Architecture on digital fabrication and housing. The workshop concluded with a 2 week visit to Teresina, Brazil in early December when full scale prototypes were digitally fabricated by Brazilian students and faculty in collaboration with local industry and support of the local government.

Science Week at UL

This year as part of the Festival, the staff and students in the Faculty of Science and Engineering organised over thirty-nine UL talks and workshops both on campus and in venues in Limerick City Centre for primary and secondary school pupils. Examples of events included talks on Build your own Siren Whistle; What is happening our Bees; Science of a Winning in Sport; Secrets of Super Hero science; Science of Aircraft Design; 3D Space Show – bring outer space into the classroom; A Celestial Journey; Chemistry Magic Workshops; Technology Workshops, Crystal Drop Workshop; Cell Explorers - hands-on discovery of cellular and molecular biology workshops, Fab Lab workshops, Code Breaker; FameLab Science Communication Competition and much more.

Books Launched

Narrowcast: Poetry and Audio Research *by Lytle Shaw,* Professor of English at New York University and is a member of the History and Theory faculty at SAUL, was launched by Margaret Mills Harper, Glucksman Professor in Contemporary Writing in English, School of English, Irish, and Communication, University of Limerick on 8th November. The book considers the problem of what sort of evidence is offered by tape recording, and where that evidence might make a difference in our thinking. The book explores how mid-century American poets associated with the New Left mobilized tape recording as a new form of sonic field research even as they themselves were being subjected to tape-based surveillance. Media theorists tend to understand audio recording as a technique for separating bodies from sounds. But this book listens closely to tape's embedded information, including information about the bodies that make sounds, and the spaces in which they make them. Narrowcast thus offers a site-specific account of tape recording--this through four case studies of American poets working with tape in the 60s: Allen Ginsberg, Larry Eigner, Charles Olson and Amiri Baraka. In considering the FBI and CIA scholars that listened in on the daily lives of these poets, Narrowcast also offers a new account of Bureau and Agency operatives as literary critics and historians. But rather than encourage a distant chuckle, the book ultimately demonstrates the close kinship between the state's scholarship, and that of official literary critics.

A Real Living Contact with the Things Themselves, by Irénée Scalbert, was launched by Professor of Architecture Merritt Bucholz, this book of essays bears witness to some of the more significant developments in architecture during the last 25 years. The essays alternate between detailed studies of major buildings, written while these were being designed or as they were being rediscovered after a period of oblivion, and broader historical surveys that seek out the origin of contemporary architectural ideas. More than its extent, however, what distinguishes this writing is that it is the result of direct experience – of interviews with architects, clients, engineers and users, and of the pleasurable, at times rapturous contemplation of architecture.

Irénée Scalbert is an architectural critic and historian based in London. He is the author of A Right to Difference: The Architecture of Jean Renaudie (2004) and Never Modern (2013). He is a lecturer at SAUL University of Limerick. He has taught in many places including the Architectural Association in London, the Politecnico in Milan and Harvard University.

Clean Sky Scientific Committee

In 2018, Professor Trevor Young was reappointed to the Scientific Committee of the Brussels-based Clean Sky research programme. In his second three-year term, he has the additional responsibility of acting as deputy chairperson for the 12-member panel of international experts, selected from across Europe.

Clean Sky 2 is the largest aviation research programme ever undertaken in Europe, with a gross budget of *ca* €4 billion over ten years (2014 – 2024). This public-private partnership, which is funded by the EU's Horizon 2020 programme, is managed by the Clean Sky Joint Undertaking (www.cleansky.eu/). The key objectives of the programme are to develop innovative, cutting-edge technologies aimed at reducing noise and harmful emissions produced by aircraft, and to enhance European competitiveness.

The Clean Sky 2 research programme, which has a focus on the development of large-scale demonstrators, is organized through three technological platforms (viz. *Airframes*, *Engines* and *Systems*) and three aircraft platforms (viz. *Large Passenger Aircraft*, *Regional Aircraft* and *Fast Rotorcraft*). There are also three "transverse areas" for *Small Air Transport*, *Eco-Design* and a *Technology Evaluator*. Over 600 legal entities currently participate in Clean Sky 2.

The Scientific Committee provides advice on the scientific priorities to be addressed in the work plans and on the achievements described in the annual activity reports. Committee members are also engaged in reviewing the technical progress of individual platform projects.

Irish Scientific Discoveries stamp

An Post have launched four new postage stamps highlighting Irish scientific discoveries made by scientists who work in pioneering research and development in Ireland. The €1 stamps focus on studies around new forms of light, fighting superbus, emissions adsorption and predicting neonatal seizures. The "Emissions Adsorption stamp" stems from Profssor Zaworotko's novel approach for purifying gases using sponge-like materials that could result in lower global energy use, emissions and pollution, published in Science May 2016.

Airbus Composite Experts Day

Professors Paul Weaver and Ronan O'Higgins, School of Engineering, represented UL at the Airbus Composite Experts Day which was held on October 17 2018, in Filton, Bristol plant. Their attendance was followed by Airbus official invitation of nominating two delegates to:

- Market the UL's capabilities and vision to Airbus Composite Experts in an **interactive "market place"** and present two posters demonstrating UL capabilities and vision for aerospace structures.
- Participate in interactive technical debate on the following topics:
  * Composite Additive Manufacturing
  * Challenges of High Rate Composite Manufacturing for Aerospace
  * Composite Virtual and Physical Testing and Simulation - State of the Art and future developments
  * Multifunctional Composites

Airbus invited the handpicked invitees based on their highly recognized expertise and their institution's profile in the field hoping for further collaboration with the Airbus Composite Experts network.

CONFIRM Activities

The Confirm Centre is a new Science Foundation Ireland (SFI) Research Centre for Smart Manufacturing based in the University of Limerick.

Confirm's vision is to transform and grow Irish manufacturing by integrating intelligence within products, machines, production systems and supply chains while also ensuring its future competitiveness and sustainability, by supporting industry transition to a smart manufacturing ecosystem.

During Berlin Science Week on 1st November 2018, Confirm was delighted to be invited to Fraunhofer IFF Magdeburg, Germany where Professor Conor McCarthy Director of the Confirm Centre and Christian Blobner Head of International Research Networks at Fraunhofer Institute for Factory Operation and Automation IFF discussed "Factories of the Future".

On 3rd December 2018, Professor Conor McCarthy of the Confirm Centre was delighted to visit the Fraunhofer IGCV for Casting, Composite and Processing Technology in Augsburg, Munich Germany to meet Jürgen Filsinger.

Autumn Conferring 2018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1. Jennifer O'Malley and Aimee Fitzgerald graduated with a Bachelor of Engineering in Biomedical Engineering
2. Brian Whelan, Kevin Hosey and Liam Hearne, Bachelor of Science in Wood Science Technology
3. Dr. Melissaby Gunnoo was conferred with a PhD
4. Gavin Murphy, Shane McNamara and Adrian Kelly, who graduated with Bachelor of Science in Energy
5. Dr. Kevin O'Dwyer, graduated with a PhD
6. Feng Zhang, Jiayi Yin and Guan Has graduated with a Bachelor of Engineering in Civil Engineering
7. Dr. Oly Owida, who was conferred with a PhD with his supervisor Prof Cathal Heavey.


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At the unveiling of a plaque dedicated to the memory of Dr. Kevin Hayes formerly of the Department of Chemical Sciences were Kevin's mother, Catherine, Sabina Higgins, President of Ireland, Michael D Higgins and Kevin's father James.

Grace Hopper and Lifetime Achievement Awards

Brenda Romero, Department of Computer Science and Information Systems was awarded the inaugural Grace Hopper award from Science Foundation Ireland at the Women in Technology conference in Dublin on November 22. The award was presented by Minister Mary Mitchell O'Connor.

Brenda has also received a Lifetime Achievement award at the Fun & Serious Games conference in Bilbao, Spain.

Dates for your Diary

Winter Conferring	14 – 17 January 2019
Spring Semester	21 January – 13 May
UL Postgraduate Fair	February 2019
UL Open Day	12 January 2019
Engineers Week	2 – 8 March 2019
S&E Summer Camp	June 2019
Inaugural Lectures	31 January – Prof Dick Fitzgerald 27 March – Prof Conor McCarthy 2 May – Prof Kevin M Ryan
S&E Faculty Board	13 February and 27 March 2019
Summer Exam Board	6 June 2019
Graduate Career Information Evenings	**2 February** - LM099 Architecture and LM076 Product Design & Technology **21 February** – LM116 Engineering & LM125 Physics **25 April** - LM077 BE Aeronautical Engineering LM115 BE Chemical & Biochemical Engineering LM118 BE Electronic & Computer Engineering LM063 BSc Technology Management LM082 BSc Construction Management & Engineering

International Concrete Design Competition – Tactility 2017/18

SAUL Y4 student, Eibhear O'Sullivan, was awarded joint first prize along with students from Queens University Belfast. The students involved in the winning projects were invited to participate in the Concrete Design Masterclass, which was held in Brussels from September 2nd to 8th 2018.

Bereavements

The Faculty extends its deepest sympathies to the following:

Prof. Ita Richrdson, Lero, on the death of her mother, Mrs. Carmel Doherty.

The family of Mr Pat O'Shea, retired, School of Engineering.

Mags Dunne, School of Engineering, on the death of her mother Mrs Catherine Dunne