



UNIVERSITY of
BRADFORD

Faculty of Engineering
& Informatics

Faculty of Engineering and Informatics Newsletter

August 2021



Welcome from the Dean

Our main event this month was the Virtual Celebration for the class of 2021 on Thursday, 19 August.

This event acknowledged the fortitude of our students, during what has been a challenging time for many, and provided a memorable backdrop for our Class of 2021. An online event was arranged to mark the occasion, as Covid-19 meant in-person ceremonies were unable to take place.

Students were also invited to book photography sessions, where they can be pictured with friends and family with the students able to wear a graduation gown and cap. You may have seen some of them on campus this last week.

To celebrate our students' success, some of Bradford's most iconic buildings were specially lit up to mark their graduation. Buildings participating in the light show included City Hall, Forster Square Arches, Margaret McMillan Tower, as well as and buildings on the University campus - all of which were bathed in gold. The giant plasma screen in City Park also shared a congratulatory video.

All graduates from the Class of 2020 and 2021 will be invited back to the University of Bradford to attend a traditional, on-campus ceremony at a later date.



Newsletter summary:

1. Academic in profile
2. RKT News (grants applications, open calls, presentations and awards)
3. Staff and Students' news

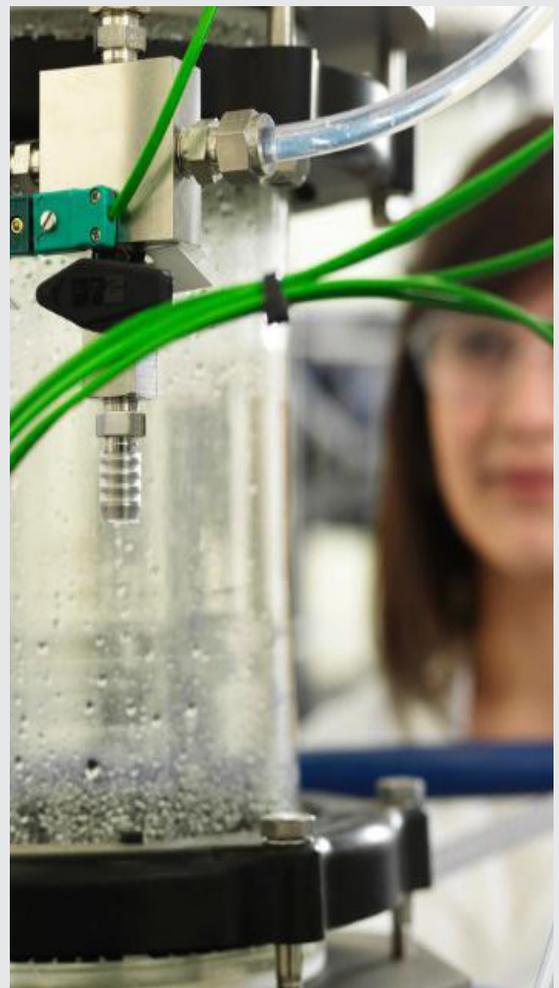
University's mental health support goes digital

Two University of Bradford projects which aim to take mental health support into the digital realm have been awarded funding by the Office for Students.

We secured £200,000 to create a ground-breaking mental health mobile phone web app and a further £46,335 to work on a separate initiative with the Open University and other partners.

The fact that two of the 18 funded projects are at Bradford has been described as a great result for the University, which has declared mental health one of its priorities.

[More here>>](#)



Academic in profile:

Dr Therese Sheehan



Therese is an Assistant Professor in Structural Engineering who has worked at the University of Bradford since 2013. She obtained her PhD entitled “Cyclic behaviour of CHS braces” from the University of Warwick, having previously completed an MSc at Imperial College London and a BEng at University College Cork.

Her main research interest is in steel-concrete composite structures, such as composite beams and concrete-filled steel tubes, which combine the best properties of steel and concrete to produce strong and efficient structures. She has also carried out work related to reusable structures and hybrid reinforced-concrete structures. She is a member of the Centre for Sustainable Environments research group and has been involved in several large-scale collaborative research projects in recent years such as DISCCO, SLIM-APP and REDUCE. She has supervised/co-supervised 12 PhD students, 4 of which are on-going, and has published nearly 30 papers in internationally leading journals.

She has been a member of the Institution of Structural Engineers Yorkshire Regional Committee since 2019, where she currently holds the position of junior vice-chair. Within the University she is a Programme Leader for 3 MSc programmes related to Civil and Structural Engineering and is the Departmental Liaison Officer with the Institution of Civil Engineers. She is actively involved in recruitment and outreach for the University, undertaking school visits and participating in STEM workshops as a STEM ambassador.



Current research interests:

- Composite beams
- Concrete-filled tubes
- Reusable/demountable structures
- Hybrid reinforced-concrete structures

Research projects:

- Lean duplex stainless steel under high strain rates
- Cyclic behaviour of hollow and concrete-filled circular hollow section braces
- Detailed design of a high rise steel building
- Bowen Construction construction of electricity substation and pylons

Research and Knowledge Transfer

Projects pipeline:

- Development of a Linguistic and ML conversational agent to assess language cognition for healthy ageing population and dementia, Kulvinder Panesar
- Die Drawing of Polyolefins Phase 5, Fin Caton-Rose
- Digital Makers: Engaging Communities in Co-designing a Visual Integration Framework to Tackle the Digital Divide, Mai Elshehaly

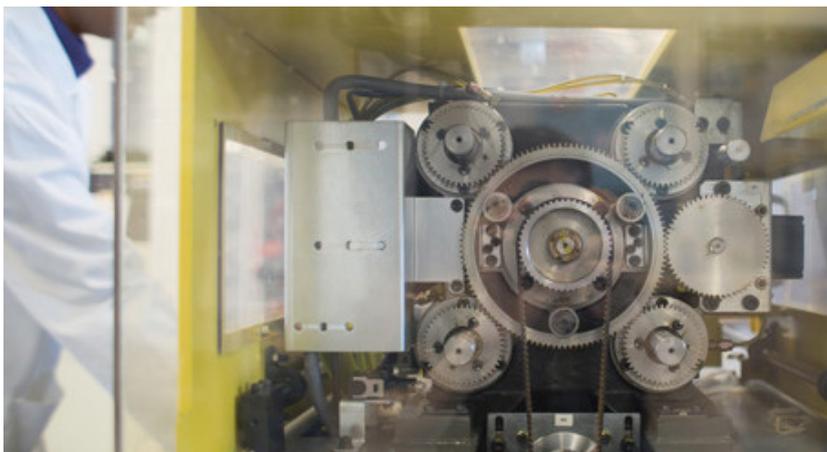


Women's Higher Education Network (WHEN) - become a member

WHEN hosts a network for all women, from all backgrounds, who work in any role in the higher education sector. We are all different but we share a unique set of challenges. WHEN recognises and celebrates our differences.

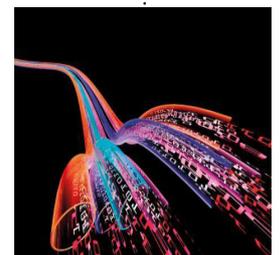
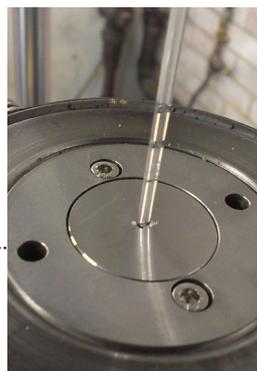
Dr Elaine Brown said: "Note also that because of the University's membership, we are eligible to join the WHEN network as individual members – there is a 'Pink' membership status that is free of charge for people working in member institutions".

The next event of WHEN - 'If not now, WHEN?' - An interactive session on gender equity within Higher Education will take place on Thursday 22nd July. [More here >>](#)



Open calls for funding:

- [Research-ready data and access funding](#), Closing date: September 2021 16:00 UK time
- [NERC independent research fellowship 2021](#), Closing date: 14 October 2021 16:00 UK time
- [Embedded digital researchers applying transformative technologies](#), Closing date: 21 September 2021 16:00 UK time
- [Equality, diversity and inclusion in the energy research community](#), Closing date: 4 November 2021 16:00



Staff and Students' news

STEM Webinars with the Muslim Women's Council

University of Bradford and the Muslim Women's Council embarked on a new STEM Pathways project which is delivered by CareBlue Training and Tutoring Services. The project aim is to enable and encourage young BAME Muslim women (aged 11-19) to explore and engage in educational and employment opportunities across Science, Technology, Engineering, Maths (STEM) career pathways, and we are looking to work with these girls and their mothers.

The first out of three webinars was 'How to think like a Programmer!' was chaired by Dr Kulvinder Panesar, Lecturer of Applied Artificial Intelligence, who did a short introduction to the project and spoke about her role at the university. Furthermore, motivation, support networks and coming out of your comfort zone were discussed with the panel - very critical in embarking on a technology-based role.

The second webinar 'How to think like an Engineer!' featured three short life experiences designed to stimulate discussion and reflection on STEM professions and career development to inspire and encourage young BAME Muslim girls and their mothers to pursue STEM career pathways. The session was chaired by Dr Elaine Brown, Associate Dean for Equality Diversity & Inclusion.



Dr Sefat is one of the editors of the special issue of Molecules

This Special Issue aims to cover the advancements of molecular sciences in medicine and dentistry. On the molecular level, we seek to study how disease can be detected in the early phase prevention from dental diseases, and treatment modalities.

Deadline for manuscript submissions: 31 December 2021.

More [here](#)>>



molecules

an Open Access Journal by MDPI

IMPACT
FACTOR
4.411

Covered in:
PubMed

Advances of Molecular Sciences in
Regenerative Dentistry



Guest Editors

Dr. Zohaib Khurshid, Prof. Dr. Paulo J. Palma, Dr. Farshid Sefat

Special Issue

Staff and Students' news

Dr Konur and Prof Gheorghe publish Springer monograph

The monograph called Membrane Computing Models: Implementations presents a comprehensive descriptions of the most significant membrane computing tools developed for various models.

The book describes the most relevant applications, facilitating a better understanding of how the tools are used in building, experimenting and analysing membrane computing models of complex problems. The target areas looked at included robotics, automatic design of P systems, image processing, ecosystem modelling, systems and synthetic biology, and bioinformatics.

The authors from China, France, Germany, Spain and the UK also discussed the efficient software and hardware solutions, together with the algorithms and platforms used.

More [here](#)>>

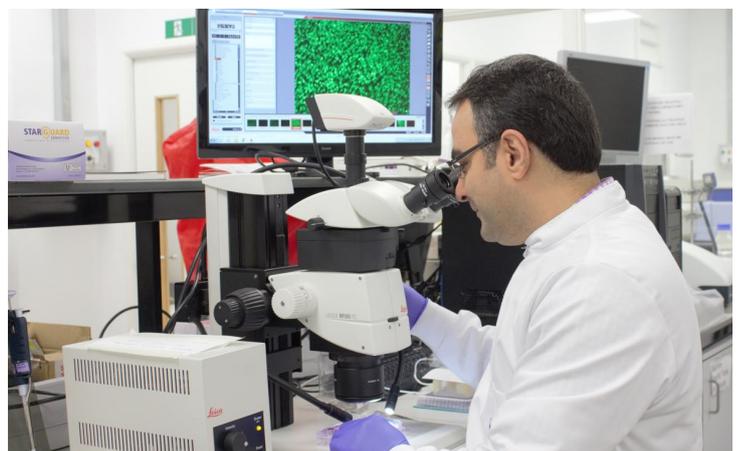


Dr Farshid Sefat published a review paper in Journal of Bioengineering

The paper entitled 'Stem Cell Niche Microenvironment: Review' summarizes all types of stem cells involved in the cornea as well as identifying the location of the human epithelial stem cells (HESCs), reconstruction of LSCN and artificial stem cells for self-renewal.

This research was covered also by the Telegraph and Argus and University news [here](#)>>

You can read the paper [here](#)>>



Staff and Students' news

New Staff - Felix Burling and Luke Sullivan

Felix Burling and Luke Sullivan joined the technical team working as Audio Visual Assistants as part of the the Government's post-Covid Kickstarter scheme to help people into work with a 6-month placement.

Felix completed a BA (Hons) in music at Leeds Conservatoire last year and he spent several years through university gigging across the country with different bands! He said: "I'm excited to broaden my skill set here at the University of Bradford, and from what I can gather my work will be quite varied - from assisting students at the Loan Counter to testing and setting up equipment, as well as assisting with various Faculty projects' teaching support."

Luke completed his BA (Hons) in Media Production: Film and Television at York St. John University last year. Luke is excited to be part of the Bradford Team - "It was difficult to find work as a new graduate, and during COVID, but I'm grateful to be working here and I'm excited to finally get my career started."

They will be based in Horton D2.21, supporting the Horton D2.20 loan counter, assisting with teaching support and various projects within the Faculty for the next six months.



Early Career Research Seminar (ECRF)

Dr Muhammad Ali delivered this month his presentation entitled 'A comparison between MIPv6 and LISP mobility protocol for SDN-based heterogeneous wireless Network Architecture'.

Dr Farshid Sefat, Dr C Tuinea-Bobe spoke about methods to raise research profiles. Prof Felician Campean discussed the future shape of ECRF meetings.

Our next meeting is on 16 September 2021, 12 noon.

More [here](#)>>

