



UNIVERSITY of
BRADFORD

Faculty of Engineering
& Informatics

Faculty of Engineering and Informatics Newsletter

June 2020



Welcome from the Dean

The Faculty coronavirus recovery planning has advanced considerably in the past few weeks, and we now have an outline of a phased return to campus mapped on to the high level University plan. We need to submit this in a detailed form for approval by the recovery project board at the end of June.

A key part of this detailing is an evaluation of the circumstances of every member of staff to see where you best fit into the plan. We are working on the principle that the health, safety and wellbeing of our staff and students is our top priority. An online training package is required by each staff member prior to returning to campus.

Stay safe and keep in touch!



Newsletter summary:

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

Lockdown podcast keeps University of Bradford students talking

A podcast designed to allay students' fears and address their concerns during lockdown has been hailed a success by organisers.

The regular UBU 'lockdown podcast', as it has come to be known, began with weekly discussions between its host, Conor Macmahon, a Film and TV Production Graduate (Faculty of Engineering and Informatics) and student union officers.

For more information visit:
www.bradford.ac.uk/news/archive/2020/lockdown-podcast-keeps-university-of-bradford-students-talking.php



students during this tough time.

UBU Coronavirus Weekly Information Talk - 26/03/2020
CORONAVIRUS WEEKLY INFORMATION TALK WITH THE UBU SUBMITTAL TEAM

Get more likes, comments and shares
When you boost this post, you'll show it to more people.

1,772	464	Boost Post
People reached	Engagements	

21 Reactions, comments & shares #

12 Like	12 On post	0 On shares
4 Love	4 On post	0 On shares
6 Comments	6 On Post	0 On Shares
1 Shares	1 On Post	0 On Shares

443 Post Clicks

331 Clicks to Play #	0 Link clicks	112 Other Clicks #
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NEGATIVE FEEDBACK

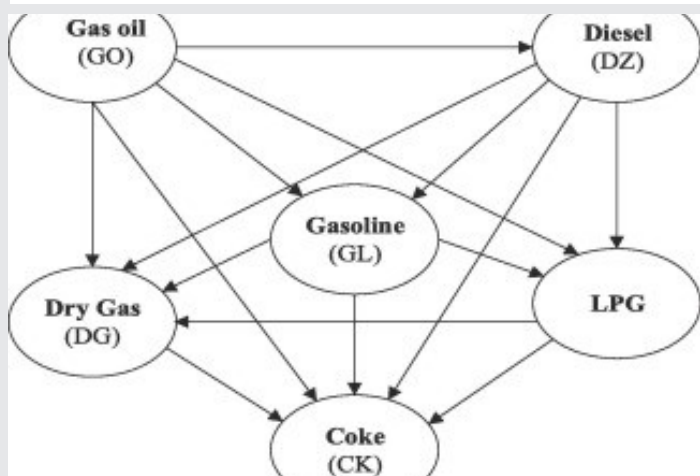
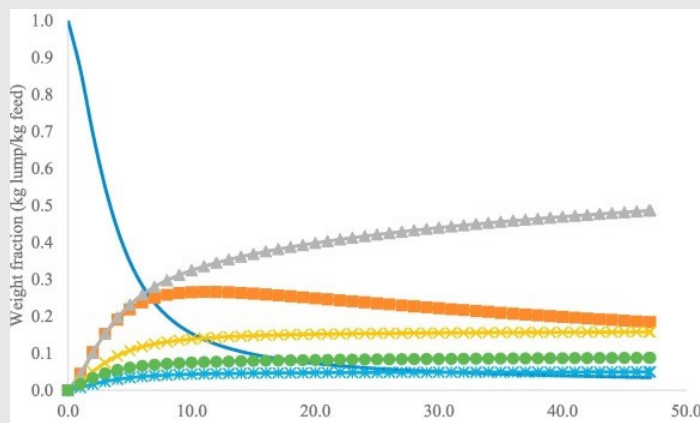
0 Hide post	0 Hide all posts
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Academic in profile:

Dr Yakubu John



Yakubu is a Lecturer in Chemical Engineering and he first came to the University of Bradford in 2014 to do his PhD on the Simulation of Fluid Catalytic Cracking Unit of petroleum refinery. Prior to this, he was a chemical engineering lecturer at Modibbo Adama University of Technology, Yola in Nigeria. Whilst doing his PhD, he taught several chemical engineering core modules. After his PhD in 2018, he became a Lecturer at Queen's University Belfast and later join the University of Bradford in August 2019. Yakubu is actively involved in many research areas such as dynamic modelling, simulation, optimisation and control of chemical processes. He has special interest in refinery processes, energy production processes, carbon capture, CO₂ minimization – a preventive approach, and the need to find safer ways to generate energy.



Current research interests:

- Petroleum Crude Oil Conversion to Chemicals
- Biofuel-Biomass Coprocessing/Catalyst
- Fluid Catalytic Cracking simulation, CO₂ minimization- Preventive approach, Carbon Capture
- Catalytic Cracking of Polymer to Chemicals and Fuels.

Active projects:

1. Co-processing of biomass and fossil fuel as feedstock to the fluid catalytic cracking unit that will create the sustainable pathway for biofuels to be introduced in the market, since it reduces environmental impacts from fossil fuels.
2. Simulation, optimisation and control of fluid catalytic cracking unit for CO₂ minimisation concentrating to develop and implement optimal preventative approaches to reduce carbon footprint using modelling, simulation, optimisation and control.

Research and Knowledge Transfer

Projects in the pipeline:

- Rearranging Environments for Social Distancing using Design Simulations , Hassan Ugail, Irfan Mehmood, Carlton Reeve, Tao Wan
- Development of a British-Irish Research Network on Behavioural Aspects of Cybercrime, Lena Yuryna Connolly
- Environmentally benign polymer stretch-wrapping materials and system, John Sweeney, Adrian Kelly, EPSRC
- KTP Tough Water Solutions, Raed Abd-Alhameed, Geev Mokryani
- KTP Siddall & Hilton Products Ltd, Kit Qichun Zhang/ Felician Campean
- KTP A & Y Law Ltd, Dhaval Thakker



‘Virtual Open Day’ at University of Bradford commands global attention

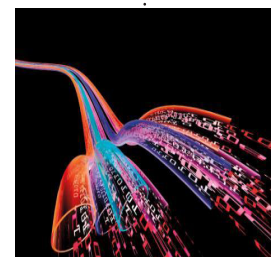
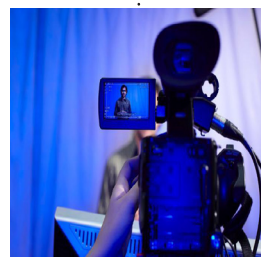
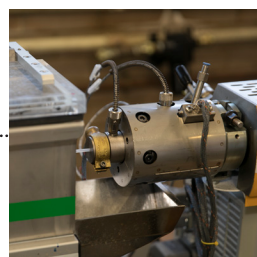
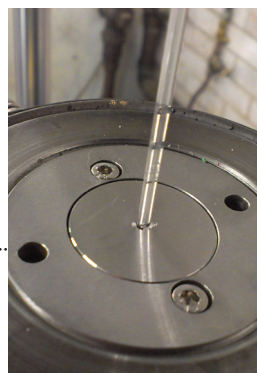
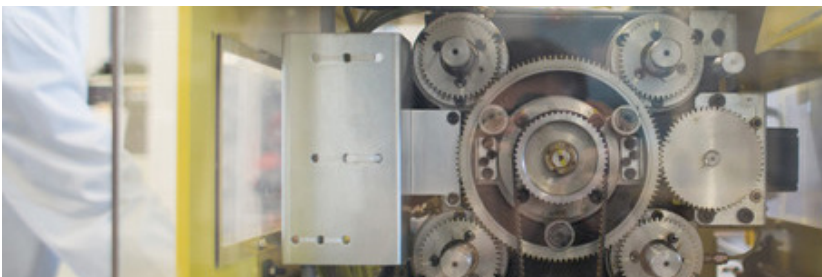
University of Bradford’s first ‘virtual’ open day attracted hundreds of bookings from students locally and around the world.

There were bookings from 132 countries – the closest being Ireland, and the furthest being 9,000 miles away in Fiji.

The Open Day on Saturday June 20 was held online due to social distancing restrictions imposed as a result of coronavirus and followed successful online events: an applicant experience day in April and careers fair in May.

Open calls for funding:

- EPSRC Pre-announcement for Responsive Manufacturing Outline Call, Closing date: 11 August 2020 at 16:00
- EPSRC Adventurous Manufacturing call, Closing date: 13 August 2020 at 16:00
- EPSRC Second Call for Transformative Healthcare Technologies – Pre-announcement and engagement event, Closing Date: 30 July 2020 at 16:00



Staff and Students' news

World Refugee Week: Online exhibition explores identity and purpose

This is Me is a collaborative project managed by Dr Karen D Thornton and Chris Hazell at the University of Bradford and Bradford Schools of Sanctuary which invited local schools to be partners in an interactive photography project where Year 10 students explored issues of self-representation. Due to take place during Bradford Refugee Week 2020, the culmination of the project was to be an interactive photography installation in Theatre in The Mill's Bradford city centre arts venue.

This Is Me gave students the opportunity to represent aspects of their lives which were significant to them and share them with those outside of their immediate community.

More about this project here: www.thisismeexhibition.co.uk



Outreach and recruitment activities

Dr Elaine Brown has confirmed that there is now a full schedule of webinars available up to the end of July. To coincide with the new school year, starting in September, the Faculty External Relations team are keen to have further topics offered with either a research or teaching focus. The next webinar in early July aiming at local students in Y9/10, to tempt them to consider engineering as a career.

Under lockdown there have been some international webinars running, targeted at interests of students in different countries. If colleagues have ideas, or links to countries, and would like support to deliver a webinar, please get in touch with Alastair Wood.



PhD viva success

Akinwale Akinyemi viva on 20 May 2020 was successful, supervised by Professor Demetres Kouvatsos, Dr Mumtaz Kamala

Mert Gulcur Viva Success on 26 May 2020, supervised by Professor Ben Whiteside, Dr Elaine Brown and Prof Tim Gough



Staff and Students' news

International Women in Engineering Day 2019

An online event was organised on 23rd June by Elaine Brown and Narkis Rahman of the University Gender Staff Forum, and chaired by Prof Udy Archibong from the Equality, Diversity, and Inclusion Team.

The event presented an exciting panel of female experts, many of them Bradford alumni, who shared their stories and experiences of working in the engineering industry. There was interest from Radio Leeds and the Telegraph and Argus, and the audience included teachers and pupils from schools and colleges, our own students and staff, and guests of the panel members. Our website was also updated to celebrate the day and a link to view a recording of the event will soon be available. More information here:
www.bradford.ac.uk/ei/women-in-engineering/



INTERNATIONAL WOMEN
In ENGINEERING DAY

23 June

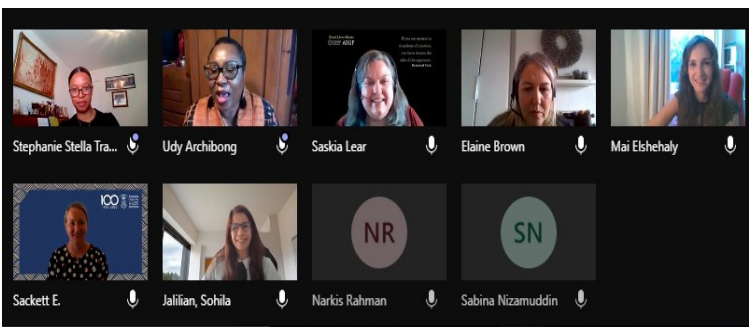


Early Career Research Seminar (ECRF):

Dr Bana Shriky talked about Injectable Smart Hydrogels for Controlled Drug Delivery System Development

The group was introduced to Intellectual Property maze by Dr Cristina Tuinea-Bobe

Our next meeting is on 15 July 2020, 12 noon.



Dr Geev Mokryani has been appointed as Associate Editor of IET Renewable Power Generation

IET Renewable Power Generation (RPG), one of the top-rank journals in the field of renewable energy and smart grids, brings together the topics of renewable energy technology, power generation and systems integration, with techno-economic issues. All renewable energy generation technologies are within the scope of the journal.

About Journal: <https://digital-library.theiet.org/content/journals/iet-rpg>

Editorial board: <https://digital-library.theiet.org/journals/iet-rpg/editorial-board>



Staff and Students' news

Bradford coders win prestigious sprint-coding 'hackathon' competition

It's the problem-solving computer coding equivalent of the 100m sprint - otherwise known as a 'hackathon' - and the University of Bradford has just come first in one such competition judged by industry leaders including UKBlackTech Ltd, Microsoft and PwC.

The UKBlackTech AI for Good Hackathon saw coders from different universities and industry compete to write an app centred around improving mental health and social care of people at risk. The app designed by Bradford students was described as 'innovative' and could even be taken to market.

The winning team included three University of Bradford students: Smriti Kotiyal and Muhammad Usman (both Msc Big Data Science and Technology students) and Svetlana Bormotova (BSc Computer Science exchange student from ITMO University, Russia) - and two more students from London South Bank University.

More about this here: www.bradford.ac.uk/news/archive/2020/bradford-coders-win-prestigious-sprint-coding-hackathon-competition.php



PPE manufacturing update

Our PPE manufacturing continues! Ben, Tim, Michael, Glen, Dave and John are producing now CE-marked face shields for the NHS. The design and material allows multiple sterilisations and is comfortable to wear.

More about this project here: <https://youtu.be/f37Rt-3qRmg>



HACKATHON

Theme: Health & Social Care

WINNERS

FEI Seminar Series:

3 June 2020 Dr Amr Abdullatif gave us an introduction to Machine Learning

10 June 2020 Prof Rami Qahwaji spoke about "Developing a Career in Academia: A Personal Reflection".

24 June 2020 Dr Paul Spencer introduced to us the 'Finite Element Simulations of Solid Polymers'

We have continued using the weekly Wednesday, 12 noon timeslot to discuss with PGR students their questions, worries/anxieties, and other information generally.

Staff and Students' news

Dr. Dhaval Thakker co-organises #AirHack2 with ODI Leeds and Bradford Council

AirHack2 is organized by ODI Leeds with the University of Bradford and Bradford City Council, in September 2020, as part of the European project: SCORE (Smart Cities and Open data REuse) to bring together researchers and practitioners working on the area of Air Quality.

September event details: <https://odileeds.org/events/airhack2/>

A warm-up event will be organised on 16th July. Details: <https://www.eventbrite.co.uk/e/airhack2-warm-up-event-tickets-108850270088>



New PhD projects:

1. Amarnath Moorthy - 'Condition Monitoring Analysis for Automotive System through Cloud computing'
2. Efiyeseimokumo Ikeremo - 'Cybersecurity and Information Security Management Systems: The Impact of Social Engineering'
3. Payam Shamsi - 'Artificial Intelligence in Chemical Engineering'
4. Mahmoud Alahmad Ali - 'Nonlinear Control of Autonomous Vehicles and Robots'
5. Japhet Manjengwa - 'Classification and Clustering of Pangola and Oat Hay Texture Quality Using Computer Vision System'

WOMEN'S COMEDY WORKSHOP ONLINE

Reserved places held for Women of Colour - Apply Now!

Have you got much planned for July 2020? No?

Well, join us for the Women's Comedy Workshop. Online.

On every Saturday in July, we will be bringing women together to laugh, have fun and be generally outrageous (in a socially distant way).

We've reserved spots in the workshop for Women of Colour. This includes anyone who experiences marginalisation in society due to their ethnicity or nationality, and identifies as a woman some or all of the time. If this applies to you, we'd love to have you join us.

Applications are open from now until 26 June, and all applicants must be 18 or over.

For more info (and to access the application form), please visit www.theatreinthemill.com/wcw. If anyone would like to discuss the application or workshop with us, we're available



