Hello,
I'm pleased to introduce the latest Civil Engineering Alumni Newsletter and my first as the Head of Civil Engineering. Despite my somewhat different background, I have found the first year of my tenure to be fascinating and am excited by the year to come. I recognise that I have a tough act to follow and thank Prof Nigel Cassidy for his excellent leadership over the past couple of years.

Gravity power
A UK consortium of leading scientific and engineering companies has come together to develop a new industry of quantum cold-atom sensors that will detect and monitor objects beneath the ground better than any current technology, thereby reducing the need for investigative drilling or digging.

Super Cube Challenge 2019
Groups of Geotechnical Engineering students competed to contextualise the materials being taught in their degrees by applying theory to this practical challenge. The challenge aimed to, where possible, simulate the types of decisions being taken by practicing geotechnical engineers.
First students complete Rail studies in Singapore

The first students have completed their studies as part of a unique railway education partnership between the University of Birmingham and Singapore’s public transport services provider SMRT. Congratulations to each of them!

Mainline testing of UK's first hydrogen train gets green light

Porterbrook and the University's Centre for Railway Research and Education announce the UK’s first hydrogen train, HydroFLEX, will be tested on the mainline railway following a successful proof-of-concept.

From the wider College: The problem with the plastics problem

Solving the plastics problem will not be easy. It does not have one single and simple solution. The problem is complex and often underestimated. Single use plastics, exemplified by plastic packaging will, and should, never be eliminated completely - to do so would risk other undesirable environmental consequences.

Is concrete one of the most dangerous materials?

Callum White, MEng Civil Engineering with Industrial Experience student (now alumnus) disagrees and has related his research project to The Guardian newspaper in an article featured during

EPS Societies' Awards

986 nominations were received to this year's student society awards. We're proud to announce that our own RailSoc won the Industrial Award in recognition of their work with rail companies across the country, a huge achievement considering the society
Concrete Week, challenging their view with his findings.

is not yet 2 years old! Congratulations RailSoc!

Launch of a brand new website
We're excited to launch to you, our alumni, the brand new EPS Community website; you're the first people to see this! Civil Engineering and the College of Engineering and Physical Sciences, in which we are part, has a community of over 85,000 graduates, students, staff and friends. This new site celebrates everything that brings our unique community together and explores opportunities for you to join in. Come along to one of our events, see what our 38 student groups are up to, learn about your fellow alumni, and discover how you could get involved. Let us know your feedback by emailing eps-community@contacts.bham.ac.uk, we'd love to hear from you.

Take a look

WE ARE BIRMINGHAM ALUMNI
Share your story and inspire our students
From recent graduates to industry leaders, you are making important things happen. You can inspire students and offer an insight into the opportunities awaiting them. Whatever you're doing, they want to hear from you. Plus, anyone who submits a profile before 1 November will receive an Old Joe magnet.

Alumni perspective: Cosmo Graham
Cosmo graduated in 2018 with a BEng Civil and Railway Engineering and is now a Graduate Rail Engineering, Morgan Sindall Construction & Infrastructure. He shares his favourite memories of the University, his motivations, learnings, how he's started his career and advice he'd give to those about to become students.

Could you mentor a student?
We're looking for enthusiastic alumni and professionals to provide expertise, advice and inspiration to help our students start their careers. Mentoring makes a real difference; we
all know the benefits of having someone to bounce ideas off. If you’d like to be that person, please get in touch.

Email Grace to become a mentor

**News roundup**

Civil Engineering at Birmingham rises into the top ten in the 2020 Guardian University Rankings.

We are delighted to announce that Prof Nicole Metje has won, for the second year running, the ICE West Midlands Awards in ‘Studies and Research’ for the Quantum Technology – Potential for Railway Infrastructure (QT-PRI) project, together with project partners RSK, Atkins and Network Rail. Also at the Awards, alumna Becky Drew received the Chair’s Award “for the person who deserved special recognition” for outstanding effort and contribution to her research field. Congratulations to them both!

Birmingham Engineers take their research to Parliament.

Revolutionary research into seawater greenhouses enables food to be grown sustainably in arid world regions.

Researchers from the Birmingham Centre for Railway Research and Education are part of a collaboration which has won an award at the Railway Industry Innovation Awards.

Students who participated in the National Student Survey have ranked Civil Engineering at the University highly, with 95% of our final year students expressing overall satisfaction with their course.

Birmingham signs strategic partnership agreement with Transport Systems Catapult to begin a three-year strategic collaboration in intelligent transport solutions.

Using smart energy control technology to combine wind and wave power could provide all the world’s electricity needs.

**Events**

**Sustainable civil nuclear power workshop**
17 September 2019, 9:30am-5pm
Old Gym, University of Birmingham

**My Life in Maths and Shaping the Brain - London Mathematical Society Popular Lectures**
19 September 2019, 6:30-8pm
Bramall Music Building, University of Birmingham

**Join In Hong Kong**
24 October 2019, 6:30-8:30pm
Asia Society Hong Kong Center, Admiralty, Hong Kong

**Careers and Coffee**
29 October, 6-8pm
Cherry Reds, Birmingham City Centre

**Join In New York**
13 November 2019, 6:30-8:30pm
Wetting of hydrophobic and superhydrophobic surfaces workshop
20 September 2019, 10:30-11:30am
G34 Engineering Building, University of Birmingham

Book to the Future
18-19 October 2019 The University’s annual festival of the written and spoken word, featuring free workshops, panel discussions, performances and author talks, including:

- **The return of race science, Angela Saini**
  18 October, 5:30-7pm

- **From Brum to bakes, Candice Brown**
  19 October, 6-7pm

Four Seasons Hotel, Barclay Street, New York

Join In San Francisco
14 November, 6:30-8:30pm
Waterbar, 399 The Embarcadero, San Francisco

LGBTSTEMinar
10 January 2020
University of Birmingham

House of Lords Reception
24 April 2020, 6:30-8:30pm
House of Lords, London

EPS Societies’ Awards
10 June 2020, 7:30-11:30pm
Great Hall, University of Birmingham

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