



UNIVERSITY OF
BIRMINGHAM

Department of Civil Engineering Community

Part of
THE EPS COMMUNITY



Welcome to your 2019 Civil Engineering Alumni Newsletter



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.

[Read more from Karl Dearn](#)



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.

[Find out more](#)



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.

[Find out more](#)



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!

[Find out more](#)



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.

[Find out more](#)



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.

[Find out more](#)



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.

[Find out more](#)

is not yet 2 years old! Congratulations RailSoc!

[Discover our Award winners](#)



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.

[Share your Birmingham story](#)



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.

[Read more about Cosmo](#)

MENTORING

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

[Join In Hong Kong](#)

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

[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

[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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