



UNIVERSITY OF  
BIRMINGHAM

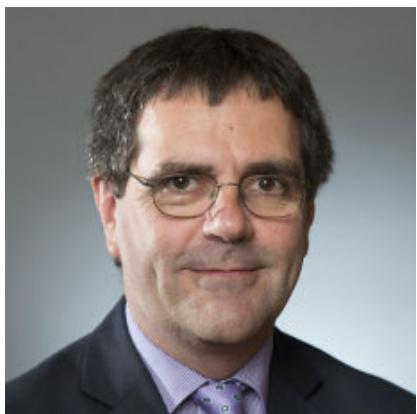
# DEPARTMENT OF ELECTRONIC, ELECTRICAL AND SYSTEMS ENGINEERING COMMUNITY

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Part of  
THE EPS COMMUNITY

## Welcome to your 2020 EESE Alumni Newsletter



**Hello, I hope this newsletter finds you well.**

It has been another successful and extremely busy year for the Department. As in every other walk of life, everything has been made more challenging by the complications of the pandemic lockdown, and I am very proud of the way everyone in the Department has pulled together to continue our teaching and research activities. This has enabled our final year undergraduate students to graduate, our non-final year students to progress and those on postgraduate taught programmes to carry out their projects.

[Read more from Peter Gardner](#)



### State-of-the-art engineering building tops out

Our new building is almost complete! Bringing our many disciplines into one combined space will provide more flexible ways of working for both staff and students, training the next generation of engineers.

### Sunny with a mild chance of catastrophe

The Sun is an interesting, complex, powerful, rapidly evolving object which will have a major impact on our technological-reliant modern society. But what would happen if the power suddenly went out?

[Find out more](#)



## HydroFLEX secures funding for hydrogen train design

The UK's first hydrogen-powered train, HydroFLEX, is moving closer to commercial operation after the University of Birmingham has been awarded new funding by the Department for Transport.

[Find out more](#)

[Find out more](#)



## National College of Advanced Transport and Infrastructure

We've been identified as the preferred bidder for the National College of Advanced Transport and Infrastructure by the Further Education Commissioner's Structure and Prospects Appraisal process.

[Find out more](#)



## Give more people the chance to build a better future

Engineers and scientists can revolutionise the world – but only if they get the right education. Every year, 69,000 jobs for engineers and skilled technicians in the UK go unfilled, while those with the potential to help create a greener, healthier world don't get the chance to attend university. We are launching a new Foundation Year in STEM (EPS Futures) degree programme, the first of its kind, to help bridge this gap.

[Find out more and get involved](#)



## Student Rail Society expand their network

RailSoc have had a great year and have even started a national transport-related network with equivalent groups from other universities. Their year closed with founder



## A very special Virtual EPS Societies' Awards

Sadly we weren't able to hold the usual celebrations for our remarkable student groups, but not to be hindered by a pandemic we took the event online for a

Matthew Teller shortlisted for the Great Achievement in EPS Award at the annual student Societies' Awards!

[Find out more](#)

unique virtual Awards ceremony. Congratulations to the 460+ nominees, shortlisted candidates and winners.

[Watch the Awards ceremony](#)



## Birmingham, STEM Ambassadors and Me

Yvonne Baker, alumna and Chief Executive of STEM Learning, delivered the 2020 EPS Distinguished Lecture in March. Best known for founding the national STEM Ambassadors volunteering scheme, Yvonne is passionate about encouraging school pupils to see the every-day science around them. In her talk, she reflects on her favourite Birmingham memories and shares her thoughts on how we can continue to make science, technology, engineering and maths attractive to the young and not so young.

[Watch Yvonne's Distinguished Lecture](#)

# WE ARE BIRMINGHAM ALUMNI

**Share your story and  
help inspire our students**

From recent graduates to industry leaders, you are making important things happen. You can inspire young people and offer an insight into the opportunities awaiting them. Anyone who submits a profile will receive an Old Joe fridge magnet. Never have your stories been more valuable.

[Share your Birmingham story](#)



**Alumni perspective: Roshni Patel**

Roshni graduated in 2018 with a BEng in Computer Systems Engineering with Industrial Year and is now a Graduate Data Researcher at TATA Steel. In this profile she shares her favourite memories of the University and how time as a student helped shape her career.

[Read more about Roshni](#)

# MENTORING

**Could you mentor a student?**

We're looking for enthusiastic alumni and professionals to provide expertise and advice to help our students start their careers. Mentoring makes a real difference; we all know the benefits of having someone to bounce ideas off, particularly in these current uncertain times. Your advice is invaluable. If you'd like to be that person, please get in touch.

Email Grace to become a mentor

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## News roundup

[HS2 signs landmark R&D agreement](#) with the UK Rail Research and Innovation Network.

Did you graduate in the last 5 years? You're eligible to enter the [6th China International College Students' "Internet Plus" Innovation and Entrepreneurship Competition](#).

The School of Engineering has achieved an [Athena SWAN Bronze Award](#) for the first time, while the University as an institution, has had its 2014 Bronze Award renewed.

Join us at the online [High Speed Rail: Education Interchange Conference](#) in December

[New graduate Sabeeka Qureshi launches a careers blog](#) offering advice to students and graduates looking for a jobs or internships in lockdown.

New system [uses wind turbines to defend the national grid](#) from power cuts.

[Space weather monitoring](#) to get major upgrade in new research programme.

Recent graduate [Mercurius Saad receives £40,000 grant](#) from Innovate UK towards his education start-up Tutorbloc.

University signs momentous research agreement to [develop highly integrated millimetre-wave front-end antennas for 5G communications](#).

Plymouth [STEM spectacular!](#)

The Birmingham Centre for Railway Research and Education has been shortlisted in the category of [Business Collaboration of the Guardian University Awards 2020](#).

University of Birmingham [wins the PraxisAuril Knowledge Exchange](#) 'Partnership of the Year' award for its innovation partnership with Siemens Mobility.

Electrical Engineers improve [aerodynamic research facilities](#).

The UK Rail Research Innovation Network (UKRRIN) Data Platform has been launched by the Birmingham Centre for Railway Research and Education (BCRRE) that will create the [largest single source of data covering railway operations](#) in the UK and internationally.

University of Birmingham [appoints leading computational scientist as Pro-Vice-Chancellor](#) and Head of College of Engineering and Physical Sciences.

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**Do we have the correct contact details for you?**

Make sure you update your details to ensure you receive the latest news and information about events in your area. [Update now](#)



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