



Welcome to your 2020 Metallurgy and Materials Alumni Newsletter



Hello, I hope this newsletter finds you well. 2020 started with a wonderful Materials Ball celebrating Professor Rex Harris' IOM3 Outstanding Achievement award for research on hydrogen in metals and his passion for global sustainability, which have had a major influence on our research. Current highlights include Prof Allan Walton's work on recycling NdFeB magnets in old hard disc drives using hydrogen, which was featured by the BBC.

[Read more from Alison Davenport](#)



Leading the way in Materials outreach

We are tireless in our determination to inspire the next generation to study materials and are taking great strides to create a national outreach programme to promote our discipline across the UK.

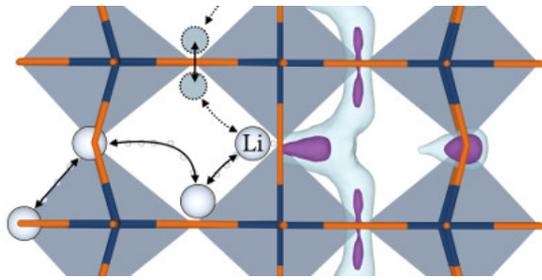
[Find out more](#)



The treasure trove hidden in discarded computers

What do you do with an old hard disk drive once it reaches the end of its life? If Professor Allan Walton has his way, parts of it could soon be propelling your next car along the road, assuming you go electric.

[Find out more](#)



Unlocking the key to super-fast-charging batteries

Lithium-ion batteries are a key technology enabling portable devices and electric vehicles. Battery charge time is determined by the speed that lithium ions can move through the battery's materials.

[Find out more](#)



Securing a responsible supply to critical materials

Our most important technologies depend on raw materials that are not evenly distributed around the world. Our teams are mitigating the dependency on rare earth imports through novel solutions.

[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](#)



As a relatively new society, AeroSoc are thriving, with much of their year spent building and flying drones.

[Read about Aerosoc](#)



The Materials Society (BUMS) has had a triumphant year with trophies and awards galore!

[Read about BUMS](#)



It's been a busy term for NucSoc with collaborations, careers talks and new-found football success.

[Read about NucSoc](#)

EPS SOCIETIES' AWARDS 2020

Success for our students at the annual 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 unique virtual Awards ceremony. We are delighted that BUMS were named Sports Team of the Year, becoming the first departmental society to claim the accolade, and two of our undergraduates also won awards: Molly Service won Role Model of the Year, and Avery Cunningham won the Engineering and Physical Sciences Community Award. Congratulations to them all!

[Watch our first ever Virtual Societies' Awards](#)



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

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



Alumni perspective: Nicole Lee

Nicole graduated in 2018 with an MEng in Mechanical and Materials Engineering and is now an Engineer at Fraser-Nash. Her Birmingham story began when she attended summer school before arriving

an Old Joe fridge magnet. Never have your stories been more valuable.

[Share your Birmingham story](#)

at University and now volunteers at similar events to help others decide their futures.

[Hear more about Nicole](#)

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](#)

News roundup

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](#).

Materials Science and Engineering scores [top marks in the 2020 National Student Survey](#).

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

Government [funding helps advanced ceramics](#) take shape in the Midlands.

[Small and medium businesses are being offered additional free support](#) to help them overcome some of the challenges of the COVID-19 pandemic via Birmingham Energy Institute.

One step closer to [super-fast-charging batteries](#).

Dr Sandy Knowles named as one of three Birmingham scientists awarded prestigious research grants from the UK [Research and Innovation's Future Leaders Fellowships](#).

Professor of Robotics, Rustam Stolkin, [chairs global nuclear expert group](#).

The UK needs to act to prevent electric vehicle [battery waste mountain](#).

Birmingham brings together experts to [secure the future of technology-critical materials](#).

Nuclear physicist, [Dr Tzany Kokalova Wheldon](#), has been named in the 2020 Timewise Power 50 Awards: a roll call of 50 powerful executives in the UK.

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

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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