



# PARMITER'S SCHOOL

FOUNDED 1681

Headmaster: Mr M Jones BA MEd

22nd March 2019

Dear Parent/Carer

## 'Engineering in Action' Trip for Mathematics A Level Students

We have 10 places for this exciting event, which will be held at the Emmanuel Centre, 9 - 23 Marsham Street, London, SW1P 3DW, on **Monday 24<sup>th</sup> June 2019**. The day has been organised into five interactive sessions by a team of engineers who will explore different types of engineering including civil, structural, mechanical and others. Each session includes a Q&A opportunity to quiz the engineers. The speakers (so far) include:

- **Anna Ploszajski, University College London** - Dr Anna Ploszajski is an award-winning materials engineer, science communicator and maker on a mission to get people fascinated by the ordinary stuff which makes up the world around us.
- **Sam Rogers, Gravity Industries** - Sam Rogers is a flight suit design engineer at Gravity Industries. He has many years' experience with pyrotechnics and built his first large solid rocket motor aged 9. Sam will shed light on the approach Gravity has taken to development of a pioneering human flight suit, with all the associated successes, failures and revelations. It will show how fundamental principles and design judgement can bring science fiction closer to reality.
- **Hugh Hunt, University of Cambridge** - Dr Hugh Hunt is a Reader in Engineering Dynamics and Vibration at Cambridge University. He is a regular presenter on Channel 4 documentaries, including "Dambusters: Building the Bouncing Bomb" and "Guy Martin Wall of Death". He has an impressive collection of boomerangs which he uses to inspire students in the study of dynamics and mechanics. In a presentation full of exciting demonstrations Hugh will answer some fundamental engineering questions, including why does a spinning top stand up? And how do cats always manage to land upright?
- **Paul Hellier, University College London** - Paul is a lecturer and engineer of sustainable energy technologies at University College London. He works with major energy companies to develop new renewable fuels. Paul will explain how he combines engineering, chemistry and biology to design new fuels that can be produced more cleanly and with less energy intense processes than current fuels, and have fewer harmful impacts on human health and the environment when used in road transport. With the help of some simple experiments, he will demonstrate how future fuels might have more in common with a bottle of shampoo and a cup of coffee than you realise.

The cost of the visit is £27 per student for the study day. In addition, they will need money for the train return fare to London from Watford Junction Station and to buy lunch, unless they bring a packed lunch.

A member of staff will accompany the excursion and meet the students at the Emmanuel Centre at 10.30am. The centre is around 10 minutes' walk from Victoria Train station. Students will independently purchase their train tickets. Nearer the time, I will provide students with a map to the venue. Students will return in a similar manner and should arrive at Watford Junction for approximately 5.30pm.

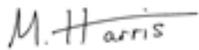
If your son/daughter would like to attend what promises to be a very interesting and stimulating day, **please pay £27 via WisePay** or by cheque (made payable to Parmiter's School). Please write your child's **FULL NAME, FORM and Engineering in Action Day 2019 for A level Students** on the back of the cheque and return the payment to the Finance BOX by **Friday 5<sup>th</sup> April 2019**.

**By paying, you are consenting to your child attending the above school trip. Please ensure the school is fully aware of any medical concerns you may have, under separate cover.**

**Tickets are limited to 10 and will be allocated on a first-come, first served basis.**

If you have any queries or concerns about the this trip, please contact me at the school or by e-mail ([m.harris@parmiters.herts.sch.uk](mailto:m.harris@parmiters.herts.sch.uk)).

Yours sincerely

A handwritten signature in black ink that reads "M. Harris". The signature is written in a cursive style with a horizontal line above the name.

Mrs M Harris  
KS5 Coordinator for Mathematics