

University of Warwick Satellite Engineering Team 2017-18

WUSAT Makes a Big Impression in Budapest!

The WUSAT team attended the European Space Agency sponsored **2nd Symposium on Space Educational Activities** in Budapest this April. The team presented their poster detailing their work on WUSAT-3 and Co-Directors Bill Crofts and Julia Hunter-Anderson presented their paper on the set-up and operation of the WUSAT programme. Our strong 'team' approach in terms of how much we value and include the input of all of our collaborating partners – including staff members within Warwick Engineering – was very evident. We were the only participating University who actually took our satellite team to the Symposium with us!



Following our presentations, we received a great deal of enthusiastic contact from members of the European Space Agency and a number of other European Universities, including Surrey, Leicester and Cranfield. It became clear from discussions with them that WUSAT is something of a unique phenomenon within the world of universities that offer Space technology programmes. Even those universities with highly respected Space credentials do not offer the unique experience of a multidisciplinary engineering team that designs, builds and launches its own satellites. WUSAT, at the University of Warwick, is increasingly becoming recognised as having significance within the Space university/industry environment. (See next item!)

WUSAT selected for inclusion in UK Space user/provider review

The UK Government have chosen 'WUSAT at the University of Warwick' as worthy of selection for a recently commissioned review of the ***Size & Health of the UK Space Industry 2018***.

This biennial survey is a regular study of the characteristics and performance of space-related organisations in the UK – covering research, science, engineering, supply and use of space and satellite services. The **UK Space Agency** has commissioned **London Economics** to conduct the survey on their behalf. It is a great privilege for WUSAT and all of our partners and associates to be recognised in this way, and we hope that it will help to promote our endeavours within the Space community.

We may be a very small player within the group chosen for this survey, but it is a remarkable achievement for such a university team to be included at all!



Marks & Clerk LLP, Patent & Trade Mark Attorneys, join WUSAT



Izzy Ferguson, a member of the 2015 WUSAT-2 launch team, recently negotiated for her employer company, Marks & Clerk, to sponsor our WUSAT programme.



Izzy is now a trainee Patent Attorney with M&C in her 3rd Year of training. We are absolutely delighted to have Izzy back on board with us in this new role, and of course we are so pleased to welcome Marks & Clerk as our latest partner company! Our thanks go to them for their generous support, and we hope that they will be pleased to see their name associated with the level of high-profile Space projects that we continue to pursue.

XCAM Ltd 'very impressed' with WUSAT intern!



Michael Kaniou, a 2018-19 WUSAT team member, has made an excellent impression with specialist imaging company, XCAM Ltd. He is working on a six-week programme entitled '**Finite Element Modelling of a Space-Qualified Particle Fall-Out Monitor WSI**'. XCAM CEO, Karen Holland, recently wrote to say that "...*his ability and his attitude to work is outstanding....*". We are looking forward



to having closer ties with XCAM and to having Michael in the next WUSAT team for 2018-19!

Continued development with Biotrack.



Following on from contacts made at BLS6 in Konstanz, we are very pleased to be working with Biotrack in Dorset. As we progress towards development of our User (and test) segment next academic year - smart tags that can transmit to our satellite, and that theoretically could be fitted to wildlife - Biotrack will support us to develop a simple test system. We will also consider collaborating on innovative solutions to the current wildlife tagging technology limitations.

Goodbye & Thanks to Graduating 2017-18 WUSAT Team!



This year's team of (L-R), Ben Olsen, Ben Taylor, Marina Shcherbakova, Naomi Dobson, Sophie Clarke, Tony Hogan and Sam Croote have considerably moved forward the development of WUSAT-3 on many fronts. Their work on thermal modelling, communications, end-user and mission requirements analysis, deployable antenna arm design, electrical power supply, and ADCS actuator analysis has been invaluable. We have really enjoyed working with you, and will miss seeing you around. Very best wishes for the future in your new careers, and we hope you will enjoy seeing your work come to fruition in an eventual successful launch!

Thanks also to our willing ex-WUSAT PhD students, Sam Tucker Harvey, Sean Perry, and Oli Vavasour who have continued to help where they can. Also to our excellent workshop technicians and to all staff in Engineering who have helped these students on their way. We are particularly grateful to all of our collaborating partner companies for all the assistance they offer in so many ways. **You are all part of the team!**



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