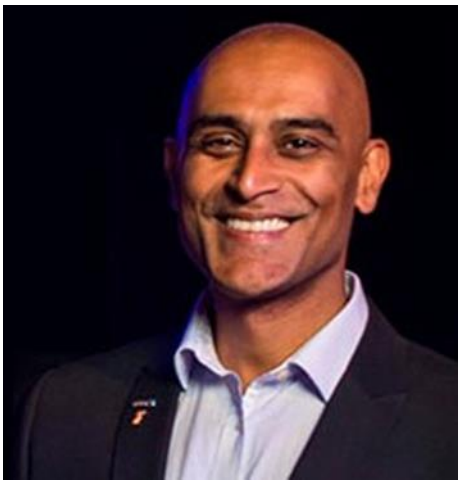
Anu Ojha - Director (National Space Academy) and Member of STFC Council



Professor Anu Ojha OBE is Director of the UK National Space Academy, a member of STFC Council and ESA's Human Spaceflight and Exploration Science Advisory Committee (HESAC) – the senior science advisory body to the Agency's Director of Human Spaceflight and Exploration. Invited by the Secretary of State for Defence to contribute to the 2020 Integrated Review, he is heavily involved in HMG's strategic programme of allowed collaborations in space science with China through the UK-China Joint Laboratory in Space Science and Technology in which he is the UK lead for skills, education and human spaceflight/robotic exploration.

Skills/education

Anu leads the UK National Space Academy which, since its launch in 2008, has trained over 6000 teachers and had over 55 000 secondary, FE and international University students participate in its masterclasses. The Academy trains (pre-pandemic figures with return to capacity forecast by 2022) nearly 10 000 students and a thousand teachers per year across the UK, the Gulf region and China.

In 2012, the Academy, in partnership with Loughborough College, established the UK's first full-time post-16 programme in Space Engineering which sees students following tandem academic (A levels in mathematics and physics) and vocational (BTEC Level 3 engineering diploma) tracks with space contexts used extensively in delivery across the course. Since 2012, 79 students – the majority with no family history of Higher Education progression – have completed the two-year course with 80% of them proceeding onto degree courses in physics, aerospace or mechanical engineering or onto Higher Apprenticeship programmes in the space or aerospace sector.

As part of his STFC role, Anu was appointed to lead the STFC Skills Factory Task Force, scoping and developing an ambitious innovative eight-year programme to boost growth by increasing the volume and diversity of research and development skills across the UK. This will train 375 apprentices, 500 graduates and 600 further undergraduates, reskilled individuals and returners to work in a £200m programme combining academic, local business and community interests/priorities which should result in double this amount of quantifiable economic impact as well as significant indirect benefits from improving STEM aspiration in young people and diversity in the UK technical workforce.

Appointed in 2016 as an Honorary Professor in the School of Physics and Astronomy at the University of Leicester, he is a Co-Investigator for the SPLIT planetary geotechnics sampling tool being developed by the University for use on future Mars exploration missions and was Principal Investigator for the Astro Academy Principia experiments conducted by European Space Agency (ESA) astronaut Tim Peake aboard the International Space Station.

Prior to his space sector career, Anu was an Advanced Skills Teacher, Assistant Headteacher and National Lead Practitioner (Physics) for the UK Specialist Schools and Academies Trust. He continues to teach A level physics on the Space Engineering course as well as on several of the University's international undergraduate and postgraduate programmes, specialising in human spaceflight systems. In 2014 he was appointed OBE for services to science education.

Over the last twenty years Anu has also continued his involvement in high-altitude expeditions, free-diving, scuba diving and triathlon and has a deep interest in human performance/physiological science in extreme environments. He is a current skydiver with nearly 1500 jumps and was involved as a skydiving and science analyst for Felix Baumgartner's Red Bull Stratos stratospheric jump programme.