Dr Rob Hewson
Department of Aeronautics, Imperial College London - Airbus
“My Fellowship will build a long-term mutually beneficial collaboration in an exciting research area. Methods and tools we develop will be used to design parts for aerospace and other industries.”

Robust tools and techniques are required to optimise the design and manufacture of aircraft parts, but creating complex components efficiently while also improving performance is a challenge. Achieving this involves identifying novel ways to describe multiscale structures and optimise them for additive manufacturing processes. A Royal Academy of Engineering Industrial Fellowship is enabling Dr Rob Hewson to tackle these issues in collaboration with Airbus. His insight into multiscale mechanics and multidisciplinary design optimisation will contribute to the development of new techniques for designing lighter, high-performance aircraft parts, which have the potential to inform Airbus’s future design strategies. Additionally, existing teaching links with Airbus will be strengthened through a PhD studentship, guest lectures and opportunities for student placements.