



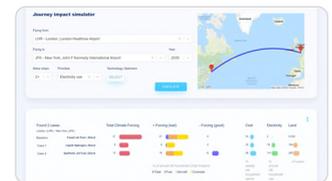
WELCOME

UK-ARC is excited to be at Farnborough 2022, our first major show. All our founding member universities are represented on our stand (Hall 4, 41130) where we will be talking about their capabilities, facilities, and collaborative projects with industry. Our new research engagement with the sector – the Strategic Aerospace Research Forum – is being launched at Farnborough and we are looking forward to exploring our research theme narratives with industry. As we work to expand the UK-ARC, initiate new research, and grow the consortium towards a second phase, we want to hear your thoughts. The UK-ARC wants to maximise the potential of its universities and expand the consortium to advance research to support the sector's net zero ambitions. Give us your ideas and get connected with the UK-Aerospace Research Consortium

SHOW NEWS & EVENTS



The **University of Cambridge** led Aviation Impact Accelerator tool will be presented by Prof Rob Miller on 18 July through the Aerospace Global Forum in Hall 3 at 3.30pm. Learn more about the AIA at the show and via www.aiazero.org



AIAA Journey Impact Simulator



In partnership with the Aerospace Growth Partnership (AGP), UK-ARC is launching the Strategic Aerospace Research Forum (SARF) at Farnborough. This new cross-community forum will identify, draw through and promote academic research in support of sector ambitions. SARF will promote research visibility, align

research agendas, and link universities, government, funders, and industry to drive new collaborative research. Let us tell you more and get you involved.

UK-ARC Network Manager, Roger Gardner, will be presenting consortium ambitions and activities in the FINN theatre in Hall 2 on Thursday 21 July at 11.30am. Come to learn more and get connected with us.



Consortium universities are pleased to welcome the [UKRI Tomorrow's Engineering Research Challenges \(TERC\)](#) which launched on 8 July. Our discussions at the show will help us to shape our future research proposals aligned with this vision for how engineering will tackle key challenges. There is already a great fit to the themes of transportation systems, materials, robotics and artificial intelligence and responsible engineering. The report is the product of broad cooperation within the research community and drawing upon aerospace knowledge. The report provides an excellent framework enabling UK-ARC universities to make a strong research contribution to supporting UKRI net zero, digital, manufacturing,

energy, and infrastructure goals.

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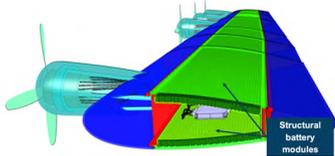


UK-ARC@UKARC3





UNIVERSITY NEWS



University of Southampton Researchers Develop Geometry-centric Decision Support Tools for Conceptual Design As part of the ATI-funded Development of Advanced Wing Systems (DAWS) programme, a research team from the University of Southampton (led by Prof. András Sóbester), has been developing novel approaches to facilitating rapid ‘what-if’ analyses as part of the conceptual

phase of the wing design process. The team has developed the ‘Electric Wing’ model for a battery electric transport aircraft wing as a demonstrator of this practically instantaneous assessment approach. It can assess whether a reduction in wing area would force the relocation of certain systems to other parts of the airframe. Come and talk to András Sóbester on the UK-ARC stand.



Imperial College London is establishing a ground-breaking research institute dedicated to developing clean, safe, and sustainable air-travel. Supported by a £25 million philanthropic donation, the Brahma Vasudevan Institute for Sustainable Aviation will pioneer the breakthroughs and technologies needed to support the aviation industry’s transition to zero pollution. Researchers will look at all elements of air transport, from fuel and aircraft design to airport infrastructure, air traffic control and aviation policy. Details can be found [here](#).

A new research facility, the [Sustainable Aviation Fuels Innovation Centre \(SAF-IC\)](#), part of the **University of Sheffield** Energy Institute, was completed last month. This facility, responding to a key theme of the government’s Jet Zero Council, will work in combination with the university’s Translational Energy Research Centre (TERC) to support state-of-the-art research and provide much-needed testing capabilities to help prepare sustainable aviation fuels for commercial use.



INTERNATIONAL NEWS



UK-ARC universities connect widely with international researchers. The new ACARE report “[Fly the Green Deal](#)” launched on 21 June, is a great stimulus for UK-ARC universities to build further international collaborations. Already involved in ACARE groups and now representing the UK research base within GARTEUR, the UK-ARC is well placed to champion UK academic capability. UK-ARC is initiating international secondment for early career researchers and will be presenting consortium strengths and achievements at the ICAS conference in Stockholm, 5-9 September. Come and ask us about international connectivity and joint working on research themes of common interest.

