

# Pioneering the future by design engineering

This session will focus on how design is used to advance engineering. The academics involved will present and discuss their research, and the benefits of collaboration in this field.

**Wednesday 16 March**

**9:00-10:00 GMT**  
**18:00-19:00 JST**

Keywords:

**design**  
**engineering**

Audience:

Industry (engineers, technologists, managers, strategists),  
government (policy makers and programme managers),  
university (researchers, students), etc.

Organised by:

University of Cambridge Engineering Design Centre (EDC) &  
Institute for Manufacturing (IfM) and The University of Tokyo  
Institute of Industrial Science (IIS) & School of Engineering

Language: **English**

Registration: **Webinar**

[https://u-tokyo-ac-jp.zoom.us/join/register/tZEqdOmsrTMrHd2TJJJeJxmAu\\_6koFiNY1Q0V](https://u-tokyo-ac-jp.zoom.us/join/register/tZEqdOmsrTMrHd2TJJJeJxmAu_6koFiNY1Q0V)



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## Agenda

9:00 GMT 18:00 JST	<b>Opening Introduction</b>	Dr Robert Phaal (Cambridge) Dr Yusuke Kajihara (UTokyo)
9:05 GMT 18:05 JST	<b>Treasure Hunting@UTokyo - Developing methods for science x design collaboration</b>	Prof Miles Pennington (UTokyo)
9:30 GMT 18:30 JST	<b>Darwin's hawk moth and the Malagasy star orchid: a story of co-evolution, and a way of thinking about the interaction between problems and solutions in design</b>	Prof Nathan Crilly (Cambridge)
9:55 GMT 18:55 JST	<b>Wrap up</b>	Dr Robert Phaal (Cambridge) Dr Yusuke Kajihara (UTokyo)
10:00 GMT 19:00 JST	<b>Announcement &amp; Close</b>	Dr Yusuke Kishita (UTokyo)

## Speakers:



### Prof Miles Pennington

[www.designlab.ac/](http://www.designlab.ac/)

Professor, Institute of Industrial Science  
The University of Tokyo

Prof Miles Pennington has been based at The University of Tokyo since September 2017, where he helps direct the DLX Design Lab. Previously he was at the Royal College of Art in London as Head of Programme of the Innovation Design Engineering (IDE) programme. He was also Founder and Head of the international exchange programme Global Innovation Design (GID).



### Prof Nathan Crilly

[www-edc.eng.cam.ac.uk/people/nc266.html](http://www-edc.eng.cam.ac.uk/people/nc266.html)

Professor, Engineering Design Centre  
University of Cambridge

Nathan Crilly is Professor of Design at the Engineering Department at the University of Cambridge. He conducts research into how products, systems and services are designed and developed, focusing on designers' creativity and users' experiences. Nathan combines a variety of research approaches in his work, including experimental and qualitative methods of empirical investigation, and integrative scholarly methods for conceptual development. This work is interdisciplinary in nature, connecting ideas, methods and findings from different research traditions. In addition to his individual research, Nathan collaborates with researchers specialising in engineering, product design, psychology, computer science, complexity science, education, anthropology and philosophy.

## Moderators:



### Dr Robert Phaal

[www.ifm.eng.cam.ac.uk/people/rp108/](http://www.ifm.eng.cam.ac.uk/people/rp108/)

Director of Research, Institute for Manufacturing  
University of Cambridge

Dr Robert Phaal is a Director of Research based in the Department of Engineering at the University of Cambridge. He conducts research in the areas of strategic technology and innovation strategy, with particular interest in the development of practical management tools. He is a chartered engineer, with a PhD in computational mechanics, and industrial experience in technical consulting and software development.



### Dr Yusuke Kajihara

[www.snom.iis.u-tokyo.ac.jp/index\\_e.html](http://www.snom.iis.u-tokyo.ac.jp/index_e.html)

Associate Professor, Institute of Industrial Science  
The University of Tokyo

Dr Yusuke Kajihara is an Associate Professor at the Institute of Industrial Science, the University of Tokyo. He is a member of DLX Design Lab. His research interests include dissimilar joining, passive nanoscale imaging, and terahertz measurements.