

BRISTOL COMPOSITES INSTITUTE PGR SYMPOSIUM

Wednesday 29th April 2026
MShed, Bristol

09:00 Registration and poster session
Tea, coffee and pastries

09:30 Welcome, Professor Stephen Hallett
Bristol Composites Institute Co-director

09:40 Keynote: Dr Sam Scott, Emirates
Following the Wind: On Foils, Yurts, and the America's Cup

10:00 Session 1 – Chair, Dr Axel Wowogno

 Technical presentations on current PhD research:

- *Smart Automated Composites Manufacture* - Ege Arabul
Supervisors: Dr Vincent K. Maes, Dr Robert Hughes and Dr James Kratz
- *Developing sustainable high-performance thermoplastic composites via a novel commingled method* - Ragnar Birgisson
Supervisors: Prof. Ian Hamerton, Dr Kate Robson Brown, Prof. Benjamin King Sutton Woods, Prof. Tom Scott and Dr Ali Kandemir
- *Evaluating novel planar fibre optic strain sensors* – Jack Burns
Supervisors: Prof. Janice Barton, Prof. Ole Thomsen, Dr Neha Chandarana and Robin Hartley
- *Low-Cost, High-Volume Manufacture of Oxide-Based CMCs* – Finbar Carroll
Supervisors: Dr Luiz Kawshita & Prof. Stephen Hallett Industry supervisor: Shraddha Singh
- *Multi-Scale void modelling in RTM Simulations* – Ryan Chung
Supervisors: Dr Jonathan Belnoue & Prof. Stephen Hallett Industry supervisor: Tomasz Garstka

10:55 Comfort break



11:05 Session 2 – Chair, Dr Beth Grimes

 Technical presentations on current PhD research:

- *Accurate Filament Winding Simulation for Hydrogen Tank Applications* – Torin Clark
Supervisors: Prof. Stephen Hallett, Dr Jonathan Belnoue and Prof. Giuliano Allegri
Industry supervisor: Adam Bishop
- *A virtual platform for porosity prediction in thermoplastic AFP deposition* – Kaan Deniz
Supervisor: Dr Jonathan Belnoue, Prof. Stephen Hallett and Dr Anatoly Koptelov
- *Repeated Impact on Composites Aerostructures – Firat Ergin*
Supervisors: Prof. Stephen Hallett, Dr Karthik Ramakrishnan and Dr Luiz Kawashita
Industry supervisors: James Finlayson and Adam Bishop
- *Multi-Scale Modelling of Fibre Waviness in Composites to ensure Sustainable Manufacturing* – Hendrick Esterhuysen
Supervisors: Prof. Lee Harper and Dr Mikhail Matveev
- *Structure-Properties Relationships in Bio-Based Polyurethane Foams* – Jacopo Lavazza
Supervisors: Prof. Fabrizio Scarpa, Dr Jemma Rowlandson, Dr Charles De Kergariou, Dr Qicheng Zhang and Prof. Wuge Briscoe
- *Deconsolidation of semi-cured carbon-epoxy laminates at forming temperatures* – Lewis Griffin
Supervisors: Dr James Kratz, Arjun Radhakrishnan Industry supervisor: Dr Petar Zivkovic

12:15 Buffet lunch and poster session

13:45 Session 3 – Chair, Dr Meiran Abdo

 Technical presentations on current PhD research:

- *The Climate Benefits of Valorising Underutilised Timber* – Matthew Leeder
Supervisors: Dr Neha Chandarana, Dr Eleni Toumpanaki, Prof. James Norman and Prof. Jo House
- *Improved design and damage tolerance of the lightweight sandwich structure* – Desmond Li
Supervisors: Prof. Ole Thomsen and Prof. Janice Barton
- *Natural Material Wrapped Tow Reinforced Trusses* – Matthew Lillywhite
Supervisors: Dr Terence Macquart, Dr Byung Chul Kim, Prof. Benjamin King Sutton Woods
- *Assessing the Performance of Recycled Carbon Fibre in Composite T-Joints* – Will Mahoney
Supervisors: Dr Karthik Ram Ramakrishnan, Dr Neha Chandarana and Prof. Ian Hamerton
Industry supervisor: Dr Ian Gent
- *Wet Filament Winding of Non-Oxide Ceramic Matrix Composites* – Priyanka Patel
Supervisors: Dr Iryna Tretiak and Prof. Giuliano Allegri
Industry supervisors: Arthur Swarbrick and Naima Saadi
- *The hybridization effect in compression using different modulus thin plies to improve the compressive performance for industrial applications* – Joe Rifai
Supervisors: Prof. Michael Wisnom, Prof. Giuliano Allegri, Dr Xun Wu and Dr Laura Pickard
- *Improving the delamination bridging performance of Z-pinned laminated composite materials through novel glass fibre Z-pins* – Romain Rutar
Supervisors: Prof. Stephen Hallett, Prof. Christophe Bouvet, Dr Luiz-Kawashita and Prof. Bruno Castanié

15:00 Tea and coffee break

15:15 Keynote: Dr Claudia Jimenez Martin, Airbus
The Effect of Stitch Direction on Non Crimp Fabric Forming for
Aerostructures

15:40 Session 4 – Chair, Dr Patrick Sullivan

 Technical presentations on current PhD research:

- *Multilayer Composite Shielding for Space Radiation Protection* – Gokhan Sancak
Supervisors: Prof. Ian Hamerton, Prof. Simon Hall and Prof. Tom Scott
- *Additive Manufacturing of fibre-reinforced thermoplastic composites with bioinspired hierarchical sutures for enhanced strength and toughness* – Aysema Unlu
Supervisors: Prof. Richard Trask and Prof. Ian Hamerton
- *Making nanoparticles with a BANG - Extreme non-equilibrium synthesis of metal, metal oxide nanoparticles via detonation* – Jan Uszko
Supervisors: Prof. Simon Hall, Dr Avniash Patil and Prof. Steve Eichhorn
- *Hot/wet experimental characterisation of high-temperature polymer matrix composites* – Anna Williams
Supervisors: Prof. Giuliano Allegri and Prof. Ian Hamerton
Industry supervisors: Zoe Fielden-Stewart, Gaetano Arena, Rob Backhouse and Adam Bishop

15:00 Comfort break

16:20 Panel discussion

“Knowing what is good enough” - Industry often needs an answer by tomorrow, but researchers often would like to keep going. Where is the balance? How to learn to make the right call?

Panellists:

- Mikhail Matveev (Chair) – University of Nottingham
- Pascal Hubert – McGill University
- Claudia Jimenez Martin – Airbus
- Ian Kinloch – Henry Royce Institute
- Guy Lawrence – Composite Braiding Ltd
- Usman Sikander – Leonardo UK
- Vicky Summers – NCC
- Luke Vardy – Cygnet Textimp

17:00 Close