

Bristol Composites Institute PGR Symposium

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Bristol Composites Institute

Tuesday 26 March 2024 Bill Brown Design Suite, Queen's Building, Bristol

9:00 Registration and poster session Tea, coffee and pastries



- 10:00 Presentations
- Introduction and welcome
- Technical presentations on current PhD research

Materials theme:

- Recycling of FRP wind blade waste material in concrete (Meiran Abdo)
- Searching for excitonic superconductivity using transition metal dichalcogenides and carbon composites (Rikesh Patel)
- Single fibre micromechanical analysis via in-situ Raman spectroscopy (Cameron Woodgate)
- Improving the resilience of benzoxazine-based composite materials for space applications (George Worden)
- Conjugated microporous polymers for hydrogen storage (John Worth)

Structures theme:

- Shear Failure of Adhesively Bonded Composite Joints at Cryogenic Temperatures (David Brearley)
- Implementation of Second-Order Homogenisation using Shell Elements for Woven Composites (Athira Anil Kumar)
- A study of factors controlling the compressive behaviour of hybrid composites (Aree Tongloet)

11:50 Presentations continue. . .

Manufacturing and design theme:

- Intelligent composites forming: simulations for faster, higher quality manufacture (Siyuan Chen)
- Forming of aligned discontinuous fibre thermoplastic (HiPerDiF) prepreg for sustainable composite manufacturing (Ogun Yavuz)
- Manufacturing with Out-Of-Autoclave prepregs: Ply-by-Ply compaction and Void analysis (Axel Wowogno)

Two-minute quickfire project introductions :

Research represents all three themes of the BCI with wide scope and targeting different Technology Readiness Levels. For example, this year the work ranges from the use of biological materials through to bio-inspired composite systems. A key element in our approach is to view and adapt natural approaches to the formation of fibre reinforced composites to maximise mechanical performance. Students will also present research into the development of modern manufacturing techniques.

12:30 Buffet lunch and poster session

14:00 Symposium ends



Please be advised that photographs will be taken at this event, and that these photographs may be used on the University website, and in University publications, including matters relating to the University's marketing and editorial functions.

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