

Wednesday 11 December 2019					
Start	End	Type	Session title	Presenter	Presentation title
8h00	8h50		Registration		
8h50	9h00		Opening words		
9h00	9h40		Keynote	Larissa Gorbatikh	FiBreMoD project: designing novel composite microstructures and applications
9h40	10h00	Oral	Interface	Carol Rodricks	Strength and toughness tuning of fibre-reinforced composites through interfacial topographical obstacles
10h00	10h20	Oral		Wei Li	Fracture toughness determination of polymeric matrix materials with TDCB specimens and its validation by simulation and VCCT
10h20	10h40	Oral		Usman Sikander	Surface modification of UHMWPE fibres with Ar-O ₂ plasma treatment
10h40	11h05			Break	
11h05	11h25	Oral	Matrix and fibres	Sina AhmadvashAghbash	Numerical analysis of the effect of interfacial parameters on longitudinal fibre-matrix debonding
11h25	11h45	Oral		Frederik Van Loock	A shear transformation zone model to predict the deformation and failure of glassy polymers in fibre reinforced composites
11h45	12h05	Oral		Lucien Lalarinandrasana	Comparative study of voiding and failure modes in thermoplastics and thermosetting matrices in fibre reinforced composites
12h05	12h25	Oral		Ali Kandemir	Natural fibres as raw materials for sustainable aligned discontinuous fibre composites
12h05	12h45	Oral		Zainab Al-Maqdasi	Functional cellulose fibers for smart composites
12h45	13h45		Lunch		
13h45	14h05	Oral	Processing and characterisation	Sarah Gayot	Relationships between processing parameters, mechanical and chemical properties of thick glass fibre reinforced thermoplastic methacrylic composites
14h05	14h25	Oral		Luca Martulli	Variability of strand-based sheet moulding compounds as failure determinant
14h25	14h45	Oral		Babs Van De Voorde	Recycled carbon fibre reinforced PET as feed for additive manufacturing for optimal composite performance
14h45	15h05	Oral		Luis Amorim	Two different interleaving approaches to mitigate impact damage propagation on carbon/epoxy laminates
15h05	15h25	Oral		Torquato Garulli	Fully-uncoupled multi-directional delamination specimens: a preliminary validation
15h25	15h50		Break		
15h50	16h10	Oral	Bio-inspired and hybrid composites	Veronica Rodriguez Garcia	Manufacturing and characterization of bioinspired CFRP
16h10	16h30	Oral		Stepan Lomov	Hybrid effect in critical energy release rates in all-carbon interlayer unidirectional fibre-hybrids
16h30	16h50	Oral		Jose Manuel Guerrero	A micromechanical progressive failure model for predicting the tensile failure and damage development in hybrid unidirectional composite materials
16h50	17h10	Oral		Mir Mohammad Badrul Hasan	Fibre hybrid composites consisting of discontinuous waste carbon fibre and continuous glass filaments with improved impact strength

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9h00	9h40		Keynote	Yentl Swolfs	Second benchmarking exercise for longitudinal tensile failure of UD composites: overview and first results
9h40	10h00	Oral	Models of different scales	Anna Matveeva	Material engineering for composites across scales and physics
10h00	10h20	Oral		Traian Dumitrica	Distinct element method (DEM) for fibrous composites: toward computational guided manufacturing
10h20	10h40	Oral		Ali Khodayari	What holds cellulose nano-fibrils together?
10h40	11h05		Break		
11h05	11h45	Mini-orals			
11h45	12h20	Posters			
12h20	13h20		Lunch		
13h20	13h40	Oral	Unidirectional composites	Fabio Malgoglio	A machine learning inspired approach to predict the longitudinal tensile failure in unidirectional composites
12h05	14h00	Oral		Mostafa Barzegar	Effects of dynamic failure and local peak stress in UD composites
14h00	14h20	Oral		Paolo Carraro	Fibre-related damage in unidirectional composites under cyclic tension loadings
14h20	14h40	Oral		Bent Sorensen	Prediction of a fatigue limit of unidirectional fibre composites
14h40	15h00	Oral		Abir Mejdoub	Compressive failure of fiber reinforced unidirectional composites: experimental approach and finite element analysis
15h00	15h20		Break		
15h20	15h40	Oral	Dedicated characterisation and modelling	Yuan Chai	Synchrotron X-ray computed tomography study of braided composite tubes under torsion
15h40	16h00	Oral		Martinus Putra Widjaja	The effect of input properties to the predicted failure of a type IV composite pressure vessel using a multiscale model
16h00	16h20	Oral		Alp Sik	Development of a modeling strategy to improve the embedded element method in composites modeling in case of matrix nonlinearity
16h20	16h40	Oral		Keerti Krishna Parvathaneni	Automated RVE generator of realistic voids for 3D textile composites manufactured by RTM
16h40	17h00	Oral		Arsen Melnikov	Influence of stitching on the tensile strength of unidirectional non-crimp fabric composites: investigation using multi-scale fibre bundle strength mode