ECCM22 — MONDAY (08:00–19:00) — PRELIMINARY TECHNICAL PROGRAMME (version of 7 June 2026)

◆ + italic = Short oral (7 min) · plain = Full oral (15 min) · Minor changes to the programme may occur.

Time	Activity	A	B	C	D	Forum	M1	M2	M4	M5	Balder	Odin
08:00–08:25	OPENING CEREMONY											
08:25–09:10	PLENARY 1											
09:15–11:00	SESSION 1											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength**	**SS15 · AI and Mechanics for Composite Design, Optimisation, and Digital Twins**	**SS13 · Digital Twins and AI for Composite Manufacturing: Modelling, Monitoring and Control**	**4.7 Optical Fiber Sensors, 4.9 Thermography & 4.5 Non-destructive evaluation**	**SS25 · Sustainable Composites Engineering: Innovations from a Doctoral Training Centre**	**2.5 Prepregs**	**5.13 Process Modelling and Simulation**	**SS33 · Exploring challenges: from novel observations to paradigm shifting applications of composites**	**3.7 Failure Mechanics and Simulations**	**2.3 Matrix Materials: Polymers, Metals, Ceramics, Concrete, Geopolymers**	**5.6 Automated Placement Technologies**
09:15					#1670 · Janice Dulieu-Barton (University of Bristol) Quadrilateral Microstructured Optical Sensors for Monitoring the Manufacture and Performance of Composite Structures	#236 · Erica Barnes (University of bristol) A Pathway to Circularity in Composite Manufacturing: Targeting High-Impact Consumables	#1026 · Alexander Bismarck (Instutute of Materials Chemistry of University of Vienna) Pushing service temperature limits: Unidirectional carbon fibre reinforced polyamideimide composites	#500 · Ioan Birgaoanu-Acaei (TU Delft) Towards model-based control for static ultrasonic welding of thermoplastic composites: identifying causal factors influencing weld machine displacement recordings	#1383 · António Marques (FEUP) EXPLORING THE CHALLENGES OF MANUPLANTS AS A METHODOLOGY FOR BIO-COMPOSITES MANUFACTURING	#806 · Xin Lu (The University of Tokyo) Machine-Learning-Accelerated Cohesive Zone Model for Fracture Analysis of Composite Materials	#427 · Jules Gardin (SAFRAN AIRCRAFT ENGINES) Thermo-chemo-mechanical characterization and modelling of a 3D interlock reinforced composite	#741 · Julie Teuwen (Faculty of Aerospace Engineering, Delft University of Technology) Bond Strength of CF/LM-PAEK Laminates Manufactured Using Flashlamp Automated Fiber Placement (FLAFP)
09:30					#663 · Cristian Builes Cárden (Advanced Composites Technologies, R&D Division, AIMEN Technology Centre) Process monitoring for a full-scale wing-box using hybrid Fiber Optic Sensors in a One-Shot Liquid Resin Infusion process (LRI) - FLASH-COMP “Flawless and sustainable production of composite parts through a human centred digital approach”	#1121 · Priyanka Patel (University of Bristol (BCI)) Use of Wet Filament Winding Processes for the Manufacture of Non-Oxide Ceramic Matrix Composites	#334 · Dennis Budelmann (Hamburg University of Technology, Institute of Polymers and Composites (IPC)) Processing charactistics of unidirectional prepregs with bio-derived poly(furfuryl alcohol) matrices	#538 · Hiyem Dhifaoui (Ecole des Mines de Saint-Etienne) Numerical Characterization of Flax Fiber Composite Variability: From Morphological Description to Fluid Flow Simulations	#1436 · Durai Prabhakaran Ragh (Indian Institute of Technology, JAMMU) Lightweight Composite Transtibial Prosthetic System with EMG-Enabled Dynamic Movement	#1054 · Rui Guo (Department of Materials Engineering, KU Leuven) High-fidelity micromechanical modelling of transverse tensile damage in cross-ply composites	#719 · Damien Gacon (Univ Toulouse, IMT Mines Albi, INSA Toulouse, ISAE Sup Aero, CNRS, ICA, Albi, France) Identification and modeling of pore formation conditions during reactive acrylic resin polymerization	#631 · Mar Zuazo Ruiz (FIDAMC, Foundation for Research, Development and Application of Composite Materials) Stamping and AFP for Next-Gen High-Rate Flaperon Manufacturing
9:45					#1468 · Nan Tao (Department of Aerospace Structures and Materials, Delft University of Technology) Optical Fibre Sensor Placement for Composite Hydrogen Tanks	#61 · Firat Ergin (Bristol Composites Institute (BCI), University of Bristol, University Walk, Bristol BS8 1TR, UK) Repeated Low-Velocity Impact and Quasi-Static Indentation at Various Temperatures	#744 · Maissaloun El-jakl (Delft University of Technology) Experimental analysis of tape manufacturing with melt impregnation	#93 · Benjamin Hailer (Airbus Helicopters) The Use of Manufacturing Process Simulation for the Industrialization of Composite Structures	#1730 · Carlos Cimini (Federal University of Minas Gerais (UFMG)) A novel approach for equivalence of Quad-DD laminates	#243 · Margot Guiho (MBDA / ONERA) A framework for designing a 2D Woven Carbon/Carbon Composite model, validated with a structural scale demonstrator	#1445 · Denise Hellmuth (University of Bayreuth) Development of Sustainable Furan-Based Resin Matrices for Composite Materials via Catalyst and Flame Retardant Optimization	#751 · Prasad Shimpi (ASOCIACIÓN DE INVESTIGACIÓN METALÚRGICA DEL NOROESTE (AIMEN)) Automated manufacturing of steered fibre variable stiffness composites by dry fibre placement
10:00		#1356 · Silvestre T Pinho (Imperial College London) Enabling fail-safe composite design – Tailored laminate design for unstable compressive crack-arrest in Fibre-Reinforced Polymers	#1265 · Wei Tan (Queen Mary University of London) Multi-Fidelity Bayesian Optimisation for Inverse Design of Cellular Composites with Targeted Nonlinear Mechanical Response	#641 · Grigori Oehl (German Aerospace Center (DLR)) Towards Sovereign Digitalization in Composite Material Development: A Shift to “Science as a Service”	#1038 · Shijie Zhang (Northwestern Polytechnical University) Characterizing Mixed-Mode Fracture Behavior in Composite-Metal Joints via Back Face Strain Derived Method	#328 · Matt Miller (Bristol University) Scalable defect inspection of NCF preforms using polarisation imaging	#1674 · Rima Sfar Zbed (IRT Antoine de Saint Exupéry) Valorization of vitrimer matrices in composite processes: from prepreg manufacturing to composite remanufacturing and repairing	#254 · Jurui Liu (KU Leuven) Numerical and experimental investigation of temperature and polymerization evolution during filament winding of Elium resin composites	#1252 · Liu Yang (University of Strathclyde) Additively manufactured high-performance polymer and composite for pump application	#1367 · Shaoran Cheng (National Key Laboratory of Strength and Structural Integrity, School of Aeronautic Science and Engineering, Beihang University (BUAA)) Investigating the evolution of damage in 3D woven composites: thermomechanical experiments and an improved failure model	#297 · Vickie Caetano Maria (University Of Montpellier) Thermosets in aeronautical composites: understanding their behavior at the heart of their properties	#575 · Félix Thébault (GeM) Optimizing the staggering of singularities in Automated Fiber Placement
10:15		#1522 · Sandra Schmidt (Hochschule Darmstadt hda) The behaviour of paper composites under pressure loads and their failure modes	#191 · Runze Li (Imperial College London) Feasibility-Aware Bayesian Modelling and Optimization of Composite Structures with Failure Constraints	#861 · Bence Szederkenyi (Department of Polymer Engineering, Faculty of Mechanical Engineering, Budapest University of Technology and Economics) A Digital Twin-driven workflow for structural design and failure analysis of continuous fiber-reinforced 3D printed components	#710 · Joanna Koman (University of Bath) Turning Up the Heat: A Novel Xenon Flash Lamp Based Active Thermography Method for Revealing Composite Defects	#596 · Alessandro Milite (Politecnico di Milano, Department of Chemistry, Materials and Chemical Engineering "Giulio Natta") Innovative mechanical recycling methods for vitrimer-matrix composites	#674 · Shailee Upadhyay (Department of Aerospace Structures and Materials, TU Delft) Effect of slurry characteristics on the quality of Carbon fiber-PEEK thin-ply prepreg tapes manufactured by wet impregnation	#1157 · Yannis Grohmann (DLR) Temperature model for the direct resistance heating of carbon fiber tapes during fiber placement processes or filament winding	#743 · Ruggero Volponi (CIRA Italian Aerospace Research Centre) Micro/Nano-structured Polyethylene Composites for Galactic Cosmic Radiation shielding.	#1233 · Endel Iarve (University of Texas at Arlington) Fully Discrete Modelling of Brittle Fracture Modes in Composite Materials	#695 · Renan Belli Berman (1AMADE - Analysis and Advanced Materials for Structural Design, Polytechnic School, University of Girona.) Divergent Stress Evolution and Relaxation Pathways in Thermosets and Vitrimers	#1398 · Florian Max (University of Bayreuth) Tack to the future: influence of resin tack and AFP process parameters on interlaminar performance in natural fibre composites
10:30		#1193 · Mark Battley (The University of Auckland) Influence of Stitching Pattern on the Fibre Misalignment and Static and Fatigue Compression Behaviour of Non-Crimp Fabric Composite Materials	#399 · Luca Patrignani (Imperial College London) Graph Transformers for Effective Prediction of Progressive Failure Evolution in Composite Structures	#1426 · Sergio Martinez Crespo (Instituto Tecnológico de Aragón (ITA)) Deep Learning-Based Surrogate Models for Resin Transfer Moulding Process Simulation	#120 · Ulrike Siemer (BHT Berliner Hochschule für Technik) Non-destructive moisture detection for damage control in stitch-and-glue composite materials	#188 · Lewis Griffin (University Of Bristol) Deconsolidation of semi-cured carbon-epoxy laminates at forming temperatures	#451 · Clemens Dransfeld (Delft University of Technology - Faculty of Aerospace Engineering) Controlling microstructures in slurry impregnated thermoplastic tapes	#1060 · Zirui Guo (The University of Tokyo) TAPE-LEVEL DEFORMATION OF CFRTP-SMC DURING MOLDING FLOW INVESTIGATED BY SIMULATION AND X-CT TRACKING	#891 · Sofia Scatragli (Department of Chemical Engineering Materials Environment, Sapienza University of Rome, Via Eudossiana 18) Bio-based PA11 Composites incorporating space-derived lunar regolith simulant	#1531 · Florian Gouhier (Ecole Polytechnique) A Phase-Field Formulation Accounting for Interfacial Fracture in Additively Manufactured Polymers	#1077 · Filip Kateusz (Łukasiewicz Research Network - Krakow Institute of Technology) Thermomechanical properties and oxidation resistance of functionally graded, polymer derived SiOC/C matrix carbon fiber reinforced composites	#1142 · Roberto Guzmán De Vill (University of Salamanca) Ultrasonic-assisted in-situ Consolidation of Carbon Fiber Thermoplastic Tapes
10:45		#764 · Charles Shaw (Department of Chemistry, Imperial College London) Silica-epoxy nanocomposite matrix shear properties and their effect on unidirectional fibre composite compressive strength	#453 · Mustafa Okumus (IINM, WMG, University of Warwick) Probabilistic Machine Learning Approach to Design of Polymer Composites for Hydrogen Permeation	#521 · Jimmy Gaspard Jean (Delft University of Technology) Accelerating flow prediction in arbitrary fibrous microstructures with latent models	#1084 · Eyuphan Kucukkalfa (Faculty of Civil Engineering & Geosciences, Delft University of Technology) AI-Powered Vision–Tactile Sensing with an Autonomous Omni-UAV for BVID Detection in Laminated Composites	#683 · George Holiday (NCC & BCI) CERAMIC COATINGS FOR PROTECTION OF POLYMER COMPOSITES FROM HIGH ENERGY EVENTS	#1348 · Gianluigi Creonti (CROSSFIRE Srl) Graphene Reinforced Glass and Recycled Carbon fabric based, Mass Productive, Circular Recyclable Crosspreg®	#586 · Beu Ni El Lee (Gyeongsang National University) Prediction and Validation of CFRP Deformation during Autoclave Curing with Orthotropic 3D-Printed Molds	#1779 · Raj Das (RMIT University) Influence of Accelerated Moisture Absorption on Thermo-Mechanical Behaviour of Carbon Fibre Composites	#473 · Won-chang Ryu (Gyeongsang National University) Quantifying the roles of interfacial fracture toughness and dispersion in strength degradation of graphene/CNT nanocomposites via phase-field/cohesive modeling	#693 · Daniel Fernández Gonzá (Spanish National Reasearch Council (CSIC)-Nanomaterials and Nanotechnology Research Center (CINN)) Graphite-metal composites fabricated by spark plasma sintering	#459 · Andreas Endruweit (University of Nottingham) Effect of the ply angle on tack between uni-directional prepreg tapes
11:00–11:30	COFFEE BREAK											
11:30–13:00	SESSION 2											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength**	**SS19 · Fatigue and Damage Mechanics of composite and composite structures**	**SS02 · Additive manufacturing (3D/4D printing, AFP) for advanced composites**	**SS32 · Durability of polymers and fibre reinforced polymer composites**	**3.8 Fatigue**	**SS12 · Long Discontinuous Fibre Composites: Processing, Microstructure, Properties and Performance**	**3.12 Joining and Joints**	**1.11 Other Application Domains**	ESCM meeting	**T2 · Interfaces & Bio-derived composites**	**5.10 Liquid Molding, Pultrusion, Filament Winding**
11:30		#1093 · Bohao Zhang (Bristol Composite Institute, School of Civil, Aerospace and Design Engineering, University of Bristol) THE EXPERIMENTAL CHARACTERISATION OF COMPRESSIVE PERFORMANCE OF PULTRUDED CARBON FIBRE/EPOXY COMPOSITES	#1586 · Marino Quaresimin (University Of Padova) INNOVATIVE ANALYSIS OF FATIGUE DAMAGE EVOLUTION AND STIFFNESS LOSS IN STRUCTURAL COMPOSITE COMPONENTS	#1431 · Antoine Le Duigou (University South Brittany) 4D printing of composite materials : Opportunity for disruptive fucntions ?	#242 · Sebastian Seidel (Fraunhofer Institute for Mechanics of Materials IWM) Time-resolved Study of CF/PPS and CF/Epoxy Aging Under Hygrothermal and Irradiative Conditions	#590 · Torben Deutschmann (Hamburg University of Technology (TUHH)) Experimental Multiaxial Fatigue Testing of Composite Profiles on a 6-DoF Hexapod	#1343 · Miro Duhovic (Leibniz-Institut für Verbundwerkstoffe) Polarization Image Analysis for the Monitoring of C-SMC Part Manufacturing	#372 · Léo Sudriès (University of Toulouse, Institut Clément Ader (UMR CNRS 5312) ISAE-SUPAERO / INSA / IMT-Mines Albi / UPS) Contribution to the study of damage in composite/metal structures under bearing stresses	#1104 · Alexandre Looten (CERN) Advanced Composite Cryostat Design for Next-Generation High-Energy Physics Detectors at CERN		#760 · Marianna Pilla (Università di Roma la Sapienza) Experimental and Computational Analysis of Bio-Inspired 3D-Printed Interlocking Interfaces	#508 · Ben Thomas (University of Edinburgh) Evaluation of the Suitability of Multi-Stage Infusions for Thermoset Composite Laminates
11:45		#1029 · Lars Pilgaard Mikkelse (DTU Wind) Compression strength predictions of pultruded carbon fiber profiles for wind turbine blades	#1585 · Paolo Andrea Carraro (University of Padova) Prediction of the stiffness loss in woven composites in the presence of transverse bundle cracks due to cyclic loadings	#689 · Pablo Romero-Rodriguez (AIMEN) Localized heating of high-performance composites with short and continuous carbon reinforcements	#1406 · Romain Léger (LMGC, Univ Montpellier, IMT Mines Ales, CNRS) Effect of hygrothermal ageing on the fatigue behaviour of pultruded composite materials	#1102 · Kaiwei Ye (Department of Systems Innovation, School of Engineering, The University of Tokyo) MICRO-CT CHARACTERIZATION OF FLEXURAL-FATIGUE DAMAGE EVOLUTION IN CFRTP-SMC	#1001 · Miguel Vieira de Carva (Unit of Composite Materials and Structures, Institute of Science and Innovation in Mechanical and Industrial Engineering (INEGI)) From Micro- to Meso-Scale: Modelling the Viscous and Anisotropic Behaviour of Aligned Discontinuous Fibre Composites	#1096 · Hassan Ejaz (King Abdullah University of Science and Technology) Degradation of semi-structure bell&spigot GFRP pipe joint integrity due to air pocket and kissing bond defects	#533 · Vincent Lutz (MGC Moser-Glaser AG, Pfiffner Group Switzerland) Advanced Polyester Textile-reinforced Epoxy Composites for High-Voltage Insulation		#248 · Israà Arafat (Université Marie et Louis Pasteur, SUPMICROTECH, CNRS, Institut FEMTO-ST) Towards a better understanding of the fibre/matrix adhesion in flax/epoxy composites	#313 · Seung Mo Son (Pusan National University) Tailoring Transcrystallinity and Moisture Stability in PA6/PA12 Copolymer CFRTPs Fabricated by T-RTM
12:00		#789 · Diana Cotenescu (Institute Of Materials Chemistry And Research, University Of Vienna) Hierarchical nanostructured interphases for high performance carbon fibre-reinforced thermoplastic composites	#714 · Sam Patel (Imperial College London) A Computationally Efficient HSL-FE Approach for Predicting Fibre Breakage in Composite Structures	#414 · Muhammad Khizer Ali Kh (Khalifa University of Science and Technology) Energy absorption of 3D-printed PEEK/CF composite honeycombs with tubular CFRP reinforcements	#368 · Thibault Haudricourt (ENSTA/ SAFRAN) Thermo-mechanical analysis on a 3D woven composite for evaluation of fatigue performance	#520 · Peter Zobec (Faculty Of Mechanical Engineering, University Of Ljubljana) Complex loading and fatigue damage of composite sandwich structures	#1031 · Richard Vocke (Faserinstitut Bremen e.V. (FIBRE)) Compression moulding with tape trim waste to manufacture structural components	#68 · Shin-ichi Takeda (Japan Aerospace Exploration Agency) Proposal of the Modified Block Shear Method for Adhesively Bonded Composite Joints and Strength Evaluation	#1369 · Amitha Ajith (IIT Madras) Tailoring Thermo-Mechanical Properties of Epoxy Using Magnetically Aligned Graphene Nanoplatelets		#598 · Innes McKay (University of Strathclyde) Influence of Microbond Sample Preparation Method on Interfacial Strength in Flax, Glass, and Carbon-PLA	#1577 · Kiyoshi Uzawa (Innovative Composite Center at KIT) 「Ultra-Fast Manufacturing of High-Pressure Hydrogen Tanks Using REDOX-Curing RTM and Non-FW Preforms
12:15		#460 · Fabrizio Donisi (Rolls-Royce PLC) Bird-Strike and Fan Blade Off compression type failures in Composite Fan Blades	#1066 · Dominik Spancken (Fraunhofer Institute for Structural Durability and System Reliability LBF) Novel aspects from a fatigue database of the fatigue properties of short fibre reinforced polymers	#1653 · Joanna Wong (University of Calgary) Additively Manufactured Deployable Lattice Booms with Tailored Fiber Placement	#107 · John Buckingham (University of Surrey) Comparison of moisture absorption in thermoset and thermoplastic matrix glass fibre polymer composites for accelerated ageing tests	#959 · Shain Azadi (Politecnico di Milano) A Physics-Informed Neural Network for Fatigue Life Estimation in Fiber Reinforced Polymer Composites	#1055 · Izumi Matsukura (IHI Corporation) Numerical and Nondestructive Evaluation of Fiber-Orientation Randomness in Discontinuous Carbon-Fiber-Reinforced Composites	#1581 · Min Seong Hwang (Department of Mechanical Engineering, Gyeongsang National University) Experimental and Numerical Analysis of L-Flange Joints in Large Sandwich Composite Structures	#1136 · Georgios Tzortzinis (TUD Dresden University of Technology) Influence of Laminate Architecture on the Torsional Behaviour of Filament-Wound CFRP Driveshafts		#98 · Marvin Veil (German Aerospace Center (DLR)) Investigation of Hygrothermal Effects on the Structural Integrity of Flax/PA11 Composites	#579 · Wonki Kim (Korea Advanced Institute of Science & Technology) Influence of winding pattern on the mechanical properties of wound composite structures
12:30		#1035 · Gustavo Quino (Imperial College London) From constituent to composite: multiscale experiments for enhanced compression performance	#999 · Masamichi Kawai (University of Tsukuba) A Critical Damage Growth Model for Notched Fatigue Fracture of CFRP Laminates at Various Stress Ratios	#868 · Giovangiuseppe Giusto (CIRA - Italian Aerospace Research Centre) Effect of TP-AFP Processing Windows on ILSS and Crystallinity of CF/LM-PAEK Rectangular-Ring Laminates	#436 · José Manuel Rodríguez (Universidad Carlos III) STRAIN RATE DEPENDENCY ON FRACTURE TOUGHNESS OF PLAIN WOVEN AS4/8552 CFRP USING IN-SITU SYNCHROTRON X-RAY PHASE CONTRAST IMAGING	#536 · Stefan Eder (Technical University of Leoben) Influence of PCR Polymers on Fatigue Life of Short-Fiber-Reinforced Composites	#1061 · Connie Qian (University of Sheffield) The First European Benchmark Exercise on Squeeze Flow Testing of High-Performance Carbon Fibre Sheet Moulding Compounds	#563 · Michael Johnson (University of Nottingham) Reversible bonding of hybrid metallic-composite shafts	#182 · Chamil Abeykoon (The University of Manchester) Evaluation of the Suitability of Carbon Fibre Reinforced Non-Metallic Pipelines for Oil and Gas Industry		#1733 · Jaswinder Kaur (Laboratory of Molecular Science and Engineering, Abo Akademi University) Tailored Biorefinery Lignin via Fractionation and Depolymerization for Sustainable Epoxy Thermoset	#387 · Hannah Rabe (Processing of Composites and Design for Recycling, Department Polymer Engineering and Science, Technical University of Leoben) Investigation of roving spreading on impregnation quality in the wet winding process using siphon impregnation
12:45		#769 · Vincent Jacques (DASSAULT AVIATION) Effects of waviness on fiber failure in compression of carbon fiber reinforced polymer (CFRP) specimens: failure scenarios, modeling requirements, and predictive capabilities	#196 · Morten Fogtmann Kristi (Aarhus University, Faculty of Technical Sciences, Department of Mechanical and Production Engineering, Section of Mechanics and Materials) Mean-level correction and transformation of load-controlled fatigue test data into strain-based SN-curves	#442 · Kamran Khan (Khalifa University) Enhanced stability of plate-based composite lattice structure fabricated via 3D printing of polyamide/carbon fiber filament	#1681 · Alexandre Clement (Research Insitute In Civil and Mechanical Engineering GeM, UMR CNRS 6183) Modeling uncertainties and variability in hygro-elastic behavior of moisture-exposed composites	#671 · Aijia Li (Univ Toulouse, UTTOP, LGP) Self-heating effect of multidirectional carbon fiber reinforced composites under biaxial tension-tension fatigue loading	#1400 · Andreas Gebhard (Leibniz-institut Für Verbundwerkstoffe Gmbh) The First European Benchmark Exercise on Squeeze Flow Testing of High-performance C-SMCs: Quantitative Analysis of Interlaboratory Variability	#814 · Atsushi Hosoi (Waseda University) Evaluation of Bonding Strength in Single-Lap Joints Between Nanostructured Aluminum Alloys and Thermoplastic CFRP Laminates	#1012 · Syed Shah (King Abdullah University of Science and Technology) Performance Assessment of Bell–Spigot Joints in GRP Pipelines with Kissing Bond Defects: Experiments and Modelling.		#1647 · Alejandro Rios (University of Ottawa) Linking Physicochemical Properties of Lignocellulosic Residues to Lime-Based Insulating Biocomposite Performance Across Feedstock Types and Volume Fractions	#882 · Joachim Greiner (IFB, Uni Stuttgart) Automated Winding Technique to Generate Functional Free-Form Composites Inspired by Nature
13:00–14:00	LUNCH											
14:00–14:30	2 KEYNOTES (rooms A & B)											
14:30–16:30	SESSION 3											
	Session →	**SS01 · Delaminations and debonding in composite materials and structures**	**SS11 · Advanced Composite Materials and Structures: Multifunctional Design, Damage Diagnostics, Testing, and Modeling**	**3.8 Fatigue**	**6.3 Energy Storage and Harvesting**	**SS17 · Image-based analysis of composite features**	**7.6 Composite Pressure Vessels**	**1.3 Civil Engineering and Architecture**	**7.11 Recycling, Remanufacturing, and Circular Economy**	**3.7 Failure Mechanics and Simulations**	**5.13 Process Modelling and Simulation**	**2.1 Bio-Derived and Sustainable Composites**
14:30		#345 · Luca Michele Martulli (Politecnico di Milano) The sequential static-fatigue approach to model delamination propagations: a comparison between VCCT and cohesive implementation	#461 · Rosemere de Alves Lima (IDMEC, Instituto Superior Técnico) 3D printed multi-functional microstructures for vitrimer-based composite bonded joints	#344 · Sofia Sartorio (Department of Aerospace Structures and Materials, Faculty of Aerospace Engineering, Delft University of Technology) How can damping capacity be used to characterize fatigue behaviour of thermoplastic composites?	#1359 · Emile S Greenhalgh (Department of Aeronautics, Imperial College London) Fractographic Insights into the Optimum Microstructures for Structural Supercapacitors	#306 · Baris Caglar (TU Delft) Fiber detection in microstructural images of composites: benchmarking and sensitivity analysis of segmentation methods	#1019 · Mohammad Sheikhi (Department of Materials Engineering, KU Leuven) Efficient Damage Prediction in Composite Pressure Vessels through Representative Modelling	#116 · Lucija Stepinac (EPFL) Additively Manufactured Polymeric TPMS Façade	#1379 · Yağız Özbek (Sabanci University) From AFP Waste to Flight-Ready Sandwich Skins: Strand-Tailored Skins, Core-Stabilized Geometry, and Plasma Activated Bonding	#373 · Pierre-Alexandre Bosch (EPFL) Machine Learning Surrogate Models for Hashin-3D Failure Prediction in Thick FRP Laminates	#581 · Mouadh Boubaker (Institut Clément Ader, Université de Toulouse, CNRS UMR 5312, IMT Mines Albi, UPS, INSA, ISAE-SUPAERO) Numerical simulation of liquid resin impregnation in a real digitized reinforcement during Liquid Composites Molding processes accounting for capillary effects	#280 · Khurshid Malik (1Department of management and Engineering, Linköping University) ADVANCING SUSTAINABLE MARINE MATERIALS WITH GRAPHENE-COATED NATURAL FIBER COMPOSITES
14:45		#1490 · Panayiotis Tsokanas (Department of Materials Engineering, KU Leuven) Effect of interface ply orientation on mode II delamination observed by in situ X-ray computed tomography	#1245 · Alberto Ciampaglia (Politecnico di Torino) Self-Sensing Capability of Hybrid Short Carbon/Glass Fiber Thermoplastic Composites for Damage Monitoring under Static and Fatigue Loading	#249 · Wajih Akleh (Université Marie et Louis Pasteur, SUPMICROTECH, CNRS, Institut FEMTO-ST) Fatigue Analysis and Residual Strength Evolution of High-Performance Unidirectional Carbon-Fibre Composites for Hydrogen Storage Applications: Characterisation Using Split-Disk Ring Tests	#799 · Beatriz Arouca Maia (INEGI) Revolutionizing Energy Storage with Coaxial Structural Batteries	#327 · Vincent Maes (University of Bristol) Benchmark Activity for micro-Structure Image-processing for Composites: Voids in 2D	#912 · Youssef Mraidi (Technical university of munich, TUM School of Engineering and Design, Chair for Carbon Composites) Manufacturing of carbon-fiber-reinforced boss elements for energy storage in space applications	#117 · Won-Kee Hong (Department of Architectural Engineering, Kyung Hee University) Data-centric Lagrange based multiple objective optimizations of biaxial loaded rectangular columns using nonlinear programming	#271 · Amit Chanda (School of Mechanical and Aerospace Engineering, Nanyang Technological University (NTU)) Spinheat-assisted Debonding-on-demand Structural Adhesives for Recyclable Composite Structures	#711 · Alexy Tailleur (DMAS, ONERA, Université Paris Saclay) Modelling the effect of out-of-plane waviness defects on damage and failure of thermoset laminates	#1242 · Etienne Dubois (PIMM (ENSAM, CNAM, CNRS)) In-situ Control and Modeling of the Liquid Composite Molding Process – Non-Intrusive Monitoring of the Degree of Polymerization	#1135 · Pooria Khalili (University of Borås) Sustainable Hybrid Natural Fiber Composites: Mechanical Performance and Life Cycle Assessment Considerations
15:00		#1627 · Bent F. Sørensen (Technical University Of Denmark) Similitude in delamination crack growth with large-scale fibre bridging	#578 · Davood Peyrow Hedayati (Advanced Materials and Structures Lab (AMSL), Faculty of Engineering, Leipzig University of Applied Sciences (HTWK Leipzig)) Damage-Induced Electrochemical Degradation in Structural Supercapacitors	#818 · Andrea Bernasconi (Politecnico di Milano) Fatigue resistance and self-healing of carbon fiber reinforced vitrimers subjected to bending tests	#1065 · Elia Chimonides (Imperial College London) Thermoplastic Structural Electrolytes	#1236 · Robin Hartley (University of Bristol) Improving Fibre Segmentation in CFRP Micrographs Through Phase-Aware Shading Correction	#130 · Marie Hondekyn (Department of Materials, Textiles and Chemical Engineering, Ghent University) An Analytical Framework for the Mechanical Analysis of Thick-Walled Hydrogen Pressure Vessels including Manufacturing Variations	#709 · Helena Rocha (PIEP - Centre for Innovation in Polymer Engineering) Lightweight Double Curvature Sandwich Panels with improved Fire Reaction for Façade Panels	#896 · Laura Mazzocchetti (University of Bologna - Dept. of Industrial Chemistry "Toso Montanari") Overcoming the valley of death: FIB3R, a successful story of research to innovation in the field of carbon fiber recycling	#1124 · Peng Lu (The University of Tokyo) MONTE CARLO SIMULATION OF PARALLELOGRAM TAPE CFRTP-SMC USING A CALCULUS BASED GEOMETRIC ABSTRACTION SUPPORTED BY TENSILE TESTS AND CT-SCAN OBSERVATIONS	#255 · Nazim Ali (Mechanics of Materials and Structures, Department of Materials, Textiles and Chemical Engineering, Ghent University, Technologiepark-Zwijnaarde 46, 9052 Zwijnaarde) Finite Element (FE) Investigation of Process-Induced Residual Stresses in Type-IV Composite Pressure Vessels: Implications for Enhanced Design Reliability	#1462 · Lukas Hartz (School of Engineering/ Bernal Institute/ University of Limerick) Prevention of fusion during the thermal treatment of melt-spun lignin precursor fibres for scaled-up production of carbon fibres.
15:15		#1506 · Stergios Goutianos (Norwegian University of Science and Technology) Predicting the transition from stable to unstable crack propagation for a specimen under mixed-mode loading	#838 · Muhammad Yasir Khalid (Khalifa University) Embedded GNP-Epoxy Films: A Route to Multifunctional GFRP Composites	#128 · Kimiyoshi Naito (National Institute for Materials Science) Static and fatigue tensile properties of epoxy-vitrimer-based CFRP	#886 · Sourav Patranabish (Shaping Matter Lab, Faculty of Aerospace Engineering, Delft University of Technology) Structural Supercapacitors with Graphene-Modified High-Surface-Area Carbon Electrodes and Gel-Polymer Electrolyte Separators	#630 · Christian Düreth (TU Dresden - Institute for Lightweight Enginnering and Polymer Technology) FFT- and Image-Based Phase-Field Simulations for Descriptor-Based Structure–Property Relationships in Fiber Reinforced Polymers with Manufacturing-Related Imperfections	#1693 · Pavit Singh Sachdeva (Institute of Lightweight Engineering and Structural Mechanics, Technical University of Darmstadt) Closed-form Analytical Modelling of Thick-walled Cylindrical Composite Pressure Vessels with Variable Dome Curvature	#1407 · Marco Abreu Filho (ISISE/IB-S/ARISE, University of Minho, Azurém) SOLAR EXPOSURE PATTERNS AND SELF-SHADOWING EFFECTS ON SERVICE TEMPERATURE PREDICTIONS IN HYBRID GFRP–CONCRETE BRIDGE	#207 · Simon Backens (Fraunhofer Institute for Large Structures in Production Engineering IGP) Study of post-treatment techniques for recycled carbon fibers to improve fiber-matrix bonding with epoxy resin by transverse fiber bundle tensile tests	#195 · Akash Sharma (Mechanics of Materials and Structures, Department of Materials, Textiles and Chemical Engineering, Ghent University, Technologiepark-Zwijnaarde 46, 9052 Zwijnaarde, Belgium) High-Fidelity Finite Element (FE) Modelling for Type-IV Composite Pressure Vessels: Predicting Damage Behaviour and Assessing the Influence of Local Defects	#810 · Yuto Masaki (Tokyo University of Science, Laboratory of Koyanagi) Numerical Simulation of Post-Forming Shape and Thermal Residual Stress in L-Shaped Thermoplastic CFRP Components	#621 · Marko Barbaric (PCCL) Dynamic biobased epoxy networks with diamine hardeners for sustainable and circular thermosets
15:30		#1047 · Jonas Richter (Institute of Lightweight Engineering and Polymer Technology, TUD Dresden University of Technology) Strain rate dependent delamination behavior of hybrid sandwich composites with modified interlaminar interfaces for crash loading scenarios	#477 · Pauline Bourda (CETIM, ‘Advanced materials and Component Engineering’ Departement) Longitudinal tensile strength characterisation using NOL test: definition of an explicit expression based on experimental and numerical approaches	#129 · Hiroyuki Oguma (National Institute for Materials Science) Experimental Study on S–N Characteristics and Failure Mechanisms of CFRP and GFRP in Cryogenic Environments	#127 · Ali Hadigheh (School of Civil Engineering, Faculty of Engineering, The University of Sydney) Enhancing the Electrochemical Performance of Alkali-Activated Electrolytes for Supercapacitor Applications	#821 · Jonas Naumann (German Aerospace Center (DLR)) Automatic Ply Instance Analysis for CFRP Micrographs	#446 · Cedric Fuchs (Leibniz-Institut für Verbundwerkstoffe GmbH) Thermoplastic high-pressure hydrogen vessels with load-bearing capability	#1622 · Alžbeta Samková (Technical University of Liberec) Viscose leno weave as a sustainable alternative to glass fiber leno weave in gypsum-based composites	#504 · Elsa Best (Delft University of Technology, Department of Materials Science and Engineering) Unravelling the Mechanisms of Electrochemical CFRP Recycling	#788 · Kai Xuan Tan (Department of Aeronautics, Imperial College London) A numerical modelling approach for incorporating the effect of defects in large composite structures	#166 · Erik Jungstedt (Mips AB) A Numerical Investigation of the Consolidation Behaviour of Composite Helmet Shells	#933 · Vito Gigante (Università di Pisa) Recycled Poly(butylene succinate) (PBS)–Cellulose Fibre Biocomposites: Processing Optimisation for Fused Granulate Fabrication (FGF)
15:45		#638 · Carolina Oliveira (Faculty of Aerospace Engineering, Aerospace Structures and Materials, Delft University of Technology) Do Delaminations Matter? Understanding Their Structural Impact on Wind Turbine Blade Spar Caps	#1138 · Carlo Gotti (Advanced Mechanics and Materials–Interdepartmental Center for Industrial Research (CIRI-MAM) - University of Bologna) Capacitive Structural Health Monitoring of Hybrid Metal–Composite Joints	#925 · Gabriela Loi (University of Cagliari) Fatigue performance of stepped lap composite joints reinforced with metal Z-pins	#815 · Marion Cardous (Department of Materials Engineering, KU Leuven, Kasteelpark Arenberg 44 bus 2450) MXene-based carbon fibre composites for structural energy storage - Towards multifunctional materials combining strength and energy storage capability	#1497 · Martin Fagerström (Chalmers University of Technology) Seeing and Simulating: Automated X-ray CT-Based Mesoscale Modeling of As-Manufactured Textile Composites	#1412 · Ryoma Aoki (Japan Aerospace Exploration Agency) Parametric Evaluation of Winding-Angle Effects on Fatigue-Induced Residual Burst Strength in Filament-Wound CFRP Hydrogen Tanks	#505 · Duarte Dias (Fibrenamics – Institute for Innovation in Fiber and Composites Materials) Self-Sensing Braided Composite Rebars for Next-Generation Concrete Structures	#1336 · Zhiyu Ye (Bristol Composites Institute, School of Civil, Aerospace and Design Engineering, University of Bristol) THE DEVELOPMENT OF THERMOPLASTIC INTERLEAVED CARBON FIBRE/EPOXY COMPOSITES FROM PREPREG WASTE	#277 · Vishakh Rajendran (Polymer Competence Center Leoben GmbH (PCCL)) Computational Sensitivity Analysis of Fracture metrics in Orthotropic Composites	#83 · Aase Sølvsberg Urdal (Kongsberg Defence & Aerospace) Discrete-Event Simulation for System-Level Optimisation in Aerospace Composite Manufacturing	#1471 · Anne Beaucamp (Bernal Institute, University of Limerick) Polymer blending as a pathway towards high performance lignin based carbon fibres
16:00		#449 · Adam Leveziel (FEMTO-ST Institute, Applied Mechanics Department, Marie and Louis Pasteur University, SUPMICROTECH) Toward a better understanding of the microdroplet debonding on elementary fiber	#1175 · Gregorio Pisaneschi (University of Bologna) Elastomer-Interfaced SMA Hybrid Composites: Interface Enhancement, Analytical Modelling, and Manufacturability for Morphing Laminates	#768 · Francois Lamming (Mines Paris / Estaca) In situ X-ray tomography investigation into the effect of the load ratio on damage mechanisms in short glass fibre-reinforced thermoplastics.	#889 · Ruben Tavano (Chalmers University of Technology) Partially Carbonised Carbon Fibres as a Viable Electrode for Sodium-ion Structural Batteries	#233 · Silvia Gomarasca (Delft University of Technology) Finding the right lenghtscales for microstructural description in unidirectional composites	#275 · Corentin Ferreira (Department of Mechanical Engineering, University of Melbourne) Minimally Intrusive Remaining Useful Life Estimation of Composite Pressure Vessels Using Foundation Models	#934 · Matthew Enrico Lillywh (Bristol Composites Institute) Design and Testing of a Wrapped Tow Reinforced Bamboo Truss Assembly.	#1377 · Mathieu Imbert (Fraunhofer EMI) Laser-assisted pyrolysis: Towards the reclamation of continuous carbon fibers from thermoset wound composite structures	#274 · Isha Paliwal (University of Southampton) The Role of Fracture Toughness on the Failure Mechanism of High Off-Axis Angle Ply Laminates	#294 · Rudi Reichenbächer (Leibniz-Institut für Polymerforschung Dresden IPF) Mesoscale wetting behaviour of rovings during resin infiltration	#1114 · Dexter Blackburn (University of Sheffield) Towards the development of carbon negative advanced composite materials
16:15		#283 · Søren Sølund Wahlgren (Aarhus University) Thresholds for the transition from arc to tunneling debonding in single fibers under uniaxial tension	#1425 · Clotilde Techoueyres (University of Limerick Bernal Institute) Exploring Nanoscale organic piezoelectric coatings for in -situ Non Destructive Structural Health Monitoring of carbon fibre reinforced Composites	#164 · Louka Masson (Safran - IRDL) ACCELERATED FATIGUE ASSESSMENT OF ADHESIVELY BONDED JOINTS USING ENERGY-BASED CRITERIA AND NON-LINEAR CONSTITUTIVE BEHAVIOR	#516 · Hawa Sidat (University of Edinburgh) Multifunctional Composites For Energy Storage	#727 · Moritz Bühl (HTWK Leipzig) Image-based material characterization of End-of-Life composite components using semantic segmentation	#1538 · Tobias Wille (DLR, Institute of Lightweight Systems) SIMULATION STRATEGY FOR LIQUID HYDROGEN COMPOSITE PRESSURE VESSEL	#1759 · Aron Gabor (University Claude Bernard Lyon 1, LMC2) Bridging the Gap Between Local TRM Mechanisms and Reliable Shear Strengthening Design: From Experimental Observations to Predictive Modelling	#147 · Giovanni Terrasi (Empa, Swiss Federal Laboratories for Material Science and Technology) Recycling of High-Performance FRP Composites Towards a Circular Material Economy	#404 · Jun Koyanagi (Tokyo University of Science) Numerical Simulation of Thermal Fatigue in CFRP Laminates Using an Entropy-based Progressive Damage Model	#1211 · Debabrata Adhikari (Department of Civil and Mechanical Engineering, Technical University of Denmark) Correlating pore-network model and high-fidelity CFD estimation of effective permeability from µ-XCT-derived stacked fiber layups	#320 · Daiva Zeleniakiene (Kaunas University of Technology) Enhanced interfacial performance and durability of basalt fibre composites via star-like copolymer and MXene-based surface treatments
16:30–17:00	COFFEE BREAK											
17:00–18:00	SESSION 4											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength**	**SS01 · Delaminations and debonding in composite materials and structures**	**7.11 Recycling, Remanufacturing, and Circular Economy**	**1.8 Renewable Energy (e.g. Wind, Solar)**	**SS17 · Image-based analysis of composite features**	**7.6 Composite Pressure Vessels & 5.10 Liquid Molding, Pultrusion, Filament Winding**	**7.12 Structural Health Monitoring and Quality Control**	**2.4 Interfaces**	**7.2 AI-Assisted Design Methods**	**5.2 Additive Manufacturing**	**2.1 Bio-Derived and Sustainable Composites**
17:00		#1316 · Sérgio Costa (GKN Aerospace) Modelling and simulation of fibre kinking response in CFRP with focus on thermal effects – experiments and simulation	#597 · Riccardo Di Giovanni (Politecnico di Milano, Department of Chemistry, Materials and Chemical Engineering "Giulio Natta") Temperature dependent vitrimer matrix composites fracture behavior	#706 · Eleonora Di Francesco (University of Genoa) Induction heating treatment of wind turbine blade glass-fiber-reinforced epoxy resin as an alternative recycling method	#1186 · Robert Pierce (DTU Wind and Energy Systems, Technical University of Denmark) Evaluating Modelling Assumptions for Large-Scale VARI Processes	#636 · Kevin Chen (Leibniz-Institut für Verbundwerkstoffe (IVW Kaiserslautern)) A-Priori-Informed Instance Segmentation of µCT Scans of Woven Fiber Composites on the Mesoscale	◆*#380 · Dhruv Narayan Mudgal (Ghent University)* *Experimental and Analytical investigation of residual stresses in filament wound composite rings* —— ◆*#779 · Pedro Abreu (PIEP - Polo de Inovação em Engenharia de Polímeros)* *Development of a thermoplastic type IV composite pressure tank for hydrogen storage at 700 bar for mobility applications*	#1624 · Michele Zappalorto (University of Padova) Structural Health Monitoring of Composite Structures Through Electrical Measurements and Deep Learning	◆*#692 · Emanuele Drago (University of Palermo)* *Functionalizing flax fibers through metakaolin dispersion for the formulation of enhanced geopolymer composites* —— ◆*#48 · Jia-Lin Tsai (National Yang Ming Chiao Tung University)* *Investigate the laser-induced surface treatment in the interfacial shear strength of carbon fiber/epoxy composites*	#1007 · Xiaodong Wang (Beihang University) Intelligent Design Method of Composites Layup Based on Generative Neural Network	◆*#422 · Elena Rodríguez (AIMEN)* *Design and Processing of High-Loaded Composite Filaments for Additive Manufacturing: From Bonded Magnets to Ceramics and Metals* —— ◆*#437 · Marina Kühn-Kauffeldt (Universität der Bundeswehr München)* *Vacuum-Arc–Enhanced Additive Manufacturing of Functional High Performance Polymer Composites*	#1298 · Qingsheng Yang (Beijing University of Technology) Effective Mechanical and Diffusion Behaviors of Fiber-Reinforced Hydrogel Composites
17:15		#1313 · Lei Wan (Northwestern Polytechnical University) Micromechanical progressive failure analysis of UD CFRP composites with 3D waviness under longitudinal compression	#1070 · Fabrice Congourdeau (DASSAULT AVIATION) Fatigue prediction of delamination : challenges, characterization, modelling and industrial implementation	#142 · Dionisis Semitekolos (R-NanoLab, School of Chemical Engineering, National Technical University of Athens) Design and Fabrication of a Racing Car Seat with Recycled Continuous and Chopped Carbon Fibre Composites	#124 · Vasileios Karatzas (DNV Denmark A/S) Lifetime extension approaches of wind turbine blades based on testing	#574 · James Kratz (University of Bristol) Discussion of Needs and Opportunities for Image-Based Analysis of Composite Features	◆*#707 · Silvia Regina Imrich (Institute of Polymer Materials and Plastics Engineering, Clausthal University of Technology)* *Influences on the fiber volume content during filament winding of thick-walled carbon fiber reinforced composite components with thermosetting matrix* —— ◆*#729 · Florian Schmidt (TU Dresden ILK)* *Development of a method for inline winding tension monitoring and component measurement in the wet winding process of hydrogen pressure vessels*	#1156 · Dilan Arslan Catak (Istanbul Technical University) Spray Printing of Carbon Nanomaterial-Based Strain Sensors onto Composite Structures: A Facile Method for Customizable Smart Structures	◆*#646 · Marco Luciano (Department of Engineering, Universita' degli Studi di Palermo)* *Interfacial Engineering of Flax-Based Bio-Composites via PCL Coatings: An Experimental and Computational Analysis* —— ◆*#931 · Dana Skácelová (Department of Plasma Physics and Technology, CEPLANT - R&D Centre for Plasma and Nanotechnology Surface Modifications, Faculty of Science, Masaryk University, Kotlářská 267/2)* *Plasma-enhanced interfacial bonding in FRP composites: Effects on fiber–matrix adhesion and dynamic mechanical response*	#1168 · Carolina Furtado (University of Porto) Machine Learning-Accelerated Predictions of Design Allowable of Composite Laminates	◆*#444 · Natalie Mähling (Baden-Wuerttemberg Cooperative State University)* *Investigation of the Mechanical and Thermal Properties of Recycled PLA in the 3D Printing Process* —— ◆*#1095 · Ertug Ihsan Tanisan (University of Strathclyde, Faculty of Engineering, Department of Mechanical and Aerospace Engineering)* *Influence of Process Parameters on the Slurry Erosion Behaviour of 3D-Printed Polylactic Acid*	#1368 · Janani Anbu Anandhan (Indian Institute of Technology Madras) DLP Printed Hybrid Resin Composites for Biomedical Applications: Mechanical and Structural Assessment
17:30		#157 · Emmanuel Fabing (Dassault Systèmes) A NUMERICAL MODEL TO PREDICT COMPRESSIVE STRENGTH WITH FIBRE DEFECT AND STRUCTURAL CONTRIBUTIONS	#946 · Brian Falzon (Western Sydney University) Influence of z-pin length on the synergistic mode I delamination behaviour of multi-scale toughened carbon fibre composites.	#169 · Mariana Pereira (Politecnico Di Milano) Towards High-Value Recycling of Composites Using High Voltage Fragmentation	#798 · Nawres Al-Ramahi (RTU) Use of Recycled Short Carbon Fibers for Anti-icing Applications in Wind Turbine Blades	#826 · Camiel Posthuma (University of Twente) 3D MICROSTRUCTURAL CHARACTERIZATION THROUGH MICRO-CT-BASED STATISTICAL ANALYSIS OF FIBER REINFORCED THERMOPLASTIC POLYMERS	◆*#1206 · Markus Bellmann (University of Stuttgart, Institute of Aircraft Design)* *Development of a Robotic Winding Head with Active Tension Control* —— ◆*#851 · Sukhwant Pal (Skolkovo Institute of Science and Technology)* *Manufacturing and Characterization of Polyamide 6 based Thermoplastic Pultruded Profiles with Carbon and Glass Fibers*	#1277 · Arunjunai Raj Mahendra (Kompetenzzentrum Holz GmbH- WOOD KPLUS) Paper-Based Printed Sensors for Multifunctional Monitoring in Fibre-Reinforced Composites	◆*#817 · Subba Reddy Daggumati (Indian Institute of Technology, Tirupati)* *On the determination of Fiber/Matrix Interface mode-II Fatigue Parameters: A Concurrent Experimental & Computational Approach* —— ◆*#901 · Akshay Sunil Salvi (Indian Institute of Science, Bangalore)* *Tailored interface by growing ZnO nanoflakes on CF surface using microwave radiation for CF/PEI laminates*	#685 · Sadik Omairey (Brunel Composites Centre) AI-Enhanced Multiscale Predictive Modelling for Characterising Recycled, Bio-Based, and Virgin Plastic Materials	◆*#1163 · Sofía Peláez Peláez (Advanced Manufacturing and Inspection Technologies Research Group, I4 Institute, Universidad de León)* *Integration of Ceramic UV Laser Vat Photopolymerization (VPP-UVL) and Spark Plasma Sintering (SPS) for the Manufacturing of High-Performance Cu/Al_2O_3 Composites* —— ◆*#1251 · Gergő Zsolt Marton (Budapest University of Technology and Economics)* *Modelling and investigation of composites with predefined failure*	#1271 · Tim Huber (Luxembourg Institute of Science and Technology (LIST)) Regenerated Cellulose Fibre Composites: From Processing–Structure Relations to Advanced Sustainable Applications
17:45		#193 · Nicolas Carrere (Ensta-IPP/IRDL) Fatigue of Laminated Composites under Compressive Loading: Comprehensive Investigation of Dissipative and Failure Mechanisms	#1509 · Valentin Begin (Laboratoire de Mecanique et d'Acoustique - Aix-Marseille University) Analysis of Delamination in static and fatigue in a laminated composite	#1190 · Violetta Schumm (Fraunhofer IGCV) Characterization of recycled carbon fiber composites based on aligned wet-laid nonwovens	#1249 · Sina Samareh (Department of Wind and Energy Systems, Technical University of Denmark) Experimental investigation of the creep response of a 12.6m wind turbine blade	#930 · Mohamad A. Raja (Faculty of Aerospace Engineering, Department of Aerospace Structures and Materials, Delft University of Technology (TU Delft)) Statistically Equivalent Microstructure Reconstruction of As-Manufactured 3D CFRP: From High-resolution X-Ray Micro-Computed Tomography to High-fidelity Fiber Network Architectures	◆*#1515 · Takeshi Eguchi (Dai-Ichi Dentsu Ltd.)* *High-Quality Manufacturing of T-profile Beams Using Thermoplastic Prepreg Tape Pultrusion with Multi-directional Servo-controlled Compression* ——	#652 · Kristine M. Jespersen (Technical University of Denmark) Terahertz spectroscopy for non-destructive evaluation of defects in glass fiber composite sandwich panels	◆*#681 · Gautier Allusse (Institut Clément Ader - Univ Toulouse, IMT Albi, INSA Toulouse, ISAE-SUPAERO, CNRS)* *Characterization of acrylic resin surface energies and effect on permeability measurements of fibrous reinforcements* —— ◆*#562 · Ryogo Konomi (Graduate School of Science and Technology, Tokyo University of Science)* *Molecular Dynamics Simulations on the Adhesive Properties of Thermosetting and Thermoplastic Resins*	#1081 · Yanqiu Zhu (School of Aeronautic Science and Engineering,Beihang University) A Multi-Level ANN-Enhanced Framework for Rapid Progressive Damage Analysis of Aeronautical Composite Laminates	◆*#445 · Sebastian Backes (Institut für Textiltechnik of Rwth Aachen University)* *3D printing of fibre-reinforced plastics - optimised carbon structures in different variants and with no need for complex moulds* —— ◆*#1389 · Paul Zachäus (Institut für Textiltechnik of RWTH Aachen University)* *A New Material-Efficient Approach for 3D Printing Complex Continuous Fibre-Reinforced Parts Using UV Curing Resins*	#71 · Sarina Schulte (Hochschule Hannover - University of Applied Sciences and Arts) Process-Structure-Property Relationships in Flax Fiber-Reinforced Composites Using PLA and PA11 Film Stacks for Lightweight Applications

ECCM22 — TUESDAY (08:00–18:00) — PRELIMINARY TECHNICAL PROGRAMME (version of 7 June 2026)
◆ + italic = Short oral (7 min) · plain = Full oral (15 min) · Minor changes to the programme may occur.

Time	Activity	A	B	C	D	Forum	M1	M2	M4	M5	Balder	Odin
08:00–08:45	PLENARY 2											
09:00–11:00	SESSION 1											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength**	**SS21 · Computed tomography**	**SS07 · Cryogenic Testing and Material Characterisation**	**SS08 · Experimentation and Modelling of Composite Materials and Structures under Dynamic Loading and Environmental Conditions**	**SS26 · EcoComposites Cluster - Sustainability of composites in the transportation sector**	**SS14 · Session Honoring Mostafa Abdalla**	**2.1 Bio-Derived and Sustainable Composites**	**SS18 · Composite Materials for Hydrogen Economy**	**3.9 Fracture and Damage**	**3.15 Multiphysics Modelling**	**SS03 · Power Ultrasonics in Processing and Joining of Composites and Multi-Materials**
09:00					#866 · Anastasios P. Vassilopoulos (Composite Mechanics Group (GR-MeC), Ecole Polytechnique Fédérale de Lausanne (EPFL)) EBR CFRP–Concrete Bond Durability Modelling under Prolonged Water Immersion	#488 · Alexandros Georgios St (Innovation in Research and Engineering Solutions SNC (IRES)) Modeling the CO2 Mitigation Potential of Bio-Based and Recycled Composite Materials	#965 · Daniël Peeters (Delft University of Technology) How to determine the influence of gaps in automated fibre placement?	#561 · Kohta Tanaka (Waseda University) Fabrication of Furan/Glass Fiber Composites Using Acid Adsorbent and Improvement of Their Mechanical Properties by Silane Treatment of Glass Fibers	#174 · Lukasz Figiel (University of Warwick) Modelling and experimental study of hydrogen permeation in polymer composites	#784 · Carlos Sandino (Universidad de Sevilla) Effect of Ply Thickness on Transverse Damage Tunnelling in Glass/Epoxy Laminates	#341 · Mohammad Rouhi (RISE Research Institutes of Sweden) Multiphysics Simulation of Linerless CFRP Tank for LH2 Storage	#669 · Moritz Liesegang (RPTU Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau) Processing and Repair of Fibre-Reinforced Polymers and Fibre-Metal Laminates by Power Ultrasonics
09:15					#395 · Nontanasorn Budninpech (University of Bristol) Effect of temperature and loading rate on the mode II interlaminar fracture toughness of glass fibre reinforced bioepoxy composites	#841 · Jan-Marten Sprenger (Fraunhofer IFAM) Efficient processing of biobased benzoxazines: A step towards sustainable biocomposite manufacturing through catalysed curing	#467 · Alexandre Morland (DELFT UNIVERSITY OF TECHNOLOGY) Assessing the impact of fiber angle deviations and gaps on the structural performance of variable stiffness laminates	#204 · Wim Van Paepegem (Ghent University, Mechanics of Materials and Structures) Development of recyclable vitrimer matrix systems for infusion processes in large-volume applications	#431 · Bernd Wetzel (Leibniz-Institut für Verbundwerkstoffe GmbH (IVW)) Hydrogen permeability of composites for type 5 hydrogen tanks	#450 · Gergely Czél (Budapest University of Technology and Economics) Mode II fracture toughness modified laminates: Damage development under out-of-plane loading and residual compressive strength	#400 · Hyoung Jun Lim (Gyeongsang National University) Finite element simulation of stamp-forming-induced deformation in thermoplastic composites	#1172 · Lukas Neumair (DLR e.V. Institute of Structures and Design, Center for Lightweight-Production-Technology) Displacement-Controlled Ultrasonic Welding of Carbon Fiber Reinforced LM PAEK Laminates - Increased Process Reliability and Repeatable Joint Properties
09:30		#244 · Bodo Fiedler (Hamburg University of Technology, Institute of Polymers and Composites) Influence of Fibre Misalignment and Temperature on the Compressive failure of GFRP	#834 · Kosuke Takahashi (Hokkaido University) Three-Dimensional Nano-Imaging of Interface Crack Growth Along Carbon Fibers Under Cyclic Loading	#385 · Stefanos Giannis (National Physical Laboratory) Instrumented nanoindentation at cryogenic temperatures: A method for fibre/matrix characterisation	#45 · Ziwen Xu (Harbin Institute of Technology) Investigation of scaling effects in the impact response of CFPR woven composites	#415 · Guillaume Vincent (Nantes University, IRT Jules Verne) Sustainable manufacturing of hollow parts from staple yarns and bladder-assisted RTM	#973 · Aranshu Modi (Delft University of Technology (TU Delft)) Lamination parameters for hybrid composite laminates	#1160 · Festus Ifeanyi Anagwu (Luxembourg Institute of Science and Technology) High-performance glass fibre polybenzoxazine vitrimer composite for aircraft interior application	#875 · Ibrahim Sebei (ENSAM) Towards Optimal Fabrication of Composite Hydrogen Pressure Vessels: Coupling Design and Manufacturing through WoundSim-Based Surrogate Optimization	#1090 · Theodoros Loutas (University of Patras) Physics-Informed Neural Network for Fracture Mechanics in Composite Structures	#509 · Paul Krauskopf (Groupe de Physique Des Matériaux (GPM INSA Rouen) / Safran Nacelles) Analysis of the thermo-mechanical behaviour of an aeronautical composite–metal bolted assembly undergoing a fire test	#1440 · Maryam Ahanpanjeh (Helmut Schmidt University) Hybrid Force and Trajectory Control for Improving Weld Quality in Robotic Continuous Ultrasonic Welding of CFR-TP
09:45		#1043 · Milo Shaffer (Imperial College London) From constituents to composites: the NextCOMP project to enhance compression performance	#1159 · Alice Pagnanini (Department of Materials Engineering, KU Leuven) Evolution of microstructural damage of aligned discontinuous carbon fibre-reinforced composites under in situ Synchrotron Computed Tomography	#482 · Nils Wieja (TUD Dresden University of Technology, Institute of Lightweight Engineering and Polymer Technology) Cryogenic cycling effects on the gas permeability of CF/LM-PAEK	#229 · Clement Watremez (ISL) Dynamic characterisation using laser impact loading of damage properties of UHMWPE-fibres based composites used in ballistic protection	#1295 · Mona Jamali Moghadam S (Université Côte d'Azur, Institut de Chimie de Nice, UMR CNRS 7272, 06108 Nice Cedex 2) Fast curing bio derived epoxy thermoset with tunable hardener systems for high performance industrial applications and demonstrated chemical recycling	#541 · Sergio Turteltaub (Delft University of Technology) Experimental and numerical characterization of buckling-induced skin-stringer delamination growth in thermoplastic composite panels	#208 · Sithiprumnea Dul (Laboratory for Advanced Fibers, Empa) Development of Overcoated Prepreg Filaments for Sustainable Composites	#1207 · Maria Grazia De Angeli (University of Edinburgh) Multiscale modeling and experimental characterization of semicrystalline polymers for hydrogen barrier applications	#298 · Isha Gupta (University of Southampton) Assessing Damage Modes in Architected Interpenetrating Metal- Polymer Phase Composites Using X-ray CT	#468 · Kaan Deniz (Bristol Composites Institute, University of Bristol) A STRONGLY COUPLED THERMO-MECHANICAL MODEL FOR THE SIMULATIONS OF THERMOPLASTIC COMPOSITES FAST PROCESSING	#864 · Bram Jongbloed (SAM XL) An alternative heating-phase control method for continuous ultrasonic welding of thermoplastic composites
10:00		#350 · Pinelopi Mageira (DTU Wind, Technical University of Denmark) Finite element modelling of unidirectional carbon fiber notched composite under compression using in-situ X-ray scanned fiber orientation data	#680 · Chih-Yu Chen (Chair of Carbon Composites, TUM School of Engineering and Design, Technical University of Munich) Microstructural Analysis of Compacted Continuous Fiber 3D Printed Parts Using In-Situ X-ray Computed Tomography	#1360 · Nikhil Bharat (AMADE, Analysis and Advanced Materials for Structural Design, Polytechnic School, University of Girona, Campus Montilivi, Edif. PII, E17003 Girona, Catalonia, Spain) Cryogenic permeability of LM-PAEK CFRP laminates under thermo-mechanical exposure	#1747 · Xiyao Sun (University of Oxford) Characterising damage mechanisms of CFRP laminates under high-strain-rate loading and extreme temperatures using synchrotron X-ray imaging	#572 · Justine Martin (COMPOSITEC) Development of sustainable composite for automotive applications	#733 · Lander Vertonghen (DMAS, ONERA, Université Paris-Saclay) Introducing fiber steering in a stacking sequence table for improved performance matching in a bi-level composite optimization	#1455 · Sandu Cibotaru (Université Côte d'Azur) Flavonoid-Derived Thermosets: A Dual Strategy for High Performance and Polymer Circularity	#1384 · Martin Starke (University of Technology Dresden, Insitute of Aerospace Engineering, Chair of Aircraft Engineering) Design and simulation of load-bearing hydrogen tank integrations in wing structures	#724 · Paulo Pereira (INEGI, Faculdade de Engenharia, Universidade do Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal) THE EFFECT OF MISMATCH ANGLE OF DOUBLE-DOUBLE COMPOSITE LAMINATES UNDER QUASI-STATIC AND FATIGUE LOADING CONDITIONS	#580 · Yu Wang (Laboratoire FAST,CNRS,Université Paris-Saclay) Avalanche description focusing on the twisted yarn under tensile loading	#287 · Edoardo Toscano (DTU Civil and Mechanical Engineering) Predictive Model for Temperature and Mechanical Strength in Ultrasonic Spot Welds of Binder-stabilized Glass Fiber Preforms
10:15		#441 · Dimitrios Bikos (Department of Mechanical Engineering, Imperial College London) BENCHMARKING MICROMECHANICAL FINITE ELEMENT MODELS OF UD-FRPS AGAINST IN-SITU COMPRESSION EXPERIMENTS	#924 · Sudip Bose (Henry Royce Institute, Department of Materials, University of Manchester) Rapid Inspection of GFRP Composites leveraging Digital Tomosynthesis: A Comparative Performance Study with X-ray CT	#1287 · Radovan Fridrich (National Physical Laboratory) Mode I fracture toughness at cryogenic temperatures: Is crack growth monitoring necessary?	#1411 · Karthik Ram Ramakrishn (University of Bristol) Effect of temperature and strain rate on the translaminar fracture of thermoplastic composites	#737 · Stefania Termine (R-NanoLab, School of Chemical Engineering, National Technical University of Athens) Innovative Carbonisation-Pyrolysis Process: Set-up of the reclamation line and CFRP recycling functionality assessment	#1381 · Javad Fatemi (Airbus Netherlands) Fiber Steering for Variable Stiffness Composites: A Technology Development Program for Next-Generation Rocket Engine Frames	#85 · Carol Rodricks (Bundesanstalt für Materialforschung und -prüfung (BAM)) Novel Recyclable Hierarchical Carbon Fibre/Epoxy Composites: Preserving Fibre Length and Orientation Using Elium®	#367 · Luz Aguilar (IMT Nord Europe, KU Leuven) Realistic fibrous structure of Elium-based filament wound hydrogen storage tanks	#619 · Mohamed Beshr (Technological University Dublin) Influence of Loading and Environmental Conditions on Adhesively Bonded Composite Joints: Assessing Controlled Polymer Ablation as a Surface Pre-Treatment	#947 · Jiaxue Li (Beihang University) Research on the Ablation Response Prediction Method for C/SiC Ceramic Matrix Composites	#881 · Daiki Tanabe (Kobe City College of Technology) Evaluation on Ultrasonic Welding Behavior and Joining Strength of CF/Epoxy Laminates and CF/PEEK Thermal Pultruded Rods Using Spread CF/PEI Semipreg Layer
10:30		#643 · Laura Rhian Pickard (Bristol Composites Institute, University of Bristol) Compressive Performance of Hierarchical Pultruded Rod Based Composites	#397 · Salaheddine Madi (Ku Leuven) Linking microstructure to strain localisation in fibre reinforced composites: a PCA-based analysis of in situ biaxial XCT–DVC experiments	#1410 · Jakub Tabin (Institute of Fundamental Technological Research, Polish Academy of Sciences) DIC-enhanced experimental platform with a multi-detector array for mechanical test of composite materials at 4 K and 77 K	#234 · Anna Williams (University of Bristol) Hot/Wet Interlaminar Fracture Characterisation of A Newly Developed Phenolic-Triazine Ester Composite System	#781 · Megha Rani (Leibniz-Institut für Verbundwerkstoffe GmbH) Comparative Study of Bio-Based and Conventional Epoxy Resins in Unidirectional Filament-Wound Coupons for Sustainable Hydrogen Storage Applications	#1154 · Arne Wulff (Delft University of Technology, Faculty of Aerospace Engineering) Quantum-Assisted Stacking Sequence Retrieval and Laminated Composite Design	#1461 · Veronica Ambrogi (DICMaPI, University of Naples Federico II) VITRIMERIC COMPOSITES BASED ON OH-RICH WASTE FILLERS	#1179 · Tibe Van Remoortel (KU Leuven) Spatial Geometric Uncertainty Quantification in Filament-Wound Composite Pressure Vessels	#1644 · Ibrahim Goda (LEM3, Arts et Métiers Paris Tech, Université de Lorraine) Numerical Investigation of Damage Evolution and Energy Absorption in 3D Auxetic Sandwich Structures Under High-Velocity Impact	#1600 · Athina Maria Theochari (NTNU) A parametric diffusion-deformation study for polymers used in the hydrogen transport infrastructure	#1323 · Awais Awan (Institute of Materials Science, Joining and Forming (IMAT), Professorship "Aviation Materials and Manufacturing Techniques", Graz University of Technology) Wood-polymer hybrid joints produced via ultrasonic energy for lightweight structures
10:45		#746 · Kasper Foss Hansen (Department of Mechanical Engineering, Imperial College London) Non-linear compressive response of aligned recycled carbon fibre composites through 4-point bending of sandwich beams	#1044 · Ali Barzegar (Sabanci University) Microscale Air Permeability Characterization of LAFP Composites via Micro-CT Imaging and Comparison with Macroscale Pulse-Decay Measurements	#1045 · Jonas Appels (DLR Institute of Lightweight Systems) Liquid Hydrogen Testing of Tubular CFRP Specimens	#1235 · Fulvio Pinto (University of Bath, Department of Mechanical Engineering) Effect of Moisture Absorption on the Dynamic Compressive Behaviour of Polymeric Syntactic Foams	#351 · Inge Schlapp-hackl (Aalto University) Transforming Textile Waste into Durable Composite Fibers for a Sustainable Future.	#1237 · Roeland De Breuker (Delft University of Technology) A review of 20 years aeroelastic tailoring research at the Delft University of Technology	#831 · Teahoon Park (Korea Institute of Materials Science) Sustainable Dual-Nucleation Engineering for Fast-Crystallizing, High-HDT PLA	#216 · Amir Mehrabianbardar (Arts et Metiers Paris tech.) Multiscale experimental analysis and AI-assisted optimization of bio-based UDCF/ PA11 composite laminates via VBO processing	#96 · Otavio Zimmermann De A (1) Repairability and residual strength of impacted carbon/PPS laminates in a marine environment	#1487 · Dariusz Perkowski (Bialystok University of Technology) Numerical Analysis of Coupled Thermomechanics, Kinetics and Residual Stress Development in Fibre-Reinforced Composites Using Fast-Curing Resins	#1414 · Manuel Francis Roth (Walter-and-Ingeborg-Herrmann Chair for Power Ultrasonics and Engineering of Functional Materials (EFM), Department of Sustainable Systems Engineering (INATECH), Faculty of Engineering, University of Freiburg) Ultrasonic welding of 3D-printed lignocellulosic biocomposites with integrated energy directors
11:00–11:30	COFFEE BREAK											
11:30–12:45	SESSION 2											
	Session →	**SS11 · Advanced Composite Materials and Structures: Multifunctional Design, Damage Diagnostics, Testing, and Modeling**	**SS29 · Multi matrix composites – design principles and processing technologies**	**SS07 · Cryogenic Testing and Material Characterisation**	**4.6 Novel Test Methods**	**5.14 Sustainable Manufacturing**	**2.7 Hybrid and Hierarchical Composites**	**7.11 Recycling, Remanufacturing, and Circular Economy**	**T1 · Aerospace & Transport**	**5.6 Automated Placement Technologies**	**6.3 Energy Storage and Harvesting**	**SS22 · Toroidal Propellers for Efficient and Sustainable Aviation - The TorPropel project**
11:30		#852 · Ioannis Katsivalis (University of Bath) Adhesive bonding of thin Tow-Based Discontinuous Composites: Damage characterisation and analysis	#230 · Michael Müller-Pabel (Institute of Lightweight Engineering and Polymer Technology (ILK), TU Dresden) Recyclable Building Block Structures based on local use of cleavable resin: manufacturing and separation studies	#1344 · Andrew Rhead (University of Bath) Overview of cryogenic mechanical testing at the University of Bath	#1532 · E'ouann Kerino (Laboratory for Multiscale Mechanics (LM2), Polytechnique Montréal) Mode I fracture characterization of high-temperature 3D-printed PEI-CF using an adhesion-inhibition pre-cracking methodology	#502 · Eunice Cunha (FIDAMC - Foundation for the Research, Development and Application of Composite Materials) Sustainable Vitrimer CFRPs: Manufacturing Pathways and Reprocessing Capabilities	#176 · Valter Carvelli (Politecnico di Milano) DELAMINATION CHARACTERIZATION AND TENSILE DAMAGE EVOLUTION IN UNIDIRECTIONAL ALL-CARBON HYBRID LAMINATES	#503 · Mónica Peñas Caballero (Foundation for the Research, Development and Application of Composite Materials (FIDAMC)) Valorization of prepreg scrap through calendaring-based recycling	◆*#265 · Prakash Jadhav (SRM University AP)* *Design Optimization of Metal Leading Edge Cap Joint in a Composite Fan Blade of Aircraft Engine subjected to Static Flexure and Thermal Loading*	#1728 · Hong Ma (Northwestern Polytechnical University) Manufacturing CF/PEEK composites by laser-assisted tape placement with elevated tool temperature for crystallinity and interphase control	#1772 · Suraj Kalia (Indian Institute of Technology Jammu) Design of Biphasic Structural Battery Electrolytes and Their Thermo-Mechanical Characterization	#289 · Noor Rehman (TUM School of Engineering and Design, Chair of Carbon Composites, Technical University of Munich) An Experimental–Numerical Approach to Assess Tooling-Driven Process-Induced Distortions in Composite Manufacturing
11:45		#1131 · Angel Mora (York University) Numerical modeling of magnetorheological polymers fabricated with the aid of a magnetic field	#237 · Dong Gi Seong (Pusan National University) A multi-drop filling process of multi-matrix on multi-fabric for deployable composites fabrication	#752 · Martin Liebisch (Deutsches Zentrum für Luft- und Raumfahrt e.V.) The Scaled Half Tank Test	#527 · Maialen Garaigordobil (IDEKO S.coop) Validation of a Novel Wireless Monitoring Approach for the Filling and Curing Stages in Vacuum-Assisted Infusion of Carbon Fiber-Reinforced Composite Parts for Aerospace	#1643 · Fidel Orlando Valega M (TNO) Towards new products from recycled composites via fused granulate fabrication	#158 · Maria Asun Cantera (University of the Basque Country UPV/EHU) Synthesis of Double-Double Hybrid Laminates Exhibiting Unconventional Thermal Expansion Behaviour	#604 · Harper Schäfer (Technische Universität Braunschweig) Closed-Loop Recycling of Resistance-Welded Thermoplastic Composite Joints: Influence of Heating Element Material on Disassembly and Rewelding	◆*#755 · Paul Nixon (University of Strathclyde)* *Rain Erosion Resistance of Laser Perforated Carbon Fibre Composites for Leading Edge Aerospace Applications*	#1086 · Jonas von Heusinger (Deutsches Zentrum für Luft- und Raumfahrt e.V.) Efficiency of different compactor types for Joule heating assisted thermoplastic cfrp winding processes	#568 · Jawon Ha (Korea Advanced Institute of Science and Technology) Transition-Metal Nanowire–Integrated Carbon Fiber Electrodes for Structural Batteries	#1520 · Alkiviadis Paipetis (UNIVERSITY OF IOANNINA) TheTorpropel Project: Concept, Objectives, Methodologies, Impact
12:00		#688 · Victor Lancrenon (Laboratoire des Composites ThermoStructuraux (LCTS) / Safran Ceramics) Identification of the damage mechanism in a ceramic matrix composite / protection (CMC-EBC) system under tensile test	#927 · Richard Grothe (TUD Dresden University of Technology / ILK Institute of Lightweight Engineering and Polymer Technology) RTM Co-Infiltration of Continuous Fiber Composites Using Two Epoxy Matrix Systems: Process Control and Interphase Analysis	#795 · Suzanne Laik (CETIM) Development of quasi-static testing and characterization of CF/PEI composite under Liquid Hydrogen immersion	#121 · Benjamin Lacombe (Safran Ceramics) Novel Approach for Non-Propagation Threshold Evaluation under Fatigue in Ceramic Matrix Composites	#170 · Clement Broggi (Aerospace Structures and Materials Department, Faculty of Aerospace Engineering, Delft University of Technology) Material heterogeneities in Frontal Polymerization	#731 · Tommaso Verdini (Università Politecnica delle Marche) Mechanical Performance of Hybrid CFRP/BFRP Filament-Wound Tubular components	#848 · Ilaria Rossitti (Polymers Composites and Hybrids (PCH), IMT Mines Alés) INVESTIGATING THE EFFECTS OF FIBER SURFACE TREATMENT AND RECYCLING ON OUT-OF-PLANE WICKING IN YARNS	◆*#747 · João Pedro Alves (INEGI - Institute of Science and Innovation in Mechanical and Industrial Engineering)* *Structural Design of a Biocomposite Monocoque Chassis for a Light Electric Two-Wheeler*	#64 · Jan-Erik Rath (Hamburg University of Technology, Institute of Aircraft Production Technology) Towards Automating Hand-Layup: A Preliminary Study on Robotic Draping of Woven Glass Fiber Fabric	#1225 · Frédéric Laurin (ONERA, Paris-Saclay University) Mechanical and electrical characterization of an aeronautical out-of-autoclave multi-functional composite structure containing solid state battery cells	#1146 · Paschalis Oikonomou (Department of Mechanical Engineering, Aristotle University of Thessaloniki) A parametric geometry framework to introduce variability in toroidal propeller designs
12:15		#253 · Qixiang Jiang (Univeristy of Vienna) Structural battery composites from multifunctional carbon fibre reinforced high performance polymer prepregs	#394 · Achyuth Ram Annadata (TUD Dresden University of Technology) Multi-matrix fiber-reinforced composite with shape memory alloys integrated through textile knitting technology	#1456 · Aravind Sasikumar (AMADE, Polytechnic School, Universitat de Girona, Campus Montilivi s/n, 17073 Girona, Spain) Advanced fracture and damage tolerance testing for liquid hydrogen composite tanks	#686 · Luka De Block (Ghent University) Compliance Free Mechanical Characterization of Single Carbon and Glass Fibers Through a Versatile Video-Extensometry Method.	#1218 · Olivia Gordon (The University of Auckland - Centre for Advanced Materials Manufacturing and Design) Plasma-Enhanced Carbon Fibre-Reinforced Thermoplastic Tapes Fabricated from Waste Plastic Blends	#1185 · Tarık Kara (Middle East Technical University, Department of Aerospace Engineering) Effect of Stacking Sequence on Carbon/Glass Hybrid Composites under Impact Loading	#1089 · Diwakar Singh (Department of Aerospace Structures & Materials, Delft University of Technology) Spatial correlation of fibre distributions in recycled carbon fibre composites using advanced image processing	◆*#956 · Seunghyeon Kang (Graduate School of Aerospace and Mechanical Engineering, Korea Aerospace University)* *Hydrogen-rich 3D-printed PEEK/PE gyroid radiation shielding composites for LEO satellite applications*	#360 · Moritz Lennartz (Institut fuer Textiltechnik, RWTH Aachen University) Human-Inspired Robotic Prepreg Sheet Layup using Knowledge Engineering from Manual Draping Demonstrations	#1009 · Shimeng Qian (Imperial College London) Multiphysics modelling of structural supercapacitors subjected to mechanical damage	#1296 · Angelos Ntaflos (Department of Materials Science & Engineering, University of Ioannina) 3R Composite Manufacturing Technologies: Vitrimer Prepreg Innovations and R2R Processing
12:30		#1387 · Ceren Yildirim (Sabanci University) Impact Damage Evolution and Compression After Impact Performance of CF/PEKK Laminates at Low, Room, and Elevated Temperatures	#785 · Tales de Vargas Lisboa (Leibniz-Institut für Polymerforschung Dresden e.V.) On the Natural Frequencies of MM-FRP Components with Polyurethane Soft Phases	#704 · Jiraphant Srisuriyacho (University of Bath) Experimental study on cryogenic bending properties and failure mechanisms of carbon fibre reinforced polymer down to 30K	#1128 · Abishek Baskar (Delft University of Technology) BIAXIAL TESTING APPARATUS AND SPECIMEN DESIGN FOR FIBRE POLYMER COMPOSITES	#1686 · Kim Sjödahl (Exel Composites Plc) Forward-thinking sustainability for composites	#59 · Nicole Motsch-Eichmann (Leibniz-Institut für Verbundwerkstoffe) CFRP-reinforced hollow aluminum struts for lightweight load-bearing pressure vessels	#1477 · Rishi Raj (EPFL) Development of surface sizing to revive the interfacial properties of recycled glass fibers with Polypropylene		#1513 · Philippe Olivier (ICA, University of Toulouse, UMR CNRS 5312) Mitigation of process-induced stress in unsymmetrical laminates via vitrimer relaxation	◆*#423 · Dominic Palubiski (Bristol Composites Institute)* *Manufacturing structural power devices; challenges and solutions of novel material systems* ◆*#845 · Hyunjoon Yoo (KAIST)* *Hybrid Lithium-Ion Thin-Film Batteries for Fast Ion Transport and High Areal Capacity*	#1028 · Dimitrios Fakis (Brunel Composites Centre, Brunel University London) Integrated Monitoring Solution for Enhanced Toroidal Propeller Safety
12:45–13:45	LUNCH											
13:45–14:15	2 KEYNOTES (rooms A & B)											
14:15–15:15	SESSION 3											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength**	**SS29 · Multi matrix composites – design principles and processing technologies**	**SS07 · Cryogenic Testing and Material Characterisation**	**3.14 Micromechanics**	**SS26 · EcoComposites Cluster - Sustainability of composites in the transportation sector**	**SS06 · CirKle - Recycling materials for aircraft cabin components**	**2.1 Bio-Derived and Sustainable Composites**	**1.4 Defense**	**SS27 · Nature-Inspired Composites: From Natural Fibres to Biomimetic Structures**	**7.9 Maintenance and Repair**	**2.3 Matrix Materials: Polymers, Metals, Ceramics, Concrete, Geopolymers**
14:15		#626 · Mounika Chowdary Karla (University of Bristol) Thermoelastic stress analysis of translaminar compressive failure in carbon fibre-reinforced composites	#726 · Axel Spickenheuer (Leibniz-Institute für Polymerforschung Dresden e. V.) Manufacturing and Applications of Soft-rigid Multi-Matrix Fiber-Reinforced Plastics	#1652 · Nicolas Abouab (Arts et Métiers Institute of Technology (CNRS, Bordeaux INP, I2M, UMR 5295)) Multi-scale Damage Assessment of Composites under Cryogenic Conditions	#1333 · Pedro Camanho (Universidade do Porto) Micromechanical modelling of inelastic deformation of fibre-reinforced polymers accounting for strain gradients	#658 · Fernando Cepero-Mejias (Centre for Future Transport and Cities (CFTC), Coventry University) A MULTIDISCIPLINARY OPTIMISATION FRAMEWORK FOR FIBRE-REINFORCED COMPOSITE MATERIALS	#337 · Souvik Chakraborty (Dept. Sustainability Technologies, Institute of Lightweight Systems, German Aerospace Center (DLR),) Sustainable Composites for Cabin Monuments – Recycling of Resins with tailored FST Properties	#996 · Natalia Victoria Dos S (Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale (DICMaPI) - Università di Napoli Federico II) Enzymatic Surface Treatment to Enhance Interfacial Performance of Hemp Fibers in PLA Biocomposites	#993 · Stavros Tsantzalis (Hellenic Air Force Academy) Investigation of Dorsal Fin Structural Failures in single engine trainer aircraft: Material Degradation, Adhesive Performance, and FEM-Based Repair Optimization	#612 · Maria Kashtalyan (University of Aberdeen) Bio-inspired Metal-Composite Joints with Stiffness Gradients	#1505 · Spyridon Psarras (University of Patras) Active Learning–Based Optimization of Stepped Composite Repairs	#1382 · Ahmad Awdi (CEA Marcoule) Multi-scale quantitative analysis of potassium geopolymer: from macro to nano scale
14:30		#665 · Yousef Rifai (University of Bristol) The longitudinal compressive response of glass/carbon hybrid composites with different modulus carbon fibres	#1209 · Dmitry Ivanov (University of Bristol) Multi-matrix composites: application rationales and manufacturing strategies	#1180 · Serafín Sánchez-Carmon (Universidad de Sevilla) CHARACTERISATION AT ROOM AND LOW TEMPERATURE OF CARBON/EPOXY MATERIAL AFTER LONG-TERM CRYOGENIC EXPOSURE	#1197 · Christian Breite (Department of Materials Engineering, KU Leuven) Physics informed geometric generator for unidirectional fibre reinforced composite microstructures with periodic boundaries	#231 · Fernando Ramos Saz (AIMPLAS) Thermoplastic Pultrusion of Bio-PA6 Hybrid Carbon Fiber Laminates with Enhanced Multidirectional Performance	#662 · Jens Bachmann (DLR German Aerospace Center) Potential environmental impacts of production and recycling for a representative state-of-the-art aircraft cabin structure	#501 · Laura Aliotta (University of Pisa) Investigation of Bio-PA11/Coconut Fiber Composites for additive and injection molding applications through Ludovic® Based Process Optimization	#485 · Daniel Barros (Fibrenamics - Institute for Innovation in Fiber and Composites Materials) Hybrid Reinforcement Structures for Optimised Ballistic Performance	#1453 · Carlos Ivan Cardona Ga (Luxembourg Institute of Science and Technology) HIERARCHICAL DESIGN PARAMETERS DRIVING THE STRAIN EVOLUTION IN BAMBOO TECHNICAL FIBERS	#511 · David May (Faserinstitut Bremen e.V.) Repair of Thermoplastic Composites with Customized AFP Patches: Analysis of the Heat-Affected Zone and Its Influence on Repair Quality	#697 · Johann Faust (TUD Dresden University of Technology) Experimental characterisation and modelling of radiation transfer in UV-reactive fibre-reinforced composites
14:45		#774 · Cameron Woodgate (Department of Chemistry, Imperial College London) Linking Carbon Fibre Microstructure to the Intrinsic Compressive Performance of Carbon Fibre Composites	#615 · Lorenzo Di Marco (Politecnico di Milano Department of Chemistry, Materials and Chemical Engineering "Giulio Natta") Delamination and Repair in Epoxy-Vitrimer Multi-Matrix Composites	#1192 · Elena Correa Montoto (Universidad de Sevilla) INTERLAMINAR AND INTRALAMINAR TOUGHNESS OF CARBON/EPOXY MATERIAL AFTER LONG-TERM CRYOGENIC EXPOSURE	#813 · B.A. Wani (INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI) Fatigue Life Estimation of Cross-ply CFRP Composite Laminates: An Experimental & Computational Micromechanical RVE Approach	#1688 · Florian Part (Institute of Waste Management and Circularity, Universität für Bodenkultur Wien) Sustainable and recyclable thermosets for the automotive, aerospace sectors and beyond	#601 · Cedric Tschentscher (Institute of Polymer Materials and Plastics Engineering, Clausthal University of Technology) Recyclable Sandwich Components - Using Hybrid Vitrimers for Disassembly	#1269 · Sophie Bistac (Université de Haute Alsace - LPIM) Surface characterization of agro-industrial by-products for composites applications	#571 · David McDonogh (Von Roll Schweiz) Flexible composite protection for a dynamic world	#1580 · Yugal Kishor Sharma (Department of Mechanical Engineering, Malaviya National Institute of Technology Jaipur) Sustainable Jute, Coarse Sheep Wool and GGBFS Reinforced Epoxy Composites: Fabrication via VARTM and Performance Evaluation	#745 · Alexander Payne (University of Strathclyde) Interfacial Performance of Vitrimers with Glass Fibres: A Comparative Study with Insight into Post-Healing Adhesion Behaviour	#628 · Lissy Flechsig (Leibniz-Institut für Polymerforschung Dresden e.V.) Novel Approach for an open-pore micro-structured interphase in carbon concrete composites
15:00		#800 · Gursahib Singh Bhatia (Trinity College Dublin) INVESTIGATION OF COMPRESSIVE FAILURE OF NOVEL HYBRID BORON-CARBON FIBRE REINFORCED COMPOSITES OBSERVED IN-SITU BY COMPUTED TOMOGRAPHY	#672 · Morgan Renard (Leibniz-Institut für Polymerforschung Dresden e. V.) Online Spinning of TPU/GF Hybrid Yarn for Thermoplastic Multi-Matrix Fiber-reinforced Plastics	#885 · Anna Volpi (Università degli Studi di Enna "Kore") Experimental Characterization of the Relationship Between Crack Network Parameters and Permeability of Composite Coupons after Cryogenic Thermal Cycling	#217 · Sergio Horta Muñoz (Universidad de Castilla-La Mancha) Influence of relative fibre geometry on crack initiation and growth in unidirectional composites under transverse and shear loads	#735 · Burak Akdeniz (Aerospace Structures and Materials Department, Faculty of Aerospace Engineering, Delft University of Technology) (Elasto)capillary Effects in the Slurry Impregnation Method in for Manufacturing Unidirectional Thin Ply Thermoplastic Tapes	#1106 · Katharina Haag (Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM) Closing the loop: full recyclability of composite structures for cabin interior through adapted vitrimeric polymers meeting the application specific requirements	#321 · Lars Wollert (ITA RWTH Aachen University) Use of bio-based and recycled composites in sports and leisure products	◆*#413 · Vincent Pichot (French-German research institute of Saint-Louis, ISL, 5 rue du Général Cassagnou)* *Ageing effects in transparent protective systems*	#1863 · Clare Garing (KU Leuven) ELUCIDATING THE MECHANISM BEHIND ENHANCED FLAX FIBRE MECHANICAL PERFORMANCE AFTER CYCLIC MOISTURE CONDITIONING	#1460 · Sara Keiko Murase (Eurecat, Technological Center of Catalonia – Polymeric and Composite Processes Unit) Microcrack repair in vitrimer-based composite matrices: A pathway to durable and reprocessable structures	#407 · Jean-Charles Malenfant (SAFRAN CERAMICS) Behaviour of unidirectional Oxide CMC for aeronautical applications
15:15–16:30	POSTER DISCUSSION (+ COFFEE BREAK)											
16:30–18:00	ESCM GENERAL ASSEMBLY											

ECCM22 — WEDNESDAY (08:00–18:00) — PRELIMINARY TECHNICAL PROGRAMME (version of 7 June 2026)

◆ + italic = Short oral (7 min) · plain = Full oral (15 min) · Minor changes to the programme may occur.

Time	Activity	A	B	C	D	Forum	M1	M2	M4	M5	Balder	Odin
08:00–08:45	PLENARY 3											
09:00–11:00	SESSION 1											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength**	**SS19 · Fatigue and Damage Mechanics of composite and composite structures**	**SS32 · Durability of polymers and fibre reinforced polymer composites**	**5.2 Additive Manufacturing**	**SS20 · History of composites**	**7.11 Recycling, Remanufacturing, and Circular Economy**	**2.1 Bio-Derived and Sustainable Composites**	**3.13 Lightning Strike and Fire Safety**	**1.8 Renewable Energy (e.g. Wind, Solar)**	**T3 · Dynamic, Impact & Crash**	**6.3 Energy Storage and Harvesting**
09:00					#1536 · Cédric Courcoux (Polytechnique Montréal, Laboratory of Multiscale Mechanics) Development of a Digital Twin for Additive Manufacturing Using Kalman Filtering and In-Situ Monitoring	#836 · Ignaas Verpoest (Composite Materials Group KU Leuven (Belgium)) The History of Composites: an introductory overview	#478 · Eike Krull (Faserinstitut Bremen e.V.) Performance-Preserving De-Joining of Overmolded Sections from Organosheets using Ferro-Magnetic Particles and Induction Heating	#1262 · Alberto Jiménez Suárez (Universidad Rey Juan Carlos) Multifunctional and sustainable hybrid composites based bio-epoxy reinforced with basalt fiber and short recycled carbon fiber	#897 · Muhammad Ali (Brunel Composites Centre) Capturing Localised Electro-Thermal Effects by Incorporating Spatially Varying Property Fields in the Simulation of Lightning Strike on Composite Structures	#1117 · Pierre Gerard (ARKEMA) Influence of Thermoplastic Composite Blades on Structural Damping and Load Reduction in Wind Turbines	#720 · Mohammadali Shirinbaya (Arts et Metiers Institute of Technology, CNAM, CNRS, PIMM) Dynamic Post-Fatigue Response of Composite Materials: A Multi-Scale Damage Analysis	#1301 · Rauan Al-Emrani (Chalmers University of Technology) Electro-chemo-mechanical modelling of the all-fibre structural battery
09:15					#126 · Yashi Zheng (The University of Manchester) Design of Lightweight Hollow Structures using Natural Filler-Reinforced PLA Composites for Engineering Applications	#227 · Christophe Binetruy (Nantes Université, Centrale Nantes, GeM, UMR CNRS 6183) Historical Perspective on Modeling of Processing of Polymer Composites	#1097 · Elisabete F. Reia Da C (SINTEF AS) Towards enhanced closed-loop recycling of sand-filled glass fibre composites	#1158 · Liisi Tampere (Estonian University of Life Sciences) Polyester-cotton hybrid mycelium composites for semistructural applications	#272 · Benoit Vieille (Groupe de Physique des Matériaux) Meso-Structure-Based Thermomechanical Modelling of Carbon Fibre Reinforced Thermoplastic Laminates Subjected to Kerosene Flame: Porosity Nucleation, Growth and Mechanical Consequences	#1684 · Gülnur Başer (METYX-Telateks A.Ş.) Development of a Lightweight, Impact-Resistant, and Innovative Composite Photovoltaic Module for Vehicle-Integrated Applications	#1397 · Shicong Xu (School of Aeronautics, Institute of Extreme Mechanics, Northwestern Polytechnical University) High-Speed Projectile Impact Damage and Finite Element Simulation of 2D-SiC/SiC Composites	#635 · Cintia Mateo-Mateo (AIMEN Technology Centre) Development of advanced Carbon Fibre-based electrodes towards their integration into high-performance Structural Supercapacitors
09:30		#1010 · Zengshan Li (Beihang University) Exploration and Reflections on Compressive Failure of Composite structures	#440 · Maik Gude (TUD Dresden University of Technology, Institute of Lightweight Engineering and Polymer Technology (ILK)) Fatigue life analysis for adhesive bonds in large FRP structures with heterogeneous property profiles	#1372 · José Sena-Cruz (ISISE, ARISE, University of Minho) Weathering durability of pultruded GFRP composites with polyester and vinyl ester matrices: Accelerated laboratory vs. natural ageing	#603 · Jesper Hesselvig (Aarhus University) Numerical-Experimental Print-Scale Investigation of PA11 Short-Fiber Composites in SLS	#273 · Veronique Michaud (EPFL STI IMX LPAC) Citius, altius, fortius: the crucial role of composites in sports	#1002 · Yixue Zhang (KU Leuven) Recycling glass fibres from thermoset epoxy composites by a mild catalytic thermo-chemical recycling method	#293 · Ivo Liepa (Delft University of Technology) Fatigue-creep interaction in hemp fibre thermoplastic composites	#1036 · Bibhuti Bikash Kagyung (IIT Bombay) Damage Mitigation in Carbon Fiber Reinforced Polymer Laminates Subjected to Lightning Strikes using Conductive Carbon Black and Retrofitting Technique	#835 · Anastasiia Larionova (Technical University of Denmark, Department of Wind and Energy Systems) Hemp-based composites usage for a 12.6 m wind turbine blade	#928 · Mohamed Amine Ajmi (ESTACA Laval, LAUM - Maine University, LA2MP - ENIS - University of Sfax) Experimental investigation of the vibrational characteristics of 3D printed biocomposite sandwich beams with periodic cores	#122 · Zhao Sha (UNSW) Fire resistant polymer electrolyte for structural energy storage composites
09:45		#513 · Deniz Sayinbas (Shaping Matter Lab, Faculty of Aerospace Engineering, Delft University of Technology) Flax Composites with Improved Interfacial and Compressive Behaviour Through Bacterial Calcium Carbonate Biomineralization	#1338 · Chunting Yu (School of Aeronautics, Northwestern Polytechnical University) In-plane shear progressive damage analysis of multiaxial three-dimensional woven composites	#998 · Christina Scheffler (Leibniz Institute of Polymer Research Dresden) Chemical Corrosion of Glass Fibers in Composites - Mechanisms, Tensile Strength Degradation and Weibull Analysis	#609 · Hendrik Ostrowski (Aarhus Universitet) X-ray µCT microstructure correlated with mechanical properties in short-fibre-reinforced SLS printed composites	#290 · Martine Wevers (KU Leuven, Department of Materials Engineering) The history of nondestructive testing (NDT) on fibre reinforced polymer composites	#458 · Essi Sarlin (Tampere University) Combined resizing and binding process for recycled carbon fibre mats for improved composite properties	#701 · Shaghayegh Elahi (1 Faculty of Built Environment, Tampere University) Dynamic Mechanical Characterization of Mycelium-Wood Particle Composite for Temperature Sweeps with Finite Element Analysis Support	#551 · Behnam Ashrafi (National Research Council Canada) Silver-based molecular inks for lightning strike protection of carbon fiber reinforced polymer composites	#1195 · Lourdes Blanco Salgado (Aimen Technology Centre) Integration of Embedded Sensor Systems for Process and Structural Health Monitoring in Smart and Sustainable Wind Turbine Blade Components	#155 · Hongyan Wang (Imperial College London) Design and Finite Element (FE) Analysis of Helicoidal and Double-Double (DD) Carbon Fibre-Reinforced Polymer (CFRP) Laminates for Improved Low-Velocity-Impact (LVI) Damage Tolerance	#173 · Phan Hoang Dao Nguyen (Aarhus University) Segmented Rim Design for High Performance Flywheel Energy Storage System
10:00		#753 · Guillaume Seon (University of Texas at Arlington) Computer Graphics–Based Generation of 3D CFRP Micromodels and the Effect of Fiber Misalignment Phase Angle on Compressive Strength	#1587 · Lucio Maragoni (Department of Management and Engineering, University of Padova) Effect of defects on fatigue crack initiation in carbon/epoxy laminates	#1424 · Alice Mija (Université Côte d'Azur) High performance biobased thermosets containing dynamic covalent bonds	#67 · Antonios Stamopoulos (University of L'Aquila, Department of Industrial and Information Engineering and Economy) Progressive Reinforcement Effects of Continuous Carbon Fibre Layers in PETG-Based 3D-Printed Composites	#592 · Hans Lilholt (Wind Energy Materials and Components Division, Department of Wind and Energy Systems, Technical University of Denmark) No wind energy without composites: The early years as seen from Denmark	#600 · Arthur Wieland (Universität Rostock (University of Rostock)) Optimizing Subcritical Hydrolysis Degradation of Composite Matrices to Enable Carbon Fiber Recycling	#1722 · Omar Elhawary (University of Bath) Development and Characterization of a Novel Semi-Bio-Based Thermoset System for High-Stiffness Flax Composites.	#1244 · Su Jeong Heo (Pusan National University) Development of CFRP Incorporating CNT Fibers for Reducing Joule Heating and Shock Wave Damage under Lightning Strikes	#1317 · Hao Peng (Hunan University) Mechanical Interlocking Design of Wavy Metal Sleeves to Enhance Fatigue Performance of Composite-Metal Joints in Wind Turbine Blade Roots	#532 · Wanlu Li (École nationale supérieure d'arts et métiers - LAMPA) Numerical and Experimental Study of Low-Velocity Impact Damage in Composite Laminates via a Dynamic Phase-Field Framework	#1378 · Odysseas Kakarelidis (Department of Aeronautics, Imperial College London) Mechanical properties and damage evolution in carbon aerogel modified carbon fibre electrodes
10:15		#466 · Pierre-Yves Mechin (Southern Spars) Understanding Compressive Instability Mechanisms in High-Modulus Carbon Fibre Systems	#1208 · Prabhjot Singh (Department of Textile and Fibre Engineering, Indian Institute of Technology Delhi) Synergistic Effects of Nanofiller Reinforcement and Surface Treatment on the Flexural Fatigue Behaviour of 3D-Woven Core based Metal-faced Sandwich Composites	#1385 · Ceren Yildirim (Sabanci University) Impact of Environmental Conditions on the Fracture Toughness of CF/PEKK Composites and Their Adhesively Bonded Joints for Aerospace Applications	#82 · Dominik Leubecher (1) Process-Relevant Relaxation and Reptation Times in Thermoplastics for Large-Scale Additive Material Extrusion: A Thermorheological Characterization	#610 · Yentl Swolfs (KU Leuven, Department of Materials Engineering) The history of fibre-hybrid composites	#184 · Wei-Lin Chang (HTWK Leipzig) Feasibility of Reusing CFRP Wind Turbine Elements as Load-Bearing Secondary Structures	#948 · Winston Lindqwister (Technische Universiteit Delft) Multiscale Computational Design of Mycelium-Based Hierarchical Composites	*◆#490 · Julie Vacandare (INSA Rouen Normandie, Univ Rouen Normandie, CNRS, Normandie Univ, GPM UMR 6634)* *Comparative study of the flexural behavior of carbon fibers reinforced PEEK laminates with different lay-ups after exposure to a kerosene flame* —— *#507 · Geoffrey Neale (Centre for Materials, Faculty of Engineering and Applied Sciences, Cranfield University)* *Lightning strike damage suppression in copper z-pinned carbon fibre composites*	#100 · Hyunbum Park (Department of Mechanical Engineering, Kunsan National University) Study on Defect Detection Methods of Composite Blades for Large Wind Turbine	#1862 · Sabrina Khammassi (UTTOP Tarbes) Crashworthiness capability of thin-walled hybrid wood–composite tubes under axial crushing: Influence of spiral-wound architecture and fiber material orientation	#827 · Rajat Sharma (Durham University) Bicontinuous Electrolytes for Structural Supercapacitors
10:30		#523 · Krisztián Hertelendy (Department of Industrial and Materials Science, Chalmers University of Technology) Compressive strength prediction with a micromechanics-inspired material model	#434 · Dennis Gibhardt (Hamburg University of Technology) Effects of Matrix Choice and Environmental Factors on the Fracture Toughness, Damage Progress and Fatigue Lifetime of GFRP	#791 · Andrejs Krauklis (Latvia University of Life Sciences and Technologies (LBTU)) Decoding Environmental Drivers of Glass Fiber Dissolution in Composite Materials	#573 · Ahmad Shawki Charkieh (Vrije Universiteit Brussel (VUB)) IN-SITU PROCESS MONITORING AND RESIDUAL STRAIN DETECTION IN 3D PRINTING VIA OPTICAL FIBER SENSING	#1281 · Alain Bourmaud (Université Bretagne Sud) From Egyptian Sails to Modern Composites: The Sustainable Journey of Natural Plant Fibres	#617 · Shiva Mohammadkarimi (KTI – Plastics Technology Group, Faculty of Mechanical Engineering and Thuringian Center of Innovation in Mobility, Technische Universität Ilmenau) Beyond Processing Parameters: Strip Alignment as the Key to High-Performance Recycled CFRTP via Direct Compression Moulding	#139 · Clare Garing (KU Leuven) Elucidating the mechanisms behind enhanced flax fibre composite mechanical performance after cyclic moisture conditioning	*◆#1214 · Hesam Badri (Brunel Composite Centre)* *Anisotropic AC/DC Electrical Conductivity Mapping of CFRP: From Single-Fibre Characterisation to Multi-Scale Electro-Thermal Modelling Using a Novel multi-Probe Method* —— *◆#1695 · Roland Petrény (Department of Polymer Engineering, Faculty of Mechanical Engineering, Budapest University of Technology and Economics)* *High-performance, conductive and sustainable PA6-based filaments for 3D printing with reclaimed carbon fibres and conductive fillers*	*◆#1181 · Philipp Ulrich Haselba (Danmarks Tekniske Universitet - DTU Wind and Energy Systems)* *Strain-Dependent Mechanical Properties of Hemp Fibre Composites and the Implications for Wind Turbine Blade Design*	#545 · Christian Hild (Institute of Lightweight Engineering and Polymer Technology, TUD Dresden University of Technology) Dual-Tailoring of Fiber and Matrix Architecture for Failure-Resistant High-Speed Composite Impellers	#922 · Fatemeh Mokhtari (Department of Materials Engineering, KU Leuven) Polydopamine-Coated $BaTiO_3$ Nanoparticles and Annealing Effects on the Piezoelectric Response of Composite Nanofibers at High-Frequency
10:45		#953 · Takayu Nishioka (The University of Tokyo) Compressive strength of self-healing vitrimer composites: Effect of the resin ductility and repairability	#364 · Aravind Premanand (Department for Sustainable Systems Engineering (INATECH), Faculty of Engineering, Walter-and-Ingeborg-Herrmann Chair for Power Ultrasonicsand Engineering of Functional Materials (EFM), University of Freiburg,) Fatigue life prediction for polymer matrix composites using fracture fatigue entropy approach	#304 · Sandeep Kumar Gantala (Universite Bourgogne Europe, DRIVE) A novel multi-scale methodology for climate-driven durability assessment, evaluating the environmental footprints of flax fiber reinforced composite structure	#1649 · João Francisco (Fachhochschule Nordwestschweiz) Robotic Large Format Additive Manufacturing of Short Glass Fiber Reinforced ABS Composite Moulds: Material Characterization and Process Simulation	*◆#935 · Giovangiuseppe Giusto (CIRA (Italian Aerospace Research Centre))* *The latest developments in grid structures for space applications*	#480 · Maria Modestou (R-NanoLab, School of Chemical Engineering, NTUA) Recycling of Glass Fibres through Supercritical Solvolysis: Kinetics analysis and characterization	#493 · Natalia Sofia Guevara- (Shaping Matter Lab, Faculty of Aerospace Engineering, Delft University of Technology) Advancing blade sustainability: erosion performance of flax fibre composites	#627 · Patrik Fernberg (Department of Engineering Sciences and Mathematics, Luleå University of Technology) Weibull Modelling of Anisotropic Dielectric Strength in Unidirectional Glass Fibre Composites		*◆#1083 · Qianqian Kou (Beihang University)* *A Viscoelastic Damping Prediction Method for Unidirectional Composites Based on Multi-Scale Relaxation Simulation*	#39 · Ziwen Zhao (Tohoku University) CFRP-Integrated Multilayer Piezoelectric Sensor for Vibration Energy Harvesting and Impact Damage Detection
11:00–11:30	COFFEE BREAK											
11:30–12:45	SESSION 2											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength**	**SS25 · Sustainable Composites Engineering: Innovations from a Doctoral Training Centre**	**SS11 · Advanced Composite Materials and Structures: Multifunctional Design, Damage Diagnostics, Testing, and Modeling**	**SS18 · Composite Materials for Hydrogen Economy**	**1.2 Automotive, Rail, and Ground Transportation**	**2.8 Foams, Cellular and Lattice Materials**	**T5 · Inline Process Monitoring, Quality Control & Multiphysics-Based Experimental Testing**	**5.8 Forming and Stamping**	**5.10 Machining**	**3.16 Multiscale Modelling**	**6.4 Integrated Smart Devices, Structural Integration, 6.2 EMI Shielding, Functionalities**
11:30		#824 · Deepak Sharma (School of Mechanical and Aerospace Engineering, Nanyang Technological University) Bio-Mediated Longitudinal Reinforcement in Architected Mycelium Composites	#1228 · Jenny Banks (University of Bristol, NCC) Continuous Recycled Carbon Fibre: Influence of Fibre-to-Preform Processing on Mechanical and Interfacial Properties	#1646 · Gary Atkinson (University of the West of England Bristol) Fear-Inspired Strain Amplification Layers for Composite Structures	#389 · Théo Baumard (CETIM) Influence of decompression rate and cyclic hydrogen exposure on mechanical and transport properties of type IV hydrogen tank liner materials	#1261 · John Montesano (Composites Research Group, University of Waterloo) Coupled high-pressure resin transfer molding process and structural impact simulations for automotive composites	#1345 · Alessandra Lingua (ETH Zürich, Institute for Building Materials) Mapping damage in composite lattices for the design of tough architected materials	#880 · Carlos González (IMDEA Materials / Technical University of Madrid) Smart Digital Twins for Composite Manufacturing	#1725 · Kalliopi-Artemi Kalteremidou (Vrije Universiteit Brussel) Thermomechanical shear characterization of Flax/PP composite laminates under thermoforming conditions: from experiment to simulation	#1451 · Alexander Brouschkin (Hamburg University of Technology) Empirical model for predicting surface roughness in CFRP during peripheral milling with lead and tilt angles.	#954 · Charles Castle (University of Tokyo, Department of Aeronautics and Astronautics) Representative Volume Element Generation for Discontinuous Fiber Composites	#498 · Sereno Sacchet (University of Trento, Department of Industrial Engineering) Development of High-Conductivity Phase Change Material (PCM) Composites for Passive Thermal Management and Advanced Manufacturing Integration
11:45		#807 · Ryuji Nishi (Nihon University) Effect of deviatoric angle on axial compressive strength of fibrous composites	#1288 · Torin Clark (University of Bristol) Accurate Filament Winding Simulation for Hydrogen Tank Applications	#846 · Álvaro Vaz-romero (Universidad Carlos III de Madrid) A new geometry to evaluate the strain rate sensitivity of Mode II Interfacial Shear Strength in CFRPs	#518 · Jan Condé-Wolter (Dresden University of Technology) Repairable Composites for Hydrogen Storage: Investigating Damage and Healing in Thermoplastic- and Vitrimer-Based Composites by Gas-Permeability Measurements	#1149 · Emanuele Maccaferri (University of Bologna) Composite laminate modification with elastomeric nanofibers for improved toughness: impact tests on an automotive component	#1167 · Michal K. Budzik (Aarhus University) Elastic-plastic response of a pressurized closed-cell foam under uniaxial loading	#149 · Christian Eitzinger (Profactor GmbH) Method for Inspecting the Inner Surface of Large Carbon Fibre Composite Structures	#945 · Chunyi Gao (Dyson School of Design Engineering, Imperial College London) Interfacial Behaviour of Unidirectional GF/PA6 under Solid-State Stamp Forming Conditions	#1703 · Islem Ben Mejri (UPJV) Orthogonal Cutting of Unidirectional CFRP Composites: Experimental Data and Numerical Modelling	#89 · Bruno Simoes Barini (ENSTA IPP - IRDL - SAFRAN) Modeling of Dissipative Mechanisms Related to Fatigue of 3D Woven Composites	#224 · Laura Simonini (University of Trento) Novel multifunctional sandwich composites for thermal management and mechanical performance
12:00		#475 · Vincent Keryvin (Univ. Bretagne Sud) Understanding premature compressive failure in high-modulus PAN-based carbon fibre composites: assessing the compressive behaviour of carbon fibres by nano-indentation and micro-pillar compression.	#763 · Kieran Guoite (UoB/NCC) Development and Testing of Core Material Homogenisation Technique for Large Scale Resin Infusion Simulations	#862 · Zhengjiang Ji (Northwestern Polytechnical University) Gradient design of CF prepregs for multifunctional composite laminates with excellent electromagnetic wave absorption and mechanical performances	#1263 · Pau Miquel-Roura (University of Girona) A NOVEL COUPLED MECHANICAL-PERMEABILITY APPROACH FOR PREDICTING HYDROGEN LEAKAGE IN LH2 COMPOSITE TANKS	#748 · Rúben Ferreira (INEGI - Instituto de Ciência e Inovação em Engenharia Mecânica e Engenharia Industrial) Structural Design and Manufacturing Validation of a Fiberglass-Reinforced Composite Bus Chassis Section	#308 · Francesco Bandinelli (Polytechnic of Turin) Experimental and numerical comparative study on the crashworthiness of pristine and recycled 3D-printed fiber-reinforced lattice structures	#767 · Mael Péron (Nantes Université, Ecole Centrale de Nantes, CNRS, GeM, UMRS CNRS 6183) Correlation between the local cristallinity and porosity and the mechanical performance of the welded interface manufactured by laser assisted tape placement of a thermoplastic composite	#994 · Per Hallander (Saab AB) Forming thermoplastic composites with fluid cell press	#223 · Iveta Čačková (Faculty of Mechanical engineering, STU) Influence of Continuous-Wave and Pulsed Mode Fiber Laser Parameters on Machining Quality of CFRP Composites	#247 · Robin Valmalette (LMA) Predicting longitudinal strength of unidirectional composites using a discrete damage model within full-field FFT-based simulations.	#855 · Linhao Cheng (National Key Laboratory of Strength and Structural Integrity, School of Aeronautics, Northwestern Polytechnical University) Design and analysis of hybrid radar absorbing structures realized by carbon fiber arrays
12:15		#412 · Emmanuel Baranger (Université Paris-Saclay, CentraleSupélec, ENS Paris-Saclay, CNRS, LMPS - Laboratoire de Mécanique Paris-Saclay) Modeling of kinking in CFRPs: a multiscale competition between damage mechanisms	#1469 · Jordan Forbes-Thomas (University of Bristol) Failure of filament wound hoop tubes by internal open-ended pressure testing	#1479 · Xi Li (Department of Aerospace Science and Technology, Politecnico di Milano) Fatigue Testing of Post-Buckling Mode Evolution in Multi-Stable Composite Panels with Metallic Stringers	#1430 · Giorgia De Piano (Department of Industrial Engineering, University of Salerno) A comprehensive study of epoxy nanocomposites for lightweight hydrogen storage tanks: from processing to gas permeability	#1267 · Jinping Hou (Zhuzhou Times New Materials Technology Co Ltd) Development of a mono composite leaf spring for light logistic truck using Finite Element Method	*◆#1005 · Daniel Cavalcanti (Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale (DICMaPI) - University of Naples Federico II)* *Engineering biopolymer–nanoparticle aerogels: mechanical properties and microstructural control by freeze-casting* —— *◆#1484 · Amit Prakash (INDIAN INSTITUTE OF TECHNOLOGY MADRAS)* *Three point bending analysis of sandwich structure with a novel hybrid cellular structure for in-plane and out of plane loading*	#549 · Maximilian Lang (Technische Universität Ilmenau) Predicting Fabric Permeability from Yarn Architecture	#1463 · Martin Müller (Leibniz-Institut für Verbundwerkstoffe) Simulation-Driven Process Development for Integrated Manufacturing of Thermoplastic Aircraft Door Surrounds	#1584 · Hendrik Möllers (Clausthal University of Technology) Mechanical properties of thick laminates using multiple different epoxy resin systems	#734 · Ruochen Zheng (Ghent University) In Silico Mechanical Characterization of 3D Interlock Reinforcements Using a Virtual Fiber Approach	#1216 · Muhammed Oğuzhan Yeşil (Istanbul Technical University Aerospace Research Center) Screen-Printed CNT/CNC Sensors Integrated into 3D Orthogonal Woven Composites for Areal Strain Mapping and Impact Localization
12:30		#1226 · Joshua Donoghue (University of Auckland) Comparison of Compressive Material Property Measurement by Direct-Axial Compression (ASTM-D6641) and Four-Point Bending (ASTM-D6272)	#1238 · Jack Davies (University of Bristol/National Composites Centre) Sensor-Driven Flow Modelling: Addressing Material Variability in Large Wind Turbine Blade Infusions	#715 · Go Yamamoto (Department of Aerospace Engineering, Tohoku University) Strain Distribution Around Damage in CNT Yarn in a Polymer Matrix Using Synchrotron Radiation X-ray CT (with DVC) and Raman Spectroscopy	#546 · Roman Beck (German Aerospace Center (DLR)) Permeability analysis of adhesives for CFRP hydrogen tank development	#1194 · Paloma Rodriguez Santa (University of Bath) Testing Burn-Through Performance of Thermoplastic Composites for eVTOL Battery Enclosures	*◆#141 · Elisabeth Verweyen (ZBT – Zentrum für BrennstoffzellenTechnik GmbH)* *Optimization of twin-screw extruder setup for production of highly filled polymers used in conductive foil production for energy applications.* —— *◆#95 · Marcel Littig (German Aerospace Center (DLR))* *Functionalization of PEKK through integration of iron microparticles*	*◆#829 · Shishir Kumar (INDIAN INSTITUTE OF TECHNOLOGY KANPUR)* *A 'characteristic length'-free cohesive fatigue damage model for improved crack-front tracking and damage prediction in laminated composites*	#1139 · Sankhya Mohanty (Technical University of Denmark) Reliable Binder-Stabilised Preform Manufacturing: Binder Distribution and Processing Conditions	#670 · Célia Cuenot (Airbus Atlantic) IN-SITU MONITORING OF THICKNESS EVOLUTION IN CARBON/PAEK LAMINATES DURING VBO CONSOLIDATION	#678 · Minghe Cui (Beihang University) A Unit Cell of Minimum Size Containing a Single Fiber Tow for Characterizing Effective Properties of Plain Woven Composites	#301 · Robert Oxford Pope (Bristol Composites Institute) Embedding pulsating heat pipes in carbon composites for advanced thermal management
12:45–13:45	LUNCH											
13:45–14:15	2 KEYNOTES (rooms A & B)											
14:15–15:45	SESSION 3								**2.1 Bio-Derived and Sustainable Composites**			
	Session →	**SS01 · Delaminations and debonding in composite materials and structures**	**SS21 · Computed tomography**	**SS09 · Methods and tools to support the certification by analysis of composites structures**	**5.2 Additive Manufacturing**	**2.6 Nanocomposites**	**1.9 Space & 1.5 Marine**			**3.9 Fracture and Damage**	**4.5 Non-Destructive Evaluation & 4.1 Acoustic Emission and Ultrasonic Methods**	**3.7 Failure Mechanics and Simulations**
14:15		#1485 · Christian HOCHARD (LMA-AMU) Influence of the matrix degradation on the fiber direction compressive Strength	#393 · Clément Prunier (Université Marie et Louis Pasteur, SUPMICROTECH, CNRS, Institut FEMTO-ST) Analysis of Moisture-Induced Deformation in Hybrid Bio-Based Yarns via RH-Controlled X-Ray Tomography	*◆#1091 · Diogo Cardoso (INEGI)* *A Physics-Informed Framework for Modeling As-Manufactured Variability in Automated Fiber Placement*	#1437 · Florian Hager (TU Wien, Institute of Materials Science and Technology) Characterization and Improvement of Fiber-Matrix Adhesion in Lithography-Based Additive-Manufactured Composite Materials	#1713 · Tayyab Khan (National Graphene Institute and Henry Royce Institute, The University of Manchester) Graphene-enhanced Thermoplastic and Elastomer Nanocomposite Systems for High-end Solvent and Gas Barrier Applications	#1094 · Ragnar Birgisson (University of Bristol) Effects of galactic cosmic radiation on the mechanical performance of thin high-strain PEEK composites for space applications.	ESCM meeting	*◆#1013 · Sabrina Assenheimer (KTH Royal Institute of Sweden)* *Investigation of moisture influence during manufacturing of artificial bio-based cellulose nanofibril (CNF) fibre/epoxy composites* —— *◆#1120 · Pietro Russo (Institute for Polymers, Composites and Biomaterials, National Research Council)* *Brewers' Spent Grain Hydrochar as a Circular Filler for Thermoplastics and their Flax-Fabric Composites*	#1103 · Angeliki Christoforido (Delft University of Technology) In-plane fatigue crack growth of fiber-polymer composites based on a novel specimen design	#114 · Jens T Thielemann (SINTEF AS) Integrating BRDF Imaging and Robotics for Automated Inspection of Specular Composite Materials	#497 · Anton Koenig (ONERA) Predictive Modelling of Waviness-Induced Delamination in Composite L-Angles Under Four-Point Bending
14:30		#481 · Hwei Linn Khoo (Imperial College London) Understanding how fibre hybridisation changes FRP compressive failure behaviour via computational modelling.	#777 · Ayshan Soltansaleki (York University) Full-Field Strain Analysis of Additively Manufactured Structures Under Compression Using Digital Volume Correlation	#1331 · Erdem Dinler (INEGI) A Unified Phenomenological Model for Elastoplastic In-Plane Shear Response in Composite Materials	#398 · Suresh Advani (University of Delaware) Z-Penetration: A Strategy for Stronger Interlayers in Composite 3D Printing	#1474 · Cahit Orhun Senol (Sabanci University) Industrial-Scale Multiscale CNT Integration to Tailor Temperature-Dependent Delamination Resistance in Aerospace CFRPs	#593 · Gokhan Sancak (Bristol Composites Institute, School of Civil, Aerospace, and Design Engineering, Faculty of Science and Engineering, University of Bristol) Shielding of Carbon Fibre Polybenzoxazine Polymer Composites with POSS Incorporation and HDPE Sandwich Structures Against Space Radiation		*◆#647 · Dimitrios Apostolidis (TUDelft)* *The Flax Files: Processing–Structure Relationships in Continuous Natural Fiber Thermoplastic Tapes.* —— *◆#1452 · Sidharth Amanthra Kelo (Bernal Institute (Composites), School of Engineering, University of Limerick)* *Interfacial Characterization of Lignin-Derived Carbon Fibers for Sustainable Composite Applications*	#613 · Yuancheng Yang (Queen Mary University of London) Phase field prediction on the micro-mechanical behaviour of composite materials subjected to transverse compression	#106 · María del Carmen Serna (University of Castilla-La Mancha) Deviation from the ideal shear strain state of a FRP under biaxial tension-compression test and standard methods	#696 · Filippo Mannino (EPFL, Composite Mechanics Group (GR-MeC)) Non-Linear material properties and classical laminate theory
14:45		#539 · Arthur Montazel (ONERA) An experimental and numerical investigation of 3D woven structures failing by kink-band propagation	#589 · Karl Arvidsson (Luleå University of Technology) Improving Electrical Reliability of Fibre Composites through X-Ray Computed Tomography and Machine Learning-Based Defect Characterisation	#1375 · Ole Thomsen (Bristol Composites Institute, University of Bristol) Certification by Analysis of Large Composite Structures – Vision or Delusion?	#303 · Martin Reiter (Johannes Kepler University Linz) Biomimetic Hierarchical Structures Based on Bone Architecture: Overlap-Controlled Toughening via Additive Manufacturing	#42 · Bon-Cheol Ku (Korea Institute of Science and Technology) Multifunctional CNT-Based Composite fibers	#797 · Siddhesh Raorane (AGH University of Krakow) Representative Volume Element and Multiscale Simulation for Mechanics of Micro-Channels in Carbon-Fibre Reinforced Composite for Self-Healing Space Structures		*◆#1650 · Ilaria Cicco (Institute of Chemistry of Polymeric Materials, Technical University of Leoben)* *Sustainable High-Performance Epoxy Thermosets via Polythiol Hardeners and Bio-Based Thermo-Latent Catalysts* —— *◆#1685 · Maximilian Stöckle (NTNU)* *On the development of wood plastic composites with reclaimed raw materials employing 3D printing and injection molding*	#1691 · Amol Vuppuluri (BITS Pilani Hyderabad Campus) Fracture response of 3D printed polyether-ether-ketone through energy-partitioning concept of EWF technique	#333 · Ayman Berrem Khalid (Universidad de Castilla-La Mancha) Biaxial tension-compression fixture for cruciform CFRP specimens on uniaxial testing machines	#315 · Jisiyuan Cheng (State IJR Center of Aerospace Design and Additive Manufacturing, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, China) Multiscale enhancements in Z-pin reinforcement performance through curing parameters
15:00		#716 · Martin Hirsekorn (DMAS, ONERA, Université Paris-Saclay) Influence of the out-of-plane stress on compressive strength in the fiber direction: application to ply waviness defects and bolted joints	#1745 · Carolina Gutierrez Bol (EPFL/PSI) Multi-scale structural analysis of pultruded carbon fiber composites using Small and Angle X-Ray Tensor Tomography	#1072 · Julien Schneider (SAFRAN AIRCRAFT ENGINES) Multi-scale Digital Twin of a 3D woven composite technological blade sample	#245 · Melany McBean (University of Exeter) Extensional viscosity of polyaryletherketones (PAEKs) and its composites in material extrusion (MEX) additive manufacturing	#911 · Rebecca Rosa (University of Bologna) Electrospun PA12 nanofibrous membranes as interleaves in CFRP laminates	#1133 · Philipp Marin (Universität der Bundeswehr München) Hybrid CFRP Composites for Cryogenic Environments: Effects of Recycled Carbon Fleece and Additives on Permeability and LOX Impact Compatibility		*◆#1715 · Anna Baaba Jacobs (Montanuniversitaet Leoben)* *Biobased Epoxy Resins for High Temperature Application: Machine Learning-Guided Design of Biobased Resins* —— *◆#356 · Matthieu Gresil (Monash University)* *Bioinspired mechanochromic vitrimer composites based on chiral nematic cellulose nanocrystals*	#718 · Elise Van Vlieberghe (Department of Materials Engineering (MTM), KU Leuven) Off-axis cracking in carbon and glass fibre-reinforced composites: in situ inspection of the influence of stacking sequences on damage patterns	#679 · Emanuel Kästle (Federal Institute for Material Research and Testing (BAM)) Treating uncertainties in the failure load prediction of fiber-reinforced composites with acoustic-emission testing	#1183 · Serdar Demir (Boğaziçi University) THE INFLUENCE OF THE OBLIQUENESS OF OPEN-HOLE NOTCHES ON WOVEN FABRIC CARBON/EPOXY COMPOSITES DAMAGING BEHAVIOR
15:15		#424 · Marco Longana (Dipartimento di Chimica, Materiali e Ingegneria Chimica) Compressive Characterisation of Biomimetic Hierarchical Composites	#153 · Benedikt Boos (Leibniz-Institute of Composite Materials) Microstructure analysis of micro-X-ray computed tomography scans of staple fiber yarns	#1231 · Alban Robin (Dassault Aviation) Advanced modelling of composite materials for aerostructures: industrial state-of-the-art and challenges	#1230 · Matthias Mihalic (Kompetenzzentrum Holz GmbH - Wood K plus) Study on chemical foaming in FFF and FGF 3D printing of PHA based blends	#723 · Giulia Fredi (University of Trento) Shape-Stabilized Phase Change Material Nanocomposites with Enhanced Thermal Effusivity via Aligned Carbon Nanotube Reinforcement	#542 · Jean-Christophe Petite (Bureau Veritas Marine & Offshore) Fatigue assessment of marine composite propellers		*◆#506 · Tsilat Shiferaw (Supmicrotech, Université Marie & Louis Pasteur, CNRS, Institut Femto-st)* *Remarkably stable damping in UD flax/epoxy composites at increasing fiber volume fractions* —— *◆#1454 · Vincent Placet (Univ Franche-Comté, CNRS, FEMTO-ST)* *Natural Fibers for Composites: Limitations and Improvements*	#339 · Reza Afsharnia (Technical University Of Leoben) Lifetime Prediction of Discontinuous Fiber Reinforced Polymers	#1051 · Alrik Dargel (Institute of Lightweight Engineering and Polymer Technology, Dresden University of Technology) Combined In-Situ CT and Transient Dynamic Analysis of Fibre-Reinforced Composite Joints at Elevated Temperatures	*◆#981 · Do Eun Kwak (Department of Mechanical Engineering, Hanbat National University)* *Study on Lightweight design of an inboard bogie frame using composite materials* —— *◆#984 · Chang Ho Kim (Department of Mechanical Engineering, Hanbat National University, 125)* *Evaluation of Strucutral Integrity for Hypertube Carbody Using Composite Materials*
15:30		#787 · David Anthony (Imperial College London) Carbon nanotube-grafted carbon fibres and their unidirectional reinforced composites	#200 · Thanasis Chatziathanas (Department of Materials Engineering, KU Leuven) Evaluating single-fibre fragmentation and transverse single-fibre tests for interfacial characterisation in composites: advantages and limitations	#772 · Alessandro Vescovini (DLR) Towards Virtual Certification of a composite aircraft moveable by means of damage tolerance assessment	#63 · Yannick Schäfer (DLR Deutsches Zentrum für Luft- und Raumfahrt e.V.) Improved Interface Strength for Overprinting with CF-LMPAEK	#34 · Rana Farhat (MINES PARIS PSL- IMT Mines Alès) Meta-Structures of Conductive Biopolymer Blends: Towards Multifunctional and Sustainable Nanocomposites	#1711 · Philippe Noury (DNV) Design and Qualification of Large-Scale Composite Aquaculture Structures for Offshore Marine Environments		*◆#566 · Mototsugu Tanaka (Kanazawa Institute of Technology)* *Durability Evaluation in Water Environment of Fiber-reinforced PLA with Hydrolysis-control Function* —— *◆#837 · Konstantinos Kanellopo (Polymer and Composite Engineering Group, Institute of Materials Chemistry and Research, University of Vienna)* *Reclaiming carbon fibers: renewable thermosetting polyester matrices for recyclable carbon fiber-reinforced polymer laminates*	#534 · Georgios Kotsinis (Luxembourg Institute of Science and Technology (LIST), Advanced Composites Manufacturing & Testing (ACMT)) Interfacial Fracture Toughness Characterization of Sandwich Composites: Effects of Core and Face-Sheet Architectures under Mixed-Mode Loading.	#111 · Nathalie Godin (INSA of Lyon - Mateis) The Contribution of Acoustic Emission Modeling to the Optimization of Damage Source Identification in Composite Materials	
15:45–16:15	COFFEE BREAK											
16:15–17:30	SESSION 4											
	Session →	**SS09 · Methods and tools to support the certification by analysis of composites structures**	**SS08 · Experimentation and Modelling of Composite Materials and Structures under Dynamic Loading and Environmental Conditions**	**SS13 · Digital Twins and AI for Composite Manufacturing: Modelling, Monitoring and Control**	**1.1 Aerospace**	**SS20 · History of composites**	**3.9 Fracture and Damage**	**2.7 Hybrid and Hierarchical Composites**	**3.19 Textile Composites**	**3.21 Uncertainty quantification**	**3.17 Sandwich Structures**	**SS15 · AI and Mechanics for Composite Design, Optimisation, and Digital Twins**
16:15		#736 · Stephanie Miot (IRT Saint Exupery) VVUQ applied to composite damage models	#46 · Yanhong Chen (Harbin Institute of Technology) A full-field coupled multiscale modelling framework for predicting the impact behaviour of interleaved composites considering material variability	#402 · Ryo Higuchi (The University of Tokyo) Multiscale simulation of process-induced residual deformation on semi-crystalline thermoplastic composites	#1768 · Abrar H Baluch (KFUPM) Dispersion-Controlled Alumina-Enhanced Carbon/Phenolic Composites for Solid Rocket Nozzle Thermal Protection	#378 · Ton Peijs (University of Wa) A Brief History of High-Strength Polymer Fibres	#160 · Romain Rutar (University of Bristol - ISAE SUPAERO) Improving the delamination bridging performance of Z-pins through novel glass fibre Z-pinning	#1119 · Burcu Saner Okan (Sabancı University) Scalable Manufacturing of Electrically Conductive CF/PEEK Thermoplastic Laminates via Multi-Dimensional Carbon Additive Hybridization	#654 · Jingshu Lu (LPMT) Investigating the morphology of prepreg composite reinforcements under varying tape-laying parameters and their influence on mechanical properties	#949 · Sei-ichiro Sakata (Kindai University) Probabilistic strength analysis of randomly arranged unidirectional fiber-reinforced composite plate under transverse tensile load with random field modeling of local apparent quantities considering uncertainties in matrix and interface strength	#1588 · Teoman Beyhun (Istanbul Technical University) Tailoring Energy Absorption in Honeycomb Sandwich Panels via Additive Manufacturing-Enabled Density Grading	#1716 · Abhiram Kolli (Profactor GmbH) Adaptive Divergence-Guided Multi-Head and Multi-Task Learning for Efficient Photometric Stereo–Based Carbon Fiber Defect Inspection
16:30		#1165 · Albertino Arteirov (INEGI, Faculty of Engineering, University of Porto) Failure criteria and damage models for virtual testing and qualification/certification by analysis	#1071 · Jiaqi Hu (Imperial College London) Thermo-mechanical Behaviour of Polyetheretherketon (PEEK) Under Low Temperatures and High Strain Rates	#349 · Andrés Felipe Ramírez (Analysis and Advanced Materials for Structural Design (AMADE), Polytechnic School, University of Girona) An as-manufactured modelling approach to quantifying the effect of gap defects on the open-hole tensile strength of Automated Fiber Placement (AFP) laminates	#205 · Mario Miranda (Imperial College London) A Multiscale Optimisation Framework for Early-Stage Design of Composite High-Aspect-Ratio Wings	#284 · Ayanobu Horinouchi (TORAY INDUSTRIES, INC.) History of carbon fibres: Origins and evolution	#448 · Daniel Effen (Leibniz-Institut für Verbundwerkstoffe GmbH) ENHANCING CFRP INTERLAMINAR STRENGTH: LASER-DRILLED–POLYAMIDE FIBER INFUSION APPROACH	#353 · Dayoung Kim (Pusan National University) Thermally Insulating and Flame-Retardant Glass Fiber Reinforced Epoxy Composites with Hollow Glass Microsphere/Branched Polyethyleneimine Multilayer Coatings for Building Applications	#698 · Mengqing He (University of Haute-Alsace, LPMT) Tensile–Shear Coupling Behavior of Stretch-Broken Carbon Fiber Woven Reinforcements	#820 · Paschalis Oikonomou (Limmat Scientific AG) Uncertainty-aware composite quality monitoring	#606 · Boyue Chen (Bristol Composites Institute, University of Bristol) Computational and experimental study on the honeycomb cell deformation during the curved surface forming	#1402 · Davide Mocerino (Imdea Materials) Defect Identification in Composite Panels via GNN Models Trained on FEM Simulations
16:45		#1362 · Said Abdel-Monsef (AMADE, Polytechnic School, Universitat de Girona) Validation-Domain Guided Selection of Bonded Stiffener Configurations for Composite Panels in Bending	#1434 · Zhongyu Li (Harbin Institute of Technology) A Prediction Framework Integrating RF and ANN for Low-Velocity Impact Behavior of the Novel Composite Sandwich Structures	#765 · Hamed Akhavan (INEGI) Digital Twins of Honeycomb Sandwich Panels for Coupled Thermal–Pressure Simulations	#883 · William Mahoney (Bristol Composites Institute) Assessing the Performance of Recycled Carbon Fibre in Composite T-Joints	#258 · Eric Moussiaux (Exel Composites PLc, Free University of Brussels (VUB)) The Story of Pultrusion	#1567 · He Zhou (Beihang University) Effect of Automated Fiber Placement Gap Defects on Mode II Interlaminar Fracture Toughness and Crack Propagation in Carbon/Epoxy Laminates	#874 · Gaurab Sundar Dutta (PuK, TU Clausthal) A Parametric Approach for Intraply Hybridization of Carbon Fiber and Natural Fiber Textiles	#648 · Thomas Gereke (TUD Dresden University of Technology, Institute of Textile Machinery and High Performance Material Technology) Experimental and Numerical Investigation of 3D Woven Carbon-Fibre Composites at the Microscale	*◆#1764 · Simone Credidio (university La Sapienza)* *A Bayesian Framework for Composite Design Allowables: Uncertainty Quantification and Reliability Enhancement under Data Scarcity* ——	#1495 · Mehmet Yildiz (Sabanci University) Engineering the Interphase: Rapid Hot-Pressing of All-PESU Sandwich Panels for Stronger, More Conductive Aircraft Interiors	#1027 · Radouan Bouallala (IMDEA Materials Institute) Periodic Laminate Unit Cell for Predicting Stiffness, Strength, and Damage in CFRP Laminates.
17:00		#1700 · Vassilis Kostopoulos (University Of Patras) Bridging Numerical Simulations and Non-Destructive Inspection with Image Processing Analysis: A Paradigm of a Certification by Analysis Procedure for Thermoplastic Composite Fuselage Panel	#1347 · Dayou Ma (Politecnico di Milano) Damage identification, simulation and design of thermoplastic composites under impact loading	#1464 · Shanthalakshmi Kilambi (Faculty of Aerospace Engineering, Delft University of Technology) Digital Twin for Large Format Extrusion Additive Manufacturing	#1500 · Christian Berggreen (Technical University of Denmark) Fracture Response of Unvented Aerospace Sandwich Panels: Effects of GAG Pressurization and In-Plane Loads	#213 · Brian L. Wardle (MIT) NANO AND NANOENGINEERED COMPOSITES REINFORCED WITH CARBON NANOTUBES	#391 · Mathilde Conan (IRDL, ENSTA – Institut Polytechnique de Paris) Mechanical recovery of Carbon Fibre/PPS laminates after repair of transverse matrix cracks.	#853 · Julia Hübner (Leibniz Institute for Polymer Research Dresden e.V.) Towards more Sustainable Cementitious Composites: Spinning of Bicomponent Micro-Fibers Using Recyled Polypropylene	#758 · Emile Garrel (Institut Clément Ader / Safran) Mesoscale modeling of 3D woven composites behavior by a semi-continuous approach	#1607 · Antonio Madeo (University of Calabria) OPTIMIZATION OF VARIABLE-ANGLE TOW SLENDER STRUCTURES IN THE POST-BUCKLING REGIME USING GRADIENT-BASED METHOD AND AN IMPLICITLY DIFFERENTIATED REDUCED-ORDER MODEL	#1354 · Stephanie Miot (IRT Saint Exupery) How manufacturing affects the mechanical performance of CMC/Ceramic sandwich structures	#650 · Adrian Pedrosa Valbuen (CIDAUT) Physics Informed Machine Learning for Multi Zone Optimization of CFRP Aerospace Components
17:15		#140 · Johannes Reiner (Deakin University) Probabilistic Simulation of Low-Velocity Impact in Non-Crimp Carbon Fibre Composites Using Finite Element Analysis and Uncertainty Quantification	#163 · Jian Xiong (Harbin Institute of Technology) Damage behavior of all carbon fiber composite honeycomb sandwich structure under low-velocity impact load	#1421 · Patrick Flore (Leibniz-Institut für Verbundwerkstoffe GmbH) Digital Twin for Inline C-SMC Quality Assurance - Evaluating Strip Density Prediction via Learning-Based and Topological Approaches	#479 · Niko Krebs (University Paris Est Creteil) Bonding, debonding and rebonding with novel synthesized high Tg epoxy disulfide vitrimer adhesives for aerospace composite applications	#1390 · Mahoor Mehdikhani (KU Leuven) Evolution of experimental methods for characterisation of mechanical properties of composites	#1755 · Joseph Bernaert (Composite Mechanics Group (GR-MeC), Ecole Polytechnique Fédérale de Lausanne) Automated crack detection in thin paste adhesive joints	#492 · Flavie Largenton (LAMPA) Influence of a new sizing on recycled carbon fibres on the fibres and composite mechanical and chemical properties	#917 · Xuejiao Li (LPMT, University of Haute-Alsace) Yarn-Level Contact Morphology and Frictional Response under Pretension in Flax/PA12 Woven Fabrics		#1659 · Sungbi Lee (Korea Institute of Science and Technology) Structural Design of CFRP Sandwich Structures Using Spread-Tow Carbon Fiber Fabrics for Radiolucent Surgical Tables	#605 · Yutaka Oya (Tokyo University of Science) Inverse Design of Polymer Properties Using Molecular Dynamics Data and Machine Learning
17:30		*◆#112 · Benjamin Gaud (Nantes Université, Ecole Centrale Nantes, CNRS, GeM, UMR 6183)* *Measurement and prediction of the development of mechanical properties of a flax-epoxy composite during the curing process*	*◆#246 · Xudan Yao (Northwestern Polytechnical University)* *THERMAL FATIGUE AND HYGROTHERMAL AGING BEHAVIOUR OF CNT/GFRP/CFRP COMPOSITES*	#614 · Ashish Vinayaka Hegde (Delft University Of Technology) Bake it till you make it! Modelling the curing of composites with graph neural networks.	#1000 · Yasir Mujahid (Department of Aerospace Engineering, Khalifa University of Science and Technology, PO Box 127788) Influence of Printing Speed on Peel Strength of FDM-Deposited Thermoplastic Polyurethane on Textile Substrates	*◆#72 · Andreas Loth (BHT Berlin)* *Material investigations for stitch and glue boats*	*◆#1074 · Sasan Karimi (Sabanci University)* *Fracture analysis of interleaved composites with self-same resin-rich layers using mechanical testing, acoustic emission, and micro-visualization*	*◆#76 · Ana Rita Carreiras (Polythechnic of Porto, School of Engineering)* *Production of hybrid composites with recycled PET by pultrusion*	#1040 · Stephen R. Hallett (Bristol Composites Institute (BCI), University of Bristol) In-Plane Mechanical and Electrical Performance of Through-Thickness Reinforced Composites		#1562 · Christian Hochard (LMA-AMU) Mechanical Behavior and Failure Mechanisms of 3D-Printed Curved Composite Sandwich Beams with Continuous Carbon Fiber Reinforcement	*◆#976 · Chenlong Ruan (The University of Tokyo)* *Transfer Learning-Enhanced Surrogate Modeling for Expanded-Dimension Structural Response Prediction of Vertical-Axis Wind Turbines*
17:37		*◆#84 · Thibaud Compain (Institut de Recherche Dupuy de Lôme (IRDL) UMR 6027, ENSTA)* *DESIGN AND EXPERIMENTAL VALIDATION OF A COMPOSITE STRUCTURE FOR DEEP-SEA APPLICATION*	*◆#584 · Jure Kajbič (Faculty of Mechanical Engineering, University of Ljubljana, Aškerčeva 6, Ljubljana SI-1000)* *Predicting the Fatigue Life of Material-Extrusion 3D-Printed Biodegradable Composites Reinforced with Continuous Fibres*			*◆#664 · Nicco Stroetmann (Fraunhofer IGP)* *FEM-driven design of a lightweight, modular composite hatch cover for ships*	*◆#296 · Tom Sauvard (ENSTA | Institut Polytechnique de Paris, UMR CNRS 6027 IRDL)* *Fracture characterization of hybrid composite /* *metal joints under dynamic loading conditions*	*◆#916 · Pedro Ferreira Pinto (FEUP, INEGI)* *Effects of manufacturing on the microstructure and mechanical performance of hybrid composites*				*◆#1380 · Abdulrahman Al-nadhari (Sabanci University)* *Self-Diagnosing Composite Repairs: Constituent-Informed Acoustic Emission for Early Failure Prediction in CFRP Patches*
17:44		*◆#957 · Bhaskar Shukla (Department of Mechanical & Aerospace Engineering, Indian Institute of Technology Hyderabad)* *Experimental Study of Quasi-Static Indentation and Compression after Indentation on Variable-angle tow Composites*	*◆#1749 · Aitor Arriaga (Leartiker S. Coop.)* *Long Term Performance of Injection Molded Isotactic Polypropylene containing Weld Lines in Neat and Glass Fiber Reinforced Grades.*	#1475 · Mahdi Tayyebati (Department of Civil and Mechanical Engineering , Technical University of Denmark) Physics-Informed Deep Learning Modelling of Thermo-Mechanical Fatigue Evolution and Failure in Composites	#1537 · János Plocher (Ansys Germany GmbH) Reinforcing Element Technology for Complex Composite Structures: A Comparative Study of Solid Modeling Approaches	*◆#750 · Kathryn Kennedy (University of Strathclyde)* *Development of Auxetically Inspired Composite Sandwich Structures for Cryogenic and Space Applications*	*◆#608 · Jörg Hohe (Fraunhofer Institute for Mechanics of Materials IWM)* *A mesoscopic continuum damage material model for filament wound [±α] plies*	*◆#152 · Emmanuel Denis Manoni (Department of Civil and Environmental Engineering, Politecnico di Milano)* *Thermomechanical characterization of polyethylene terephthalate cords for rubber matrix composites*	*◆#713 · Oguz Kagan Genc (Airbus)* *Experimental and numerical investigations on the bending and inter-layer shearing behavior of glass-fabric rubber composites*		#1675 · İlke Algül (Gebze Technical University) Static and Free Vibration Analysis of a Sandwich Shell with an Auxetic Honeycomb Core via the Unified Formulation and Generalized Differential Quadrature Method	*◆#854 · Marcello Laurenti (University of Rome La Sapienza)* *Generative AI Design of Bio-Inspired Interlocking Interfaces for Tailored Mechanical Performances*
17:51			*◆#884 · Geoffrey Gisclon (Institut Clément Ader)* *Study of the Impact behaviour of Double-Double Laminate*				*◆#809 · Ryuki Akimoto (Graduate School of Tokyo University of Science)* *Numerical Simulation of Fatigue Damage in CFRP Cross-Ply Laminates Incorporating Frequency-Dependent Internal Heat Generation Using an Entropy-Based Viscoelastic–Plastic Damage Model*	*◆#677 · Carrie Schulz (Institute of Polymer Materials and Plastic Engineering, Clausthal University of Technology)* *Modification of a flax fibre textile using a surface barrier discharge plasma in oxidating, inert and reducing gases*				*◆#967 · Ziyao Tang (University of Tokyo)* *Data-Driven Microstructure Extraction and RVE Reconstruction for NW-CFRTP*

ECCM22 — THURSDAY (08:00–18:15) — PRELIMINARY TECHNICAL PROGRAMME (version of 7 June 2026)
◆ + italic = Short oral (7 min) · plain = Full oral (15 min) · Minor changes to the programme may occur.

Time	Activity	A	B	C	D	Forum	M1	M2	M4	M5	Balder	Odin
08:00–08:30	**PLENARY 4**											
08:45–10:45	**SESSION 1**											
	Session →	**SS02 · Additive manufacturing (3D/4D printing, AFP) for advanced composites**	**SS30 · Variable-Stiffness Composites**	**SS16 · Characterisation of recycled composites**	**SS01 · Delaminations and debonding in composite materials and structures**	**SS27 · Nature-Inspired Composites: From Natural Fibres to Biomimetic Structures**	**7.14 Topology/Design Optimization**	**3.12 Joining and Joints**	**3.4 Durability, Ageing, and Environmental Effects**	**5.17 Welding and Bonding**	**2.6 Nanocomposites**	**6.6 Sensing and Actuation**
08:45					#352 · Gilles Lubineau (KAUST) Understanding the role of chemical interactions and mechanical interlocking in the adhesion of electroplated copper to ABS	#1450 · Carlos Fuentes (Luxembourg Institute of Science and Technology) Enhanced Interfacial Energy Dissipation in Carbon Fiber Composites via Bioinspired Multilayer APTES Deposition using Atmospheric Micro-Plasma	#919 · Inês Gonçalves (Institute of Science and Innovation in Mechanical and Industrial Engineering) Development and implementation of topology optimization techniques for unidirectional composite materials	#496 · Daniel Preston (Centre for Materials) Induction Welding of Vitrimeric Composites	#1692 · Floriane Verceux (NTNU) Reprocessability of cryogenically aged basalt fiber reinforced polyamide matrix composites used for hydrogen storage in aircrafts	#1558 · Osuke Ishida (Innovative Composite Center, Kanazawa Institute of Technology) Heating process analysis in ultrasonic welding of thermoplastic composites based on dynamic viscoelasticity and vibration phenomena	#86 · Rachid Amrhar (Université de Toulon) Synthesis of a nanocomposite based on recycled epoxidized vegetable oils containing Ag-ZnO nanoparticles for antimicrobial surface protection	#1763 · Yun Xu (Institute of Lightweight Engineering and Polymer Technology (ILK), TUD Dresden University of Technology) 3D MODELLING OF MAGNETIC ALIGNMENT DYNAMICS OF AN INDIVIDUAL FIBRE-LIKE REINFORCING ELEMENT IN MELT-PROCESSED SOFT MAGNETIC COMPOSITES
09:00					#873 · Joseph Bernaert (Composite Mechanics Group (GR-MeC), Ecole Polytechnique Fédérale de Lausanne - Station 16, Batiment BP,) Detection of Mode II fracture of thin paste adhesive joints	#1222 · Raja Bade (City University of Applied Sciences Bremen) From Biomimetic Core Designs to Circular Composites: PHA-Based Sandwich Structures with Natural Fibre Reinforcements	#91 · Muhammad Uzair (Department of Mechanical Engineering, LUT University) Reliability-Aware Multi-Objective Optimisation of Variable-Stiffness Composite Cylinders with Geometric Imperfections	#1582 · Byeong-Hun Min (Gyeongsang National University) Strength Evaluation and Prediction of Cross-Shaped Composite Joints Reinforced with Multiple I-Fiber Stitching Method	#1105 · Juan Pablo Marquez Cos (PIMM, Arts et Métiers Institute of Technology, CNRS, CNAM) Analysis of the interfacial diffusion coefficient in organic matrix composites based on multi-scale finite element modelling of thermo-oxidation gradients	#876 · Till Kremonke (herone GmbH) Examination and demonstration of innovative welding technologies for continuous fiber-reinforced thermoplastic hollow profiles in high-performance applications.	#1024 · Xi Shen (The Hong Kong Polytechnic University) Anisotropic Nanocomposite for Sustainable Solar-Thermal Application	#363 · Karina Dragasiute (Kaunas University of Technology) Development of Cellulose Nanofibre–MXene Nanopapers as Multifunctional Interlayers for Fibre-Reinforced Plastic Composites
09:15					#859 · Jean-Baptiste Desbrest (EPFL) Debondable primer for demanufacturing of composite sandwich structures	#439 · Andrea Bercini Martins (Leibniz Institute of Polymer Research Dresden e.V.) BIOINSPIRED NANOCLAY GLASS FIBER SIZING FOR INTERPHASE STRUCTURING IN EPOXY RESIN	#197 · Shuya Nozawa (Department of Mechanical Engineering, KU Leuven – Bruges Campus) Eigenfrequency control of composite beams via collaborative topology and fiber orientation optimization	#189 · Filipe Ribeiro (ISQ) Experimental Characterization of Out-of-Autoclave Composite Adhesive Joints for Aeronautical Applications	#1364 · Maria Morissa Lu (University of the Philippines Los Banos) Effects of high vacuum SEM on unaged and aged flax fibre/polyester composites	#1699 · Casilda Serrano Villal (WMG, University of Warwick) Effects of polymer molecular weight on the performance of overmoulded parts	#355 · Yiqing Xue (Queen's University Belfast) FUNCTIONALIZED MWCNT/PEI NANOCOMPOSITE FOR ANTI-ICING/DE-ICING APPLICATIONS	#903 · Ruben Windey (Department of Materials Engineering, KU Leuven) Challenges and strategies for particle dispersion and process-induced microstructural design in functional particulate composites
09:30		#804 · Masahito Ueda (Nihon University) Recycling and tailored printing of carbon fiber composites	#905 · Matteo Iozzi (University of Bordeaux) A Stripe Pattern approach to generate a semi-realistic models of Variable Stiffness Composite laminates obtained through AFP	#268 · Ana Yong (NPL) Unlocking the value of recycled composites through advanced metrology	#336 · Leonardo Guido Salvi (Politecnico di Milano) Modelling delamination initiation and propagation in composite structures using a combined CZM-VCCT approach.	#1283 · Yahya Kara (Functional Polymeric and Particulate Materials Unit, Luxembourg Institute of Science and Technology (LIST), 28 avenue des Hauts-Fourneaux, L-4362) Development of lignocellulosic fiber-based all-cellulose composites	#150 · Matteo Pastrello (University of Ghent) Design Optimization of Thick-Walled Type IV Hydrogen COPVs using an Analytical Framework	#325 · Benedikt Preisz (Universität der Bundeswehr München) Influence of low-velocity impact damage on crack propagation in adhesively bonded thermoplastic composites	#1079 · Elias Bilalis (Shipbuilding Technology Laboratory, School of Naval Architecture and Marine Engineering, National Technical University of Athens) Statistical analysis of the effect of long-term deep-sea exposure on the mechanical properties of filament wound composite materials	#119 · Maria Luisa Puga (University of Twente) Influence of dwell times on structure development and mechanical performance of press-consolidated C/PEKK laminates	#1757 · Müslüm Kaplan (Bartin University) Metal-Free Thermoelectric Nanocomposites: g-C_3N_4/SWCNT Hybrid Fillers in Recycled Polyamide 6 for Sustainable Waste Heat Recovery	#776 · Francesco Mongioi (University of Bologna, Department of Industrial Engineering) Self-Sensing CFRP Laminates with Electrospun Barium Titanate Nanofibrous Interleaves for Integrated Structural Health Monitoring
09:45		#968 · Naruki Ichihara (The University of Tokyo) Bio-morphologic printing patterns for 3D/4D fiber-reinforced polymer composites	#1030 · Trang Le (Technological University of the Shannon) Effect of Fibre Inclination and Gaps on the Homogenised Stiffness of Variable Angle Tow Composites	#491 · Jianqun Hao (Vrije Universiteit Brussel) Upcycling carbon fibre prepreg scraps by optimizing ply-level joining geometry for high-performance laminates	#637 · Vasco Daniel Castro Pi (Chair of Designing Plastics and Composite Materials, Polymer Engineering and Science, Technical University of Leoben) Automated characterization of delamination onset and growth in multidirectional glass/epoxy laminates	#1388 · Jaime Buitrago Osorio (Luxembourg Institute of Science & Technology - LIST) Bioinspired Intermittent Plasma Deposition of APTES on Carbon and Glass Fibres for Tailored Interfacial Functionalisation	#1015 · Burak Alperen İhtiyar (ITU) Multimaterial Auxetic Lattice Structures with Optimized Stiffness and Reduced Stress Concentration	#80 · Thaïs Furon-Faucher (Airbus) Experimental characterization of bearing mechanisms in a carbon/epoxy composite laminate for the modelling of damage in hole-to-hole assembly	#1196 · Valentin Perruchoud (TU Delft) Understanding the effects of outdoor and accelerated hygrothermal ageing on the monotonic and fatigue performance of flax FRP composites	#382 · Anastasios Vassilopoul (EPFL, Composite Mechanics Group (GR-MeC)) Challenges in the Experimental Characterization of Bulk Structural Adhesives	#5 · Dan Sun (Queen's University Belfast) Synthesizing Functional Nanocomposites through “Green” Plasma Chemistry	#369 · Yupeng Shi (KAUST) Wireless Passive LC Sensors for Lifetime Condition Monitoring of Non-Metallic Joints
10:00		#1247 · Zsolt Kállai (Hamburg University of Technology) From Scan to Part: A Digital Process Chain for Robotic 3D Printing of Fiber-Reinforced Thermoplastics on Curved Thermoset Surfaces	#1418 · Eduardo Menezes (Leibniz Institut für Polymerforschung Dresden e.V.) Local Reinforcement of Cutouts in Filament-Wound Composite Cylinders Using Tailored Fiber Placement Patches	#1161 · Johnattan Vargas (Advanced Composites Group, Department of Mechanical and Aerospace Engineering, University of Strathclyde, James Weir Building, 75 Montrose Street, Glasgow, G1 1XJ) Mechanical performance of thermoplastic composites reinforced with thermally recycled glass fibres	#560 · Federica Daghia (Université Paris-Saclay, CentraleSupelec, ENS Paris-Saclay, CNRS, LMPS - Laboratoire de Mécanique Paris-Saclay) Identification of a two-mechanisms cohesive zone law for delamination of architected hybrid joints	#703 · Fetiye Esin Yakin (Luxembourg Institute of Science and Technology (LIST), Sustainable Composite Materials & Manufacturing (SCMM) Innovation Centre) Contrasting Durability Mechanisms in Flax Laminates and Bamboo Fiber Composites with MA-g-PP Modification	#682 · Alexandra Krzeminski (DMAS, ONERA, Université Paris-Saclay) Concurrent density- and fiber orientation-based topology optimization of 3D transversely isotropic composite structures with strength constraints	*◆#123 · Dustin Gesang (German Aerospace Center e.V.)* *Thermal simulation of thermoplastic resistance welding for complex-geometry interfaces*	#801 · Yuting Wang (Imperial College London) Quantitative Evaluation of Interfacial Degradation in Hydrothermally Aged CFRP Using Cyclic Push-Out Testing	#607 · Rachel Zammit-Mangion (University of Bath) Statistical Evaluation of Surface Variability on Mode-I Performance of Adhesively Bonded Composite Joints	#279 · Ayumu Morita (Waseda University) The Effect of Processing Conditions and Nanofiller Addition on the Crystallinity and Morphology of Highly Crystalline Thermoplastic Epoxy Resins	#1391 · Yansong Li (University of Warwick) Architectural Decoupling of Mechanical and Thermal Sensing in Dual-Layer Multifunctional Composites
10:15		#1516 · Julien Deschamps (Univ. Bretagne Sud, UMR CNRS 6027, IRDL) Adaptive by design: 4D-printed metamaterials inspired by marine life	#1307 · Kai Uhlig (Leibniz-Institut für Polymerforschung Dresden e.V.) A NOVEL MANUFACTURING PROCESS FOR COMPLEX-SHAPED COMPOSITE PARTS BASED ON TAILORED FIBER PLACEMENT MADE PREFORMS FROM CONTINUOUS MINERAL FIBER / POLYPROPYLENE AND POLYCARBONATE HYBRID YARNS	#1594 · Masoud Bodaghi (Luxembourg Institute of Science and Technology (LIST), Sustainable Composite Materials & Manufacturing Innovation) Advancing Sustainable Composites: Benchmarking Recyclable EzCiclo® Resin Against Araldite Epoxy Using Robotic GRAM® Wet Filament Winding with Recovered Continuous Carbon Fibres	#989 · Ahmed Wagih (Mechanics of Composites for Energy and Mobility Lab, King Abdullah University of Science and Technology (KAUST)) EFFECT OF PLY THICKNESS ON INTERLAMINAR FRACTURE TOUGHNESS OF THIN-PLY THERMOPLASTIC COMPOSITES	#1132 · Kunal Masania (TU Delft) Three-dimensional printing of functional mycelium biohybrids	#219 · Karthik Ramaswamy (Collins Aerospace - Applied Research & Technology) Multidisciplinary Design Optimisation Framework for Composite Structures with Manufacturing Constraints	*◆#1573 · Büşra Topal (Ankara Yıldırım Beyazıt University, Department of Aerospace Engineering)* *The Single Lap Joints (SLJ) with laminated composite adherends under buckling load*	#270 · Guillaume Lebreton (Nantes Université) Thermal oxidation of a disulfide based vitrimer	#899 · Emma Chiavelli (Faculty of Aerospace Engineering, Delft University of Technology) Magnetic Nanoparticles for Self-regulated Magnetic Heating in Thermoplastic Composite Welding	#1342 · Mariam Omar (Sabanci University) From Fiber Coating to Matrix Integration: Enhancing Strength–Toughness Synergy via Dual-Alternant Interphase in CF/Epoxy Composites	#1166 · Theodora Kryparakou (Institute of Lightweight Engineering and Polymer Technology (ILK), TUD Dresden University of Technology) Performance Assessment of Piezoelectric Sensors and Encapsulation Techniques in Composite Structures at Cryogenic Temperatures
10:30		#660 · Justin Merotte (IRDL/UBS) From Limitation to Function: Toward Localized 4D-Printing Control for Morphing Complex Multi-Material Composite Parts	#55 · Sung Hoon Kang (Korea Advanced Institute of Science and Technology) Bone-inspired dynamically self-adaptive composites	#1496 · Gregory Petropoulos (Department of Mechanical Engineering and Aeronautics, University of Patras) Mechanical and interfacial performance of recycled carbon and glass fibres from a novel solvolysis recycling method	#390 · Christina Neeser (Head Sport GmbH) The Impact of Reuse and Remanufacturing on Mechanical Properties of Alpine Skis	#856 · Kyungil Kong (University of Bristol) HIERARCHICAL INTERPHASE DESIGN WITH METAL OXIDE NANOSTRUCTURES ON CARBON FIBRES FOR IMPROVED IMPACT RESISTANCE AND FUNCTIONALITY	#388 · Troy Zangle (University of Maine) Multi-Objective Optimization of Additive Manufactured High-Speed Small Craft		#712 · Luiza Melo De Lima (Thermoplastic Composites Research Center (TPRC)) Kinetic Modelling of Early-Stage Thermal Degradation in Carbon-Fibre-Reinforced Thermoplastic Composites During Processing	#235 · Hawraa Becher (IRT Jules Verne, IREENA) Modelling degradation and healing effect on inductive welding of carbon fiber reinforced composite	#278 · Serge Zhuiykov (Ghent University Global Campus) Ultrathin $Ga_2In_2O_5$–Ag Plasmonic Composite Membranes for Dual-Mode Photonic and Spectroscopic Detection of Biomolecules	#529 · Fanni Balogh (Budapest University of Technology and Economics) Integration of Multifunctional PCL Layers for Enhanced Performance in Smart Composite Systems
10:45–11:15	**COFFEE BREAK**											
11:15-12:30	**SESSION 2**											
	Session	**4.2 Data-Driven and Full-Field Methods**	**T3 · Fibre & ductile behaviour**	**SS12 · Long Discontinuous Fibre Composites: Processing, Microstructure, Properties and Performance**	**5.1 2D and 3D Textile Reinforcements and Their Composites**	**T5 · Braided composites & Processing technologies**	**T3 · Multiscale modelling, Hybrid Modelling & Creep**	**7.12 Structural Health Monitoring and Quality Control**	**T7 · Design methods**	**5.17 Welding and Bonding**	**7.11 Recycling, Remanufacturing, and Circular Economy**	**T6 · Functionality & Smart Systems (mixed)**
11:15		#109 · Francisco Chinesta (PIMM Lab @ ENSAM) Data-driven-based roughness descriptors discovery for tapes surface characterization and optimal consolidation modelling	#499 · Michael Jerabek (Borealis) Damage mechanisms in glass fibre reinforced polypropylene composites	#1232 · Yvonne Aitomäki (RISE) Evaluating the Influence of Forming Process Simulation on the Performance of Recycled Composites for an Electric Vehicle Application	#740 · Yue Zheng Wen (Dresden University of Technology, Institute of Textile Machinery and High Performance Material Technology (ITM)) Improved Flexibility in Robotic Direct Yarn Placement for 3D Textile Reinforcement via Dynamic Height Adjustment of Roving Placement Rack	#1253 · Beth Grimes (NCC) Material Processability of Continuous Reclaimed Carbon Fibre Tow Using Braiding	#1656 · Liva Pupure (Riga Technical University) The affect of temperature on time dependent properties of 3D printed PLA	#577 · Urs Zimmermann (OST Eastern Switzerland University of Applied Sciences / KTH Royal Institute of Technology Stockholm) Synergy between Optical and Embedded Sensor Techniques in Structural Health Monitoring of Composites	#770 · John Finder (Institute of Aircraft Design and Lightweight Structures - TU Braunschweig) A multi-step simulation method using representative volume elements for predicting mechanical properties of recycled composites made from chopped carbon fibre-reinforced thermoplastics	#725 · Israr Ud Din (Brunel Composites Centre, College of Engineering, Design and Physical Sciences, Brunel University London) Finite element modelling of electromagnetic induction welding of carbon fibre reinforced thermoplastics composites	*◆#433 · Bianca Purgleitner (Transfercenter für Kunststofftechnik GmbH)* *Enhancing the mechanical performance of shredded glass fibre composites in epoxy resin bulk moulding compounds* —— *◆#1224 · Gustavo Asai (Shaping Matter Lab, Faculty of Aerospace Engineering, Delft University of Technology)* *2D nesting of fragmentable shapes applied to the upcycling of composite sheet manufacturing waste*	*◆#955 · GeonGyu Lee (Graduate School of Aerospace and Mechanical Engineering, Korea Aerospace University)* *Sustainable Ni-plated S-glass/Vitrimer composites for electric vehicle battery housings with electromagnetic interference (EMI) shielding and enhanced flame retardancy* —— *◆#1259 · Arleth Suarez Hurtado (York University)* *Composite Magnetic Filament Fabrication and Characterization for Magnetically-Assisted FFF Aplication*
11:30		#990 · Sai Krishna Yelamarthi (Center for Interdisciplinary Programs, Indian Institute of Technology Hyderabad) Mechanical characterization of carbon fiber-reinforced polymer composites using physics-informed neural networks	#1702 · Leonardo Barcenas (Depatment of Mechanical & Mechatronics Engineering, University of Waterloo) Mechanical Characterization of Sheet Moulding Compounds: Effects of Strain Gauge Width and Strain Rate	#1439 · Martin Detzel (Leibniz-Institut für Verbundwerkstoffe (IVW) GmbH) Investigation on the Pseudo-Plastic Deformation Behavior of Staple Fiber Organic Sheets	#144 · Serena Tan (NCC) Manufacturing and Characterisation of 3D Woven Composites Developed Using Next-Gen Jacquard-less Loom	#257 · Cassandra Bauer (Fraunhofer IGCV) Influence of Twisting Angle and Braiding Layers on the Bending of Glass Fibre Reinforced Thermoplastic Profiles	#269 · Andrey Aniskevich (University of Latvia, Institute for Mechanics of Materials) Long- and short-term creep of 3D-printed polymer structures	#359 · Sotaro Minami (WASEDA University) Strain and Damage Sensing of GFRP electrically functionalized by Self-Organized Adsorption of Graphene	#938 · Soheil Navvabi (Durham University) High–Aspect–Ratio Discontinuous Galerkin Finite Elements for Efficient 3D Stress Analysis of Laminated Composites	#1023 · Thomas Hoffmann (Leibniz-Institut für Verbundwerkstoffe GmbH) Simulation-Based Target-Surface-Temperature Control for Continuous Induction Welding of CFRP	*◆#1678 · José Luis Morillo (CATEC)* *Optimization of mechanical properties in fibre-reinforced composite materials made with aeronautic reused uncured prepreg cutoffs* —— *◆#435 · Billy Monthe (DLR- German Aerospace Center; Institut of Lightweight Systems; Dept. of Sustainability Technologies)* *Consequences on process parameters upon scaling up the vessel size for solvolysis-based recycling.*	*◆#629 · Harald Strittmatter (Fraunhofer IGB)* *Preparation and application of new building blocks for high value Vitrimers* —— *◆#1618 · Qingbin Zheng (School of Science and Engineering, The Chinese University of Hong Kong, Shenzhen, China)* *Nanocarbon-Based Composites for Wearable Physical Sensors*
11:45		#690 · Ali Ghaznavi (Federal Institute for Materials Research and Testing (BAM)) Data driven acoustic emission classification of failure mechanisms in CFRP Tensile Tests	#1041 · Yuki Fujita (Nagoya University) Propagation fracture toughness of injection-moulded short-fibre composites under the combined effects of fibre orientation and testing temperature	#1564 · Takehiro Shirai (Innovative Composite Center, Kanazawa Institute of Technology) Experimental Evaluation of Fiber-Orientation Anisotropy on Flow and Mechanical Behavior in Discontinuous Long Carbon Fiber Thermoplastic Composites	#1330 · Leonie Weiblen (Fraunhofer-Institut für Gießerei-, Composite- und Verarbeitungstechnik IGCV) Development and evaluation of a method for the one-shot integration of top layers onto lofted nonwoven based core structures (fiber spring-back) for the integral sandwich construction	#371 · Boris Duchamp (IRT M2P) Adaptive Multi-Axis Braiding of Hybrid Preforms Integrating Functional Fibers for Advanced Composite Structures	#1122 · Faranak Bahrami (Brunel Composites Centre) A predictive multiscale modelling framework to accelerate the development of novel vitrimers and their composites	#651 · Khaled Labidi (Linköping University) Truly integrated sensors for Structural Health Monitoring of Composite Structures in Cryogenic Applications	#210 · Farida Touni (Institute of Polymers and Composites, Hamburg University of Technology) Experimental and Numerical Study of Mantis Shrimp Inspired Thin-Ply Bouligand Composites	#329 · Buse Atac Teksin (University of Sheffield) Introducing a Double-Welding Approach and Investigating the Effect of Welding Time on the Room- and Low-Temperature Performance of Resistance-Welded CF/PEKK Joints	*◆#932 · Samet Ozyigit (LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY)* *RECYCLING OF CARBON FIBERS EMPLOYING DEBONDING ON DEMAND APPROACH IN COMPOSITE STRUCTURES* —— *◆#1351 · Christina Podara (1Research Lab of Advanced, Composites, Nanomaterials and Nanotechnology (R-NanoLab), Materials Science and Engineering Department, School of Chemical Engineering, National Technical University of Athens)* *Sustainable Polypropylene Composites Reinforced with Construction Demolition Wood Waste: Processing, Characterization and Optimization*	*◆#1052 · Kwan Zhi Teh (School of Metallurgy and Materials, University of Birmingham)* *Effects of laminate ply orientations on fibre disruption in branching vascular network composites* —— *+P19◆#1215 · Dağcan Kaptan (Aerospace Research Center, Istanbul Technical University)* *Next-Generation Strain Sensor in Bonded Glass Fiber Composite Joints for SHM*
12:00		#585 · Ines Chaouki (Vrije Universiteit Brussel (VUB)) 3D-micro-DIC as a full-field technique for residual strain analysis using incremental hole drilling in additively manufactured nylon composites.	#181 · Michael Wisnom (University of Bristol) Flexural failure of pseudo-ductile carbon / glass hybrid laminates and the interaction between tensile and compressive response	#793 · Demeke Abay Ashebir (Swinburne University of Technology) FFF-Printed Continuous-Fiber Thermoplastic Composites for Lightweight Aerostructures: A Correlation of Process-induced Defects and Mechanical Properties	#177 · Rebecca Emmerich (Institut für Textiltechnik of RWTH Aachen University) Adaption of the multi-axial warp knitting process for processing of rCF-Tapes	#1328 · Ellinor Jansson (Chalmers University of Technology) Improving Manufacturability of Structural Battery Composites Using High-Volume Battery Production Practices	#1130 · Tomohiro Yokozeki (The University of Tokyo) Multiphysics Simulation for Predicting Mechanical Properties of Thermoplastic Resins Considering Molding Conditions and Crystalline Imperfections	*◆#1258 · Aldyandra Hami Seno (King Abdullah University of Science and Technology)* *Capacitive IoT Strain Sensing System for Structural Health Monitoring of Non-metallic Pipes* —— *◆#1032 · Adele Berends (Technical University of Leoben)* *Comparison of the Mode I and Mode II fracture toughness of glass fiber- and carbon fiber-epoxy laminates and in-depth analysis of the delamination process using acoustic emission analysis*	#1629 · Kinal Kim (Department of Mechanical Engineering, Inha University) Laser-Induced Graphene Metasurfaces with Anisotropic Conductivity for Load-Bearing Broadband Radar Absorbing Structures	#487 · Ziyue Wei (Department of Mechanical Engineering, Faculty of Design and Engineering,University of Bath) Enhanced Resistance Welding of Thermoset Composites via Preconsolidated Heating Elements	*◆#418 · Valeria De Fabritiis (Politecnico di Milano)* *Mild, universal and flexible catalyst-assisted solvolysis for circular recycling of fiber reinforced polymers* —— *◆#362 · Julio Vidal (Aitiip)* *Recovery and reuse of recycled materials after solvolysis treatments*	*◆#1682 · Yi Liu (Loughborough University)* *Autonomous Thermal Management in Flexible Conductive Polymer Composites for Wearable Systems and Battery Safety* —— *◆#1399 · Valeria Berner (Fraunhofer Institute for Chemical Technology ICT)* *Recyclable, flame retardant epoxy vitrimers based on disulfide bonds and their composites preparation*
12:15		#159 · Vahid Movahedi-Rad (Wood Materials Science, Institute for Building Materials, ETH Zürich, 8093 Zürich, Switzerland.) Unsupervised–Supervised Classification and Regression Machine Learning (USS-ML) Framework for Predicting Mechanical Properties of Reconstructed Poplar, a High-Performance Fiber-Reinforced Biocomposite		*◆#1543 · Maurice Collins (University of Limerick)* *Impact of Polyamides on Lignin/TPU Blends for Sustainable Carbon Fiber Precursors* ——	#1561 · Peng Xu (School of Mechanical Engineering and Automation, Beihang University) Mechanical property variation after incremental sheet forming of woven fabric reinforced polymer structures	#640 · Jeeeun Lee (InnoCORE PRISM-AI Center, Korea Advanced Institute of Science and Technology) Microscale Permeability Prediction of Fibrous Textiles using Finite Basis Physics-Informed Neural Networks and Domain Decomposition	*◆#1668 · Vasileios Anagnostopou (B&T Composites SA)* *Development of a Dual Analytical–Computational Framework for the Design and Modelling of Hybrid Filament-Wound and AFP Carbon Fiber Rollers*	*◆#661 · Federico Marino (University of Derby)* *Mechanical and Electrical Characterisation of GnP-reinforced Thermoplastic Elium® Nanocomposites* —— *◆#1565 · Stefano De Luca (University of Parma)* *Preparation of polymer-based composite scaffolds functionalized with titanium dioxide nanoparticles for water remediation.*	#383 · Aya Hosoi (Imperial College London) Functionally graded lattices designed by machine learning: considering material orthotropy	#113 · Jesper K. Jørgensen (Technical University of Denmark) Tailoring the Cure Conditions for Thick Glass Fibre Composites for Wind-Turbine Blades		*◆#357 · Geunsu Joo (Korea Institute of Materials Science)* *Re-Infusion-Based Repair Process and Structural Integrity Evaluation of Pultruded CFRP Spar Caps with Unimpregnated Interlaminar Defects* —— *◆#1127 · Defne Deniz Menceloğlu (Istanbul Technical University)* *Tailoring Composite Laminates for Auxetic Behavior via Particle Swarm Optimization*
12:30–13:30	**LUNCH**											
13:30-14:00	**2 KEYNOTES (rooms A & B)**											
14:00-15:30	**SESSION 3**											
	Session →	**SS02 · Additive manufacturing (3D/4D printing, AFP) for advanced composites**	**SS28 · Intelligent Production Technologies for Load-Dedicated Graded Polymer Composite Structures**	**SS16 · Characterisation of recycled composites**	**2.4 Interfaces**	**3.4 Durability, Ageing, and Environmental Effects**	**5.12 Manufacturing of Discontinuous Composites**	**3.12 Joining and Joints**	**2.2 Fibers and Textiles**	**7.7 Environmental Impact, Life Cycle Assessment & 7.13 Sustaibility by design ()**	**2.1 Bio-Derived and Sustainable Composites**	**6.5 Self-Healing**
14:00		#920 · Esra Yalcinkaya (University of Mons) LIGHT-DRIVEN PNIPAM/GOLD NANOPARTICLE HYDROGEL NANOCOMPOSITES FABRICATED VIA STEREOLITHOGRAPHY FOR BIOMEDICAL APPLICATIONS	#676 · Petar Peric (Institute and Chair for Plastics Processing at RWTH Aachen University) Coextrusion of profiles with graded mechanical properties to reduce stress peaks	#512 · Anna Siebert (Institute of Polymer Materials and Plastics Engineering, Clausthal University of Technology) Mechanical Recycling of Carbon Fibre-Reinforced Thermoplastics: Effects of Processing Strategies on Structure and Mechanical Performance	#759 · Ross F. Minty (University of Strathclyde) Re-exploring the Importance of Residual Stresses to the Stress Transfer Capability of the Fibre-Matrix Interface	#757 · Vincenzo Fiore (University of Palermo) Impact of salt-fog ageing on the recyclability of flax fibre-reinforced bio-composites	#1171 · Shivdarshan Sherugar (University of Bath) Effect of resin infusion on fibre orientation level of aligned discontinuous fibre composites	#666 · Shamala Sambasivam (AIRBUS Operations) Multiscale approach for development of end to end methodology for determination of build stresses in large composite structures	#285 · Delphine Quereilhac (Univ. Bretagne Sud, UMR CNRS 6027, IRDL) Improving flax fibres mechanical properties for sustainable composites: defect microstructural rearrangement during chemical bleaching studied with µ-tomography and multiphoton microscopy	#632 · Thomas Neumeyer (Leibniz-Institut für Verbundwerkstoffe GmbH) Life Cycle Assessment of a Geometrically Highly Flexible Lightweight Hydrogen Tank	#691 · Mohamed Amine Belahcen (Université Marie et Louis Pasteur, SUPMICROTECH, CNRS, Institut FEMTO-ST, F-25000) Multi-Scale Assessment of the Stiffness–Damping Trade-Off in Hemp/Elium ® Composites for structural Applications	#708 · Andrea Dorigato (University of Trento) Smart thermoplastic composite laminates with self-healing capability
14:15		#167 · Sho Bando (The University of Tokyo) Experimental and numerical study on thermal deformation and mechanical properties of 3D printed continuous carbon fiber reinforced composites	#335 · Stephan Rudolph (Professorship Adaptronics and Lightweight Design, Chemnitz University of Technology) Manipulation of fibre orientation using shape memory alloys infibre-reinforced plastics during manufacturing – a feasibility study	#1327 · Marina Corvo Alguacil (Lulea University of Technology) Evaluation of the Effect of Re-Sizing for Recycled Carbon Fiber Using Various Pyrolysis Conditions	#392 · Rami Alawar (LMGC, IMT Mines Alès) COUPLING THERMAL AND INTERFACIAL ANALYSIS FOR A DEEPER UNDERSTANDING OF FIBER–MATRIX ADHESION IN THERMOPLASTIC COMPOSITES	#653 · Alex Frederick Liebau (Fraunhofer Institute for Large Structures in Production Engineering IGP) Investigations into residual load-bearing capacity of damaged and artificially aged flax-fiber-reinforced composites	#256 · Jabran Saroia (The University of Auckland) Enhancing Mechanical Properties Through Reactive In-Situ Plasma-Assisted Extrusion of Glass Fibre-Reinforced Polypropylene/Polyamide-6 Blend Composites	#419 · Julian Steinmetz (TU Braunschweig) Early-stage assessment of bonded composite fuselage joints using a reduced structural model with high-fidelity material modelling	#347 · Alexia Reynet (GEMTEX) Evaluation of the manufacturing of slivers and rovings from recycled carbon fibers	#386 · Paul Domberger (TU Leoben, Processing of Composites and Design for Recycling) Life cycle screening of alpine ski delamination by solvolysis employing supercritical fluids – A novel recycling approach	#991 · Giovanni Filippone (Dipartimento di Ingegneria Chimica, dei Materiali e della Produzione Industriale (DICMaPI) - Università di Napoli Federico II) Effect of Processing Pressure on the Interfacial Shear Strength in Hemp/PLA Biocomposites	#591 · Kota Kanauchi (Tokyo University of Science) Self-Healing Mechanisms and Mechanical Property in Polyrotaxane-Modified Epoxy Vitrimers: A Molecular Dynamics Study
14:30		#738 · Erdem Yildiz (Bristol Composites Institute, Department of Aerospace Engineering, School of Civil, Aerospace, and Design Engineering, University of Bristol) 4D Printing of Fibre-Reinforced Thermoplastics: A Pathway to Intelligent Composite Manufacturing	#699 · Evgenia Madia (Institute of Lightweight Engineering and Polymer Technology, Technische Universität Dresden) Computational workflow for process–structure analysis of thermoplastic braided tape preforms in pressing	#721 · Lorenzo Calervo (POLITECNICO DI MILANO) On the failure mechanisms in discontinuous fiber composites obtained from recycled prepreg scraps.	#410 · Leandra Schmid (Pforzheim University) Investigation of Interface Optimization Methods in Thermoset–Thermoplastic Hybrid Structures	#642 · Anna Kandinskaia (KU Leuven) TIME-DEPENDENCY OF SELF-REINFORCED POLYPROPYLENE AND BIAXIALLY ORIENTED POLYPROPYLENE LAMINATES	#904 · Joana Malheiro (PIEP - Innovation in Polymer Engineering) SMC goes full circle: From characterization and numerical simulation of compression moulding to end of life recycling	#1241 · Riem Kilian (Institute of Mechanics and Adaptronics, Technical University of Braunschweig) Enhancing Damage Tolerance in Adhesively Bonded CFRP Leading-Edge Slat through Surface Toughening	#1020 · Indraneel Roy Chowdhur (Aalborg University) Impact of chemical recycling on the surface roughness and sizing retention of carbon fibre reinforcements recovered from recyclamine epoxy composites	#620 · Sabrina Diniz (German Aerospace Center (DLR)) Mind the gap: Improvement of the life cycle inventory for epoxy resins	#599 · Jonas-Rumi Baumann (University of Applied Sciences Bremen) Genotype-Structure-Property Relationships in Fibre Nettle: A Multiscale Study from Fibre-Level Properties to Composite Performance	#77 · Daniele Rigotti (University Of Trento, Department of Industrial Engineering) Design Of Advanced SelfHealing Mechanism In Fiber Reinforced Composite
14:45		#183 · Quynh Anh Le (ESTACA) A conductive polymer composites (CPCs)-based micron-thick embeddable strain sensor via fused deposition modeling (FDM).	#843 · Oliver Henry Schmidt (Institute of Lightweight Engineering and Polymer Technology - Dresden University of Technology) Experimental and numerical investigation into magnetic alignment of coated fibres in thermoplastic melts	#762 · David Bryce (University of Strathclyde) Use of Recycled Glass Fibres and Manufacturing Waste in the Production of Sustainable Bulk Moulding Compounds.	#754 · Beth Malone (University of Strathclyde) Further exploration of single fibre gold coating to investigate the contribution of residual stresses to the fibre-matrix interface	#1003 · Qiujun Wang (The University of Tokyo) Effects of Long-Term Hydrothermal Aging and Secondary Recycling Process on the Interfacial and Mechanical Properties of Recycled Carbon Fibers	#816 · Dai Hasegawa (Graduate School of Chubu University) Fabrication and Evaluation of Polyamide 66 Composites with Recycled Carbon Fiber	#633 · Arthur Ioualalen (ENSTA | Institut Polytechnique de Paris, UMR CNRS 6027 IRDL) A comparative assessment of experimental tests for coupled-criterion-based Adhesive joint failure analysis	#1447 · Jean Rougé (Bernal Institute) Wet-Spinning and Carbonisation of Water coagulated Lignin/Bio-Based Thermoplastic Polyurethane Precursor Fibers.	*◆#515 · Karina Kroos (DLR - German Aerospace Center)* *Parameters of autoclave processes and their influence on the energy consumption* —— *◆#312 · Soon Ho Yoon (Korea Institute of Science and Technology)* *A complete design of ultra-lightweight composite structures using topology optimization and additive manufacturing*	#668 · Marc Gadinger (Engineering Design, Friedrich-Alexander-Universität Erlangen-Nürnberg) Deviations in laminates with local reinforcement patches: Transferable to plant fibre composites?	#1701 · Han Zhang (University of Warwick) Smart and repeatable easy-repairing composites enabled by thermoplastic interleaves
15:00		#1524 · Mathieu Le Blévenec (Université Bretagne Sud, UMR 6027, IRDL, BIONICS Group) 3D printing of bio-inspired multi-composite material for energy dissipation in coastal environments.	#771 · Johannes Keil (TUD Dresden University of Technology, Institute of Lightweight Engineering and Polymer Technology) Realizing Local Coverage Variations in Thermoplastic Tape-Braided Structures	#286 · Roberto Palazzetti (Politecnico di Milano) Acoustic emissions for damage evolution monitoring on 4PB composite recycled samples	#370 · Jesse Savolainen (Materials Science and Environmental Engineering, Tampere University) Improving the surface properties of recycled glass fibers with supercritical CO2 silylation	#1625 · Pietro Agostino (NTNU) On the durability of non-crimp fabric composite exposed to water bath and freeze-thaw aged	#125 · Burak Ogun Yavuz (University of Bristol) The effect of curing pressure on consolidation of aligned discontinuous fibre-reinforced composites (ADFRCs)	#1557 · Vladimir Vinogradov (Newcastle University) Stress analysis and energy release rate in a single-lap shear joint	#958 · Jungeun Yi (Department of Materials Science and Engineering and Research Institute of Advanced Materials (RIAM), Seoul National University) Rational Design of Continuous Thermal Networks using Novel HCN-Assisted AlN Fibers for High-Performance Thermal Management Composites	*◆#1441 · Maria-Paraskevi Beliok (Faculty of Science and Engineering, University of Maastricht)* *Life Cycle Assessment (LCA) of multi-material self-healed composites with improved circularity.* —— *◆#438 · Helena Khoury Moussa (IPREM UMR 5254, UPPA/CNRS, Université de Pau et des Pays de l'Adour)* *Comparative Life Cycle Assessment of Monolayer Polypropylene Pipe and Multilayer Polypropylene Composite Pipes with Talc- or Glass-Fiber-Reinforced Middle Layer*	#1033 · Mitchell Jones (University of Vienna) Mycelium-Textile Prepreg Analogues for Fungal Composites	#1137 · Josep Costa (AMADE - University of Girona) Bridging Material- and Structural-Scale Characterization of Self-Healing Polymer Composites
15:15		#1491 · Alfonso Magliano (University of Salerno) Design of hybrid leading edge based on titanium lattice structure architecture and CFRP for improving the damage tolerance under bird strike conditions	#728 · Klara Liesegang (Fraunhofer Institute for Machine Tools and Forming Technology IWU) Digital Twins for In-Line Monitoring of Press Processes for Composites with 3D grading: a Concept Paper	#1335 · Johanna Beckmann (Paderborn University) Processing-Structure-Performance Interactions in Recycled PA6-CF Flake-Based Composite Laminates	#1324 · Gregory May-Wilson (University of strathclyde) An Investigation on the effects of fibre sizing on glass fibre Elium and Epoxy composites Interfacial shear strength	#877 · Niklas Lorenz (Aerospace Structures & Materials Department, Faculty of Aerospace Engineering, Delft University of Technology) Effect of thermo-oxidative ageing on the dynamic properties of disulfide-based epoxy vitrimers	#104 · Cam Abercromby (University of Bristol) The effect of fibre length tensile strength and impact performance of Tow-Based Discontinuous Composites manufactured from dry fibre preforms.		#739 · Emmanuel Lopez (Airbus, CANOE, I2M) Towards sustainable, lightweight, high-performance and cost effective carbon fibers	*◆#1609 · Egemen Erçimen (TOBB University of Economics and Technology)* *Sustainability-Based Design Optimization of a Cruise Missile Canister* —— *#1250 · Monika Lingemann (Composites Research Group, Faculty of Engineering, University of Nottingham)* *Composites demanufacturing using debondable primers with expandable microspheres – a preliminary study of the debonding process*	#1635 · Cheng-Ying Li (National Taiwan University, Department of Chemical Engineering) Bacterial cellulose composites for the next decade: From fabrication to application	#1203 · Richard Trask (University of Bristol) Thermal Performance of Complex Microchannel Architectures Embedded Within Carbon Fibre Reinforced Polymers (CFRPs)
15:30–16:00	**COFFEE BREAK**											
16:00-16:45	**◆ SHORT-ORAL RAPID SESSION**											
	Session →				**5.12 Process Modelling and Simulation**	**SS07 · Cryogenic Testing, Material Characterisation & Durability**	**T5 · Manufacturing (mixed)**	**2.7 Hybrid and Hierarchical Composites**	**3.9 Fracture and Damage**	**5.14 Sustainable Manufacturing & 7.11**	**2.1 Bio-Derived and Sustainable Composites**	**6.6 Sensing and Actuation**
16:00		ESCM Awards			*◆#221 · Sophia Keller (University of Applied Sciences Upper Austria)* *Modeling Strategies of Thick Ply Stack Draping Simulations for Large Carbon Composite Components*	*◆#261 · Antoine Delarue (CETIM)* *Development of alternative testing strategy to obtain in-plane shear failure properties of UD composites under cryogenic environment*	*◆#1514 · Julian Schuster (Fraunhofer IGCV)* *Fiber path optimization for highly challenging surfaces in AFP manufacturing*	*◆#525 · Andreas Schiffer (Department of Mechanical and Nuclear Engineering, Khalifa University of Science and Technology)* *Toughening of additively manufactured photopolymer-derived ceramic using bioinspired nacre-like structure and epoxy infiltration*	*◆#675 · Aristea Giannakopoulou (Linköping University)* *Thermal and Mechanical Influence of Interlaminar Defects in RTM-Manufactured Carbon Fiber-Reinforced Polymer Laminates*	*◆#582 · Christian Bülow (German Aerospace Center (DLR))* *Sustainability and Cost Assessment of Structural Components for Cryogenic H2 Aircraft Tanks*	*◆#1459 · Alexander Delp (TU Dortmund University, Chair of Materials Test Engineering (WPT))* *Mechanical capability of forming-optimized all-cellulose composite vulcanized fiber under wet and dry conditions*	*◆#569 · Dajeong Kang (Korea Advanced Instituite of Science and Technology)* *Development of the two-way shape memory alloys and polymer composite smart actuator*
16:07					*◆#902 · Lucas Sardo (Sciences Computers Consultants)* *Optimisation of fibre-reinforced polymer extrusion with numerical simulation and AI*	*◆#428 · Lou Narbonne (Univ Toulouse, IMT Mines Albi, INSA Toulouse, ISAE-SUPAERO, CNRS, ICA)* *Experimental Study of The Behavior of Composite Materials At Low Cryogenic Temperature*	*◆#1221 · David Williams (University of Bath)* *Factors Affecting Thermoplastic Tape-to-Tape Bond Strength in Automated Composites Manufacture*	*◆#543 · Maedeh Amirpour (the University of Auckland)* *Designing Durable Hydrogel-Lattice Composites for Personalised Biomechanical Interfaces: An Experimental and FE Modelling Study*	*◆#172 · Adrien Sapet (Institut Clément Ader (ICA), University of Toulouse, CNRS UMR 5312, INSA, ISAE-Supaéro, IMT Mines Albi, UPS)* *Experimental and Numerical Analysis of the Effects of Sand Particle Erosion on 2D Carbon-Epoxy composite*	*◆#1404 · Georgios Pappas (Department of Mechanical and Process Engineering, ETH Zurich)* *Sustainable, Circular, and Performing FR-PET Composites*	*◆#1672 · Kamil Novotny (Chair of Materials Science and Testing of Polymers, Montanuniversität Leoben)* *Effect of eggshell-derived additives on curing of fully bio-based epoxy resin systems*	*◆#1504 · Abhishek Kumar (Leonardo SpA)* *Towards Green Sensing in Composite Aerostructures: European Ecosystem for Green Electronics (EECONE) Project*
16:14					*◆#1017 · Lingxiao Yang (beihang university)* *Effects of Residual Stresses on the Load-Bearing Performance of Asymmetric Foam Sandwich Structures*	*◆#918 · Maria Fernanda Betanco (Universidad Carlos III)* *Transverse mechanical behavior of unidirectional composites under extreme low-temperature conditions*	*◆#659 · Ehshan Ul-haq (Delft University of Technology)* *Local Assessment of Electrical Behavior of Thin-Ply CFRP for Aerospace Manufacturing*	*◆#564 · Go Masuda (The University of Tokyo)* *Enhanced Damping Behaviour in CFRP Laminates Enabled by a Novel Polyurea Interleaf Concept*	*◆#307 · Thiago Vasconcellos Bi (EDF R&D)* *Modeling Strategies and Failure Prediction for Fiber-Reinforced Composite Structures Using Code_Aster: Current State and Future Directions*	*◆#252 · Elise Mathouillot (Polymers Composites and Hybrids (PCH), IMT Mines Alès)* *Feasibility of Flax/Recycled PolyEthylene Terephthalate (PET) Thermoplastic Tapes: Manufacturing and Characterization*	*◆#510 · Joanna Rehfeldt (Dresden University of Technology, Institute of Aerospace Engineering, Chair of Aircraft Engineering)* *Mesoscale finite element modeling of flax fiber composites with automated material calibration*	*◆#361 · Gabriele Jovarauskaite (Kaunas University of Technology)* *Rain-erosion damage assessment on wind turbine blades using MXene and carbon nanotube coatings*
16:21					*◆#985 · Piaras Kelly (Centre for Advanced Materials Manufacturing and Design, Engineering Science and Biomedical Engineering)* *IMPLEMENTATION AND MODELLING OF VACUUM-ASSISTED THROUGH-THICKNESS MELT IMPREGNATION OF THERMOPLASTIC COMPOSITES*	*◆#1150 · Lewis Kelly (University of Strathclyde)* *Effect of Humidity on the Fibre-Matrix Interface During Cryogenic Cycling*	*◆#1605 · Ahmed Elsayed (NTNU)* *Robotic Processing of Reclaimed Timber*	*◆#1046 · Georgios Foteinidis (Luxembourg Institute of Science and Technology (LIST))* *Development and Evaluation of Hybrid Sandwich Composites for Enhanced Low-Velocity Impact Resistance*	*◆#553 · Tianyu Chen (College of Sciences, Northeastern University)* *Dynamic interfacial fracture for laminates*	*◆#295 · Shristi Ghosh (Georgia Institute of Technology)* *Lightweighting, recycled and renewable materials towards sustainable composites for automotive applications*	*◆#644 · Paula Bucci (FUNDACION CIDAUT)* *Process Platform and Sustainability from Agro-Industrial Residues to Circular High-Performance Elastomers via an Integrated Hydrothermal-Catalytic Platform*	*◆#908 · Tommaso Ternelli (University of Bologna)* *Impact localization by P(VDF-TrFE) piezoelectric nanofibers scaled up from coupons to real components*
16:28					*◆#858 · Maria Onoufriou (KTH Royal Institute of Technology)* *Hybrid modelling of process-induced variability in the morphology of spread-tow thin ply composites during compaction*	*◆#1311 · Yonggun Park (National Insititute of Forest Science)* *Durability of Wood-Based Panels after 3 Year of Natural Weathering in Three Korean Climates*	*◆#1401 · Jeong-gyu Kim (Gyeongsang National University)* *Investigation of Electric Field Effects on Resin Impregnation Behavior and Interfacial Properties in the VaRTM Process*	*◆#988 · Dae Chul Ha (Department of Materials Science and Engineering and Research Institute of Advanced Materials (RIAM), Seoul National University)* *Tailored Interfacial Engineering of Ultra-Thin Hybrid Composites via CNT interleaving for Enhanced Structural and Functional Performance*	*◆#342 · Hélène Brunet (Institut Clément Ader / CNES)* *Damage Modelling of Thick Composite by Non-Intrusive Global/Local Approach*	*◆#225 · Anaïs Barasinski (IMT Mines Albi - ICA)* *Toward rheological characterisation of thermoplastic pre-impregnated UD tape, for its recycling and reuse.*	*◆#69 · Jiayi Sun (Imperial College London)* *Converting wood particles into monolithic cellulose reinforced lignin composites*	#1612 · Tommaso Maria Brugo (University of Bologna) Automated Curve-Based Design of ESR Prosthetic Feet Using Evolutionary Algorithms
16:35					#667 · Christos Nikolaou (Vrije Universiteit Brussel) High definition thermo-mechanical finite element modelling of fused filament fabrication: validation and comparison with existing simulation tools	*◆#165 · Vadim V. Silberschmidt (Loughborough University)* *Effect of seawater on performance of composite structures*	*◆#1433 · Yichen Wu (Northwestern Polytechnical University)* *In-situ Curing of FRP Composites via Joule Heating Using Embedded Carbon Nanotubes*	*◆#1155 · Tom Hill (WMG, University of Warwick)* *Implications of Dissimilar Resin Systems and Fibre Architectures on Mechanical Performance of Hybrid Composites*	*◆#1667 · Marcus Welsh (RWTH Aachen)* *Multiscale statistical failure analysis of filament wound unit cells accounting for process induced variation*	*◆#1240 · Christoph Burgstaller (Tckt - Transfercenter für Kunststofftechnik Gmbh)* *Large Scale Recycling of Wood-Polymer Composites*	*◆#179 · Maryam Sodagar (Institut für Textiltechnik of RWTH Aachen University)* *Innovative approach for converting untreated bast fibres into engineered UD tapes tailored for multi-axial non-crimp composite manufacturing.*	
16:45–17:45	**AWARDS CEREMONY**											
17:45–18:15	**CLOSING CEREMONY**											