ECCM22 — Programme at a Glance

Oslo Kongressenter · 21–25 June 2026 (block heights are proportional to time)

Time	Sunday 21	Monday 22	Tuesday 23	Wednesday 24	Thursday 25
08:00	*Arrivals & Registration*	**08:00–08:25 Opening Ceremony**	**08:00–08:45 Plenary 2**	**08:00–08:45 Plenary 3**	**08:00–08:30 Plenary 4**
08:25					
08:30		**08:25–09:10 Plenary 1**			
08:45					**08:45–10:45 SESSION 12**
09:00			**09:00–11:00 SESSION 5**	**09:00–11:00 SESSION 8**	
09:10					
09:15		**09:15–11:00 SESSION 1**			
10:45					10:45–11:15 Coffee Break
11:00		11:00–11:30 Coffee Break	11:00–11:30 Coffee Break	11:00–11:30 Coffee Break	
11:15					**11:15–12:30 SESSION 13**
11:30		**11:30–13:00 SESSION 2**	**11:30–12:45 SESSION 6**	**11:30–12:45 SESSION 9**	
12:30					12:30–13:30 Lunch
12:45			12:45–13:45 Lunch	12:45–13:45 Lunch	
13:00		13:00–14:00 Lunch			
13:30					**13:30–14:00 Keynotes · rooms A & B**
13:45			**13:45–14:15 Keynotes · rooms A & B**	**13:45–14:15 Keynotes · rooms A & B**	
14:00		**14:00–14:30 Keynotes · rooms A & B**			**14:00–15:30 SESSION 14**
14:15			**14:15–15:15 SESSION 7**	**14:15–15:45 SESSION 10**	
14:30		**14:30–16:30 SESSION 3**			
15:15			15:15–16:30 Poster Discussion + Coffee		
15:30					15:30–16:00 Coffee Break
15:45				15:45–16:15 Coffee Break	
16:00					**16:00–17:00 SESSION 15 — Rapid & ESCM Awards**
16:15				**16:15–18:00 SESSION 11**	
16:30		16:30–17:00 Coffee Break	16:30–18:00 ESCM General Assembly		
17:00		**17:00–18:00 SESSION 4**			**17:00–17:30 Closing & Awards**
17:30					
Evening	**Welcome Reception 18:00**		**Student / PhD Event 20:00–00:00**	**Gala Dinner 20:00–00:00**	

ECCM22 — MONDAY (08:00–19:00) — TECHNICAL PROGRAMME · VERSION 2 (updated 19 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 · Marcin Rusin (Gjenkraft AS) & Alessandro Forestieri (OCF) From Wind Waste to Wind Blade Chair: Sotirios Grammatikos (NTNU)											
09:15–11:00	SESSION 1											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength** **Session chair: Lars Pilgaard Mikkelsen (Technical University of Denmark), Paul Robinson (Imperial College London)**	**SS15 · AI and Mechanics for Composite Design, Optimisation, and Digital Twins** **Session chair: Wei Tan (Queen Mary University of London), Richard Butler (University of Bath)**	**SS13 · Digital Twins and AI for Composite Manufacturing: Modelling, Monitoring and Control** **Session chair: Baris Caglar (TU Delft), Iryna Tretiak (University of Bristol)**	**SS08 · Experimentation and Modelling of Composite Materials and Structures under Dynamic Loading and Environmental Conditions** **Session chair: Yanhong Chen (Harbin University of Technology), Karthik Ram Ramakrishnan (University of Bristol), Dayou Ma (Politecnico di Milano)**	**SS25 · Sustainable Composites Engineering: Innovations from a Doctoral Training Centre** **Session chair: Janice Barton (University of Bristol), Lee Harper (University of Nottingham)**	**2.5 Prepregs** **Session chair: Bodo Fiedler (Hamburg University Of Technology), Clemens Dransfeld (TU Delft), Veronique Michaud (EPFL)**	**5.13 Process Modelling and Simulation** **Session chair: Suresh Advani (University of Delaware), Chung Hae Park (IMT Nord Europe)**	**SS33 · Exploring challenges: from novel observations to paradigm shifting applications of composites** **Session chair: Nuno Correia (University of Porto), Antonio Torres Marques (FEUP)**	**3.7 Failure Mechanics and Simulations** **Session chair: Gergely Czél (Budapest University of Technology and Economics), Frédéric Laurin (ONERA, Paris-Saclay University)**	**2.3 Matrix Materials: Polymers, Metals, Ceramics, Concrete, Geopolymers** **Session chair: Maik Gude (TU Dresden), Martin HIRSEKORN (ONERA)**	**5.6 Automated Placement Technologies** **Session chair: Christophe Binetruy (Centrale Nantes), Andreas Endruweit (University of Nottingham)**
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 Co-authors: Stephen R. Hallett; Karthik Ram Ramakrishnan	#236 · Erica Barnes (University of bristol) A Pathway to Circularity in Composite Manufacturing: Targeting High-Impact Consumables Co-authors: Callum Branfoot; Ffion Rodes; Ian Hamerton; Karthik Ram Ramakrishnan	#1026 · Alexander Bismarck (Instutute of Materials Chemistry of University of Vienna) Pushing service temperature limits: Unidirectional carbon fibre reinforced polyamideimide composites Co-authors: Diana Bratilescu; Ian Hamerton; Milo Shaffer	#113 · Jesper K. Jørgensen (Technical University of Denmark) Tailoring the Cure Conditions for Thick Glass Fibre Composites for Wind-Turbine Blades Co-authors: Tom L. Andersen; Justine Beauson; Lars P. Mikkelsen	#1383 · António Marques (FEUP) Exploring the challenges of manuplants as a methodology for bio-composites manufacturing Co-authors: António Baptista; Steve Evans; Matilde Guedes; Filipe Santos	#806 · Xin Lu (The University of Tokyo) Machine-Learning-Accelerated Cohesive Zone Model for Fracture Analysis of Composite Materials Co-authors: Ryo Higuchi; Tomohiro Yokozeki	#427 · Jules Gardin (SAFRAN AIRCRAFT ENGINES) Thermo-chemo-mechanical characterization and modelling of a 3D interlock reinforced composite Co-authors: Steven LE CORRE; Martin HIRSEKORN; Lionel MARCIN	#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) Co-authors: Kasahun Niguse Asfew; Daniël Peeters
09:30					#45 · Ziwen Xu (Harbin Institute of Technology) Investigation of scaling effects in the impact response of CFPR woven composites Co-authors: Yanhong Chen; Zhongwei Guan	#1121 · Priyanka Patel (University of Bristol (BCI)) Use of Wet Filament Winding Processes for the Manufacture of Non-Oxide Ceramic Matrix Composites Co-authors: David King; Giuliano Allegri; Iryna Tretiak	#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 Co-authors: Bodo Fiedler	#538 · Hiyem Dhifaoui (Ecole des Mines de Saint-Etienne) Numerical Characterization of Flax Fiber Composite Variability: From Morphological Description to Fluid Flow Simulations Co-authors: Renaud Ferrier; Nicolas Moulin; Julien Bruchon; Cécile Mattrand	#1436 · Durai Prabhakaran Ragh (Indian Institute of Technology, JAMMU) Lightweight Composite Transtibial Prosthetic System with EMG-Enabled Dynamic Movement Co-authors: Durai Prabhakaran Raghavalu Thirumalai	#1054 · Rui Guo (Department of Materials Engineering, KU Leuven) High-fidelity micromechanical modelling of transverse tensile damage in cross-ply composites Co-authors: Christian Breite; Mahoor Mehdikhani; Yentl Swolfs	#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 Co-authors: Raffaele D'Elia; Olivier De Almeida	#631 · Mar Zuazo Ruiz (FIDAMC, Foundation for Research, Development and Application of Composite Materials) Stamping and AFP for Next-Gen High-Rate Flaperon Manufacturing Co-authors: Katia Fernández Horcajo; Rafael Contento Tercedor; Alberto Hernandez Ortiz; Alberto Blanco Laiz
09:45					#229 · Clement Watremez (ISL) Dynamic characterisation using laser impact loading of damage properties of UHMWPE-fibres based composites used in ballistic protection Co-authors: Laurent Berthe; Patrick Rozycki; Yael Demarty	#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 Co-authors: Luiz Kawashita; Karthik Ram Ramakrishnan; Stephen R. Hallett	#744 · Maissaloun El-jakl (Delft University of Technology) Experimental analysis of tape manufacturing with melt impregnation Co-authors: Onur Yuksel; Shailee Upadhyay; Oguz Eryilmaz; Clemens Dransfeld	#93 · Benjamin Hailer (Airbus Helicopters) The Use of Manufacturing Process Simulation for the Industrialization of Composite Structures Co-authors: Markus Englhard; Johannes Mattheus Balvers	#1730 · Carlos Cimini (Federal University of Minas Gerais (UFMG)) A novel approach for equivalence of Quad-DD laminates Co-authors: Lucas Vignoli	#243 · Margot Guiho (MBDA / ONERA) A framework for designing a 2D Woven Carbon/Carbon Composite model, validated with a structural scale demonstrator Co-authors: Jean Bénézech; Corentin Léger; Arthur Derrien; Jean-François Maire; Frédéric Laurin	#1445 · Denise Hellmuth (University of Bayreuth) Development of Sustainable Furan-Based Resin Matrices for Composite Materials via Catalyst and Flame Retardant Optimization Co-authors: Holger Ruckdäschel	#751 · Prasad Shimpi (ASOCIACIÓN DE INVESTIGACIÓN METALÚRGICA DEL NOROESTE (AIMEN)) Automated manufacturing of steered fibre variable stiffness composites by dry fibre placement Co-authors: Beatriz Gomes; Mario Pedrera; Pablo Rodriguez
10:00		#1043 · Milo Shaffer (Imperial College London) From constituents to composites: the NextCOMP project to enhance compression performance Co-authors: Giuliano Allegri; Steve Eichhorn; Emile Greenhalgh; Ian Hamerton; Soraia Pimenta; Silvestre Pinho; Paul Robinson; Richard S. Trask; Michael R. Wisnom	#1265 · Wei Tan (Queen Mary University of London) Multi-Fidelity Bayesian Optimisation for Inverse Design of Cellular Composites with Targeted Nonlinear Mechanical Response Co-authors: Hirak Kansara	#641 · Grigori Oehl (German Aerospace Center (DLR)) Towards Sovereign Digitalization in Composite Material Development: A Shift to "Science as a Service" Co-authors: Dominic Bertling; Nico Liebers; Daniel Krause	#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 Co-authors: David Sory; Bratislav Lukic; Kai Liu; Yanhong Chen; Ziwen Xu; Justus Hoffmann; Jens Wiegand; Alexander Rack; Maria Lissner; David Chapman; Nik Petrinic; Daniel Eakins	#328 · Matt Miller (Bristol University) Scalable defect inspection of NCF preforms using polarisation imaging Co-authors: Chris Dighton; Iryna Tretiak; Byung Chul Kim	#1674 · Rima Sfar Zbed (IRT Antoine de Saint Exupéry) Valorization of vitrimer matrices in composite processes: from prepreg manufacturing to composite remanufacturing and repairing Co-authors: Karine Labastie; Patricia Sandre; Mathias Destarac	#254 · Jurui Liu (KU Leuven) Numerical and experimental investigation of temperature and polymerization evolution during filament winding of Elium resin composites Co-authors: Stepan Lomov; Chung Hae Park; Jan Ivens	#1252 · Liu Yang (University of Strathclyde) Additively manufactured high-performance polymer and composite for pump application Co-authors: Ashleee Espinoza	#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 Co-authors: Zhenyu Yang	#297 · Vickie Caetano Maria (University Of Montpellier) Thermosets in aeronautical composites: understanding their behavior at the heart of their properties Co-authors: Christine JOLY-DUHAMEL; Sylvain CAILLOL; Léonard COURAPIED	#575 · Félix Thébault (GeM) Optimizing the staggering of singularities in Automated Fiber Placement Co-authors: Alexandre Clément; Sylvain Fréour; Gwénolé Le Moal; Pascal Casari
10:15		#1522 · Sandra Schmidt (Hochschule Darmstadt hda) The behaviour of paper composites under pressure loads and their failure modes Co-authors: Andreas Büter	#191 · Runze Li (Imperial College London) Feasibility-Aware Bayesian Modelling and Optimization of Composite Structures with Failure Constraints Co-authors: Wei Zhou; Mario Miranda; Silvestre Pinho	#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 Co-authors: Norbert Krisztian Kovacs; Tibor Czigany	#1411 · Karthik Ram Ramakrishn (University of Bristol) Effect of temperature and strain rate on the translaminar fracture of thermoplastic composites Co-authors: Gustavo Quino; Karthik Ram Ramakrishnan	#596 · Alessandro Milite (Politecnico di Milano, Department of Chemistry, Materials and Chemical Engineering "Giulio Natta") Innovative mechanical recycling methods for vitrimer-matrix composites Co-authors: Enrica Greco; Riccardo Di Giovanni; Lorenzo Di Marco; Narongkorn Krajangsawasdi; Roberto Frassine; Marco Luigi Longana	#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 Co-authors: Eloi Andrieux; Veronique Michaud; Oğuz Eryilmaz; Onur Yuksel; Baris Caglar; Clemens Dransfeld	#1157 · Yannis Grohmann (DLR) Temperature model for the direct resistance heating of carbon fiber tapes during fiber placement processes or filament winding Co-authors: Jonas von Heusinger; Jörg Melcher; Daniel Stefaniak	#743 · Ruggero Volponi (CIRA Italian Aerospace Research Centre) Micro/Nano-structured Polyethylene Composites for Galactic Cosmic Radiation shielding. Co-authors: Filomena Piscitelli; Fabrizia Cilento; Barbara Palmieri; Alfonso Martone; Giovangiuseppe Giusto; Mario Costantini; Mario De Cesare; Lucio Gialanella; Lorenzo Manti	#1531 · Florian Gouhier (Ecole Polytechnique) A Phase-Field Formulation Accounting for Interfacial Fracture in Additively Manufactured Polymers Co-authors: Samuel Guiton; David Melancon; Daniel Therriault; Martin Lévesque	#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 Co-authors: Valeria Garbin; Clemens Dransfeld	#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 Co-authors: Alexander Schmitt; Philipp Salathe; Holger Ruckdäschel
10:30		#1356 · Emile Greenhalgh (Imperial College London) Enabling fail-safe composite design – Tailored laminate design for unstable compressive crack-arrest in Fibre-Reinforced Polymers Co-authors: Bruno P Santos; Silvestre T Pinho	#399 · Luca Patrignani (Imperial College London) Graph Transformers for Effective Prediction of Progressive Failure Evolution in Composite Structures Co-authors: Silvestre Pinho	#1426 · Sergio Martínez Crespo (Instituto Tecnológico de Aragón (ITA)) Deep Learning-Based Surrogate Models for Resin Transfer Moulding Process Simulation Co-authors: Francisco Serrano Alcalde; Manuel Laspalas Casanova	#234 · Anna Williams (University of Bristol) Hot/Wet Interlaminar Fracture Characterisation of A Newly Developed Phenolic-Triazine Ester Composite System Co-authors: Ian Hamerton; Giuliano Allegri	#188 · Lewis Griffin (University Of Bristol) Deconsolidation of semi-cured carbon-epoxy laminates at forming temperatures Co-authors: Arjun Radhakrishnan; Petar Zivkovic; James Kratz	#451 · Clemens Dransfeld (Delft University of Technology - Faculty of Aerospace Engineering) Controlling microstructures in slurry impregnated thermoplastic tapes Co-authors: Julia Jungbluth; Silvia Gomarasca; Shailee Upadhyay; Burak Akdeniz	#1060 · Zirui Guo (The University of Tokyo) Tape-level deformation of CFRTP-SMC during molding flow investigated by simulation and x-CT tracking Co-authors: Cheng Jin; Yi Wan; Jun Takahashi	#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 Co-authors: Matteo Sambucci; Erika Palazzi; Fabrizio Sarasini; Jacopo Tirillò	#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 Co-authors: Hyoung Jun Lim	#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 Co-authors: Magdalena Bisztyga-Szklarz; Tomasz Dudziak	#1142 · Roberto Guzmán De Vill (University of Salamanca) Ultrasonic-assisted in-situ Consolidation of Carbon Fiber Thermoplastic Tapes Co-authors: Jorge Bautista Pérez; M. Elena Hernández; Saber Maamri; C. Izquierdo; Pablo Moreno
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 Co-authors: Dimitrios Bikos; Ian Hamerton; Milo Shaffer	#453 · Mustafa Okumus (IINM, WMG, University of Warwick) Probabilistic Machine Learning Approach to Design of Polymer Composites for Hydrogen Permeation Co-authors: Lukasz Figiel	#521 · Jimmy Gaspard Jean (Delft University of Technology) Accelerating flow prediction in arbitrary fibrous microstructures with latent models Co-authors: Guillaume Broggi; Baris Caglar	#1235 · Fulvio Pinto (University of Bath, Department of Mechanical Engineering) Effect of Moisture Absorption on the Dynamic Compressive Behaviour of Polymeric Syntactic Foams Co-authors: Yue Chen; Lallina Shah; Gustavo Quino Quispe; Antonio Pellegrino	#683 · George Holiday (NCC & BCI) Ceramic coatings for protection of polymer composites from high energy events Co-authors: Sean Cooper; Konstantina Kanari; Craig Wallduck; Dong Liu; Ian Hammerton; Richard Trask	#1348 · Gianluigi Creonti (CROSSFIRE Srl) Graphene Reinforced Glass and Recycled Carbon fabric based, Mass Productive, Circular Recyclable Crosspreg® Co-authors: Ahmed Elmarakbi; Beatriz Alonso; Pelin Uzun; Ali Rezaei; Daniele Pullini; Marco Marchi; Laura Mazzocchetti; Daniele Biondi; Jacopo Ortolani	#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 Co-authors: Brandon Argent; Srinivas Nunna; Brian Falzon	#1233 · Endel Iarve (University of Texas at Arlington) Fully Discrete Modelling of Brittle Fracture Modes in Composite Materials Co-authors: David Mollenhauer; Eric Zhou; Kevin Hoos; Keith Ballard	#693 · Daniel Fernández Gonzá (Spanish National Reasearch Council (CSIC)-Nanomaterials and Nanotechnology Research Center (CINN)) Graphite-metal composites fabricated by spark plasma sintering Co-authors: Juan Piñuela-Noval; Marta Suárez; Cecilia Solís; Cristian Gómez-Rodríguez; Adolfo Fernández	#459 · Andreas Endruweit (University of Nottingham) Effect of the ply angle on tack between uni-directional prepreg tapes Co-authors: Davide De Focatiis
11:00–11:30	**COFFEE BREAK**											
11:30–13:00	SESSION 2											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength** **Session chair: Silvestre Pinho, Charlie Shaw (Imperial College London)**	**SS19 · Fatigue and Damage Mechanics of composite and composite structures** **Session chair: Marino Quaresimin, Paolo Andrea Carraro, Lucio Maragoni (University of Padova)**	**SS02 · Additive manufacturing (3D/4D printing, AFP) for advanced composites** **Session chair: Kunal Masania (TU Delft), Antoine Le Duigou (University of South Brittany)**	**SS32 · Durability of polymers and fibre reinforced polymer composites** **Session chair: José Sena-Cruz (ISISE, ARISE, University of Minho), Sotirios Grammatikos (NTNU), Olga Bulderberga (Uniersity of Latvia)**	**3.8 Fatigue** **Session chair: Anastasios Vassilopoulos (EPFL), Andrea Dorigato (University of Trento)**	**SS12 · Long Discontinuous Fibre Composites: Processing, Microstructure, Properties and Performance** **Session chair: Connie Qian (University of Sheffield), Miro Duhovic (Leibniz-Institut für Verbundwerkstoffe)**	**3.12 Joining and Joints** **Session chair: Michele Zappalorto (University of Padova), Atsushi Hosoi (Waseda University)**	**1.11 Other Application Domains** **Session chair: Karthik Ramaswamy (Collins Aerospace), Erik Thostenson (University of Delaware)**		**T2 · Interfaces & Bio-derived composites** **Session chair: Fabrizio Sarasini (University of Rome La Sapienza), Vincent Placet (Université Marie et Louis Pasteur)**	**5.10 Liquid Molding, Pultrusion, Filament Winding** **Session chair: Mâlin Akermo (KTH Royal Institute of Technology), Benjamin Alcock (Sintef)**
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 Co-authors: Kostas Menegos; Gustavo Quino; Paul Robinson; Richard S. Trask	#1586 · Marino Quaresimin (University Of Padova) Innovative analysis of fatigue damage evolution and stiffness loss in structural composite components Co-authors: Paolo Andrea Carraro; Lucio Maragoni; Filippo Veneziani; Filip Damaschin	#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 Co-authors: Benedict Rohrmüller; Carla Beckmann; Claudio Findeisen; Achim Neubrand; Jörg Hohe	#590 · Torben Deutschmann (Hamburg University of Technology (TUHH)) Experimental Multiaxial Fatigue Testing of Composite Profiles on a 6-DoF Hexapod Co-authors: Floyd Bischop; Dieter Krause	#1343 · Miro Duhovic (Leibniz-Institut für Verbundwerkstoffe) Polarization Image Analysis for the Monitoring of C-SMC Part Manufacturing Co-authors: Pascal Felber; Paul Egorov; Fabian Röder; Markus Kronenberger; Florian Gortner; Katja Schladitz; Hannes Grimm-Strele	#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 Co-authors: Joël Serra; Wiyao Azoti; Bruno Castanié	#1104 · Alexandre Looten (CERN) Advanced Composite Cryostat Design for Next-Generation High-Energy Physics Detectors at CERN	ESCM Council Meeting	#760 · Marianna Pilla (Università di Roma la Sapienza) Experimental and Computational Analysis of Bio-Inspired 3D-Printed Interlocking Interfaces Co-authors: Marcello Laurenti; Jacopo Tirillò; Fabrizio Sarasini	#508 · Ben Thomas (University of Edinburgh) Evaluation of the Suitability of Multi-Stage Infusions for Thermoset Composite Laminates Co-authors: Eddie McCarthy; Adam Butterworth; Philipp Thies; Selda Oterkus
11:45		#1029 · Lars Pilgaard Mikkelse (DTU Wind) Compression strength predictions of pultruded carbon fiber profiles for wind turbine blades Co-authors: Lars Pilgaard Mikkelsen	#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 Co-authors: Lucio Maragoni; Marino Quaresimin	#689 · Pablo Romero-Rodriguez (AIMEN) Localized heating of high-performance composites with short and continuous carbon reinforcements Co-authors: Ander Reizabal; Xabier Perez; Alberto Pedreira; Andres Gonzalez; Camilo Prieto	#1406 · Romain Léger (LMGC, Univ Montpellier, IMT Mines Ales, CNRS) Effect of hygrothermal ageing on the fatigue behaviour of pultruded composite materials Co-authors: Hussein Chebbo; Arnaud Regazzi; Didier Perrin; Patrick Ienny	#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 Co-authors: Cheng Jin; Yi Wan; Jun Takahashi	#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 Co-authors: Igor Rodrigues Lopes; Beatriz Costa Pereira; Šimáček Pavel; Suresh Advani; Nuno Correia	#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 Co-authors: A. Wagih; X. Li; A. Asiri; R. Hajri; A. Al-Jarro; Hamad Saiari; G. Lubineau	#533 · Vincent Lutz (MGC Moser-Glaser AG, Pfiffner Group Switzerland) Advanced Polyester Textile-reinforced Epoxy Composites for High-Voltage Insulation Co-authors: Simon Lüthi; Julian Kupski; Karsten Frick		#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 Co-authors: Sylvie Pourchet; Vincent Placet; Lamine Boubakar; Florian Boutenel	#313 · Seung Mo Son (Pusan National University) Tailoring Transcrystallinity and Moisture Stability in PA6/PA12 Copolymer CFRTPs Fabricated by T-RTM Co-authors: Su Jeong Heo; SeungWoo Jung; Moonsuk Jang; Dong Gi Seong
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 Co-authors: David B. Anthony; Milo S.P. Shaffer; Alexander Bismarck	#714 · Sam Patel (Imperial College London) A Computationally Efficient HSL-FE Approach for Predicting Fibre Breakage in Composite Structures Co-authors: Soraia Pimenta	#414 · Muhammad Khizer Ali Kh (Khalifa University of Science and Technology) Energy absorption of 3D-printed PEEK/CF composite honeycombs with tubular CFRP reinforcements Co-authors: Muhammad Khizer Ali Khan; Wesley Cantwell; Kamran Ahmed Khan	#368 · Thibault Haudricourt (ENSTA/ SAFRAN) Thermo-mechanical analysis on a 3D woven composite for evaluation of fatigue performance Co-authors: Libor Navratil; Youssera El Archi; Vincent Le saux; Yann Marco	#520 · Peter Zobec (Faculty Of Mechanical Engineering, University Of Ljubljana) Complex loading and fatigue damage of composite sandwich structures Co-authors: Jure Kajbič; Jernej Klemenc	#1031 · Richard Vocke (Faserinstitut Bremen e.V. (FIBRE)) Compression moulding with tape trim waste to manufacture structural components Co-authors: Oliver Focke; Schiebel Patrick; Marius Möller; David May	#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 Thermal Properties of Epoxy Using Magnetically Aligned Graphene Nanoplatelets Co-authors: Sarathi Ramanujan; Shankar Krishnapillai; Velmurugan Ramachandran; Gandluri Parameswarreddy		#598 · Innes McKay (University of Strathclyde) Influence of Microbond Sample Preparation Method on Interfacial Strength in Flax, Glass, and Carbon-PLA Co-authors: Liu Yang; Reda Felfel	#1577 · Kiyoshi Uzawa (Innovative Composite Center at KIT) 「Ultra-Fast Manufacturing of High-Pressure Hydrogen Tanks Using REDOX-Curing RTM and Non-FW Preforms Co-authors: Hirofumi Nishida; Katsuhiko nunotani; Osuke Ishida; hiroshi yamashita; Toshio Ogasawara; Norio Hirayama; Kazuhiro Sakata
12:15		#460 · Fabrizio Donisi (Rolls-Royce PLC) Bird-Strike and Fan Blade Off compression type failures in Composite Fan Blades Co-authors: James Finlayson	#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 Co-authors: Julia Decker; Andreas Büter	#1653 · Joanna Wong (University of Calgary) Additively Manufactured Deployable Lattice Booms with Tailored Fiber Placement Co-authors: Nicholas Elderfield; Aghna Mukherjee; Paolo Ermanni	#107 · John Buckingham (University of Surrey) Comparison of moisture absorption in thermoset and thermoplastic matrix glass fibre polymer composites for accelerated ageing tests Co-authors: Robert Dorey; Stefanos Giannis; Andrew Viquerat	#959 · Shain Azadi (Politecnico di Milano) A Physics-Informed Neural Network for Fatigue Life Estimation in Fiber Reinforced Polymer Composites Co-authors: Valter Carvelli	#1055 · Izumi Matsukura (IHI Corporation) Numerical and Nondestructive Evaluation of Fiber-Orientation Randomness in Discontinuous Carbon-Fiber-Reinforced Composites Co-authors: Takehiro Shirai; Kazuto Ogawara; Kiyoshi Uzawa	#1581 · Min Seong Hwang (Department of Mechanical Engineering, Gyeongsang National University) Experimental and Numerical Analysis of L-Flange Joints in Large Sandwich Composite Structures Co-authors: Seong Hyeon Kim; Byeog Hun Min; Jin Ho Choi	#1136 · Georgios Tzortzinis (TUD Dresden University of Technology) Influence of Laminate Architecture on the Torsional Behaviour of Filament-Wound CFRP Driveshafts Co-authors: Elias Bilalis; Qingyun Wu; Florian Schmidt; Angelos Filippatos; Nicholas Tsouvalis; Maik Gude		#98 · Marvin Veil (German Aerospace Center (DLR)) Investigation of Hygrothermal Effects on the Structural Integrity of Flax/PA11 Composites Co-authors: Sarah Kieling; Marcel Littig; Yannick Schäfer; Ashley R. Chadwick; Georg Doll	#579 · Wonki Kim (Korea Advanced Institute of Science and Technology (KAIST)) Influence of winding pattern on the mechanical properties of wound composite structures Co-authors: Miro Duhovic; Ulrich Blass; Michael Päßler; Kenf Andreas; Andreas Gebhard; Nicole Motsch-Eichmann; Jens Schlimbach; Sebastian Schmeer
12:30		#441 · Dimitrios Bikos (Department of Mechanical Engineering, Imperial College London) Benchmarking micromechanical finite element models of UD-FRPS against in-situ compression experiments Co-authors: Richard S. Trask; Paul Robinson; Anirudh Kohli; Philip J. Withers; Soraia Pimenta	#999 · Masamichi Kawai (University of Tsukuba) A Critical Damage Growth Model for Notched Fatigue Fracture of CFRP Laminates at Various Stress Ratios	#968 · Naruki Ichihara (The University of Tokyo) Bio-morphologic printing patterns for 3D/4D fiber-reinforced polymer composites Co-authors: Masahito Ueda	#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 Co-authors: Adrián Cimadevilla; José Alfonso Artero-Guerrero; Jesús Pernas-Sánchez; Fernando Naya; Álvaro Vaz-Romero; Bratislav Lukic; Georg Ganzenmüller; Julien Berthe	#536 · Stefan Eder (Technical University of Leoben) Influence of PCR Polymers on Fatigue Life of Short-Fiber-Reinforced Composites Co-authors: Reza Afsharnia; Dario Kaylani; Gerald Pinter	#1061 · Connie Qian (University of Sheffield) The First European Benchmark Exercise on Squeeze Flow Testing of High-Performance Carbon Fibre Sheet Moulding Compounds Co-authors: Miro Duhovic; Dominic Schommer; Florian Gortner; Andreas Gebhard; Thomas Neumeyer; Marcel Olma; Louis Schreyer; Luise Kärger; Martin Hohberg; Hao Yuan; Anna Imbsweiler; Leah Ramirez		#182 · Chamil Abeykoon (The University of Manchester) Evaluation of the Suitability of Carbon Fibre Reinforced Non-Metallic Pipelines for Oil and Gas Industry Co-authors: Othman Alyahya; Yasith S Perera; Prasad Potluri		#1733 · Jaswinder Kaur (Laboratory of Molecular Science and Engineering, Abo Akademi University) Tailored Biorefinery Lignin via Fractionation and Depolymerization for Sustainable Epoxy Thermoset Co-authors: Patrik Eklund; Henrik Grenman; Chunlin Xu	#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 Co-authors: Michael Huszar; Ewald Fauster
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 Co-authors: Yann MIDOL; Dominique Martini; Alban ROBIN	#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 Co-authors: Morten Fogtmann Kristiansen; Steffen Rasmussen; Henrik Myhre Jensen; Lars Pilgaard Mikkelsen	#442 · Kamran Khan (Khalifa University) Enhanced stability of plate-based composite lattice structure fabricated via 3D printing of polyamide/carbon fiber filament Co-authors: Sultan Al Hassanieh; Wesley Cantwell	#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 Co-authors: Sylvain Fréour; Frédéric Jacquemin	#671 · Aijia Li (Univ Toulouse, UTTOP, LGP) Self-heating effect of multidirectional carbon fiber reinforced composites under biaxial tension-tension fatigue loading Co-authors: Christian Garnier; Marie-Laetitia Pastor; Xiaojing Gong; Clément Keller	#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 Co-authors: Louis Schreyer; Miro Duhovic; Connie Qian; Ton Peijs; Dominic Schommer; Florian Gortner; Thomas Neumeyer; Marcel Olma; Luise Kärger; Martin Hohberg; Hao Yuan; Anna Julia Imbsweiler	#814 · Atsushi Hosoi (Waseda University) Evaluation of Bonding Strength in Single-Lap Joints Between Nanostructured Aluminum Alloys and Thermoplastic CFRP Laminates Co-authors: Hiroyuki Kawada	#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. Co-authors: Xiaole Li; A. Wagih; A. Asiri; R. Hajri; A. Al-Jarrod; Hamad Saiari; Gilles Lubineau		#1647 · Alejandro Rios (University of Ottawa) Linking Physicochemical Properties of Lignocellulosic Residues to Lime-Based Insulating Biocomposite Performance Across Feedstock Types and Volume Fractions Co-authors: Fernando Asencio; Tomas Contreras; Orlando Peredes; Martin Noël; Marcelo Gonzalez	#882 · Joachim Greiner (IFB, Uni Stuttgart) Automated Winding Technique to Generate Functional Free-Form Composites Inspired by Nature Co-authors: Johannes Valentin Bauer; Silvia Imrich; Mike Kornely; Gaurab Sundar Dutta
13:00–14:00	**LUNCH**											
14:00–14:30	2 KEYNOTES (rooms A & B)	**★ KEYNOTE · Dimitrios Zarouchas (Delft University of Technology)** **Why (and why not) AI can enhance structural and performance analysis of composites?** **Chair: Paul Robinson (Imperial College London)**	**★ KEYNOTE · Dr. Miguel Ángel Castillo Acero — (Aernnova)** **Aernnova' s Industrial Vision for Next-Generation Composite Aerostructures** **Chair: Brian Falzon (Western Sydney University)**									
14:30–16:30	SESSION 3											
	Session →	**SS01 · Delaminations and debonding in composite materials and structures** **Session chair: Marco Alfano (University of Modena and Reggio Emilia), Bent F. Sørensen (Technical University Of Denmark)**	**SS11 · Advanced Composite Materials and Structures: Multifunctional Design, Damage Diagnostics, Testing, and Modeling** **Session chair: Xi Li (Politecnico di Milano), Rosemere Lima (Universidade de Lisboa), Ioannis Katsivalis (University of Bath)**	**3.8 Fatigue** **Session chair: Paolo Andrea Carraro (University of Padova), Marino Quaresimin (University of Padova)**	**6.3 Energy Storage and Harvesting** **Session chair: Dimitrios Bekas (Airbus), Brian Wardle (Massachusetts Institute of Technology)**	**SS17 · Image-based analysis of composite features** **Session chair: Baris Caglar (TU Delft), James Kratz (University of Bristol)**	**7.6 Composite Pressure Vessels** **Session chair: Ugo Lafont (European Space Agency), Yentl Swolfs (KU Leuven), Antonios Stamopoulos (University of L'Aquila)**	**1.3 Civil Engineering and Architecture** **Session chair: Jose Sena-Cruz (University of Minho), Anastasios Vassilopoulos (EPFL)**	**7.11 Recycling, Remanufacturing, and Circular Economy** **Session chair: Essi Sarlin (Tampere University), Nektaria-Marianthi Barkoula (University of Ioannina)**	**3.7 Failure Mechanics and Simulations** **Session chair: Patrik Fernberg (Luleå University of Technology), Silvestre Pinho (Imperial College London)**	**5.13 Process Modelling and Simulation** **Session chair: Benjamin Alcock (Sintef), Malin Åkermo (KTH Royal Institute of Technology)**	**2.1 Bio-Derived and Sustainable Composites** **Session chair: Ton Peijs (University of Warwick), Daiva Zeleniakiene (Kaunas University of Technology)**
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 Co-authors: Leonardo Guido Salvi; Sajjad Safaei; Albert Turon; Laura Carreras	#461 · Rosemere de Alves Lima (IDMEC, Instituto Superior Técnico) 3D printed multi-functional microstructures for vitrimer-based composite bonded joints Co-authors: Sofia Teixeira de Freitas	#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? Co-authors: John-Alan Pascoe; René Alderliesten	#1359 · Emile S Greenhalgh (Department of Aeronautics, Imperial College London) Fractographic Insights into the Optimum Microstructures for Structural Supercapacitors Co-authors: Dmitry S. Ivanov; Odysseas Kakarelidis; Anthony Kucernak; Sang Nguyen; Dominic R. Palubiski; Shimeng Qian; Milo Shaffer; Rajat Sharma; Natasha Shirshova	#306 · Baris Caglar (TU Delft) Fiber detection in microstructural images of composites: benchmarking and sensitivity analysis of segmentation methods Co-authors: Guillaume Broggi; Onur Yuksel; Vincent Maes; Robin Hartley; James Kratz	#1019 · Mohammad Sheikhi (Department of Materials Engineering, KU Leuven) Efficient Damage Prediction in Composite Pressure Vessels through Representative Modelling Co-authors: Christian Breite; Jan Ivens; Yentl Swolfs	#116 · Lucija Stepinac (EPFL) Additively Manufactured Polymeric TPMS Façade Co-authors: Anastasios Vassilopoulos	#1379 · Yağız Özbek (Sabanci University) From AFP Waste to Flight-Ready Sandwich Skins: Strand-Tailored Skins, Core-Stabilized Geometry, and Plasma Activated Bonding Co-authors: Abdulrahman Al-Nadhari; Mehmet Yıldız; Hatice Sinem Şaş	#373 · Pierre-Alexandre Bosch (EPFL) Machine Learning Surrogate Models for Hashin-3D Failure Prediction in Thick FRP Laminates Co-authors: Pierre-Alexandre Boschert; Joël Cugnoni; Véronique Michaud	#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 Co-authors: Arthur CANTAREL; Gérald DEBENEST	#280 · Khurshid Malik (1Department of management and Engineering, Linköping University) Advancing sustainable marine materials with graphene-coated natural fiber composites Co-authors: Marie Jonsson; Mikael Segersäll; Mohamed Loukil; Erik Khranovsky; Mykhailo Zhybak; Robin Wikström; Makki Abdelmouleh; Sami Boufi
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 Co-authors: Fiona Decantere; Thanasis Chatziathanasiou; Mahoor Mehdikhani; Yentl Swolfs	#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 Co-authors: Davide S. Paolino; Raffaele Ciardiello	#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 Co-authors: Xavier Gabrion; Violaine Guicheret; Vincent Placet; Frédéric Thiebaud	#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 Co-authors: Lewis Griffin; Amirali Amirian; Christophe Binetruy; Guillaume Broggi; Baris Caglar; Clemens Dransfeld; Silvia Gomarasca; Wouter Grouve; Robin Hartley; James Kratz; Arthur Levy; Mahoor Mehdikhani	#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 Co-authors: Gabriel Eduardo Rojas Velenzuela; Konstantin Träger; Claudius Breitmoser; Maximilian Konstantin Strobel; Klaus Drechsler	#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 Co-authors: Tien Dat Pham	#271 · Amit Chanda (School of Mechanical and Aerospace Engineering, Nanyang Technological University (NTU)) Spinheat-assisted Debonding-on-demand Structural Adhesives for Recyclable Composite Structures Co-authors: JiaoJiao Wang; Raju V. Ramanujan; Terry W.J. Steele; Sridhar Idapalapati	#711 · Alexy Tailleur (DMAS, ONERA, Université Paris Saclay) Modelling the effect of out-of-plane waviness defects on damage and failure of thermoset laminates Co-authors: Christian Fagiano; Martin Hirsekorn; Frédéric Laurin; Myriam Kaminski; Martin Desailloud	#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 Co-authors: Juan-Pablo Marquez-Costa; Pierre Margerit; Marc Rébillat	#1135 · Pooria Khalili (University of Borås) Sustainable Hybrid Natural Fiber Composites: Mechanical Performance and Life Cycle Assessment Considerations Co-authors: Mikael Skrifvars
15:00		#1627 · Bent F. Sørensen (Technical University Of Denmark) Similitude in delamination crack growth with large-scale fibre bridging Co-authors: Ashish K. Bangaru; Rubén Erives	#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 Co-authors: Rafael Schelkow; Eunice Cunha; Beatriz Arouca Maia; Livia Melina Doss; Filipa Ribeiro; Pedro Nuno Fernandes; Andreia Araújo; Robert Böhm	#818 · Andrea Bernasconi (Politecnico di Milano) Fatigue resistance and self-healing of carbon fiber reinforced vitrimers subjected to bending tests Co-authors: Elena Squellati; Giulia Altamura; Luca Michele Martulli; Gianmarco Griffini; Stefano Turri	#1065 · Elia Chimonides (Imperial College London) Thermoplastic Structural Electrolytes Co-authors: Emiliano Bilotti; Emile Greenhalgh	#1236 · Robin Hartley (University of Bristol) Improving Fibre Segmentation in CFRP Micrographs Through Phase-Aware Shading Correction Co-authors: James Kratz	#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 Co-authors: Matteo Pastrello; Nazim Ali; Wim Van Paepegem	#709 · Helena Rocha (PIEP - Centre for Innovation in Polymer Engineering) Lightweight Double Curvature Sandwich Panels with improved Fire Reaction for Façade Panels Co-authors: Miguel Vasconcelos; Paulo Antunes; António Nascimento; Deives Paula; Nuno Simões; Alexandra Barreiros; Teresa Diamantino; Cristina Ferreira; Diana Gonçalves; Paulo Antunes	#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 Co-authors: Emanuele Maccaferri; Samuel Martinini; Luca Ciacci; Daniele Cespi; Jacopo Ortolani; Tiziana Benelli; Daniele Biondi; Loris Giorgini	#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 Co-authors: YI WAN; JUN TAKAHASHI	#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 Co-authors: Akash Sharma; Marie Hondekyn; Dhruv Narayan; Wim Van Paepegem	#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. Co-authors: Mark Vaughan; Sidharth Amanthra; Maurice N. Collins
15:15		#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 Co-authors: Moritz Kuhtz; Richard Protz; Johannes Pusicha; Johannes Buhl; Maik Gude	#838 · Muhammad Yasir Khalid (Khalifa University) Embedded GNP-Epoxy Films: A Route to Multifunctional GFRP Composites Co-authors: Rehan Umer	#128 · Kimiyoshi Naito (National Institute for Materials Science) Static and fatigue tensile properties of epoxy-vitrimer-based CFRP Co-authors: Yasuyuki Nakamura; Shota Ando; Jun Koyanagi; Keiichi Shirasu; Makoto Watanabe; Takaya Suzuki; Hiroaki Kuwahara	#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 Co-authors: Sian Ying Chen; Kathrin Weiland; Qixiang Jiang; Alexander Bismarck; Ludovic Jourdin; Kunal Masania	#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 Co-authors: Jan Condé-Wolter; Jan P. Walter; Richard Protz; Karsten Dobrint-Tittmann; Maik Gude	#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 Co-authors: Christian Mittelstedt	#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 Co-authors: João Miguel Pereira; Miguel Azenha; José Sena-Cruz	#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 Co-authors: Lukas Böhme; Stefan Schmidt; Wilko Flügge	#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 Co-authors: Nazim Ali; Sumandeep Singh Rana; Wim Van Paepegem	#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 Co-authors: Andrew Koyanagi; Jun Koyanagi	#621 · Marko Barbaric (PCCL) Dynamic biobased epoxy networks with diamine hardeners for sustainable and circular thermosets Co-authors: Markus Wolfahrt; Sandra Schlögl
15:30		#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 Co-authors: Dimitrios Zarouchas; Julie Teuwen	#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 Co-authors: Denis Espinassou; Suzanne Laik; David Chainchard; Philippe Amuzuga	#129 · Hiroyuki Oguma (National Institute for Materials Science) Experimental Study on S–N Characteristics and Failure Mechanisms of CFRP and GFRP in Cryogenic Environments Co-authors: Kimiyoshi Naito; Masatoshi Midorikawa	#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 Co-authors: Yunyun Tao	#821 · Jonas Naumann (German Aerospace Center (DLR)) Automatic Ply Instance Analysis for CFRP Micrographs Co-authors: Jonas P. Appels; Julius Biermann; Christopher Gorsky; Timo de Wolff; Christoph Brauer	#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 Co-authors: Blanka Tomková; Ondřej Novák; Kristýna Bendová	#504 · Elsa Best (Delft University of Technology, Department of Materials Science and Engineering) Unravelling the Mechanisms of Electrochemical CFRP Recycling Co-authors: J.M.C. Mol; J.W. Haverkort; P. Taheri; S.T. Abrahami	#788 · Kai Xuan Tan (Department of Aeronautics, Imperial College London) A numerical modelling approach for incorporating the effect of defects in large composite structures Co-authors: Hongyan Wang; Luis Filipe Varandas; Dimitris Gouskos; Ryoko Morishima; Martin Desailloud; Silvestre Taveira Pinho	#166 · Erik Jungstedt (Mips AB) A Numerical Investigation of the Consolidation Behaviour of Composite Helmet Shells Co-authors: Maria Onoufriou; Gustav Boustedt; Gustav Strandgård; Malin Åkermo	#933 · Vito Gigante (Università di Pisa) Recycled Poly(butylene succinate) (PBS)–Cellulose Fibre Biocomposites: Processing Optimisation for Fused Granulate Fabrication (FGF) Co-authors: Jacopo Tirillò; Fabrizio Sarasini; Serena Gabrielli; Laura Aliotta
15:45		#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 Co-authors: Xavier Gabrion; Florian Boutenel; Gilles Bourbon; Patrice Le Moal; Vincent Placet; Sébastien Thibaud	#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 Co-authors: Fabrizio Moroni; Ulderico Tarasconi; Mario Castro; Enrico Basso; Luca Raimondi; Giacomo Selleri; Tommaso Brugo; Andrea Zucchelli	#925 · Gabriela Loi (University of Cagliari) Fatigue performance of stepped lap composite joints reinforced with metal Z-pins Co-authors: Rachele Massetti; Gianluca Marongiu; Daniele Lai; Francesco Aymerich	#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 Co-authors: Ruben Windey; Jef Vleugels; Ruth Cardinaels; Yentl Swolfs	#1497 · Martin Fagerström (Chalmers University of Technology) Seeing and Simulating: Automated X-ray CT-Based Mesoscale Modeling of As-Manufactured Textile Composites Co-authors: Johan Friemann; Carolyn Oddy; Lars Mikkelsen	#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 Co-authors: Ryo Higuchi; Tomohiro Yokozeki; Tetsuya Matsuda; Jun Koyanagi; Wataru Iwase	#505 · Duarte Dias (Fibrenamics – Institute for Innovation in Fiber and Composites Materials) Self-Sensing Braided Composite Rebars for Next-Generation Concrete Structures Co-authors: José Sousa; João Bessa; Raul Fangueiro; Jorge Fontes; Andresa Gomes	#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 Co-authors: Andrew Jacob; Konstantinos Menegos; Architha Giridhar; Christroph Burgstaller; Alexander Bismarck; Bohao Zhang; Paul Robinson	#274 · Isha Paliwal (University of Southampton) The Role of Fracture Toughness on the Failure Mechanism of High Off-Axis Angle Ply Laminates Co-authors: Katy Rankin; Meisam Jalalvand; Anna Scott; David Charlesworth	#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 Co-authors: Mark Vaughan; Jean Rougé; Lukas Hartz; Maurice Collins
16:00		#283 · Søren Sølund Wahlgren (Aarhus University) Thresholds for the transition from arc to tunneling debonding in single fibers under uniaxial tension Co-authors: Michal Kazimierz Budzik; Henrik Myhre Jensen	#1175 · Gregorio Pisaneschi (University of Bologna) Elastomer-Interfaced SMA Hybrid Composites: Interface Enhancement, Analytical Modelling, and Manufacturability for Morphing Laminates Co-authors: Carlo Gotti; Francesco Mongioi; Andrea Zucchelli; Tommaso Maria Brugo	#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. Co-authors: Nacera Bedrici; Stéphane Gillet; Sébastien Joannès	#516 · Hawa Sidat (University of Edinburgh) Multifunctional Composites For Energy Storage Co-authors: Ignacio Tudela-Montes; Dipa Roy; Wini Obande; Francisca Martinez-Hergueta	#233 · Silvia Gomarasca (Delft University of Technology) Finding the right lenghtscales for microstructural description in unidirectional composites Co-authors: Daniël M. J. Peeters; Bilim Atli-Veltin; Clemens A. Dransfeld	#275 · Corentin Ferreira (Department of Mechanical Engineering, University of Melbourne) Minimally Intrusive Remaining Useful Life Estimation of Composite Pressure Vessels Using Foundation Models Co-authors: Torben Deutschmann; Fabian Laukotka; Jens Schmidt; Dieter Krause; Boris Eisenbart; Kevin Otto	#934 · Matthew Enrico Lillywh (Bristol Composites Institute) Design and Testing of a Wrapped Tow Reinforced Bamboo Truss Assembly. Co-authors: Matthew Enrico Lillywhite; Ayan Thomas; Benjamin King Sutton Woods; Terence Macquart; Byung Chul Kim	#1377 · Mathieu Imbert (Fraunhofer EMI) Laser-assisted pyrolysis: Towards the reclamation of continuous carbon fibers from thermoset wound composite structures Co-authors: Markus Jung; Philipp Hahn; Dominic Heunoske; Martin Lück	#404 · Jun Koyanagi (Tokyo University of Science) Numerical Simulation of Thermal Fatigue in CFRP Laminates Using an Entropy-based Progressive Damage Model Co-authors: Yutong Li; Takumu Sugiyama	#294 · Rudi Reichenbächer (Leibniz-Institut für Polymerforschung Dresden IPF) Mesoscale wetting behaviour of rovings during resin infiltration Co-authors: Dominik Burr; Christina Scheffler; Konrad Steiner; Günter K. Auernhammer	#1114 · Dexter Blackburn (University of Sheffield) Towards the development of carbon negative advanced composite materials Co-authors: Patrick Fairclough; Andrew Parnell
16:15		#666 · Shamala Sambasivam (AIRBUS Operations) Multiscale approach for development of end to end methodology for determination of build stresses in large composite structures Co-authors: Aditya Babu,; Santiago Garcia-Rodriguez; Stephane Guinard; Pedro João Cunha; Paulo Reinier Gonçalves; Albertino Arteiro; Albert Turon; Jose Manuel Guerrero Garcia; Jerome Rousset	#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 Co-authors: Anne Beaucamp; Maurice N. Collins	#164 · Louka Masson (Safran - IRDL) Accelerated fatigue assessment of adhesively bonded joints using energy-based criteria and non-linear constitutive behavior Co-authors: Pierre Bidaud; Yoan Boussès; Nicolas Carrère	#213 · Brian L. Wardle (MIT) Nano and nanoengineered composites reinforced with carbon nanotubes Co-authors: Jae-Moon Jeong	#727 · Moritz Bühl (HTWK Leipzig) Image-based material characterization of End-of-Life composite components using semantic segmentation Co-authors: Philipp Johst; David Atteln; Dimitrij Seibert; Robert Böhm	#1538 · Tobias Wille (DLR, Institute of Lightweight Systems) Simulation strategy for liquid hydrogen composite pressure vessel Co-authors: Felipe Franzoni; Vineeth Ravi; Albert Turon; Aravind Sasikumar; Pau Miquel-Roura; Albertino Arteiro; João Pedro; Pedro J. Cunha; Paulo Teixeira Gonçalves; Ludovic Barriere; Clement Laboulfie	#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 Co-authors: Mohamed Saidi; Laurent Michel	#147 · Giovanni Terrasi (Empa, Swiss Federal Laboratories for Material Science and Technology) Recycling of High-Performance FRP Composites Towards a Circular Material Economy Co-authors: Amol Pansare		#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 Co-authors: Jesper Lisegaard; Jesper Hattel; Sankhya Mohanty	#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 Co-authors: Tatjana Glaskova-Kuzmina; Kristina Zukiene; Gediminas Monastyreckis
16:30–17:00	**COFFEE BREAK**											
17:00–18:00	SESSION 4											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength** **Session chair: Frederic Laurin (ONERA), Michael Wisnom (University of Bristol)**	**SS01 · Delaminations and debonding in composite materials and structures** **Session chair: Luca Michele Martulli (Politecnico di Milano), Brian Falzon (Western Sydney University)**	**7.11 Recycling, Remanufacturing, and Circular Economy** **Session chair: Alexander Bismarck (University of Vienna), Ton Peijs (University of Warwick)**	**1.8 Renewable Energy (e.g. Wind, Solar)** **Session chair: Vadim Silberschmidt (Loughborough University), Olga Bulderberga (University of Latvia)**	**SS17 · Image-based analysis of composite features** **Session chair: Baris Caglar (TU Delft), James Kratz (University of Bristol)**	**7.6 Composite Pressure Vessels & 5.10 Liquid Molding, Pultrusion, Filament Winding** **Session chair: Antonios Stamopoulos (University of L'Aquila), Stavros Tsantzalis (Hellenic Air Force Academy)**	**7.12 Structural Health Monitoring and Quality Control** **Session chair: Dimitrios Bekas (Airbus), Alkis Paipetis (University of Ioannina)**	**2.4 Interfaces** **Session chair: Valter Carvelli (Politecnico di Milano), Jun Koyanagi (Tokyo University of Science)**	**7.2 AI-Assisted Design Methods** **Session chair: Iryna Tretiak (University of Bristol), Dayou Ma (Politecnico di Milano)**	**5.2 Additive Manufacturing** **Session chair: Marco Zichner (TU Dresden), Erik Thostenson (University of Delaware)**	**2.1 Bio-Derived and Sustainable Composites** **Session chair: Alice Mija (Université Côte d'Azur), Maurice N. Collins (University Of Limerick)**

ECCM22 — MONDAY (08:00-19:00) — TECHNICAL PROGRAMME · VERSION 2 (updated 19 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
17:00		#1316 · Sérgio Costa (GKN Aerospace) Modelling and simulation of fibre kinking response in CFRP with focus on thermal effects – experiments and simulation Co-authors: Yvonne Aitomaki; Dimitra Ramantani	#597 · Riccardo Di Giovanni (Politecnico di Milano, Department of Chemistry, Materials and Chemical Engineering "Giulio Natta") Temperature dependent vitrimer matrix composites fracture behavior Co-authors: Lorenzo Di Marco; Alessandro Milite; Federico Olla; Narongkorn Krajangsawasdi; Roberto Frassine; Marco Luigi Longana	#458 · Essi Sarlin (Tampere University) Combined resizing and binding process for recycled carbon fibre mats for improved composite properties Co-authors: Jesse Savolainen; Olatz Ollo; Mariasun Mendizabal; Sonia Garcia	#1186 · Robert Pierce (DTU Wind and Energy Systems, Technical University of Denmark) Evaluating Modelling Assumptions for Large-Scale VARI Processes Co-authors: Daniel Griffin; Michael Elkington	#636 · Kevin Chen (Leibniz-Institut für Verbundwerkstoffe (IVW Kaiserslautern)) A-Priori-Informed Instance Segmentation of µCT Scans of Woven Fiber Composites on the Mesoscale Co-authors: Benedikt Boos; Andreas Gebhard; Martin Gurka	*◆#380 · Dhruv Narayan Mudgal (Ghent University)* *Experimental and Analytical investigation of residual stresses in filament wound composite rings* *Co-authors: Matteo Pastrello; Nazim Ali; Kobe Vandevelde; Ives De Baere; Wim Van Paepegem* —— *◆#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* *Co-authors: Helena Rocha; Carla Martins; Paulo Antunes*	#1624 · Michele Zappalorto (University of Padova) Structural Health Monitoring of Composite Structures Through Electrical Measurements and Deep Learning Co-authors: Alvise Gazzola; Paolo Andrea Carraro; Marino Quaresimin	*◆#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* *Co-authors: Yuan-Chi Fan; Chung-Wei Cheng*	#1007 · Xiaodong Wang (Beihang University) Intelligent Design Method of Composites Layup Based on Generative Neural Network Co-authors: Zhidong Guan; Zengshan Li	*◆#422 · Elena Rodríguez (AIMEN)* *Design and Processing of High-Loaded Composite Filaments for Additive Manufacturing: From Bonded Magnets to Ceramics and Metals* *Co-authors: Ricardo Losada; Marisol Rivas; Rebeca Abalde; Diego Cabaleiro; Ander Reizabal; Olalla Sanchez* —— *◆#437 · Marina Kühn-Kauffeldt (Universität der Bundeswehr München)* *Vacuum-Arc–Enhanced Additive Manufacturing of Functional High Performance Polymer Composites* *Co-authors: Marvin Kühn; Jay Phuerkthayanon*	#1298 · Qingsheng Yang (Beijing University of Technology) Effective Mechanical and Diffusion Behaviors of Fiber-Reinforced Hydrogel Composites Co-authors: Xia Liu
17:15		#1313 · Lei Wan (Northwestern Polytechnical University) Micromechanical progressive failure analysis of UD CFRP composites with 3D waviness under longitudinal compression Co-authors: Jiayun Chen; Sérgio Costa	#1070 · Fabrice Congourdeau (DASSAULT AVIATION) Fatigue prediction of delamination : challenges, characterization, modelling and industrial implementation Co-authors: Alban ROBIN; Dominique Martini; Vincent JACQUES	#169 · Mariana Pereira (Politecnico Di Milano) Towards High-Value Recycling of Composites Using High Voltage Fragmentation Co-authors: Matteo Grante; Marco Diani; Marcello Colledani	#124 · Vasileios Karatzas (DNV Denmark A/S) Lifetime extension approaches of wind turbine blades based on testing Co-authors: Christopher Harrison; Xiao Chen; Bent Sørensen	#574 · James Kratz (University of Bristol) Discussion of Needs and Opportunities for Image-Based Analysis of Composite Features Co-authors: Baris Caglar	*◆#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* *Co-authors: Gerhard Ziegmann* —— *◆#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* *Co-authors: Sirko Geller; Maik Gude*	#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 Co-authors: Adel Alrai; Ramazan Yuksel; Furkan Tepe; Deniz Koken; Kaan Yildiz; Alptekin Yildiz; Hulya Cebeci	*◆#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* *Co-authors: Iryna Kovinchuk; Emanuele Drago; Vincenzo Fiore; Gennaro Scarselli; Antonino Valenza* —— *◆#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* *Co-authors: Eliška Rapcová; Alžbeta Pastieriková; Lenka Vítková; Richard Krumpolec; Slavomír Sihelník; Martina Drdlová; Dušan Kováčik*	#1168 · Carolina Furtado (University of Porto) Machine Learning-Accelerated Predictions of Design Allowable of Composite Laminates Co-authors: Luís Rodrigues; Igor Lopes; João Esteves; Federico Danzi; Gerard Guillamet	*◆#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* *Co-authors: Sara Giganto; Álvaro Martínez-Sánchez; Carlos F. Gutiérrez-González; Joaquín Barreiro; Susana Martínez-Pellitero* —— *◆#1251 · Gergő Zsolt Marton (Budapest University of Technology and Economics)* *Modelling and investigation of composites with predefined failure* *Co-authors: Gábor Szebényi*	#1368 · Janani Anbu Anandhan (Indian Institute of Technology Madras) DLP Printed Hybrid Resin Composites for Biomedical Applications: Mechanical and Structural Assessment Co-authors: Shankar Krishnapillai; Velmurugan Ramachandran
17:30		#157 · Emmanuel Fabing (Dassault Systèmes) A numerical model to predict compressive strength with fibre defect and structural contributions Co-authors: Pierre-Yves Méchin; Jean-Claude Grandidier; Vincent Keryvin	#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. Co-authors: Anil Ravindran; Raj Ladani	#1190 · Violetta Schumm (Fraunhofer IGCV) Characterization of recycled carbon fiber composites based on aligned wet-laid nonwovens Co-authors: Michael Sauer; Frank Manis	#798 · Nawres Al-Ramahi (RTU) Use of Recycled Short Carbon Fibers for Anti-icing Applications in Wind Turbine Blades Co-authors: Roberts Joffe	#826 · Camiel Posthuma (University of Twente) 3D microstructural characterization through micro-CT-based statistical analysis of fiber reinforced thermoplastic polymers Co-authors: Chongrui Tang; Mohammed Iqbal Abdul Rasheed; Theodorus Hendrikus Hoksbergen; Remko Akkerman	*◆#1206 · Markus Bellmann (University of Stuttgart, Institute of Aircraft Design)* *Development of a Robotic Winding Head with Active Tension Control* *Co-authors: Stefan Carosella; Peter Middendorf* —— *◆#851 · Sukhwant Pal (Skolkovo Institute of Science and Technology)* *Manufacturing and Characterization of Polyamide 6 based Thermoplastic Pultruded Profiles with Carbon and Glass Fibers* *Co-authors: Sergey Gusev; Yuri Yavorsky; Alexander Safonov*	#652 · Kristine M. Jespersen (Technical University of Denmark) Terahertz spectroscopy for non-destructive evaluation of defects in glass fiber composite sandwich panels Co-authors: Ruben I. Erives; Ashish K. Bangaru; Kaj K. Borum; Simon J. Lange; Bjørn Mølvig; Thorsten Bæk; Nicolai F.-J. Johansen	*◆#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* *Co-authors: Bhemineni Sudeep* —— *◆#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* *Co-authors: Subodh Kumar; Suryasarathi Bose*	#685 · Sadik Omairey (Brunel Composites Centre) AI-Enhanced Multiscale Predictive Modelling for Characterising Recycled, Bio-Based, and Virgin Plastic Materials Co-authors: Faranak Bahrami; Nithin Jayasree; Michail Kazilas; Mir Nafis Sharear Shopnil; Mohammad Anis Uz Zaman	*◆#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* *Co-authors: Paul Zachäus; Thomas Gries* —— *◆#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* *Co-authors: Sebastian Backes; Thomas Gries*	#1271 · Tim Huber (Luxembourg Institute of Science and Technology (LIST)) Regenerated Cellulose Fibre Composites: From Processing–Structure Relations to Advanced Sustainable Applications Co-authors: Nina Graupner; Jörg Müssig
17:45		#193 · Nicolas Carrere (Ensta-IPP/IRDL) Fatigue of Laminated Composites under Compressive Loading: Comprehensive Investigation of Dissipative and Failure Mechanisms Co-authors: Otavio Zimmermann de Almeida; Matthieu Le Saux; Gurvan Moreau; Yann Marco	#1509 · Valentin Begin (Laboratoire de Mecanique et d'Acoustique - Aix-Marseille University) Analysis of Delamination in static and fatigue in a laminated composite Co-authors: Hochard Christian	#706 · Eleonora Di Francesco (University of Genoa) Induction heating treatment of wind turbine blade glass-fiber-reinforced epoxy resin as an alternative recycling method Co-authors: Maila Castellano; Silvia Vicini; Nadia Parodi; Riccardo Freccero; Andrea Pastorino; Dario Cavallo	#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 Co-authors: Peter Berring; Sergei Semenov; Sebastiaan Abraham Gerald van Putten; Kim Branner	#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 Co-authors: Silvia Gomarasca; Clemens Dransfeld; Boyang Chen	*◆#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* *Co-authors: Kazuaki Nishiyabu* —— *◆#1401 · Jeong-gyu Kim (Gyeongsang National University)* *Investigation of Electric Field Effects on Resin Impregnation Behavior and Interfacial Properties in the VaRTM Process* *Co-authors: Hyeon-ju Seong; Jin-ho Choi; Seung-yoon On*	#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 Co-authors: Luca Keller; Gion Andrea Barandun; Malin Åkermo	*◆#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* *Co-authors: Monica Francesca Pucci; Rami Alawar; Quentin Govignon; Pierre-Jacques Liotier; Olivier De Almeaida* —— *◆#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* *Co-authors: Yutaka Oya; Maruri Takamura; Ryo Inoue; Jun Koyanagi*	#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 Co-authors: Weijie Zhang; Xi Zou; Shibo Yan	*◆#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* *Co-authors: Reda Felfel; Liu Yang* ——	#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 Co-authors: Chayenne Maries Witte; Svea Wehlage; Jan Tinnemeier; Natalie Empting; Leon Magnusson; Ole Gonnsen; Stephen Kroll; Andrea Siebert-Raths

ECCM22 — TUESDAY (08:00–18:00) — TECHNICAL PROGRAMME · VERSION 2 (updated 19 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 · Anastasios P. Vassilopoulos (EPFL) & Alexander Krimmer (TPI Composites GmbH)** **Theory and practice of composites in renewable energy - how dreams come true** **Chair: Wim Van Paepegem (Ghent University)**											
09:00–11:00	SESSION 5											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength** **Session chair: Richard Trask, Bohao Zhang (University of Bristol)**	**SS21 · Computed tomography** **Session chair: Yentl Swolfs, Christian Breite, Mahoor Mehdikhani (KU Leuven)**	**SS07 · Cryogenic Testing and Material Characterisation** **Session chair: Andrew Rhead (University of Bath), Ole Thomsen (Bristol Composites Institute)**	**4.7 Optical Fiber Sensors, 4.9 Thermography & 4.5 Non-destructive evaluation** **Session chair: Dimitrios Bekas (Airbus), Dimitrios Zarouchas (TU Delft)**	**SS26 · EcoComposites Cluster - Sustainability of composites in the transportation sector** **Session chair: Mehdi Marin (IRT Jules Verne), Kate Trompeta (National Technical University of Athens), Costas Charitidis (National Technical University of Athens)**	**SS14 · Session Honoring Mostafa Abdalla** **Session chair: Daniël Peeters, Roeland De Breuker (TU Delft)**	**2.1 Bio-Derived and Sustainable Composites** **Session chair: Véronique Michaud (EPFL), Alice Mija (Université Côte d'Azur)**	**SS18 · Composite Materials for Hydrogen Economy** **Session chair: Lukasz Figiel (University of Warwick), Maria Grazia De Angelis (University of Edinburgh), Marcus Walls-Bruck (NCC)**	**3.9 Fracture and Damage** **Session chair: Kamran Khan (Khalifa University), Theodoros Loutas (University of Patras)**	**3.15 Multiphysics Modelling** **Session chair: Martin Fagerström (Chalmers University of Technology), Stergios Goutianos (NTNU)**	**SS03 · Power Ultrasonics in Processing and Joining of Composites and Multi-Materials** **Session chair: Moritz Liesegang (RPTU Rheinland-Pfälzische Technische Universität Kaiserslautern), Sankhya Mohanty (Technical University of Denmark)**
09:00						#488 · Alexandros Georgios St (Innovation in Research and Engineering Solutions SNC (IRES)) Modeling the CO2 Mitigation Potential of Bio-Based and Recycled Composite Materials Co-authors: Alexandros Georgios Stavrou; Anastasia Gkika; Emmanouil Markakis; Foteini Petrakli; Evangelia Stamkopoulou; Elias Koumoulos	#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 Co-authors: Tatsuharu Yamada; Taiki Moriya; Yoshihiko Arao	#546 · Roman Beck (German Aerospace Center (DLR)) Permeability analysis of adhesives for CFRP hydrogen tank development Co-authors: Rebekka Hundertmark; Thomas Gesell; Josef Koord; Christian Hühne	#784 · Carlos Sandino (Universidad de Sevilla) Effect of Ply Thickness on Transverse Damage Tunnelling in Glass/Epoxy Laminates Co-authors: Serafín Sánchez Carmona; Elena Correa Montoto	#341 · Mohammad Rouhi (RISE Research Institutes of Sweden) Multiphysics Simulation of Linerless CFRP Tank for LH2 Storage Co-authors: Erik Marklund; Abishek Ramachandran; Runar Långström; Jocke Pettersson	#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					#1670 · Janice Dulieu-Barton (University of Bristol) Quadrilateral Microstructured Optical Sensors for Monitoring the Manufacture and Performance of Composite Structures Co-authors: Robin Hartley; James Kratz; Pawel Maniewski; Timothy Lee; Gholamreza Dhayeganrad; Bruno Moog; Martynas Beresna; Christopher Holmes	#841 · Jan-Marten Sprenger (Fraunhofer IFAM) Efficient processing of biobased benzoxazines: A step towards sustainable biocomposite manufacturing through catalysed curing Co-authors: Katharina Arnaut; Katharina Haag	#467 · Alexandre Morland (DELFT UNIVERSITY OF TECHNOLOGY) Assessing the impact of fiber angle deviations and gaps on the structural performance of variable stiffness laminates Co-authors: Daniël Peeters	#204 · Wim Van Paepegem (Ghent University, Mechanics of Materials and Structures) Development of recyclable vitrimer matrix systems for infusion processes in large-volume applications Co-authors: Virginia Amfilochiou; Ives De Baere; Tapas Debsharma; Susanne Fischer; Harald Stecher; Filip Du Prez	#431 · Bernd Wetzel (Leibniz-Institut für Verbundwerkstoffe GmbH (IVW)) Hydrogen permeability of composites for type 5 hydrogen tanks Co-authors: Mohamadreza Nasirzade Tabrizi	#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 Co-authors: Joongwom Lee; Byeong-Su Kwak; Sung-Ha Ji; Hyun-Woo Ju	#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 Co-authors: Stefan Jarka; Maximilian Janek; Lars Larsen
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 Co-authors: Jonas Drummer	#834 · Kosuke Takahashi (Hokkaido University) Three-Dimensional Nano-Imaging of Interface Crack Growth Along Carbon Fibers Under Cyclic Loading Co-authors: Naoya Matsuda; Ryo Kumagai	#385 · Stefanos Giannis (National Physical Laboratory) Instrumented nanoindentation at cryogenic temperatures: A method for fibre/matrix characterisation Co-authors: Hannah Zhang; Stefan Stoica	#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” Co-authors: Tania Grandal González; Mario Román Rodríguez; Arántzazu Núñez Cascajero; Rubén Ruiz Lombera; Elena Rodríguez Senín; Adrián López González	#415 · Guillaume Vincent (Nantes University, IRT Jules Verne) Sustainable manufacturing of hollow parts from staple yarns and bladder-assisted RTM Co-authors: Thomas Le Hetet; Athanasios D. Porfyris; Stefania Termine; Costas A. Charitidis; Sébastien Guéroult; Mehdi Marin	#973 · Aranshu Modi (Delft University of Technology (TU Delft)) Lamination parameters for hybrid composite laminates Co-authors: Saullo Castro; Daniël Peeters	#1160 · Festus Ifeanyi Anagwu (Luxembourg Institute of Science and Technology) Flexural and interlaminar shear performance of glass fibre-reinforced benzoxazine vitrimer composite for aircraft cabin interior application Co-authors: Pierre Verge; Gaetano Giunta; Lucas Binsfeld	#875 · Ibrahim Sebei (ENSAM) Towards Optimal Fabrication of Composite Hydrogen Pressure Vessels: Coupling Design and Manufacturing through WoundSim-Based Surrogate Optimization Co-authors: Zouhaier JENDLI; Stéphane GILLET; Mohammadali SHIRINBAYAN; Amine ABICHOU; Joseph FITOUSSI	#1090 · Theodoros Loutas (University of Patras) Physics-Informed Neural Network for Fracture Mechanics in Composite Structures Co-authors: Giannis Stamatelatos; Georgios Kotsinis	#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 Co-authors: Tanguy Davin; Clément Victor; Fabrice Barbe; Benoit Vieille	#1440 · Maryam Ahanpanjeh (Helmut Schmidt University) Hybrid Force and Trajectory Control for Improving Weld Quality in Robotic Continuous Ultrasonic Welding of CFR-TP Co-authors: Filipp Köhler; Marc Fette; Jens P. Wulfsberg
09:45		#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 Co-authors: Nicola Shepherd; Tom Allen	#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 Co-authors: Salaheddine Emine Madi; Camilo Rojas Gomez; Thanasis Chatziathanasiou; Elise Van Vlierberghe; Lourens Blok; Jonathan Wilson; Michael Vo; Dirk Heider; Julie Villanova; Jan Ivens; Christian Breite; Yentl Swolfs	#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 Co-authors: Jan Condé-Wolter; Christoph Ebert; Maik Gude	#1468 · Nan Tao (Department of Aerospace Structures and Materials, Delft University of Technology) Optical Fibre Sensor Placement for Composite Hydrogen Tanks Co-authors: Karthik Ramaswamy; Mirko Simonetto; Kasun Dissanayake; Roger Groves	#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 Co-authors: Fakhri-Eddin Nadir Lahfaidh; Nathanael Guigo; Luc Vincent; Nicolas Sbirrazzuoli	#541 · Sergio Turteltaub (Delft University of Technology) Experimental and numerical characterization of buckling-induced skin-stringer delamination growth in thermoplastic composite panels Co-authors: Andres Pereira; Christos Kassapoglou	#208 · Sithiprumnea Dul (Laboratory for Advanced Fibers, Empa) Development of Overcoated Prepreg Filaments for Sustainable Composites Co-authors: Rudolf Hufenus; Edith Perret	#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 Co-authors: Mustafa Okumuş; Raffaele Longo; Liberata Guadagno; Roberto Pantani; Łukasz Figiel	#298 · Isha Gupta (University of Southampton) Assessing Damage Modes in Architected Interpenetrating Metal- Polymer Phase Composites Using X-ray CT Co-authors: Aadhithya Jayaprakash	#468 · Kaan Deniz (Bristol Composites Institute, University of Bristol) A strongly coupled thermo-mechanical model for the simulations of thermoplastic composites fast processing Co-authors: Veit Wuerfel; Eric Mischorr; Raul Gomez Quinones; Kate Gongadze; Stephanie Miot; Karine Labastie; Attilio Chiappini; Maik Gude; Stephen R. Hallett; Jonathan P.-H Belnoue	#864 · Bram Jongbloed (SAM XL) An alternative heating-phase control method for continuous ultrasonic welding of thermoplastic composites Co-authors: Nigel van Nierop
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 Co-authors: Anirudh Kohli; Konstantinos Poulios; Prasad Potluri; Philip J. Withers; Lars P. Mikkelsen	#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 Co-authors: Dennis Bublitz; Garth Pearce; Klaus Drechsler	#1287 · Radovan Fridrich (National Physical Laboratory) Mode I fracture toughness at cryogenic temperatures: Is crack growth monitoring necessary? Co-authors: Nassos Spetsieris; Michael Gower; Stefanos Giannis	#1038 · Shijie Zhang (Northwestern Polytechnical University) Characterizing Mixed-Mode Fracture Behavior in Composite-Metal Joints via Back Face Strain Derived Method Co-authors: Yilin Jin; Wandong Wang	#572 · Justine Martin (COMPOSITEC) Development of sustainable composite for automotive applications Co-authors: Dimitris Perivoliotis; Poppy Krassa	#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 Co-authors: Cédric Julien; Attilio Chiappini; François-Xavier Irisarri	#1455 · Sandu Cibotaru (Université Côte d'Azur) Flavonoid-Derived Thermosets: A Dual Strategy for High Performance and Polymer Circularity Co-authors: Roxana Dinu; David Swanson; Alice Mija	#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 Co-authors: Chris Fischer; Manuel Reif; Georg Grötzschel; Martin Semsch; Johannes Marmiller	#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 Co-authors: Federico Danzi; Torquato Garulli; Jordi Renart; Carolina Furtado	#580 · Yu Wang (Laboratoire FAST,CNRS,Université Paris-Saclay) Avalanche description focusing on the twisted yarn under tensile loading Co-authors: Antoine Seguin	#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 Co-authors: Jesper Lisegaard; Sankhya Mohanty
10:15		#1035 · Gustavo Quino (Imperial College London) From constituent to composite: multiscale experiments for enhanced compression performance Co-authors: Bohao Zhang; Eleni Georgiou; Ian Hamerton; Paul Robinson; Richard S. Trask	#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 Co-authors: Mary Chris Roperos Go; Matteo Contino; Prasad Potluri; Philip J. Withers	#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 Co-authors: Adam Brodecki; Adam Szyszko; Hubert Nejman	#710 · Joanna Koman (University of Bath) Turning Up the Heat: A Novel Xenon Flash Lamp Based Active Thermography Method for Revealing Composite Defects Co-authors: Tim Harrell; Fulvio Pinto; David Williams	#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 Co-authors: Stavros Anagnou; Aikaterini-Flora Trompeta; Damien Lecointe; Costas Charitidis	#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® Co-authors: Annabell Prockat; Gerhard Kalinka; Volker Trappe	#367 · Luz Aguilar (IMT Nord Europe, KU Leuven) Realistic fibrous structure of Elium-based filament wound hydrogen storage tanks Co-authors: Jan Ivens; Stepan Lomov; Dmytro Vasiukov	#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 Co-authors: Róża Paterek; Aaron Byrne; Shubham Sharma; Cian Madigan; James Clancy; James Nicholas Barry; Brandon Crosbie; David Murray; Tomás Flanagan; Joseph Mohan	#947 · Jiaxue Li (Beihang University) Research on the Ablation Response Prediction Method for C/SiC Ceramic Matrix Composites Co-authors: Xiangyu Liu; Zhidong Guan; Xiaodong Wang	#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 Co-authors: Ryunosuke Hashimoto; Kazuaki Nishiyabu
10:30		#643 · Laura Rhian Pickard (Bristol Composites Institute, University of Bristol) Compressive Performance of Hierarchical Pultruded Rod Based Composites Co-authors: Iheoma C Nwuzor; Ian Lee; Nicolas S T Darras; Bohao Zhang; Giuliano Allegri; Michael R Wisnom; Richard S Trask	#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 Co-authors: Thanasis Chatziathanasiou; Quincy Chin-Chan-Sen; Johan Vanhulst; Alice Pagnanini; Elise Van Vlierberghe; Loic Courtois; Rémi Blanc; Guillaume Bravais; Barbara Fayard; Martine Wevers; Yentl Swolfs; Jeroen Soete	#1045 · Jonas Appels (DLR Institute of Lightweight Systems) Cryogenic Testing of Pressurised Tubular CFRP Specimens Co-authors: Philipp Sämann; Alexander Fischer; Ashley Chadwick; Josef Koord; Julia Pösch; Martin Linder	#120 · Ulrike Siemer (BHT Berliner Hochschule für Technik) Non-destructive moisture detection for damage control in stitch-and-glue composite materials Co-authors: Andreas Loth; Ralf Förster	#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 Co-authors: Jens Schlimbach; Thomas Neumeyer	#1154 · Arne Wulff (Delft University of Technology, Faculty of Aerospace Engineering) Quantum-Assisted Stacking Sequence Retrieval and Laminated Composite Design Co-authors: Swapan Madabhushi Venkata; Boyang Chen; Yinglu Tang; Matthias Möller; Sebastian Feld	#1461 · Veronica Ambrogi (DICMaPI, University of Naples Federico II) Vitrimeric composites based on OH-rich waste fillers Co-authors: Giovanni Filippone; Martina Salzano de Luna; Marco Agizza	#1179 · Tibe Van Remoortel (KU Leuven) Spatial Geometric Uncertainty Quantification in Filament-Wound Composite Pressure Vessels Co-authors: Ben Van Bavel; David Moens; Dirk Vandepitte	#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 Co-authors: Camila Chaves; Vilde Andreassen; Ben Alcock; Stergios Goutianos	#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 Co-authors: Gean Henrique Marcatto de Oliveira; Sergio de Traglia Amancio-Filho
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 Co-authors: Ian Lee; Joe Rifai; Lourens Blok; Ian Hamerton; Michael Wisnom; Soraia Pimenta	#1044 · Ali Barzegar (Sabanci University) Microscale Air Permeability Characterization of LAFP Composites via Micro-CT Imaging and Comparison with Macroscale Pulse-Decay Measurements Co-authors: Sasan Karimi; Mohammad Sajad Sorayani Bafqi; Hatice S. Sas; Mehmet Yildiz	#704 · Jiraphant Srisuriyacho (University of Bath) Experimental study on cryogenic bending properties and failure mechanisms of carbon fibre reinforced polymer down to 30K Co-authors: Jiraphant Srisuriyachot; Onur Tokkan; Kei Takashina; Richard Butler; Chris Bowen; Andrew Rhead	#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 Co-authors: Ahmed Ali; Andreas Stavis; Andrei Anisimov; Erik Schlangen; Marco Loog; Antonio Franchi; Chiara Gabellieri; Mohammad Fotouhi	#351 · Inge Schlapp-hackl (Aalto University) Transforming Textile Waste into Durable Composite Fibers for a Sustainable Future. Co-authors: Krisnadewi Suciati; Alexandra Hanhisalo; Sajib Mynul; Michael Hummel	#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 Co-authors: Zouhaier Jendli; Stéphane Gillet; Khaled Benfriha; Joseph Fitoussi; Mohammadali Shirinbayan	#96 · Otavio Zimmermann De A (1) Repairability and residual strength of impacted carbon/PPS laminates in a marine environment Co-authors: Mael Arhant; Thomas Bonnemains; Eric Lolive; Mathilde Conan; Nicolas Carrere	#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 Co-authors: Piotr Muśko; Rafal Stanik; Albert Langkamp; Michael Müller-Pabel; Johann Faust; Lars Muschalski; Maik Gude	#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 Co-authors: Karima Saddedine; Marie-Pierre Laborie; Frank Balle
11:00–11:30	**COFFEE BREAK**											
11:30–12:45	SESSION 6											
	Session →	**SS11 · Advanced Composite Materials and Structures: Multifunctional Design, Damage Diagnostics, Testing, and Modeling** **Session chair: Xi Li (Politecnico di Milano), Rosemere Lima (Universidade de Lisboa), Ioannis Katsivalis (University of Bath)**	**SS29 · Multi matrix composites – design principles and processing technologies** **Session chair: Maik Gude (TU Dresden), Marco Luigi Longana (Politecnico Di Milano)**	**SS07 · Cryogenic Testing and Material Characterisation** **Session chair: Stefanos Giannis (National Physical Laboratory), Sotirios Grammatikos (NTNU)**	**4.6 Novel Test Methods** **Session chair: Nathalie Godin (INSA of Lyon - Mateis), Sankhya Mohanty (Technical University of Denmark)**	**5.14 Sustainable Manufacturing** **Session chair: Mark Battley (The University of Auckland), Véronique Michaud (EPFL), Clement Broggi (TU Delft)**	**2.7 Hybrid and Hierarchical Composites** **Session chair: Valter Carvelli (Politecnico di Milano), Giovanni Pietro Terrasi (Empa)**	**7.11 Recycling, Remanufacturing, and Circular Economy** **Session chair: Maurice Collins (University of Limerick), Mónica Peñas Caballero (FIDAMC)**	**SS06 · CirKle - Recycling materials for aircraft cabin components** **Session chair: Jens Bachmann (DLR) & Souvik Chakraborty (DLR)**	**5.6 Automated Placement Technologies** **Session chair: Chung-Hae Park (IMT Nord Europe), Suresh Advani (University of Delaware)**	**6.3 Energy Storage and Harvesting** **Session chair: Emile Greenhalgh (Imperial College London), Brian Wardle (Massachusetts Institute of Technology), Leif Asp (Chalmers University of Technology)**	**SS22 · Toroidal Propellers for Efficient and Sustainable Aviation - The TorPropel project** **Session chair: Alkis Paipetis (University of Ioannina)**
11:30		#852 · Ioannis Katsivalis (University of Bath) Adhesive bonding of thin Tow-Based Discontinuous Composites: Damage characterisation and analysis Co-authors: Rosemere de Araujo Alves Lima; Leif E. Asp; Sofia Teixeira de Freitas	#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 Co-authors: Moritz Kurkowski; Anna Sambale; Nina von den Berg; Markus Stommel; Maik Gude	#1344 · Andrew Rhead (University of Bath) Overview of cryogenic mechanical testing at the University of Bath Co-authors: Kei Takashina; Onur Tokkan; Frank Marken; Chanel Fallon; George Neville; Jay Srisuriyachot; Zirui Liu; Can Chen; Dylan Gray; Nouf Sameh; Chris Bowen; Richard Butler	#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 Co-authors: Daniel Therriault; Martin Lévesque	#502 · Eunice Cunha (FIDAMC - Foundation for the Research, Development and Application of Composite Materials) Sustainable Vitrimer CFRPs: Manufacturing Pathways and Reprocessing Capabilities Co-authors: Ignacio R. Gilabert; Nerea Markaide; V.M. Boucher; Álvaro C. Casanova	#176 · Valter Carvelli (Politecnico di Milano) Delamination characterization and tensile damage evolution in unidirectional all-carbon hybrid laminates Co-authors: Luca Spaziani; Valentin Ott; Giovanni Pietro Terrasi	#503 · Mónica Peñas Caballero (Foundation for the Research, Development and Application of Composite Materials (FIDAMC)) Valorization of prepreg scrap through calendaring-based recycling Co-authors: Fernando Ramos Delgado; Martín Martín; Juan P. Fernández-Blazquez; María Ariño; Álvaro C. Casanova	#530 ·Ralf Zerlik (Safran Cabin Germany Gmbh) Overview of CirKle with current in-use materials	#1728 · Hong Ma (Northwestern Polytechnical University) Manufacturing CF/PEEK composites by laser-assisted tape placement with elevated tool temperature for crystallinity and interphase control Co-authors: Aswani Bandaru; Paul Weaver	#1772 · Suraj Kalia (Indian Institute of Technology Jammu) Design of Biphasic Structural Battery Electrolytes and Their Thermo-Mechanical Characterization Co-authors: Durai Prabhakaran RT; Shobit Omar	#1520 · Alkiviadis Paipetis (UNIVERSITY OF IOANNINA) TheTorpropel Project: Concept, Objectives, Methodologies, Impact Co-authors: K. Tsirka; M. Xenidou; A. Ntaflos; D. Fakis; A. Gaitanidou; J. Kozak; N. Rehman; N. Gower; N. Markaide; P. Tsirikiglou; G. Kanterakis
11:45		#1131 · Angel Mora (York University) Numerical modeling of magnetorheological polymers fabricated with the aid of a magnetic field Co-authors: Arleth Suarez-Hurtado; Aleksander Czekanski	#237 · Dong Gi Seong (Pusan National University) A multi-drop filling process of multi-matrix on multi-fabric for deployable composites fabrication Co-authors: Seung Mo Son; SeungWoo Jung	#752 · Martin Liebisch (Deutsches Zentrum für Luft- und Raumfahrt e.V.) The Scaled Half Tank Test Co-authors: Jan Rehra; Tobias Wille	#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 Co-authors: Eneritz Cereza; Francisco Javier Vallejo; Peio Olaskoaga; Arkaitz Uriarte	#1643 · Fidel Orlando Valega M (TNO) Towards new products from recycled composites via fused granulate fabrication Co-authors: Eric Craenmehr; Britt Kleijnen; Myrthe Pötgens; Willem Seuren	#158 · Maria Asun Cantera (University of the Basque Country UPV/EHU) Synthesis of Double-Double Hybrid Laminates Exhibiting Unconventional Thermal Expansion Behaviour Co-authors: David Gonzalez Alonso; Francesco Danzi	#604 · Harper Schäfer (Technische Universität Braunschweig) Closed-Loop Recycling of Resistance-Welded Thermoplastic Composite Joints: Influence of Heating Element Material on Disassembly and Rewelding Co-authors: Sebastian Heimbs; Carsten Schmidt	#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 Co-authors: Julie Basch; Adrian Wolf; Klaus Rischka; Jan-Marten Sprenger	#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 Co-authors: Yannis Grohmann; Mihai Fetecau; Daniel Stefaniak; Clemens Dransfeld	#568 · Jawon Ha (Korea Advanced Institute of Science and Technology) Transition-Metal Nanowire–Integrated Carbon Fiber Electrodes for Structural Batteries Co-authors: Mousumi Garai; Il-kwon Oh	#1146 · Paschalis Oikonomou (Department of Mechanical Engineering, Aristotle University of Thessaloniki) A parametric geometry framework to introduce variability in toroidal propeller designs Co-authors: Anastasia Gaitanidou; Konstantinos Zisis; Panagiotis Tsirikoglou; Vasilis Gkoutzamanis; Anestis Kalfas
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 Co-authors: Olivier Caty; Sébastien Denneulin; Francis Rebillat	#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 Co-authors: Daniel Wohlfahrt; Michael Müller-Pabel; Maik Gude	#261 · Antoine Delarue (CETIM) Development of alternative testing strategy to obtain in-plane shear failure properties of UD composites under cryogenic environment Co-authors: Denis Espinassou; Suzanne Laik	#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 Co-authors: Veronique Michaud; Baris Caglar	#731 · Tommaso Verdini (Università Politecnica delle Marche) Mechanical Performance of Hybrid CFRP/BFRP Filament-Wound Tubular components Co-authors: Iacopo Bianchi; Chiara Mignanelli; Michela Simoncini; Archimede Forcellese	#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 Co-authors: Monica Francesca Pucci; Pierre-Jacques Liotier	#601 · Cedric Tschentscher (Institute of Polymer Materials and Plastics Engineering, Clausthal University of Technology) Recyclable Sandwich Components - Using Hybrid Vitrimers for Disassembly Co-authors: Valentin Heinmüller; Leif Steuernagel; Peter Wierach	#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 Co-authors: Moaaz Ismail Mahmoud Abdelmeguid; Thorsten Schüppstuhl	#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 Co-authors: Anne Mavel; Juan-Manuel Garcia; Helmut Kühnelt; Alexander Beutl; Alejandro Treceño	#289 · Noor Rehman (TUM School of Engineering and Design, Chair of Carbon Composites, Technical University of Munich) Influence of printing direction on thermal anisotropy in large-scale additively manufactured composite tooling Co-authors: Jakob Faustmann; Maximilian Schäffler; Patrick Ilg; Franz Pfeiffer; Kalle Kind; Klaus Drechsler
12:15		#253 · Qixiang Jiang (Univeristy of Vienna) Structural battery composites from multifunctional carbon fibre reinforced high performance polymer prepregs Co-authors: Mateo Gomez; Alexander Beutl; Alexander Bismarck	#394 · Achyuth Ram Annadata (TUD Dresden University of Technology) Multi-matrix fiber-reinforced composite with shape memory alloys integrated through textile knitting technology Co-authors: Johannes Mersch; Matthias Overberg; Thomas Gereke; Chokri Cherif	#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 Co-authors: Jordi Llobet; Edwin Meulmann; Jose David Acosta; Carlos Sarrado; Jordi Renart; Albert Turon	#686 · Luka De Block (Ghent University) Compliance Free Mechanical Characterization of Single Carbon and Glass Fibers Through a Versatile Video-Extensometry Method. Co-authors: Lode Daelemans; Wim Van Paepegem	#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 Co-authors: Maximilian Pitto; Tom Allen; Johan Verbeek; Simon Bickerton; Mark Battley; Racim Radjef; Boris Eisenbart	#1185 · Tarık Kara (Middle East Technical University, Department of Aerospace Engineering) Effect of Stacking Sequence on Carbon/Glass Hybrid Composites under Impact Loading Co-authors: Barış Akış; Ahmet Çevik; Görkem Eğemen Güloğlu; Demirkan Çöker	#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 Co-authors: Ahmad Shakeel; Baris Caglar; Kunal Masania; Clemens Dransfeld	#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 Co-authors: Jan Sam Bobby; Alexandra Kühn; Maximillian Jux; Thorsten Mahrholz; Ulrich Krause; Steffen Opitz	#360 · Moritz Lennartz (Institut fuer Textiltechnik, RWTH Aachen University) Human-Inspired Robotic Prepreg Sheet Layup using Knowledge Engineering from Manual Draping Demonstrations Co-authors: Felix Glawe; Luisa Vervier; Ralf Müller-Polyzou; Thomas Gries; Martina Ziefle	#1009 · Shimeng Qian (Imperial College London) Multiphysics modelling of structural supercapacitors subjected to mechanical damage Co-authors: Sang Nguyen; Ajit Panesar; Emile Greenhalgh	#1296 · Angelos Ntaflos (Department of Materials Science & Engineering, University of Ioannina) 3R Composite Manufacturing Technologies: Vitrimer Prepreg Innovations and R2R Processing Co-authors: Kyriaki Tsirka; Maria Xenidou; Alkiviadis S. Paipetis; Nerea Markaide; Virginie M. Boucher
12:30		#1387 · Ceren Yildirim (ThermoPlastic Composites Research Center, TPRC) Impact Damage Evolution and Compression After Impact Performance of CF/PEKK Laminates at Low, Room, and Elevated Temperatures Co-authors: Hasan Ulus; Hatice S Sas; Mehmet Yildiz	#726 · Axel Spickenheuer (Leibniz-Institute für Polymerforschung Dresden e. V.) Manufacturing and Applications of Soft-rigid Multi-Matrix Fiber-Reinforced Plastics Co-authors: Simon Konze; Tales de Vargas Lisbôa; Lars Bittrich	#1692 · Floriane Verceux (NTNU) Reprocessability of cryogenically aged basalt fiber reinforced polyamide matrix composites used for hydrogen storage in aircrafts Co-authors: Pietro Agostino; Subrata Chandra Das; Sotirios Grammatikos	#1128 · Abishek Baskar (Delft University of Technology) Biaxial testing apparatus and specimen design for fibre polymer composites Co-authors: Marko Pavlovic; Frans van der Meer	#816 · Dai Hasegawa (Graduate School of Chubu University) Fabrication and Evaluation of Polyamide 66 Composites with Recycled Carbon Fiber	#59 · Nicole Motsch-Eichmann (Leibniz-Institut für Verbundwerkstoffe) CFRP-reinforced hollow aluminum struts for lightweight load-bearing pressure vessels Co-authors: Anastasiya Tönjes	#1477 · Rishi Raj (EPFL) Development of surface sizing to revive the interfacial properties of recycled glass fibers with Polypropylene Co-authors: Alessandro Mottino; Veronique Michaud; Pascal Gallo; Polina Damla	#662 · Jens Bachmann (DLR German Aerospace Center) Potential environmental impacts of production and recycling for a representative state-of-the-art aircraft cabin structure Co-authors: Sabrina Diniz; Karina Kroos; Mahfuz Sayed; Ralf Zerlik; Weronika Yalaz; Souvik Chakraborty; Steffen Opitz	#1513 · Philippe Olivier (ICA, University of Toulouse, UMR CNRS 5312) Mitigation of process-induced stress in unsymmetrical laminates via vitrimer relaxation Co-authors: Josephine DE CALBIAC; Rima SFAR-SBED; Marc GUERRE	*◆#423 · Dominic Palubiski (Bristol Composites Institute)* *Manufacturing structural power devices; challenges and solutions of novel material systems* *Co-authors: Dmitry Ivanov; Emile Greenhalgh; Milo Shaffer; Natasha Shirshova* --- *◆#845 · Hyunjoon Yoo (KAIST)* *Hybrid Lithium-Ion Thin-Film Batteries for Fast Ion Transport and High Areal Capacity* *Co-authors: Il-Kwon Oh*	#1028 · Dimitrios Fakis (Brunel Composites Centre, Brunel University London) Integrated Monitoring Solution for Enhanced Toroidal Propeller Safety Co-authors: Nithin Amirth Jayasree; Asep Suryandi
12:45–13:45	**LUNCH**											
13:45–14:15	2 KEYNOTES (rooms A & B)	**★ KEYNOTE · Philippe Christou (Huntsman Advanced Materials)** **Thermoset Polymers for Composites: An Industry Perspective on Future Needs and Constraints** **Chair: Yentl Swolfs (KU Leuven)**	**★ KEYNOTE · George Pechlivanoglou (Eunice Energy Group / JOLTIE S.A.)** **When Physics Is Not the Bottleneck: Why Energy Infrastructure Demands a New Composite Paradigm?** **Chair: Danny VAN HEMELRIJCK (Vrije Universiteit Brussel)**									
14:15–15:15	SESSION 7											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength** **Session chair: Gustavo Quino (Imperial College London), Laura Rhian Pickard (University of Bristol)**	**SS29 · Multi matrix composites – design principles and processing technologies** **Session chair: Axel Spickenheuer (Leibniz Institut für Polymerforschung), Michael Muller-Pabel (TU Dresden), Marco Luigi Longana (Politecnico Di Milano)**	**SS07 · Cryogenic Testing and Material Characterisation** **Session chair: Suzanne Laik (CETIM), Stefanos Giannis (National Physical Laboratory)**	**3.14 Micromechanics** **Session chair: Martin Fagerström (Chalmers University of Technology), Pedro Camanho (Universidade do Porto)**	**SS26 · EcoComposites Cluster - Sustainability of composites in the transportation sector** **Session chair: Mehdi Marin (IRT Jules Verne), Kate Trompeta (National Technical University of Athens), Costas Charitidis (National Technical University of Athens)**	**T1 · Aerospace & Transport** **Session chair: Dimitrios Bekas (Airbus), Ugo Lafont (European Space Agency)**	**2.1 Bio-Derived and Sustainable Composites** **Session chair: Valter Carvelli (Politecnico di Milano), Giovanni Pietro Terrasi (Empa)**	**1.4 Defense** **Session chair: Stavros Tsantzalis (Hellenic Air Force Academy), Vincent Pichot (French-German research institute of Saint-Louis, ISL)**	**SS27 · Nature-Inspired Composites: From Natural Fibres to Biomimetic Structures** **Session chair: Carlos Fuentes (Luxembourg Institute of Science and Technology), Essi Sarlin (Tampere University)**	**7.9 Maintenance and Repair** **Session chair: Vassilis Kostopoulos, Spyridon Psarras (University of Patras)**	**2.3 Matrix Materials: Polymers, Metals, Ceramics, Concrete, Geopolymers** **Session chair: Jose Sena-Cruz (University of Minho), Daiva Zeleniakiene (Kaunas University of Technology)**
14:15		#626 · Karthik Ram Ramakrishnan (University of Bristol) Thermoelastic stress analysis of translaminar compressive failure in carbon fibre-reinforced composites Co-authors: Mounika Chowdary Karlapudi; Laura Rhian Pickard; Richard S Trask	#785 · Tales de Vargas Lisboa (Leibniz-Institut für Polymerforschung Dresden e.V.) On the Natural Frequencies of MM-FRP Components with Polyurethane Soft Phases Co-authors: Simon Konze; Otávio Bariviera; Marcos Tonello; Lars Bittrich; Axel Spickenheuer	#1652 · Nicolas Abouab (Arts et Métiers Institute of Technology (CNRS, Bordeaux INP, I2M, UMR 5295)) Multi-scale Damage Assessment of Composites under Cryogenic Conditions Co-authors: Christophe Bois; Jean-Christophe Wahl	#1333 · Pedro Camanho (Universidade do Porto) Micromechanical modelling of inelastic deformation of fibre-reinforced polymers accounting for strain gradients Co-authors: Igor Lopes; Ana Francisca Alves; Nathan Klavzer; Thomas Pardoen	#658 · Fernando Cepero-Mejias (Centre for Future Transport and Cities (CFTC), Coventry University) A multidisciplinary optimisation framework for fibre-reinforced composite materials Co-authors: Sadiq Abubakar; Jesper Christensen	#407 · Jean-Charles Malenfant (SAFRAN CERAMICS) Behaviour of unidirectional Oxide CMC for aeronautical applications Co-authors: Antoine Guerbé; Florent Bouillon; Thomas Revel	#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 Co-authors: Lucia Gioiella; Giulia Ronconi; Libera Vitiello; Andrea D'Iorio; Valentina Mazzanti; Monica Bertoldo; Sabrina Carola Carroccio; Veronica Ambrogi; Giovanni Filippone; Martina Salzano de Luna	#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 Co-authors: Dimitrios Stamatelos; Dimitris Varelis; Emmanuel Georgiou; Panagiotis Chondros; Angelos Koutsomichalis; Vassilis Kostopoulos	#612 · Maria Kashtalyan (University of Aberdeen) Bio-inspired Metal-Composite Joints with Stiffness Gradients Co-authors: Olufemi Taylor; Mehmet Kartal	#1505 · Spyridon Psarras (University of Patras) Active Learning–Based Optimization of Stepped Composite Repairs Co-authors: Giannis Stamatelatos; Theodoros Loutas; Emilien Billaudeau; Maelle Sergolle; Thomas Balutch; Vasilis Kostopoulos	#1382 · Ahmad Awdi (CEA Marcoule) Multi-scale quantitative analysis of potassium geopolymer: from macro to nano scale Co-authors: Mario SCHEEL; Louis CORNET; Daniel FERRY; Olivier GRAUBY; Timm WEITKAMP; Arnaud POULESQUEN
14:30		#665 · Yousef Rifai (University of Bristol) The longitudinal compressive response of glass/carbon hybrid composites with different modulus carbon fibres Co-authors: Xun Wu; Laura Rhian Pickard; Giuliano Allegri; Michael Wisnom	#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 Co-authors: Carmen Pino-Pueyo; Elena Correa Montoto; Federico París	#1197 · Christian Breite (Department of Materials Engineering, KU Leuven) Physics informed geometric generator for unidirectional fibre reinforced composite microstructures with periodic boundaries Co-authors: Rui Guo; Runze Li; Mahoor Mehdikhani; Yentl Swolfs; Silvestre T. Pinho	#231 · Fernando Ramos Saz (AIMPLAS) Thermoplastic Pultrusion of Bio-PA6 Hybrid Carbon Fiber Laminates with Enhanced Multidirectional Performance Co-authors: Jaime Lozano; Guillermo Ulldemolins	*◆#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* *Co-authors: Nidhi Yadav* --- *◆#755 · Paul Nixon (University of Strathclyde)* *Rain Erosion Resistance of Laser Perforated Carbon Fibre Composites for Leading Edge Aerospace Applications* *Co-authors: Alexander Baty; Martin Bell; Liu Yang; Ross Minty*	#501 · Laura Aliotta (University of Pisa) Investigation of Bio-PA11/Coconut Fiber Composites for additive and injection molding applications through Ludovic® Based Process Optimization Co-authors: Ewen Fourel; Vito Gigante	#485 · Daniel Barros (Fibrenamics - Institute for Innovation in Fiber and Composites Materials) Hybrid Reinforcement Structures for Optimised Ballistic Performance Co-authors: Duarte Dias; João Bessa; Raul Fangueiro; Jakob Konig	#1453 · Carlos Ivan Cardona Ga (Luxembourg Institute of Science and Technology) Hierarchical design parameters driving the strain evolution in bamboo technical fibers Co-authors: Carlos FUENTES ROJAS	#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 Co-authors: Markus Geiger; Frederick Nabor; Patrick Schiebel	#697 · Johann Faust (TUD Dresden University of Technology) Experimental characterisation and modelling of radiation transfer in UV-reactive fibre-reinforced composites Co-authors: Dariusz Mariusz Perkowski; Michael Müller-Pabel; Albert Langkamp; Maik Gude
14:45		#774 · Cameron Woodgate (Department of Chemistry, Imperial College London) Linking Carbon Fibre Microstructure to the Intrinsic Compressive Performance of Carbon Fibre Composites Co-authors: David Anthony; Stephen Eichhorn; Milo Shaffer	#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 Co-authors: Riccardo Di Giovanni; Federico Olla; Alessandro Milite; Narongkorn Krajangsawasdi; Roberto Frassine; Marco Longana	#1192 · Elena Correa Montoto (Universidad de Sevilla) Interlaminar and intralaminar toughness of carbon/epoxy material after long-term cryogenic exposure Co-authors: María Luisa Velasco; Serafín Sánchez-Carmona; Carmen Pino-Pueyo; Pepe Cañas; Federico París	#813 · B.A. Wani (INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI) Fatigue Life Estimation of Cross-ply CFRP Composite Laminates: An Experimental & Computational Micromechanical RVE Approach Co-authors: Basharat Ahmad Wani; S. Daggumati	#1688 · Florian Part (Institute of Waste Management and Circularity, Universität für Bodenkultur Wien) Sustainable and recyclable thermosets for the automotive, aerospace sectors and beyond Co-authors: Elvira Villaro; Christoph Olscher; Athanasios Kotzakolios; Daniel Peral Crespo; Ainhoa Tolentino; Mireia Miro Mezquita; Joseba Luna; Andrea Porcari; Elena Destro; Olmo Guagnetti	*◆#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* *Co-authors: António Alves; Paulo Teixeira Gonçalves; João Cardoso* --- *◆#956 · Seunghyeon Kang (Graduate School of Aerospace and Mechanical Engineering, Korea Aerospace University)* *Design and Evaluation of a Sandwich Composite Radome Structure Using Frequency Selective Surfaces* *Co-authors: Chaehwan Lim; Jaewon Shim; Woomin Cho; Hyunung Oh; Youngwoo Nam*	#1269 · Sophie Bistac (Université de Haute Alsace - LPIM) Surface characterization of agro-industrial by-products for composites applications Co-authors: Narcisse Defo; Rodrigue Nicodème Tagne Sikame; Ebenezer Njeugna	#571 · David McDonogh (Von Roll Schweiz) Flexible composite protection for a dynamic world Co-authors: Simon Kraft; Besnik Bytyqi; Fiorenzo Lenzi	#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 Co-authors: RICKWINDER SINGH; ANOJ MEENA; AMAR PATNAIK	#745 · Alexander Payne (University of Strathclyde) Interfacial Performance of Vitrimers with Glass Fibres: A Comparative Study with Insight into Post-Healing Adhesion Behaviour Co-authors: Niklas Meyn; Zacharias Kakaratsios; Ross F. Minty	#628 · Lissy Flechsig (Leibniz-Institut für Polymerforschung Dresden e.V.) Novel Approach for an open-pore micro-structured interphase in carbon concrete composites Co-authors: Julius Scheel; Wen Yuezheng; Silvia Reißig; Danny Friese; Viktor Mechtcherine; Chokri Cherif; Christina Scheffler
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 Co-authors: Gustavo Quino; Bruno P. Santos; Hwei Linn Khoo; Dimitrios Bikos; Anirudh Kohli; Tayyaba Rabnawaz; Philip J. Withers; Soraia Pimenta; Paul Robinson; Emile S. Greenhalgh; Silvestre T. Pinho	#672 · Morgan Renard (Leibniz-Institut für Polymerforschung Dresden e. V.) Online Spinning of TPU/GF Hybrid Yarn for Thermoplastic Multi-Matrix Fiber-reinforced Plastics Co-authors: Matthias Krüger; Christina Scheffler; Tales de Vargas Lisbôa; Philipp Brückner; Matthias Overberg; Chokri Cherif; Markus Stommel; Axel Spickenheuer	#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 Co-authors: Marta Pereira; Carolina Furtado; Giuseppe Catalanotti	#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 Co-authors: María del Carmen Serna Moreno	#55 · Sung Hoon Kang (Korea Advanced Institute of Science and Technology) Bone-inspired dynamically self-adaptive composites		#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) Ageing effects in transparent protective systems Co-authors: Sebastian Engelbrecht; Thomas Goepfert; Karl-Ludwig Krüger; Anthony Bracq; Nicolas Montmasson; Laurent Sinniger; Paul Beillard	#1863 · Clare Garing (KU Leuven) Elucidating the mechanism behind enhanced flax fibre mechanical performance AFTER CYCLIC MOISTURE CONDITIONING Co-authors: Yasmine Mosleh; Aart Willem van Vuure	#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 Co-authors: Sihem Zaidi; Jesé Chávez; Pere Verdugo; David Santiago; Daniel Sánchez-Rodríguez; Laura Carreras; Pere Maimí; Josep Costa	
15:15–16:30	**POSTER DISCUSSION (+ COFFEE BREAK)**											
16:30–18:00	**ESCM GENERAL ASSEMBLY**											

ECCM22 — WEDNESDAY (08:00–18:00) — TECHNICAL PROGRAMME · VERSION 2 (updated 19 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 · Stephen W. Tsai (Stanford University) A revolutionary laminate theory: simplified design, testing and manufacturing Chair: Pedro Camanho (Universidade do Porto)**											
09:00–11:00	SESSION 8											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength Session chair: Milo Shaffer, Cameron Woodgate (Imperial College London)**	**SS19 · Fatigue and Damage Mechanics of composite and composite structures Session chair: Marino Quaresimin, Paolo Andrea Carraro, Lucio Maragoni (University of Padova)**	**SS32 · Durability of polymers and fibre reinforced polymer composites Session chair: Sotirios Grammatikos (NTNU), Yvonne Aitomäki (RISE), Andrejs Krauklis (Latvia University of Life Sciences and Technologies)**	**5.2 Additive Manufacturing Session chair: Raj Das (RMIT University), Masahito Ueda (Nihon University)**	**SS20 · History of composites Session chair: Stepan Lomov, Ignass Verpoest (KU Leuven)**	**7.11 Recycling, Remanufacturing, and Circular Economy Session chair: Maurice Collins (University of Limerick), Olga Bulderberga (University of Latvia)**	**2.1 Bio-Derived and Sustainable Composites Session chair: Giulia Fredi (University of Trento), Mikko Kanerva (Tampere University)**	**3.13 Lightning Strike and Fire Safety Session chair: Mihalis Kazilas (Brunel University London), Evangelos Kordatos (Sheffield Hallam University)**	**1.8 Renewable Energy (e.g. Wind, Solar) Session chair: Danny Hemelrijck (Vrije Universiteit Brussel), Stergios Goutianos (NTNU)**	**T3 · Dynamic, Impact & Crash Session chair: Brian Falzon (Western Sydney University), Chiara Bisagni (Politecnico di Milano)**	**6.3 Energy Storage and Harvesting Session chair: Leif Asp (Chalmers University of Technology), Emile Greenhalgh (Imperial College London)**
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 Co-authors: Daniel Therriault; Frédérick Gosselin	#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 Co-authors: Patrick Schiebel; David May	#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 Co-authors: Zahra Esmaeili; Alejandro Cortés; Isaac Isarn; Silvia G. Prolongo	#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 Co-authors: Hesam Badri; Sadik Omairey; Nithin Jayasree; Mihalis Kazilas	#1117 · Pierre Gerard (ARKEMA) Influence of Thermoplastic Composite Blades on Structural Damping and Load Reduction in Wind Turbines Co-authors: Alexander ZOLLER; Damien CAOUS; Julien VALETTE	#720 · Mohammadali Shirinbayan (Arts et Metiers Institute of Technology, CNAM, CNRS, PIMM) Dynamic Post-Fatigue Response of Composite Materials: A Multi-Scale Damage Analysis Co-authors: Joseph Fitoussi	#1301 · Rauan Al-Emrani (Chalmers University of Technology) Electro-chemo-mechanical modelling of the all-fibre structural battery Co-authors: Richa Chaudhary; Johanna Xu; Fredrik Larsson; Leif Asp
09:15					#126 · Yashi Zheng (The University of Manchester) Design of Lightweight Hollow Structures using Natural Filler-Reinforced PLA Composites for Engineering Applications Co-authors: Sophia Ruiz; Yasith S Perera; Anura Fernando; Chamil Abeykoon	#227 · Christophe Binetruy (Nantes Université, Centrale Nantes, GeM, UMR CNRS 6183) Historical Perspective on Modeling of Processing of Polymer Composites Co-authors: Suresh Advani	#1097 · Elisabete F. Reia Da C (SINTEF AS) Towards enhanced closed-loop recycling of sand-filled glass fibre composites Co-authors: James Comerford; Morten Frøseth; Stephan Kubowicz; Marius Johansen; Alireza Hassani; Jane Haavaldsen	#1158 · Liisi Tampere (Estonian University of Life Sciences) Polyester-cotton hybrid mycelium composites for semistructural applications Co-authors: Maidu Silm; Qixiang Jiang; Helen Tammert; Alexander Bismarck; Mitchell Jones	#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 Co-authors: Fabrice Barbe; Tanguy Davin; David Philippe	#1684 · Gülnur Başer (METYX-Telateks A.Ş.) Development of a Lightweight, Impact-Resistant, and Innovative Composite Photovoltaic Module for Vehicle-Integrated Applications Co-authors: Melisa Yeke	#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 Co-authors: Chao Zhang; Bo Wang; Tao Suo	#635 · Cintia Mateo-Mateo (AIMEN Technology Centre) Development of advanced Carbon Fibre-based electrodes towards their integration into high-performance Structural Supercapacitors Co-authors: Ignacio Ezpeleta; Lourdes Blanco; Marisol Rivas; Alba Peña; Rubén de la Mano; Yingchun Su; Yujie Fu; Jiantong Li; Komal Gola; Jinhua Sun; Steffen Thrane
09:30		#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 Co-authors: Ingo Nettersheim; Jeong-Joo Oh; Marie-Eve Aubin-Tam; Julie Teuwen; Kunal Masania	#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 Co-authors: Karsten Dobrindt-Tittmann; Michael Müller-Pabel; Richard Protz; Christian Düreth; Aaron Raphael Reuter; Linda Fröck; Lukas Wolfram; Wilko Flügge	#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 Co-authors: Marco Jorge; Omid Hassanshahi; Luís Correia; Tarikul Hasan; João Ramôa Correia; Mário Garrido; Susana Cabral-Fonseca	#603 · Jesper Hesselvig (Aarhus University) Numerical-Experimental Print-Scale Investigation of PA11 Short-Fiber Composites in SLS Co-authors: Rasmus Nygaard; Frederik Munk; Michal Budzik; Michael Sandberg	#273 · Veronique Michaud (EPFL STI IMX LPAC) Citius, altius, fortius: the crucial role of composites in sports Co-authors: Helena Teixido; Ignaas Verpoest	#1002 · Yixue Zhang (KU Leuven) Recycling glass fibres from thermoset epoxy composites by a mild catalytic thermo-chemical recycling method Co-authors: Carlos Marquez; Elias Feghali; Kathy Elst; Jan Ivens	#293 · Ivo Liepa (Delft University of Technology) Fatigue-creep interaction in hemp fibre thermoplastic composites Co-authors: Rene Alderliesten; Frans van der Meer; Yasmine Mosleh	#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 Co-authors: Chandra Sekher Yerramalli	#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 Co-authors: Philipp U. Haselbach; Robert S. Pierce	#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 Co-authors: Zouhaier JENDLI; Abderrahim EL MAHI; Mohamed Amine BEN SOUF; Mohamed HADDAR	#122 · Zhao Sha (UNSW) Fire resistant polymer electrolyte for structural energy storage composites Co-authors: Chun Hui Wang
09:45		#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 Co-authors: Andrew Makeev	#1338 · Chunting Yu (School of Aeronautics, Northwestern Polytechnical University) In-plane shear progressive damage analysis of multiaxial three-dimensional woven composites Co-authors: Ci Zhao; Xitao Zheng	#998 · Christina Scheffler (Leibniz Institute of Polymer Research Dresden) Chemical Corrosion of Glass Fibers in Composites - Mechanisms, Tensile Strength Degradation and Weibull Analysis Co-authors: Rudi Reichenbächer; Elisha Piette Piette; Ole Osterthun; Jürgen Klankermayer; Cindy Elschner	#609 · Hendrik Ostrowski (Aarhus Universitet) X-ray µCT microstructure correlated with mechanical properties in short-fibre-reinforced SLS printed composites Co-authors: Catalina-Gabriela Sanporean; Michal Kazimierz Budzik; Michael Sandberg	#290 · Martine Wevers (KU Leuven, Department of Materials Engineering) The history of nondestructive testing (NDT) on fibre reinforced polymer composites Co-authors: Jeroen Soete; Helge Pfeiffer; Christ Glorieux; Mahoor Mehdikhani	#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 Co-authors: Maria Modestou; Ioannis Papadopoulos; Carlota Rubio Pocoterra; Andreia Araujo; Noelia Mendoza; Engracia Mozas; Francisco Lahuerta; Chiara Pernechele; Costas Charitidis	#701 · Shaghayegh Elahi (Faculty of Built Environment, Tampere University) Dynamic Mechanical Characterization of Mycelium-Wood Particle Composite for Temperature Sweeps with Finite Element Analysis Support Co-authors: Clara Lessa Belone; Jarmo Laakso; Mari Honkanen; Sami Pajunen; Mikko Kanerva	#551 · Behnam Ashrafi (National Research Council Canada) Silver-based molecular inks for lightning strike protection of carbon fiber reinforced polymer composites Co-authors: Bhavana Deore; Marc Genest; Catalin Mandache; Chantal Paquet; Arnold Kell	#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 Co-authors: Alba Peña Gómez; Rubén De la Mano Ferreira; Olalla Sánchez Sobrado; Marta Castiñeiras Nespereira; Tania Grandal González; Elena Rodríguez Senín	#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 Co-authors: Erfan Kazemi; Andrea Passariello; Lorenzo Mencattelli; Oran Walsh; Silvestre Pinho	#173 · Phan Hoang Dao Nguyen (Aarhus University) Segmented Rim Design for High Performance Flywheel Energy Storage System Co-authors: Søren Wahlgren; Søren Madsen; Michal Budzik
10:00		#466 · Pierre-Yves Mechin (Southern Spars) Understanding Compressive Instability Mechanisms in High-Modulus Carbon Fibre Systems Co-authors: Vincent Keryvin; Emmanuel Fabing	#1587 · Lucio Maragoni (Department of Management and Engineering, University of Padova) Effect of defects on fatigue crack initiation in carbon/epoxy laminates Co-authors: Sota Oshima; Satoshi Kobayashi; Paolo Andrea Carraro; Marino Quaresimin	#1424 · Alice Mija (Université Côte d'Azur) High performance biobased thermosets containing dynamic covalent bonds Co-authors: Sandu Cibotaru; Roxana Dinu; David Swanson	#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 Co-authors: Pierpaolo Catena; Humberto Almeida Jr.	#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 Co-authors: Bo Madsen; Lars P Mikkelsen	#600 · Arthur Wieland (Universität Rostock (University of Rostock)) Optimizing Subcritical Hydrolysis Degradation of Composite Matrices to Enable Carbon Fiber Recycling Co-authors: Felicitas Augustin; Simon Backens; Stefan Schmidt; Wilko Flügge	#1722 · Omar Elhawary (University of Bath) Development and Characterization of a Novel Semi-Bio-Based Thermoset System for High-Stiffness Flax Composites. Co-authors: Jonathan Husband; Gavin Irvine; David Williams; Fulvio Pinto; Matthew Davidson	#1244 · Su Jeong Heo (Pusan National University) Development of CFRP Incorporating CNT Fibers for Reducing Joule Heating and Shock Wave Damage under Lightning Strikes Co-authors: Moonsuk Jang; Joonwoo Park; Jaejun Lee; Dong Gi Seong	#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 Co-authors: Zhimin Lei; Jianfeng W	#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 Co-authors: Saber El Arem; Christophe Cruanes; Laurent Guillaumat	#1378 · Odysseas Kakarelidis (Department of Aeronautics, Imperial College London) Mechanical properties and damage evolution in carbon aerogel modified carbon fibre electrodes Co-authors: Shimeng Qian; Sang Nguyen; Milo Shaffer; Emile Greenhalgh
10:15		#523 · Krisztián Hertelendy (Department of Industrial and Materials Science, Chalmers University of Technology) Compressive strength prediction with a micromechanics-inspired material model Co-authors: Ragnar Larsson	#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 Co-authors: Shubham Agnihotri; Javed Sheikh; B. K. Behera	#1385 · Hatice S. Sas (University of Sheffield) Impact of Environmental Conditions on the Fracture Toughness of CF/PEKK Composites and Their Adhesively Bonded Joints for Aerospace Applications Co-authors: Ceren Yildirim; Hasan Ulus; Mehmet Yildiz	#82 · Dominik Leubecher (Bundeswehr Research Institute of Materials, Fuels and Lubricants) Process-Relevant Relaxation and Reptation Times in Thermoplastics for Large-Scale Additive Material Extrusion: A Thermorheological Characterization Co-authors: Helena Braitmaier; Patrick Consul; Georg Tauer; Philipp Höfer	#610 · Yentl Swolfs (KU Leuven, Department of Materials Engineering) The history of fibre-hybrid composites Co-authors: Thanasis Chatziathanasiou	#184 · Andrej Fehler (HTWK Leipzig) Feasibility of Reusing CFRP Wind Turbine Elements as Load-Bearing Secondary Structures Co-authors: Dimitrij Seibert; Jan Bürgener; Philipp Johst; Robert Böhm	#948 · Winston Lindqwister (Technische Universiteit Delft) Multiscale Computational Design of Mycelium-Based Hierarchical Composites Co-authors: Mrinal Chaudhury; Kunal Masania; Martin Lesueur; Iuri Rocha; Camille Carre; Christian Weimer	#627 · Patrik Fernberg (Department of Engineering Sciences and Mathematics, Luleå University of Technology) Weibull Modelling of Anisotropic Dielectric Strength in Unidirectional Glass Fibre Composites Co-authors: Karl Arvidsson; Ishara Ranathunga; Janis Varna	#100 · Hyunbum Park (Department of Mechanical Engineering, Kunsan National University) Study on Defect Detection Methods of Composite Blades for Large Wind Turbine Co-authors: Taemin Han; Haseung Lee	#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 Co-authors: Arthur Cantarel; Florant Eyma; Bruno Castanié	#827 · Rajat Sharma (Durham University) Bicontinuous Electrolytes for Structural Supercapacitors Co-authors: Natasha Shirshova
10:30		#953 · Takayu Nishioka (The University of Tokyo) Compressive strength of self-healing vitrimer composites: Effect of the resin ductility and repairability Co-authors: Ryo Higuchi; Tomohiro Yokozeki; Tong Earn Tay; Vincent Tan; Takaya Suzuki	#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 Co-authors: Tobias Tiedemann; Melissa Walter; Alexander Trippel; Felwa Tafesh; Bodo Fiedler	#757 · Vincenzo Fiore (University of Palermo) Impact of salt-fog ageing on the recyclability of flax fibre-reinforced bio-composites Co-authors: Iryna Kovinchuk; Fabrizio Sarasini	#573 · Ahmad Shawki Charkieh (Vrije Universiteit Brussel (VUB)) In-situ process monitoring and residual strain detection in 3D printing via optical fiber sensing Co-authors: Sergei Mikhailov; Francis Berghmans; Lincy Pyl	#1281 · Alain Bourmaud (Université Bretagne Sud) From Egyptian Sails to Modern Composites: The Sustainable Journey of Natural Plant Fibres Co-authors: Jörg Müssig	#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 Co-authors: Florian Puch	#139 · Clare Garing (KU Leuven) Elucidating the mechanisms behind enhanced flax fibre composite mechanical performance after cyclic moisture conditioning Co-authors: Yasmine Mosleh; Aart Willem Van Vuure	*◆#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* *Co-authors: Tanguy Davin; Fabrice Barbe; Benoît Vieille* —— *◆#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* *Co-authors: Shuan Wang; Xiaodong Xu; Scott Millen*	#165 · Vadim V. Silberschmidt (Loughborough University) Effect of seawater on performance of composite structures Co-authors: Norman Osa-uwagboe; Emrah Demirci	#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 Co-authors: Mert Anil Uzun; Michael Schiffner; Sebastian Spitzer; Axel Spickenheuer; Tales de Vargas Lisbôa; Lars Bittrich; Maik Gude	#922 · Fatemeh Mokhtari (Department of Materials Engineering, KU Leuven) Polydopamine-Coated BaTiO₃ Nanoparticles and Annealing Effects on the Piezoelectric Response of Composite Nanofibers at High-Frequency Co-authors: Arn Mignon; Veerle Bloemen; Hans Hallez; Veerle Vandeginste
10:45			#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 Co-authors: Frank Balle	#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 Co-authors: Benoit PIEZEL; Clemence ROUGE; Jerome ROUSSEAU; Olivier SICOT	#1649 · João Francisco (Fachhochschule Nordwestschweiz) Robotic Large Format Additive Manufacturing of Short Glass Fiber Reinforced ABS Composite Moulds: Material Characterization and Process Simulation Co-authors: Christian Brauner; Oliver Harley	#935 · Giovangiuseppe Giusto (CIRA (Italian Aerospace Research Centre)) The latest developments in grid structures for space applications Co-authors: Giovanni Totaro; Felice De Nicola; Paola Spena; Vincenzo Iannone; Francesco Di Caprio	#480 · Maria Modestou (R-NanoLab, School of Chemical Engineering, NTUA) Recycling of Glass Fibres through Supercritical Solvolysis: Kinetics analysis and characterization Co-authors: Carlota Rubio Pocaterra; Dionisis Semitekolos; Cynthia Morales Cruz; Anya Vollpracht; Costas Charitidis	#493 · Natalia Sofia Guevara- (Shaping Matter Lab, Faculty of Aerospace Engineering, Delft University of Technology) Advancing blade sustainability: erosion performance of flax fibre composites Co-authors: Pim van der Molen; Julie Teuwen; Kunal Masania	*◆#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* *Co-authors: Nithin Amirth Jayasree; Chris Worrall* —— *◆#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* *Co-authors: László Mészáros; Gergely Czél*		*◆#1083 · Qianqian Kou (Beihang University)* *A Viscoelastic Damping Prediction Method for Unidirectional Composites Based on Multi-Scale Relaxation Simulation* *Co-authors: Yiding Li; Shibo Yan*	#39 · Ziwen Zhao (Tohoku University) CFRP-Integrated Multilayer Piezoelectric Sensor for Vibration Energy Harvesting and Impact Damage Detection Co-authors: Zhenjin Wang; Fumio Narita
11:00–11:30	COFFEE BREAK											
11:30–12:45	SESSION 9											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength Session chair: Gursahib Bhatia, David Anthony (Imperial College London)**	**SS25 · Sustainable Composites Engineering: Innovations from a Doctoral Training Centre Session chair: Janice Barton (University of Bristol), Lee Harper (University of Nottingham)**	**SS11 · Advanced Composite Materials and Structures: Multifunctional Design, Damage Diagnostics, Testing, and Modeling Session chair: Xi Li (Politecnico di Milano), Rosemere Lima (Universidade de Lisboa), Ioannis Katsivalis (University of Bath)**	**SS18 · Composite Materials for Hydrogen Economy Session chair: Lukasz Figiel (University of Warwick), Maria Grazia De Angelis (University of Edinburgh), Marcus Walls-Bruck (NCC)**	**1.2 Automotive, Rail, and Ground Transportation Session chair: David Williams (University of Bath), Philippe Noury (DNV)**	**2.8 Foams, Cellular and Lattice Materials Session chair: Kunal Masania (TU Delft)**	**T5 · Inline Process Monitoring, Quality Control & Multiphysics-Based Experimental Testing Session chair: Christophe Binetruy (Nantes Université), Carlos González (IMDEA Materials / Technical University of Madrid)**	**5.8 Forming and Stamping Sessio chair: Antonios Stamopoulos (University of L'Aquila), Danny Hemelrijck (Vrije Universiteit Brussel)**	**5.10 Machining Session chair: Spyros Psarras (University of Patras), Patrik Fernberg (Luleå University of Technology)**	**3.16 Multiscale Modelling Session chair: Jian Xiong (Harbin Institute of Technology), Martin Fagerström (Chalmers University of Technology)**	**6.4 Integrated Smart Devices, Structural Integration, 6.2 EMI Shielding, Functionalities Session chair: Alkis Paipetis (University of Ioannina), Kyriaki Tsirka (University of Ioannina)**
11:30		#824 · Deepak Sharma (School of Mechanical and Aerospace Engineering, Nanyang Technological University) Bio-Mediated Longitudinal Reinforcement in Architected Mycelium Composites Co-authors: Eugene Soh; Hortense Le Ferrand	#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 Co-authors: Fahad Mohammed; Jehan Akbar; Shwe Soe	#389 · Théo Baumard (CETIM) Influence of decompression rate and cyclic hydrogen exposure on mechanical and transport properties of type IV hydrogen tank liner materials Co-authors: Awen Bruneau; Suzanne Laik	#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 Co-authors: Jan S. Van Dokkum; Mohit Pundir; François Hild; David S. Kammer	#880 · Carlos González (IMDEA Materials / Technical University of Madrid) Smart Digital Twins for Composite Manufacturing Co-authors: Sofía Fernández; Luis Baumela; Davide Mocerino	#1725 · Kalliopi-Artemi Kalteremidou (Vrije Universiteit Brussel) Thermomechanical shear characterization of Flax/PP composite laminates under thermoforming conditions: from experiment to simulation Co-authors: Ramak Hossein Abadi; Danny Van Hemelrijck	#1451 · Alexander Brouschkin (Hamburg University of Technology) Empirical model for predicting surface roughness in CFRP during peripheral milling with lead and tilt angles. Co-authors: Jonas Emmerich; Carsten Möller; Jan Hendrik Dege	#954 · Charles Castle (University of Tokyo, Department of Aeronautics and Astronautics) Representative Volume Element Generation for Discontinuous Fiber Composites Co-authors: Ryo Higuchi; Xin Lu; Tomohiro Yokozeki	#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 Co-authors: Francesco Valentini; Luca Fambri
11:45		#807 · Ryuji Nishi (Nihon University) Effect of deviatoric angle on axial compressive strength of fibrous composites Co-authors: Masahito Ueda; Naruki Ichihara; Kohei Yamada; Hayato Nakatani	#1288 · Torin Clark (University of Bristol) Accurate Filament Winding Simulation for Hydrogen Tank Applications Co-authors: Michael Pei; Jonathan P-H Belnoue; Giuliano Allegri; Stephen R Hallett	#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 Co-authors: José Manuel Rodríguez-Sereno; María Fernanda Betancourt-Soto; Adrián Cimadevilla-Díez; Fernando Naya-Montans	#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 Co-authors: Michael Müler-Pabel; Gordon Just; Christoph Ebert; Alexander Liebsch; Maik Gude	#1149 · Emanuele Maccaferri (University of Bologna) Composite laminate modification with elastomeric nanofibers for improved toughness: impact tests on an automotive component Co-authors: Tommaso Maria Brugo; Carlo Gotti; Tiziana Benelli; Loris Giorgini; Andrea Zucchelli; Marco Scardovi; Gabriele Bandini; Laura Mazzocchetti	#1167 · Michal K. Budzik (Aarhus University) Elastic-plastic response of a pressurized closed-cell foam under uniaxial loading Co-authors: Bruno Hinkel Rosado; Matteo Pezzulla	#149 · Christian Eitzinger (Profactor GmbH) Method for Inspecting the Inner Surface of Large Carbon Fibre Composite Structures Co-authors: Abdalla Shahin; Lukas Hartung	#945 · Chunyi Gao (Dyson School of Design Engineering, Imperial College London) Interfacial Behaviour of Unidirectional GF/PA6 under Solid-State Stamp Forming Conditions Co-authors: Zerong Ding; Jayden Tran; Bamber Blackman; Nan Li	#1703 · Islem Ben Mejri (UPJV) Orthogonal Cutting of Unidirectional CFRP Composites: Experimental Data and Numerical Modelling Co-authors: Alaa Kobeissi; Yosra Turki; Hassina Derbal Habak; Malek Habak; Zoubeir Bouaziz	#89 · Bruno Simoes Barini (ENSTA IPP - IRDL - SAFRAN) Modeling of Dissipative Mechanisms Related to Fatigue of 3D Woven Composites Co-authors: Matthieu Le Saux; Youssera El Archi; Libor Navrátil; Nicolas Carrere	#224 · Laura Simonini (University of Trento) Novel multifunctional sandwich composites for thermal management and mechanical performance Co-authors: Giulia Fredi; Alessandro Pegoretti
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. Co-authors: Pierre-Yves Mechin	#763 · Kieran Guoite (UoB/NCC) Development and Testing of Core Material Homogenisation Technique for Large Scale Resin Infusion Simulations Co-authors: Simone Bancora; Chris Dighton; Cristian Lira; Ole Thomsen; Jonathan Belnoue	#862 · Zhengjiang Ji (Northwestern Polytechnical University) Gradient design of CF prepregs for multifunctional composite laminates with excellent electromagnetic wave absorption and mechanical performances Co-authors: Leilei Yan; Linhao Cheng; Minghui Cao; Keyu Zhu; Xitao Zheng	#1263 · Pau Miquel-Roura (University of Girona) A novel coupled mechanical-permeability approach for predicting hydrogen leakage in LH2 composite tanks Co-authors: Raffael Bogenfeld; Vineeth Ravi; Aravind Sasikumar; Tobias Wille; Albert Turon	#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 Co-authors: João Alves; António Alves; João Cardoso	#308 · Francesco Bandinelli (Polytechnic of Turin) Experimental and numerical comparative study on the crashworthiness of pristine and recycled 3D-printed fiber-reinforced lattice structures Co-authors: Lorenzo Peroni; Martina Scapin	#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 Co-authors: Noé Restif; Suzanne Laik; Federica Daghia; Frédéric Jacquemin	#994 · Per Hallander (Saab AB) Forming thermoplastic composites with fluid cell press Co-authors: Malin Akermo; Abhik Dutta; Maria Onoufriou; Sebastian Alm; Bjorn Carlsson; Jonas Liljeberg	#223 · Iveta Čačková (Faculty of Mechanical engineering, STU) Influence of Continuous-Wave and Pulsed Mode Fiber Laser Parameters on Machining Quality of CFRP Composites Co-authors: Viliam Čačko; Bálint Ferenczi	#247 · Robin Valmalette (LMA) Predicting longitudinal strength of unidirectional composites using a discrete damage model within full-field FFT-based simulations. Co-authors: Cédric Bellis; Christian Hochard; Noël Lahellec	#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 Co-authors: Leilei Yan; XiTao Zheng
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 Co-authors: Camilla Osmiani; Janice Dulieu-Barton; Marcus Walls-Bruck; Neha Chandarana	#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 Co-authors: Chiara Bisagni	#1207 · Maria Grazia De Angeli (University of Edinburgh) Multiscale modeling and experimental characterization of semicrystalline polymers for hydrogen barrier applications Co-authors: Omar Atiq; Lorenzo Merlonghi; Marco Giacinti Baschetti	#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 Co-authors: Bo Liu; Mingxing Wang; Sai Li; Bo Xu; Chaoyi Peng	*◆#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* *Co-authors: Gioacchino Pignatiello; Veronica Ambrogi; Giovanni Filippone; Martina Salzano de Luna* —— *◆#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* *Co-authors: Shankar Krishnapillai; R Gnanamoorthy*	#549 · Maximilian Lang (Technische Universität Ilmenau) Predicting Fabric Permeability from Yarn Architecture Co-authors: Benedikt Neitzel; Florian Puch	#1463 · Martin Müller (Leibniz-Institut für Verbundwerkstoffe) Simulation-Driven Process Development for Integrated Manufacturing of Thermoplastic Aircraft Door Surrounds Co-authors: Jens Schlimbach; Miro Duhovic; Thomas Neumeyer	#1584 · Hendrik Möllers (Clausthal University of Technology) Mechanical properties of thick laminates using multiple different epoxy resin systems Co-authors: Carsten Schmidt; Leif Steuernagel; Dieter Meiners	#734 · Ruochen Zheng (Ghent University) In Silico Mechanical Characterization of 3D Interlock Reinforcements Using a Virtual Fiber Approach Co-authors: Kourosh Sayar Dogahe; Wim Van Paepegem; Lode Daelemans	#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 Co-authors: Muhammed Oğuzhan Yeşilselvi; Melisa Dinçer; Dilan Arslan Çatak; Yusuf Can Südütemiz; Hülya Cebeci
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) Co-authors: Tom Allen; Mark Battley; Pierre-Yves Méchin; Vincent Keryvin	#1238 · Jack Davies (University of Bristol/National Composites Centre) Sensor-Driven Flow Modelling: Addressing Material Variability in Large Wind Turbine Blade Infusions Co-authors: Peter Giddings; Janice M-Dulieu Barton; Andrew Jenkins; Dmitry Ivanov	#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 Co-authors: Sojun Nakano; Haruki Oyamada; Satoru Yoneyama; Yuki Sada; Masayuki Uesugi; Akihisa Takeuchi; Akira Kunitomo; Nozomu Shigemitsu	#174 · Lukasz Figiel (University of Warwick) Modelling and experimental study of hydrogen permeation in polymer composites Co-authors: Mustafa Okumus; Frans Janssen	#1194 · Paloma Rodriguez Santa (University of Bath) Testing Burn-Through Performance of Thermoplastic Composites for eVTOL Battery Enclosures Co-authors: David Williams	*◆#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.* *Co-authors: Tim Sulewski; Marco Grundler* —— *◆#95 · Marcel Littig (German Aerospace Center (DLR))* *Functionalization of PEKK through integration of iron microparticles* *Co-authors: Ashley Chadwick; Lukas Raps*	*◆#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* *Co-authors: SUPRATIK MUKHOPADHYAY* --- *◆#221 · Sophia Keller (University of Applied Sciences Upper Austria)* *Modeling Strategies of Thick Ply Stack Draping Simulations for Large Carbon Composite Components* *Co-authors: Jakob Hinterhölzl; Franz Maier; Gernot Schneiderbauer; Jürgen Tauchner; Roland Markus Hinterhölzl*	#1139 · Sankhya Mohanty (Technical University of Denmark) Reliable Binder-Stabilised Preform Manufacturing: Binder Distribution and Processing Conditions Co-authors: Jesper Lisegaard; Debabrata Adhikari; Jesper Henri Hattel	#670 · Célia Cuenot (Airbus Atlantic) In-situ monitoring of thickness evolution in carbon/PAEK laminates during vbo consolidation Co-authors: Bernard Paluch; Marc Legrand; Nicolas Vernet; Mohamed El Mansori	#678 · Minghe Cui (Beihang University) A Unit Cell of Minimum Size Containing a Single Fiber Tow for Characterizing Effective Properties of Plain Woven Composites Co-authors: Shibo Yan; Yiding Li; Shilian Sun; Shuguang Li	#301 · Robert Oxford Pope (Bristol Composites Institute) Embedding pulsating heat pipes in carbon composites for advanced thermal management Co-authors: Benjamin Woods; Mark Schenk; Laura Pickard; Diego Alvarez Feito
12:45–13:45	LUNCH											
13:45–14:15	2 KEYNOTES (rooms A & B)	**★ KEYNOTE · Silvestre Pinho (Imperial College London) Simulation of mechanics of composites at different design stages: from sizing to certification Chair: Dimitrios Bekas (Airbus)**	**★ KEYNOTE · Leif Asp (Chalmers University of Technology) Multifunctional Composites Chair: Emile Greenhalgh (Imperial College London)**									
14:15–15:45	SESSION 10											
	Session →	**SS10 · Understanding and improving longitudinal compressive strength Session chair: Dimitrios Bikos (Imperial College London), Alexander Bismarck (University of Vienna)**	**SS21 · Computed tomography Session chair: Yentl Swolfs, Christian Breite, Mahoor Mehdikhani (KU Leuven)**	**SS09 · Methods and tools to support the certification by analysis of composites structures Session chair: Stephanie Miot (IRT Saint Exupery), Albertino Arteiro (University of Porto)**	**5.2 Additive Manufacturing Session chair: Connie Qian (University of Sheffield), Antoine Le Duigou (University South Brittany)**	**2.6 Nanocomposites Session chair: Dennis Gibhardt (Hamburg University of Technology), Alkis Paipetis (University of Ioannina)**	**1.9 Space & 1.5 Marine Session chair: Ugo Lafont (European Space Agency), Philippe Noury (DNV)**	ESCM Council Meeting	**2.1 Bio-Derived and Sustainable Composites Session chair: Alain Bourmaud (Université Bretagne Sud), Giovanni Pietro Terrasi (Empa)**	**3.9 Fracture and Damage Session chair: Raj Das (RMIT University), Gilles Lubineau (KAUST)**	**4.5 Non-Destructive Evaluation & 4.1 Acoustic Emission and Ultrasonic Methods Session chair: Dimitrios Zarouchas (TU Delft), Theodoros Loutas (University of Patras)**	**3.7 Failure Mechanics and Simulations Session chair: Jun Koyanagi (Tokyo University of Science), Gustavo Quino (Imperial College London)**
14:15		#1485 · Christian HOCHARD (LMA-AMU) Influence of the matrix degradation on the fiber direction compressive Strength Co-authors: Olivier MONTAGNIER	#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 Co-authors: Xavier Gabrion; Vincent Placet	*◆#1091 · Diogo Cardoso (INEGI)* *A Physics-Informed Framework for Modeling As-Manufactured Variability in Automated Fiber Placement* *Co-authors: Rúben Pereira; João Silva; António Ramos Silva; Nuno Correia*	#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 Co-authors: Dominik Laa; Jan Bornemann; Jürgen Stampfl	#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 Co-authors: Ian Kinloch	#1094 · Ragnar Birgisson (University of Bristol) Effects of galactic cosmic radiation on the mechanical performance of thin high-strain PEEK composites for space applications. Co-authors: Ali Kandemir; Benjamin Woods; Ian Hamerton		*◆#1013 · Sabrina Assenheimer (KTH Royal Institute of Sweden)* *Inv+A:Mestigation of moisture influence during manufacturing of artificial bio-based cellulose nanofibril (CNF) fibre/epoxy composites* *Co-authors: Fabienne Meier; Karl Håkansson; Mats Johansson; Malin Åkermo* ——	#1103 · Angeliki Christoforido (Delft University of Technology) In-plane fatigue crack growth of fiber-polymer composites based on a novel specimen design Co-authors: Angeliki Christoforidou; Abishek Baskar; Nick Ruigrok; Marko Pavlovic	#114 · Jens T Thielemann (SINTEF AS) Integrating BRDF Imaging and Robotics for Automated Inspection of Specular Composite Materials Co-authors: Ingrid Onstein; Karl H. Haugholt; Ådne Linnerud; Torbjørn Leirmo	#497 · Anton Koenig (ONERA) Predictive Modelling of Waviness-Induced Delamination in Composite L-Angles Under Four-Point Bending Co-authors: Christian Fagiano; Frédéric Laurin; Juan Manuel Garcia; Martin Desailloud
14:30		#481 · Hwei Linn Khoo (Imperial College London) Understanding how fibre hybridisation changes FRP compressive failure behaviour via computational modelling. Co-authors: Richard Trask; Soraia Pimenta; Paul Robinson	#777 · Ayshan Soltansaleki (York University) Full-Field Strain Analysis of Additively Manufactured Structures Under Compression Using Digital Volume Correlation Co-authors: Garrett Melenka	#1331 · Erdem Dinler (INEGI) A Unified Phenomenological Model for Elastoplastic In-Plane Shear Response in Composite Materials Co-authors: Igor Lopes; Carolina Furtado; Pedro Ponces Camanho	#398 · Suresh Advani (University of Delaware) Z-Penetration: A Strategy for Stronger Interlayers in Composite 3D Printing Co-authors: Uday Balaga	#1474 · Cahit Orhun Senol (Sabanci University) Industrial-Scale Multiscale CNT Integration to Tailor Temperature-Dependent Delamination Resistance in Aerospace CFRPs Co-authors: Abdulrahman Al-Nadhari; Mariam Omar; Sercan Akgün; Serkan Ünal; Bekir Dizman; Mehmet Yıldız	#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 Co-authors: Ali Kandemir; George Worden; Simon Hall; Tom Scott; Ian Hamerton		*◆#647 · Dimitrios Apostolidis (TUDelft)* *The Flax Files: Processing–Structure Relationships in Continuous Natural Fiber Thermoplastic Tapes.* *Co-authors: Oğuz Eryilmaz; Clemens Dransfeld; Baris Caglar* —— *◆#1452 · Sidharth Amanthra Kelo (Bernal Institute (Composites), School of Engineering, University of Limerick)* *Interfacial Characterization of Lignin-Derived Carbon Fibers for Sustainable Composite Applications* *Co-authors: Anthony Comer; Maurice Collins*	#613 · Yuancheng Yang (Queen Mary University of London) Phase field prediction on the micro-mechanical behaviour of composite materials subjected to transverse compression Co-authors: Wei Tan; Haibao Liu	#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 Co-authors: Sergio Horta Muñoz	#696 · Filippo Mannino (EPFL, Composite Mechanics Group (GR-MeC)) Non-Linear material properties and classical laminate theory Co-authors: Anastasios P. Vassilopoulos
14:45		#539 · Arthur Montazel (ONERA) An experimental and numerical investigation of 3D woven structures failing by kink-band propagation Co-authors: Frédéric Laurin; Johann Rannou; Yvonnet Julien; Sylvain Mousillat	#589 · Karl Arvidsson (Luleå University of Technology) Improving Electrical Reliability of Fibre Composites through X-Ray Computed Tomography and Machine Learning-Based Defect Characterisation Co-authors: Henrik Lycksam; Fredrik Forsberg; Patrik Fernberg	#1375 · Ole Thomsen (Bristol Composites Institute, University of Bristol) Certification by Analysis of Large Composite Structures – Vision or Delusion? Co-authors: Janice Dulieu-Barton; Bassam Elsaid; Stephen Hallett; Andrew Rhead; Richard Butler	#303 · Martin Reiter (Johannes Kepler University Linz) Biomimetic Hierarchical Structures Based on Bone Architecture: Overlap-Controlled Toughening via Additive Manufacturing Co-authors: Theresa Rubenzucker; Sebastian Lämmermann; Michael Jerabek; Zoltan Major	#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 Co-authors: Wojciech Guziewicz; Tadeusz Uhl; Waldemar Pichor; Mikko Kanerva		*◆#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* *Co-authors: Daniela Perkonigg; Thomas Griesser; Katharina Resch-Fauster* —— *◆#1685 · Maximilian Stöckle (NTNU)* *On the development of wood plastic composites with reclaimed raw materials employing 3D printing and injection molding* *Co-authors: Sotirios Grammatikos*	#1691 · Amol Vuppuluri (BITS Pilani Hyderabad Campus) Fracture response of 3D printed polyether-ether-ketone through energy-partitioning concept of EWF technique Co-authors: Gaurav Sharma	#333 · Ayman Berrem Khalid (Universidad de Castilla-La Mancha) Biaxial tension-compression fixture for cruciform CFRP specimens on uniaxial testing machines Co-authors: María del Carmen Serna Moreno; Sergio Horta Muñoz	#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 Co-authors: Yingjie Xu; Weihong Zhang; Weiwei Liu
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 Co-authors: Thaïs Furon-Faucher; Alexy Tailleur	#1745 · Carolina Gutierrez Bol (EPFL/PSI) Multi-scale structural analysis of pultruded carbon fiber composites using Small and Angle X-Ray Tensor Tomography Co-authors: Sici Wang; Mads Carlsen; Andreas Menzel; Jens Wenzel Andreasen; Lars Pilgaard Mikkelsen; Marianne Liebi	#1072 · Julien Schneider (SAFRAN AIRCRAFT ENGINES) Multi-scale Digital Twin of a 3D woven composite technological blade sample Co-authors: Florent MATHIEU; Guillaume FOURRIER; Alex CHANG; Bastien DEROIN	#245 · Melany McBean (University of Exeter) Extensional viscosity of polyaryletherketones (PAEKs) and its composites in material extrusion (MEX) additive manufacturing Co-authors: Nan Yi; Adam Chaplin; Oana Ghita	#911 · Rebecca Rosa (University of Bologna) Electrospun PA12 nanofibrous membranes as interleaves in CFRP laminates Co-authors: Emanuele Maccaferri; Laura Mazzocchetti; Tiziana Benelli; Tommaso Maria Brugo; Andrea Zucchelli; Loris Giorgini	#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 Co-authors: Franka Schulz; Matthias Abbt; Eduardo Szpoganicz; Andreas Scherer; Tobias Dickhut		*◆#1715 · Anna Baaba Jacobs (Montanuniversitaet Leoben)* *Biobased Epoxy Resins for High Temperature Application: Machine Learning-Guided Design of Biobased Resins* *Co-authors: Katharina Resch-Fauster; Michael Feuchter; Thomas Griesser* —— *◆#356 · Matthieu Gresil (Monash University)* *Bioinspired mechanochromic vitrimer composites based on chiral nematic cellulose nanocrystals* *Co-authors: David Mendoza; Francois Tournilhac*	#718 · Elise Van Vlierberghe (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 Co-authors: Serafín Sánchez-Carmona; Carlos Sandino; Christian Breite; Yentl Swolfs; Elena Correa Montoto	#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 Co-authors: Eric Duffner; Ali Ghaznavi	#1183 · Serdar Demir (Boğaziçi University) The influence of the obliqueness of open-hole notches on woven fabric carbon/epoxy composites damaging behavior Co-authors: Nuri Ersoy
15:15		#787 · David Anthony (Imperial College London) Carbon nanotube-grafted carbon fibres and their unidirectional reinforced composites Co-authors: Hassan Almousa; Diana-Ioana Cotenescu; Yanhao Sun; Emile Greenhalgh; Alexander Bismarck; Milo Shaffer	#153 · Benedikt Boos (Leibniz-Institute of Composite Materials) Microstructure analysis of micro-X-ray computed tomography scans of staple fiber yarns Co-authors: Chandrasekhar Govindu; Christoph Queck; Martin Gurka	#1231 · Alban Robin (Dassault Aviation) Advanced modelling of composite materials for aerostructures: industrial state-of-the-art and challenges Co-authors: Dominique Martini; Vincent JACQUES; Guy SOLA; Paul-Arthur DE LA FAIRE	#1230 · Matthias Mihalic (Kompetenzzentrum Holz GmbH - Wood K plus) Study on chemical foaming in FFF and FGF 3D printing of PHA based blends Co-authors: Ömer Faruk Çelebi; Manfred Schöflinger	#723 · Giulia Fredi (University of Trento) Shape-Stabilized Phase Change Material Nanocomposites with Enhanced Thermal Effusivity via Aligned Carbon Nanotube Reinforcement Co-authors: Duo Xu; Svetlana V. Boriskina; James Zhang; Gang Chen; Brian L. Wardle	#542 · Jean-Christophe Petite (Bureau Veritas Marine & Offshore) Fatigue assessment of marine composite propellers Co-authors: Jean-Christophe Petiteau; Stéphane Paboeuf; Arno Huijer		*◆#566 · Mototsugu Tanaka (Kanazawa Institute of Technology)* *Durability Evaluation in Water Environment of Fiber-reinforced PLA with Hydrolysis-control Function* *Co-authors: Yuki Katagiri* —— *◆#837 · Konstantinos Kanellopoulos (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* *Co-authors: Philip Verdross; Alexander Bismarck*	#339 · Reza Afsharnia (Technical University Of Leoben) Lifetime Prediction of Discontinuous Fiber Reinforced Polymers Co-authors: Margit Christa Lang; Vishakh Rajendran; Peter Fuchs; Gerald Pinter	#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 Co-authors: Thomas Werner; Gregor Reschke; Juliane Troschitz; Maik Gude; Alexander Brosius; Robert Kupfer	*◆#981 · Do Eun Kwak (Department of Mechanical Engineering, Hanbat National University)* *Study on Lightweight design of an inboard bogie frame using composite materials* *Co-authors: Chang Ho Kim; Chi Hyun Song; Sung Hoon Choi; Kwang Bok Shin* —— *◆#984 · Chang Ho Kim (Department of Mechanical Engineering, Hanbat National University, 125)* *Evaluation of Strucutral Integrity for Hypertube Carbody Using Composite Materials* *Co-authors: Dae Han Cheon; Tae Hee Kang; Hyuk Jin Yoon; Jung Seok Kim; Chang Young Lee; Kwang Bok Shin*
15:30			#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 Co-authors: Thanasis Chatziathanasiou; Salaheddine Emine Madi; Christian Breite; Martin Diehl; Mahoor Mehdikhani; Yoshiki Sugimoto; Yentl Swolfs	#772 · Alessandro Vescovini (DLR) Towards Virtual Certification of a composite aircraft moveable by means of damage tolerance assessment Co-authors: Christopher Gorsky; Raffael Bogenfeld; Tobias Wille	#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 Co-authors: Séverine.A.E Boyer; Alain Burr; Jérome Crépin-Leblond; Jean-Claude Roux; Marcos Batistella; José-Marie Lopez-Cuesta	#1711 · Philippe Noury (DNV) Design and Qualification of Large-Scale Composite Aquaculture Structures for Offshore Marine Environments Co-authors: Nicolas Krumenacker; Ole Vegar Moldesæther; Jørgen R. Krokstad; Lars Kallum; Jørn Lilleborge		*◆#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* *Co-authors: Pauline Butaud; Morvan Ouisse; Vincent Placet* ——	#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. Co-authors: Georgios Foteinidis; Levent Kirkayak; Lucas Binsfeld	#111 · Nathalie Godin (INSA of Lyon - Mateis) The Contribution of Acoustic Emission Modeling to the Optimization of Damage Source Identification in Composite Materials Co-authors: Aurélien Doitrand; Claudio Fusco	*◆#553 · Tianyu Chen (College of Sciences, Northeastern University)* *Dynamic interfacial fracture for laminates* *Co-authors: Yiding Liu; Simon Wang; Xiang Zhang; Vadim Silberschmidt* ——
15:45–16:15	COFFEE BREAK											
16:15–18:00	SESSION 11											
	Session →	**SS13 · Digital Twins and AI for Composite Manufacturing: Modelling, Monitoring and Control Session chair: Baris Caglar (TU Delft), Iryna Tretiak (University of Bristol)**	**SS08 · Experimentation and Modelling of Composite Materials and Structures under Dynamic Loading and Environmental Conditions Session chair: Gustavo Quino Quispe (Imperial College London), Karthik Ram Ramakrishnan (University of Bristol)**	**SS09 · Methods and tools to support the certification by analysis of composites structures Session chair: Albertino Arteiro (University of Porto), Stephanie Miot (IRT Saint Exupery)**	**1.1 Aerospace Session chair: Karthik Ramaswamy (Collins Aerospace), Patrik Fernberg (Luleå University of Technology)**	**SS20 · History of composites Session chair: Ignaas Verpoest, Mahoor Mehdikhani (KU Leuven)**	**3.9 Fracture and Damage Session chair: Raj Das (RMIT University), Antoine Le Duigou (University South Brittany)**	**2.7 Hybrid and Hierarchical Composites Session chair: Kamran Khan (Khalifa University), António Torres Marques (FEUP), António Torres Marques (FEUP)**	**3.19 Textile Composites Session chair: Suresh Advani (University of Delaware), David Williams (University of Bath)**	**3.21 Uncertainty quantification Session chair: Spyros Psarras (University of Patras), Antonio Madeo (University of Calabria)**	**3.17 Sandwich Structures Session chair: Ole Thomson (Bristol Composites Institute), Karthik Ram Ramakrishna (University of Bristol)**	**SS15 · AI and Mechanics for Composite Design, Optimisation, and Digital Twins Session chair: Carlos Gonzalez (IMDEA), Wei Tan (Queen Mary University of London)**
16:15		#402 · Ryo Higuchi (The University of Tokyo) Multiscale simulation of process-induced residual deformation on semi-crystalline thermoplastic composites Co-authors: Keisuke Kubota; Takayu Nishioka; Shu Minakuchi; Tomohiro Yokozeki	#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 Co-authors: Ziwen Xu; Jens Wiegand; Nik Petrinic	#736 · Stephanie Miot (IRT Saint Exupery) VVUQ applied to composite damage models Co-authors: Ludovic Barriere; Sébastien Bocquet; Florent Grotto	#1768 · Abrar H Baluch (KFUPM) Dispersion-Controlled Alumina-Enhanced Carbon/Phenolic Composites for Solid Rocket Nozzle Thermal Protection Co-authors: Kalid Kassa	#378 · Ton Peijs (University of Wa) A Brief History of High-Strength Polymer Fibres Co-authors: Pieter Jan Lemstra	#160 · Romain Rutar (University of Bristol - ISAE SUPAERO) Improving the delamination bridging performance of Z-pins through novel glass fibre Z-pinning Co-authors: Luiz Kawashita; Eduardo Santana de Vega; Christophe Bouvet; Bruno Castanié; Stephen SR Hallett	#1119 · Burcu Saner Okan (Sabancı University) Scalable Manufacturing of Electrically Conductive CF/PEEK Thermoplastic Laminates via Multi-Dimensional Carbon Additive Hybridization Co-authors: Mostafa Mehdipour; Selin Arıcan; Murat Cansever; Yahya Zweiri; Ebrahim Al Hajri; Yarjan Abdul Samad; Mehmet Yildiz	#654 · Jingshu Lu (LPMT) Investigating the morphology of prepreg composite reinforcements under varying tape-laying parameters and their influence on mechanical properties Co-authors: Gildas L'HOSTIS; PENG WANG	#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 Co-authors: George Stefanou; Shintaro Hokamura; Yu Nakayama	#1588 · Teoman Beyhun (Istanbul Technical University) Tailoring Energy Absorption in Honeycomb Sandwich Panels via Additive Manufacturing-Enabled Density Grading Co-authors: Kaan Yildiz	#1716 · Abhiram Kolli (Profactor GmbH) Adaptive Divergence-Guided Multi-Head and Multi-Task Learning for Efficient Photometric Stereo–Based Carbon Fiber Defect Inspection Co-authors: Denis Krajnc; Christian Eitzinger
16:30		#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 Co-authors: Said Ahmed Ibrahim Abdel Monsef; Laura Carreras; Albert Turon	#1071 · Jiaqi Hu (Imperial College London) Thermo-mechanical Behaviour of Polyetheretherketon (PEEK) Under Low Temperatures and High Strain Rates Co-authors: Gustavo Quino	#1165 · Albertino Arteiro (INEGI, Faculty of Engineering, University of Porto) Failure criteria and damage models for virtual testing and qualification/certification by analysis	#205 · Mario Miranda (Imperial College London) A Multiscale Optimisation Framework for Early-Stage Design of Composite High-Aspect-Ratio Wings Co-authors: Alvaro Cea; Runze Li; Rafael Palacios; Silvestre Pinho	#284 · Ayanobu Horinouchi (TORAY INDUSTRIES, INC.) History of carbon fibres: Origins and evolution Co-authors: Fumihiko Tanaka	#448 · Daniel Effen (Leibniz-Institut für Verbundwerkstoffe GmbH) Enhancing CFRP interlaminar strength: Laser-drilled–polyamide fiber infusion approach Co-authors: Julia Jungbluth; Ulf Breuer; Christoph Queck; Samuel Weber; Mareike Schäfer; Johannes L ´huillier	#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 Co-authors: Dahee Cho; Dong Gi Seong	#698 · Mengqing He (University of Haute-Alsace, LPMT) Tensile–Shear Coupling Behavior of Stretch-Broken Carbon Fiber Woven Reinforcements Co-authors: Sascha Krügl; Christian Pidancier; Gildas L'Hostis; PENG WANG	#820 · Paschalis Oikonomou (Limmat Scientific AG) Uncertainty-aware composite quality monitoring Co-authors: Panagiotis Tsirikoglou; Artemis Ioannou; George Maistros; Anestis Kalfas	#606 · Boyue Chen (Bristol Composites Institute, University of Bristol) Computational and experimental study on the honeycomb cell deformation during the curved surface forming Co-authors: Karthik Ram Ramakrishnan; Neha Chandarana	#1402 · Davide Mocerino (Imdea Materials) Defect Identification in Composite Panels via GNN Models Trained on FEM Simulations Co-authors: Carlos González; Sofía Fernández
16:45		#765 · Hamed Akhavan (INEGI) Digital Twins of Honeycomb Sandwich Panels for Coupled Thermal–Pressure Simulations Co-authors: João Cardoso; Pedro Fernandes	#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 Co-authors: Xinyu Ma; Jianfeng Wang; Bing Wang	#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 Co-authors: Thomas Zaragkas; George Sotiriadis; Spyridon Psarras	#883 · William Mahoney (Bristol Composites Institute) Assessing the Performance of Recycled Carbon Fibre in Composite T-Joints Co-authors: Karthik Ram Ramakrishnan; Neha Chandarana; Ian Hamerton; Ian Gent	#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 Co-authors: Yi Wang; XiaoBing Li; Peng Xu; Xiaoqiang Li	#874 · Gaurab Sundar Dutta (PuK, TU Clausthal) A Parametric Approach for Intraply Hybridization of Carbon Fiber and Natural Fiber Textiles Co-authors: Christian Jenensch; Krishnachandran Chandrasekharan Nair Jayalekshmi; Leif Steuernagel; Carsten Schmidt	#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 Co-authors: Johannes Mersch; Chokri Cherif	#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 Co-authors: Francesco S. Liguori; Fedele Morrone; Giovanni Garcea	#1495 · Mostafa Aghbolagh (Sabanci University) Engineering the Interphase: Rapid Hot-Pressing of All-PESU Sandwich Panels for Stronger, More Conductive Aircraft Interiors Co-authors: Mehmet Yildiz	#1027 · Radouan Bouallala (IMDEA Materials Institute) Periodic Laminate Unit Cell for Predicting Stiffness, Strength, and Damage in CFRP Laminates. Co-authors: Carlos González

ECCM22 — WEDNESDAY (08:00–18:00) — TECHNICAL PROGRAMME · VERSION 2 (updated 19 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
17:00		#1464 · Shanthalakshmi Kilambi (Faculty of Aerospace Engineering, Delft University of Technology) Digital Twin for Large Format Extrusion Additive Manufacturing Co-authors: Baris Caglar; Kunal Masania	#1347 · Dayou Ma (Politecnico di Milano) Damage identification, simulation and design of thermoplastic composites under impact loading Co-authors: Andrea Manes	#140 · Johannes Reiner (Deakin University) Probabilistic Simulation of Low-Velocity Impact in Non-Crimp Carbon Fibre Composites Using Finite Element Analysis and Uncertainty Quantification	#1500 · Christian Berggreen (Technical University of Denmark) Fracture Response of Unvented Aerospace Sandwich Panels: Effects of GAG Pressurization and In-Plane Loads Co-authors: Arturo Gomez	#1390 · Mahoor Mehdikhani (KU Leuven) Evolution of experimental methods for characterisation of mechanical properties of composites Co-authors: Jan Ivens	#391 · Mathilde Conan (IRDL, ENSTA – Institut Polytechnique de Paris) Mechanical recovery of Carbon Fibre/PPS laminates after repair of transverse matrix cracks. Co-authors: Maël Arhant; Thomas Bonnemains; Eric Lolive; Nicolas Carrère	#853 · Julia Hübner (Leibniz Institute for Polymer Research Dresden e.V.) Towards more Sustainable Cementitious Composites: Spinning of Bicomponent Micro-Fibers Using Recyled Polypropylene Co-authors: Norbert Smolka; Viktor Mechtcherine; Christina Scheffler	#758 · Emile Garrel (Institut Clément Ader / Safran) Mesoscale modeling of 3D woven composites behavior by a semi-continuous approach Co-authors: Pablo Navarro; Jean-François Ferrero; Steven Marguet; Laurent Baroumes; Sylvain Treutenaere	*◆#1764 · Simone Credidio (university La Sapienza)* *A Bayesian Framework for Composite Design Allowables: Uncertainty Quantification and Reliability Enhancement under Data Scarcity* ---	#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 Co-authors: Munsu Kim; Seunghwa Yoo; Woong-Ryeol Yu; Cheol-Hee Ahn; Jung Jae Yoo; Il-Joon Bae; Wonjin Na	#650 · Alberto Blanco (CIDAUT) Physics Informed Machine Learning for Multi Zone Optimization of CFRP Aerospace Components Co-authors: Adrian Pedrosa Valbuena; Paula Bucci; Esteban Cañibano Álvarez; Juan Carlos Merino Senovilla; Maite Fernández Peña
17:15		#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 Co-authors: Fabian Röder; Andreas Gebhard; Kevin Chen	#163 · Jian Xiong (Harbin Institute of Technology) Damage behavior of all carbon fiber composite honeycomb sandwich structure under low-velocity impact load	*◆#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* *Co-authors: Thomas Bonnemains; Eric Lolive; Florian Madec; Dylan Bizien; Nicolas Carrère* ---- *◆#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* *Co-authors: Gangadharan Raju*	#479 · Niko Krebs (University Paris Est Creteil) Bonding, debonding and rebonding with novel synthesized high Tg epoxy disulfide vitrimer adhesives for aerospace composite applications Co-authors: Fabian Hübner; Uwe Beier; Thomas Meer; Wolfgang Machunze; Agustin Rios de Anda	*◆#72 · Andreas Loth (BHT Berlin)* *Material investigations for stitch and glue boats* *Co-authors: Ralf Förster; Ulrike Siemer; Lutz Berger*	#1755 · Joseph Bernaert (Composite Mechanics Group (GR-MeC), Ecole Polytechnique Fédérale de Lausanne) Automated crack detection in thin paste adhesive joints Co-authors: Angelo S. Calabrese; Anastasios P. Vassilopoulos	#1116 · Spyros Tsiotos (Adamant Composites) Multifunctional CFRPs Enabled by Roll-to-Roll Laser-Reduced Graphene Oxide Co-authors: Chrysanthi Paparouni; Natalia Kantouni; Spyros Yannopoulos; Antonios Vavouliotis; Despoina Batsouli	#917 · Xuejiao Li (LPMT, University of Haute-Alsace) Yarn-Level Contact Morphology and Frictional Response under Pretension in Flax/PA12 Woven Fabrics Co-authors: Sascha Krugl; Christian Pidancier; Aboubakar sedick Ibrahim-mamane; Gildas L'Hostis; Peng Wang		#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 Co-authors: Ahmet Sinan Öktem	#605 · Yutaka Oya (Tokyo University of Science) Inverse Design of Polymer Properties Using Molecular Dynamics Data and Machine Learning Co-authors: Masaharu Katabira; Ryuichi Hiraiwa; Jun Koyanagi
17:30		#614 · Ashish Vinayaka Hegde (Delft University Of Technology) Bake it till you make it! Modelling the curing of composites with graph neural networks. Co-authors: Dimitrios Zarouchas; Baris Caglar	*◆#246 · Xudan Yao (Northwestern Polytechnical University)* *Thermal fatigue and hygrothermal aging behaviour of CNT/GFRP/CFRP composites* *Co-authors: Yaxin Wang; Haolin Wang*		#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 Co-authors: Wesley J. Cantwell; Kamran A. Khan	*◆#664 · Nicco Stroetmann (Fraunhofer IGP)* *FEM-driven design of a lightweight, modular composite hatch cover for ships* *Co-authors: Stefan Schmidt; Wilko Flügge*	*◆#1074 · Mehmet Yildiz (Sabanci University)* *Fracture analysis of interleaved composites with self-same resin-rich layers using mechanical testing, acoustic emission, and micro-visualization* *▸ T3 · Fracture and Damage* *Co-authors: Ali Barzegar; Ali Barzegar*	*◆#76 · Ana Rita Carreiras (Polythechnic of Porto, School of Engineering)* *Production of hybrid composites with recycled PET by pultrusion* *Co-authors: Púria Esfandiari; João Francisco Silva; António Torres Marques*	*◆#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* *Co-authors: Marios Moutso; Evangelos Diplas; Kosmas Tiriakidis; Nikolaos Tiriakidis; Thomai Tiriakidou*		#1354 · Stephanie Miot (IRT Saint Exupery) How manufacturing affects the mechanical performance of CMC/Ceramic sandwich structures Co-authors: Emilie Perret; Julien Lesseur; Guillaume Jubelin; Solène Vendel; Céline Apheceixborde; Aurélien Debelle; Frédéric Bumbieler	*◆#976 · Chenlong Ruan (The University of Tokyo)* *Transfer Learning-Enhanced Surrogate Modeling for Expanded-Dimension Structural Response Prediction of Vertical-Axis Wind Turbines* *Co-authors: Yi Wan; Jun Takahashi*
17:38			*◆#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* *Co-authors: Jernej Klemenc*			*◆#750 · Kathryn Kennedy (University of Strathclyde)* *Development of Auxetically Inspired Composite Sandwich Structures for Cryogenic and Space Applications* *Co-authors: Catherine Yokan; Catherine Jones; Ross Minty*	*◆#296 · Tom Sauvard (ENSTA | Institut Polytechnique de Paris, UMR CNRS 6027 IRDL)* *Fracture characterization of hybrid composite /* *metal joints under dynamic loading conditions* *Co-authors: Georgios STAMOULIS; Aboulghit EL MALKI ALAOUI; Julie MASSON; Noelig DAGORN; David THEVENET*	*◆#916 · Pedro Ferreira Pinto (FEUP, INEGI)* *Microstructural Characterisation and Mode I Fracture Properties of Non-Conventional Composites* *Co-authors: Ana Francisca Carvalho Alves; Nathan Klavzer; Pedro Ponces Camanho*	*◆#1221 · David Williams (University of Bath)* *Factors Affecting Thermoplastic Tape-to-Tape Bond Strength in Automated Composites Manufacture*			*◆#1380 · Ali Barzegar (Sabanci University)* *Self-Diagnosing Composite Repairs: Constituent-Informed Acoustic Emission for Early Failure Prediction in CFRP Patches* *Co-authors: Abdulrahman Al-nadhari; Serra Topal; Mehmet Yildiz*
17:45		#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 Co-authors: Christian Berggreen; Brian N. Legarth	*◆#1749 · Aitor Arriaga (Leartiker S. Coop.)* *Long Term Performance of Injection Molded Isotactic Polypropylene containing Weld Lines in Neat and Glass Fiber Reinforced Grades.* *Co-authors: Sten J.J. van den Broek; Leon E. Govaert; Tom A. P. Engels*		#1537 · János Plocher (Ansys Germany GmbH) Reinforcing Element Technology for Complex Composite Structures: A Comparative Study of Solid Modeling Approaches Co-authors: Fabio Pavia; Rene Roos		*◆#608 · Jörg Hohe (Fraunhofer Institute for Mechanics of Materials IWM)* *A mesoscopic continuum damage material model for filament wound [±α] plies* *Co-authors: Carla Beckmann*	*◆#152 · Emmanuel Denis Manoni (Department of Civil and Environmental Engineering, Politecnico di Milano)* *Thermomechanical characterization of polyethylene terephthalate cords for rubber matrix composites* *Co-authors: David Faraci; Paola Caracino; Giorgio Novati; Claudia Comi*	*◆#713 · Oguz Kagan Genc (Airbus)* *Experimental and numerical investigations on the bending and inter-layer shearing behavior of glass-fabric rubber composites* *Co-authors: Gilles DUSSERRE; Steven Marguet; Fabrice Schmidt; Pablo Navarro; Alice Courtois*			*◆#854 · Marcello Laurenti (University of Rome La Sapienza)* *Generative AI Design of Bio-Inspired Interlocking Interfaces for Tailored Mechanical Performances* *Co-authors: Pilla Marianna; Jacopo Tirillò; Fabrizio Sarasini; Filippo Berto*
17:52			*◆#884 · Geoffrey Gisclon (Institut Clément Ader)* *Study of the Impact behaviour of Double-Double Laminate* *Co-authors: Pablo Navarro; Olivier Dorival; Steven Marguet; Jean-François Ferrero; Léonard Serrano*				*◆#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* *Co-authors: Yutong Li; Jun Koyanagi; Mohammad Fikry*	*◆#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* *Co-authors: Sebastian Dahle; Leif Steuernagel*	*◆#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* *Co-authors: Amandine Célino; Sylvain Fréour; Mael Péron*			*◆#967 · Ziyao Tang (University of Tokyo)* *Data-Driven Microstructure Extraction and RVE Reconstruction for NW-CFRTP* *Co-authors: Fan ZHANG; Mingqing YUAN; Yi WAN; Jun TAKAHASHI*

ECCM22 — THURSDAY (08:00–17:30) — TECHNICAL PROGRAMME · VERSION 2 (updated 19 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 · Giulia Fredi (University of Trento) Young Researcher Award Winner Session chair: Clemens Dransfeld (TU Delft)**											
08:45–10:45	**SESSION 12**											
	Session →	**SS02 · Additive manufacturing (3D/4D printing, AFP) for advanced composites Session chair: Masahito Ueda (Nihon University), Kamran Khan (Khalifa University)**	**SS30 · Variable-Stiffness Composites Session chair: Richard Butler (University of Bath), Spyridon Psarras (University of Patras)**	**SS16 · Characterisation of recycled composites Session chair: Ana Yong (National Physical Laboratory), Connie Qian (University of Sheffield), Panayiotis Tsokanas (KU Leuven)**	**SS01 · Delaminations and debonding in composite materials and structures Session chair: Gilles Lubineau (KAUST), Luca Michele Martulli (Politecnico di Milano)**	**SS27 · Nature-Inspired Composites: From Natural Fibres to Biomimetic Structures Session chair: Carlos Fuentes (Luxembourg Institute of Science and Technology), Kunal Masania (TU Delft)**	**7.14 Topology/Design Optimization Session chair: Wim Van Paepegem (Ghent University), António Torres Marques (FEUP)**	**3.12 Joining and Joints Session chair: Martin Hirsekorn (ONERA), Andrea Bernasconi (Politecnico di Milano), Georgios Foteinidis (Luxembourg Institute of Science and Technology)**	**3.4 Durability, Ageing, and Environmental Effects Session chair: Nuno Correia (INEGI), Andrejs Krauklis (Latvia University of Life Sciences and Technologies)**	**5.17 Welding and Bonding Session chair: Anastasios Vassilopoulos (EPFL), Erik Andreassen (SINTEF)**	**2.6 Nanocomposites Session chair: Bodo Fiedler (Hamburg University Of Technology), Kosuke Takahashi (Hokkaido University)**	**6.6 Sensing and Actuation Session chair: Evangelos Kordatos (Sheffield Hallam University), Maik Gude (TU Dresden)**
08:45					#352 · Gilles Lubineau (KAUST) Understanding the role of chemical interactions and mechanical interlocking in the adhesion of electroplated copper to ABS Co-authors: Ran Tao; Amit Tevtia	#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 Co-authors: Jaime Buitrago-Osorio; Julien Bardon; Simon Bolou; Thomas Gaulain; Quintana Roberto	#919 · Inês Gonçalves (Institute of Science and Innovation in Mechanical and Industrial Engineering) Development and implementation of topology optimization techniques for unidirectional composite materials Co-authors: Bruno Christoff; Pedro Fernandes	#189 · Filipe Ribeiro (ISQ) Experimental Characterization of Out-of-Autoclave Composite Adhesive Joints for Aeronautical Applications Co-authors: Radouan Bouallala; Luís Correia; Ricardo Rocha; Raul Campilho	#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 Co-authors: Eric Monteiro; Xavier Colin	#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 Co-authors: Kazutami Mitani; Kimihiko Uemura; Takeo Sogawa; Kiyoshi Uzawa	#86 · Rachid Amrhar (Université de Toulon) Synthesis of a nanocomposite based on recycled epoxidized vegetable oils containing Ag-ZnO nanoparticles for antimicrobial surface protection Co-authors: Pascal Carriere; Phuong Nguyen-Tri	#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 Co-authors: Anja Winkler; Martin Helwig; Oliver Henry Schmidt; Maik Gude; Niels Modler
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 Co-authors: Angelo S. Calabrese; John Botsis; Anastasios P. Vassilopoulos	#1222 · Raja Bade (City University of Applied Sciences Bremen) From Biomimetic Core Designs to Circular Composites: PHA-Based Sandwich Structures with Natural Fibre Reinforcements Co-authors: Dietmar Koch; Jörg Müssig	#91 · Muhammad Uzair (Department of Mechanical Engineering, LUT University) Reliability-Aware Multi-Objective Optimisation of Variable-Stiffness Composite Cylinders with Geometric Imperfections Co-authors: Saullo Castro; Humberto Almeida Jr.	#325 · Benedikt Preisz (Universität der Bundeswehr München) Influence of low-velocity impact damage on crack propagation in adhesively bonded thermoplastic composites Co-authors: Phillip Höfer; Jens Holtmannspötter	#1364 · Maria Morissa Lu (University of the Philippines Los Banos) Effects of high vacuum SEM on unaged and aged flax fibre/polyester composites Co-authors: Aart Willem Van Vuure	#876 · Till Kremonke (herone GmbH) Examination and demonstration of innovative welding technologies for continuous fiber-reinforced thermoplastic hollow profiles in high-performance applications. Co-authors: Daniel Barfuss	#1024 · Xi Shen (The Hong Kong Polytechnic University) Anisotropic Nanocomposite for Sustainable Solar-Thermal Application Co-authors: Xiaomeng Zhao; Yunfei Yang; Kit-Ying Chan	#363 · Karina Dragasiute (Kaunas University of Technology) Development of Cellulose Nanofibre–MXene Nanopapers as Multifunctional Interlayers for Fibre-Reinforced Plastic Composites Co-authors: Gediminas Monastyreckis; Daiva Zeleniakiene
09:15					#859 · Jean-Baptiste Desbrest (EPFL) Debondable primer for demanufacturing of composite sandwich structures Co-authors: Véronique Michaud; Martyn Wakeman; Cristina Garcia-Simon; Ebrahim Farmand-Ashtiani; Philippe Cristou	#439 · Andrea Bercini Martins (Leibniz Institute of Polymer Research Dresden e.V.) Bioinspired nanoclay glass fiber sizing for interphase structuring in epoxy resin Co-authors: Toni Utech; Lutz Zybell; Kai Uhlig; Christina Scheffler	#197 · Shuya Nozawa (Department of Mechanical Engineering, KU Leuven – Bruges Campus) Eigenfrequency control of composite beams via collaborative topology and fiber orientation optimization Co-authors: Gokhan Serhat	#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 Co-authors: Martin Hirsekorn; Myriam Kaminski; Santiago Garcia-Rodriguez; François-Xavier Irisarri	#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 Co-authors: Panagiotis Chatzinas; Astrinos Papadakis; George Konstantinidis; Nicholas Tsouvalis	#1699 · Casilda Serrano Villal (WMG, University of Warwick) Effects of polymer molecular weight on the performance of overmoulded parts Co-authors: Samson Gnanadass; Jai Gupta; Neill Raath; Neil Reynolds; Ton Peijs	#355 · Yiqing Xue (Queen's University Belfast) Functionalized MWCNT/PEI nanocomposite for anti-icing/de-icing applications Co-authors: Dan Sun; Wenyan Liang	#903 · Ruben Windey (Department of Materials Engineering, KU Leuven) Challenges and strategies for particle dispersion and process-induced microstructural design in functional particulate composites Co-authors: Yentl Swolfs; Ruth Cardinaels; Jef Vleugels; David Seveno; Frederik Desplentere; Martine Wevers
09:30		#804 · Masahito Ueda (Nihon University) Recycling and tailored printing of carbon fiber composites Co-authors: Keigo Sato; Naruki Ichihara	#905 · Matteo Iozzi (University of Bordeaux) A Stripe Pattern approach to generate a semi-realistic models of Variable Stiffness Composite laminates obtained through AFP Co-authors: Marco Montemurro; Jerome Paihes; Anita Catapano	#268 · Ana Yong (NPL) Unlocking the value of recycled composites through advanced metrology Co-authors: Stefanos Giannis; Jamin Daniel Vincent; Michael Gower	#336 · Leonardo Guido Salvi (Politecnico di Milano) Modelling delamination initiation and propagation in composite structures using a combined CZM-VCCT approach. Co-authors: Guilherme Da Cruz Sobral Picoto De Assunção; Sajjad Safaei; Andrea Bernasconi; Luca Michele Martulli	#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 Co-authors: Carlos A. Fuentes; Tim Huber	#150 · Matteo Pastrello (University of Ghent) Design Optimization of Thick-Walled Type IV Hydrogen COPVs using an Analytical Framework Co-authors: Marie Hondekyn; Wim Van Paepegem	#419 · Julian Steinmetz (TU Braunschweig) Early-stage assessment of bonded composite fuselage joints using a reduced structural model with high-fidelity material modelling Co-authors: Riem Kilian; Oliver Völkerink	#1196 · Valentin Perruchoud (TU Delft) Understanding the effects of outdoor and accelerated hygrothermal ageing on the monotonic and fatigue performance of flax FRP composites Co-authors: René Alderliesten; Yasmine Mosleh	#119 · Maria Luisa Puga (University of Twente) Influence of dwell times on structure development and mechanical performance of press-consolidated C/PEKK laminates Co-authors: Wouter Grouve; Vanessa Marinosci; Remko Akkerman	#1757 · Müslüm Kaplan (Bartin University) Metal-Free Thermoelectric Nanocomposites: $g\text{-}C_3N_4$/SWCNT Hybrid Fillers in Recycled Polyamide 6 for Sustainable Waste Heat Recovery Co-authors: Emre Alp; Beate Krause	#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 Co-authors: Sofiia Butenko; Arun Ichangi; Bernhard Weisse; Tommaso Ternelli; Tommaso Maria Brugo; Frank Clemens; Andrea Zucchelli
09:45		#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 Co-authors: Vincenzo Iannone; Felice De Nicola; Filomena Piscitelli; Mario Costantini; Giovanni Cosentino; Pietro Caramuta; Pierpaolo Carlone	#1030 · Trang Le (Technological University of the Shannon) Effect of Fibre Inclination and Gaps on the Homogenised Stiffness of Variable Angle Tow Composites Co-authors: Paul Weaver; Paul Leahy; Daniela Butan; Luan Trinh	#286 · Roberto Palazzetti (Politecnico di Milano) Acoustic emissions for damage evolution monitoring on 4PB composite recycled samples Co-authors: Robert Huges; Andrea Zucchelli	#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 Co-authors: Maria Gfrerrer; Clara Schuecker	#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 Co-authors: Julien Bardon; Simon Bolou; Thomas Gaulain; Roberto Quintana; C.A. Fuentes	#1015 · Burak Alperen İhtiyar (ITU) Multimaterial Auxetic Lattice Structures with Optimized Stiffness and Reduced Stress Concentration Co-authors: Rabia Nur Toprak; Ali Nabizadeh; Oguzcan Inal; Kaan Yildiz	#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 Co-authors: Pierre BIDAUD; David THEVENET	#801 · Yuting Wang (Imperial College London) Quantitative Evaluation of Interfacial Degradation in Hydrothermally Aged CFRP Using Cyclic Push-Out Testing Co-authors: Eduardo Saiz; Finn Giuliani	#382 · Anastasios Vassilopoulos (EPFL, Composite Mechanics Group (GR-MeC)) Challenges in the Experimental Characterization of Bulk Structural Adhesives Co-authors: Filippo Mannino; Anastasios Vassilopoulos	#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 Co-authors: Hassan A. Mahmoud; Xiaole Li; Ping Hu; Gilles Lubineau
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 Co-authors: Johann Kipping; Thorsten Schüppstuhl; Jana Diekmann; Jan Bremer	#1418 · Eduardo Menezes (Leibniz Institut für Polymerforschung Dresden e.V.) Local Reinforcement of Cutouts in Filament-Wound Composite Cylinders Using Tailored Fiber Placement Patches Co-authors: Cristiano Azevedo; Tales Lisbôa; José Humberto Almeida Jr; Matheus Madrid; Axel Spickenheuer; Sandro Amico	#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 Co-authors: Ramin Moradi; Ross F. Minty; Liu Yang	#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 Co-authors: Luis Torres; Karin Saavedra	#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 Co-authors: Iouliana Chrysafi; Khouloud Tilouche Guerdelli; Clément Mugemana; Carlos A. Fuentes Rojas	#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 Co-authors: Lander Vertonghen; Johann Rannou; François-Xavier Irisarri; Boris Desmorat	#1557 · Vladimir Vinogradov (Newcastle University) Stress analysis and energy release rate in a single-lap shear joint Co-authors: Mohammad Fikry; Shinji Ogihara	#270 · Guillaume Lebreton (Nantes Université) Thermal oxidation of a disulfide based vitrimer Co-authors: Juliana Preisner; Antoine de Fontgalland; Nicolas Boyard	#607 · Rachel Zammit-Mangion (University of Bath) Statistical Evaluation of Surface Variability on Mode-I Performance of Adhesively Bonded Composite Joints Co-authors: Tom Ainsworth; Thomas Maierhofer; Chanel Fallon; Evripides G. Loukaides; Fulvio Pinto	#279 · Ayumu Morita (Waseda University) Effects of Processing and Nanofiller addition on the Mechanical and Thermal properties of Thermoplastic Epoxy Resin Co-authors: Haruki Kuwata; Yoshihiko Arao; Jonathan Tanks	#1391 · Yansong Li (University of Warwick) Architectural Decoupling of Mechanical and Thermal Sensing in Dual-Layer Multifunctional Composites Co-authors: Han Zhang
10:15		#1516 · Julien Deschamps (Univ. Bretagne Sud, UMR CNRS 6027, IRDL) Adaptive by design: 4D-printed metamaterials inspired by marine life Co-authors: Mickael Castro; Christelle Combescure; Bertrand Galpin; Ugo Lafont; Nadia Améziane; Antoine Le Duigou	#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 Co-authors: Lucas Schraa; Axel Spickenheuer; Christina Scheffler; Markus Stommel	#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 Co-authors: Clément Mugemana; Samet Ozyigit; Claus G. Bayreuther; Ahmed El Moumen; David Macieira; Munka Lu; Martin Kerschbaum	#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 Co-authors: Karim Couchan; Fatih Oz; Xiaole Li; Gilles Lubineau	#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 Co-authors: Erich Wehrle	◆*#123 · Dustin Gesang (German Aerospace Center e.V.)* *Thermal simulation of thermoplastic resistance welding for complex-geometry interfaces*	#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 Co-authors: Marten van der Werff; Lars Niens; Sabrine Bentalib; Vanessa Marinosci	#899 · Emma Chiavelli (Faculty of Aerospace Engineering, Delft University of Technology) Magnetic Nanoparticles for Self-regulated Magnetic Heating in Thermoplastic Composite Welding Co-authors: Agneta Meiksane; Laura Rossi; Clemens Dransfeld	#1342 · Mariam Omar (Sabanci University) From Fiber Coating to Matrix Integration: Enhancing Strength–Toughness Synergy via Dual-Alternant Interphase in CF/Epoxy Composites Co-authors: Cahit orhun Senol; Abdulrahman Al-Nadhari; Mostafa Mehdipour; Saeed Salamatgharamaleki; Bekir Dizman; Mehmet Yildiz	#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 Co-authors: Nils Wieja; Anja Winkler; Andreas Hornig; Maik Gude
10:30		#660 · Justin Merotte (IRDL/UBS) From Limitation to Function: Toward Localized 4D-Printing Control for Morphing Complex Multi-Material Composite Parts Co-authors: Quentin Le Paih; Melvin Josselin; Antoine Le Duigou		#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 Co-authors: Panayiotis Tsokanas; Yixue Zhang; Alexandros Prapavesis; Vassilis Kostopoulos	#1241 · Riem Kilian (TU Braunschweig) Enhancing Damage Tolerance in Adhesively Bonded CFRP Leading-Edge Slat through Surface Toughening Co-authors: Martin Johannes Schollerer; Oliver Völkerink	#856 · Kyungil Kong (University of Bristol) Hierarchical interphase design with metal oxide nanostructures on carbon fibres for improved impact resistance and functionality Co-authors: Young-Bin Park; Hyung Wook Park	#388 · Troy Zangle (University of Maine) Multi-Objective Optimization of Additive Manufactured High-Speed Small Craft Co-authors: Nicholas Garfield; Jacob Ward			#235 · Hawraa Becher (IRT Jules Verne, IREENA) Modelling degradation and healing effect on inductive welding of carbon fiber reinforced composite Co-authors: Banda Kane; Guillaume Wasselynck; Didier Trichet; Guillaume Vincent	#278 · Serge Zhuiykov (Ghent University Global Campus) Ultrathin $Ga_2In_2O_3$–Ag Plasmonic Composite Membranes for Dual-Mode Photonic and Spectroscopic Detection of Biomolecules Co-authors: Mohammad Karballaei Akbari	#529 · Fanni Balogh (Budapest University of Technology and Economics) Integration of Multifunctional PCL Layers for Enhanced Performance in Smart Composite Systems Co-authors: Andrea Toldy; Gábor Szebényi
10:45–11:15	**COFFEE BREAK**											
11:15–12:30	**SESSION 13**											
	Session →	**4.2 Data-Driven and Full-Field Methods Session chair: Janice Barton (University of Bristol), Frédéric Laurin (ONERA)**	**T3 · Fibre & ductile behaviour Session chair: Gergely Czél (Budapest University of Technology and Economics), Yentl Swolfs (KU Leuven), Patrik Fernberg (Luleå University of Technology)**	**SS12 · Long Discontinuous Fibre Composites: Processing, Microstructure, Properties and Performance Session chair: Connie Qian (University of Sheffield), Miro Duhovic (Leibniz-Institut für Verbundwerkstoffe)**	**5.1 2D and 3D Textile Reinforcements and Their Composites Session chair: Andreas Endruweit (University of Nottingham), Leonie Weiblen (Fraunhofer IGCV)**	**T5 · Braided composites & Processing technologies Session chair: Roland Hinterhoelzl (University of Applied Sciences Upper Austria), Beth Grimes (NCC)**	**T3 · Multiscale modelling, Hybrid Modelling & Creep Session chair: Olga Bulderberga (University of Latvia), Stergios Goutianos (NTNU)**	**7.12 Structural Health Monitoring and Quality Control Session chair: Nathalie Godin (INSA of Lyon - Mateis), Andrea Bernasconi (Politecnico di Milano)**	**T7 · Design methods Session chair: Richard Butler (University of Bath), Raj Das (RMIT University)**	**5.17 Welding and Bonding Session chair: Antonios Stamopoulos (University of L'Aquila), Kalliopi-Artemi Kalteremidou (Vrije Universiteit Brussel)**	**7.11 Recycling, Remanufacturing, and Circular Economy Session chair: Kunal Masania (TU Delft), Souvik Chakraborty (DLR)**	**T6 · Functionality & Smart Systems (mixed) Session chair: Alkis Paipetis (University of Ioannina), Kyriaki Tsirka (University of Ioannina)**
11:15		#109 · Francisco Chinesta (PIMM Lab @ ENSAM) Data-driven-based roughness descriptors discovery for tapes surface characterization and optimal consolidation modelling Co-authors: Sebastian Rodriguez; Camilo Cruz; Mabel Palacios; Jad Mounayer; Anais Barasinski	#499 · Michael Jerabek (Borealis) Damage mechanisms in glass fibre reinforced polypropylene composites Co-authors: Julia Thalhammer; Dietmar Salaberger	#1232 · Yvonne Aitomäki (RISE) Evaluating the Influence of Forming Process Simulation on the Performance of Recycled Composites for an Electric Vehicle Application Co-authors: Anna Lim; Thierry Renault; Ahmed Elmasry	#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 Co-authors: Danny Friese; Chokri Cherif	#1253 · Beth Grimes (NCC) Material Processability of Continuous Reclaimed Carbon Fibre Tow Using Braiding Co-authors: Kyle Pender; Dan Scott; N.A Warrior	#1656 · Liva Pupure (Riga Technical University) The affect of temperature on time dependent properties of 3D printed PLA Co-authors: Elvijs Bojars; Kurts Packuns; Andrey Aniskevich; Janis Varna	#1277 · Arunjunai Raj Mahendra (Kompetenzzentrum Holz GmbH- WOOD KPLUS) Paper-Based Printed Sensors for Multifunctional Monitoring in Fibre-Reinforced Composites Co-authors: Arunjunai Raj Mahendran; Nitin Gupta	#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 Co-authors: Carsten Schmidt; Sebastian Heimbs	#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 Co-authors: Affifa Adeeb; Sadik Omairey; Nithin Jayasree; Mihalis Kazilas	◆*#433 · Bianca Purgleitner (Transfercenter für Kunststofftechnik GmbH)* *Enhancing the mechanical performance of shredded glass fibre composites in epoxy resin bulk moulding compounds* *Co-authors: Christoph Burgstaller* ◆*#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* *Co-authors: Chit Ho Cheng; Christopher Lankhof; Jovana Jovanova; Frédéric Lachaud; Joseph Morlier; Kunal Masania*	◆*#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* *Co-authors: Pyeong Kang; Shanigaram Mallesh; Youngwoo Nam* ◆*#1259 · Arleth Suarez Hurtado (York University)* *Composite Magnetic Filament Fabrication and Characterization for Magnetically-Assisted FFF Aplication* *Co-authors: Angel Mora; Aleksander Czekanski*
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 Co-authors: Gangadharan Raju; Maunendra Sankar Desarkar	#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 Co-authors: Trevor Sabiston; John Montesano	#1439 · Martin Detzel (Leibniz-Institut für Verbundwerkstoffe (IVW) GmbH) Investigation on the Pseudo-Plastic Deformation Behavior of Staple Fiber Organic Sheets Co-authors: Thomas Neumeyer; Ulf Breuer; Peter Mitschang; Florian Gortner	#144 · Serena Tan (NCC) Manufacturing and Characterisation of 3D Woven Composites Developed Using Next-Gen Jacquard-less Loom Co-authors: Monali Dahale; Kazi Sowrov; Roy Conway; Prasad Potluri	#257 · Cassandra Bauer (Fraunhofer IGCV) Influence of Twisting Angle and Braiding Layers on the Bending of Glass Fibre Reinforced Thermoplastic Profiles Co-authors: Maximilian Rieger; Sebastian Strauß; Janitha Jeewantha; Sachini Wickramasinghe	#269 · Andrey Aniskevich (University of Latvia, Institute for Mechanics of Materials) Long- and short-term creep of 3D-printed polymer structures Co-authors: Roberts Joffe; Sergejs Tarasovs; Olga Bulderberga; Stanislav Stankevich	#359 · Sotaro Minami (WASEDA University) Strain and Damage Sensing of GFRP electrically functionalized by Self-Organized Adsorption of Graphene Co-authors: Koichi Nakamura; Shunsuke Harashima; Yoshihiko Arao	#938 · Soheil Navvabi (Durham University) High–Aspect–Ratio Discontinuous Galerkin Finite Elements for Efficient 3D Stress Analysis of Laminated Composites Co-authors: Stefano Giani; William Coombs	#1023 · Thomas Hoffmann (Leibniz-Institut für Verbundwerkstoffe GmbH) Simulation-Based Target-Surface-Temperature Control for Continuous Induction Welding of CFRP Co-authors: Peter Mang; Miro Duhovic; Thomas Neumeyer	◆*#1678 · José Luis Morillo (CATEC)* *Optimization of mechanical properties in fibre-reinforced composite materials made with aeronautic reused uncured prepreg cutoffs* *Co-authors: Mario Rueda; Jorge Sogorb; Irene Heras; Esteban Castro; Alejandro Domínguez; Carlos Galleguillos* ◆*#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.* *Co-authors: Souvik Chakraborty; Matt Keith; Steffen Opitz*	◆*#629 · Harald Strittmatter (Fraunhofer IGB)* *Preparation and application of new building blocks for high value Vitrimers* *Co-authors: Paul Stockmann; Fabian Hübner; Uwe Beier; Wolfgang Machunze* ◆*#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 Co-authors: Bartosz Popiela; Emanuel D. Kästle; Krishnachandran Chandrasekharan Nair Jayalekshmi; Eric Duffner; Volker Trappe	#1041 · Yuki Fujita (Nagoya University) Propagation fracture toughness of injection-moulded short-fibre composites under the combined effects of fibre orientation and testing temperature Co-authors: Aya Hosoi; Akinori Yoshimura; Emile Greenhalgh; Soraia Pimenta	#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 Co-authors: Yurika Mori; Kiyoshi Uzawa	#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 Co-authors: Valentin Braun; Mesut Cetin; Alisa Zeitler	#371 · Boris Duchamp (IRT M2P) Adaptive Multi-Axis Braiding of Hybrid Preforms Integrating Functional Fibers for Advanced Composite Structures Co-authors: Florian Dance; Eric Jacques	#667 · Christos Nikolaou (Vrije Universiteit Brussel) High definition thermo-mechanical finite element modelling of fused filament fabrication: validation and comparison with existing simulation tools Co-authors: Efstratios Polyzos; Lincy Pyl	#651 · Khaled Labidi (Linköping University) Truly integrated sensors for Structural Health Monitoring of Composite Structures in Cryogenic Applications Co-authors: Mohamed Sahbi Loukil; Amoog Lakshmanan; Stephanie Nunes; Runar Långström; Olfa Kanoun	#210 · Farida Touni (Institute of Polymers and Composites, Hamburg University of Technology) Experimental and Numerical Study of Mantis Shrimp Inspired Thin-Ply Bouligand Composites Co-authors: Marcel Neubacher; Kohei Yamada; Masaaki Nishikawa; Florian Bittner; Hans-Josef Endres; Bodo Fiedler	#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 Co-authors: Halil Nezih Sezer; Levent Civan; Fahri Buğra Çamlıca; Hatice S. Sas	◆*#932 · Samet Ozyigit (LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY)* *Recycling of carbon fibers employing debonding on demand approach in composite structures* *Co-authors: Julien Bardon; David Ruch; Abdelghani Laachachi* ◆*#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* *Co-authors: CHRISTOS TSIROGIANNIS; ELENI GKARTZOU; TATJANA KOSANOVIC; COSTAS CHARITIDIS*	◆*#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* *Co-authors: Hugo R. Williams* *+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. Co-authors: Lincy Pyl	#181 · Michael Wisnom (University of Bristol) Flexural failure of pseudo-ductile carbon / glass hybrid laminates and the interaction between tensile and compressive response Co-authors: Putu Suwarta; Gergely Czél	#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 Co-authors: Mostafa Nikzad; Reza Arablouei; Andreas Hendlmeier; Michelle Dunn; Benedicta Arhatari	#177 · Rebecca Emmerich (Institut für Textiltechnik of RWTH Aachen University) Adaption of the multi-axial warp knitting process for processing of rCF-Tapes Co-authors: Maeve O'Neill; Lourens Blok; Paul Riesen	#1328 · Ellinor Jansson (Chalmers University of Technology) Improving Manufacturability of Structural Battery Composites Using High-Volume Battery Production Practices Co-authors: Richa Chaudhary; Leif Asp; Björn Johansson	#1122 · Faranak Bahrami (Brunel Composites Centre) A predictive multiscale modelling framework to accelerate the development of novel vitrimers and their composites Co-authors: Daniel Paul; Konstantinos Papadopoulos; Nithin Jayasree; Sadik Omairey; Mihalis Kazilas; Dimitris Anastasiou	◆*#1258 · Aldyandra Hami Seno (King Abdullah University of Science and Technology)* *Capacitive IoT Strain Sensing System for Structural Health Monitoring of Non-metallic Pipes* *Co-authors: Hassan Mahmoud; Omar Khalifa; Mohammed Hussaini; Nour Kouzahya; Abdulaziz Asiri; Ahmed Al-Jarro; Ali Shehri; Hamad Saiari; Rizwan Bajwa; Tareq Al Naffouri; Gilles Lubineau* ◆*#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* *Co-authors: Maria Gfrerrer; Andreas Brunner; Gerald Pinter*	#1629 · Kinal Kim (Department of Mechanical Engineering, Inha University) Laser-Induced Graphene Metasurfaces with Anisotropic Conductivity for Load-Bearing Broadband Radar Absorbing Structures Co-authors: Sang Eui Lee	#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 Co-authors: Thomas Maierhofer; Evripides G. Loukaides; Richard Butler; David Williams; Fulvio Pinto	◆*#418 · Valeria De Fabritiis (Politecnico di Milano)* *Mild, universal and flexible catalyst-assisted solvolysis for circular recycling of fiber reinforced polymers* *Co-authors: Leonardo Matta; Gianmarco Griffini; Stefano Turri* ◆*#362 · Julio Vidal (Aitiip)* *Recovery and reuse of recycled materials after solvolysis treatments* *Co-authors: Carlos Hornero*	◆*#1682 · Yi Liu (Loughborough University)* *Autonomous Thermal Management in Flexible Conductive Polymer Composites for Wearable Systems and Battery Safety* *Co-authors: Hongxu Guo; Lichang Lu; Ton Peijs; Emiliano Bilotti; Han Zhang* ◆*#1399 · Valeria Berner (Fraunhofer Institute for Chemical Technology ICT)* *Recyclable, flame retardant epoxy vitrimers based on disulfide bonds and their composites preparation* *Co-authors: Arrate Huegun; Larissa Hammer; Anna Maria Cristadoro; Carl-Christoph Höhne*
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 Co-authors: Ingo Burgert; Guido Panzarasa			#1561 · Peng Xu (School of Mechanical Engineering and Automation, Beihang University) Mechanical property variation after incremental sheet forming of woven fabric reinforced polymer structures Co-authors: Yi Wang; Xiaobing Li; He Zhou; Xiaoqiang Li	#640 · Jeeeun Lee (Korea Advanced Institute of Science and Technology) Microscale Permeability Prediction of Fibrous Textiles using Finite Basis Physics-Informed Neural Networks and Domain Decomposition Co-authors: Denis Korolev; Miro Duhovic; Seong Su Kim	◆*#543 · Maedeh Amirpour (the University of Auckland)* *Designing Durable Hydrogel-Lattice Composites for Personalised Biomechanical Interfaces: An Experimental and FE Modelling Study* *Co-authors: Connor Pearson; Mohammadreza Arjmandi; Marius Marius Compans*	◆*#661 · Federico Marino (University of Derby)* *Mechanical and Electrical Characterisation of GnP-reinforced Thermoplastic Elium® Nanocomposites* *Co-authors: Yiling Lu; Marzena Pawlik* ◆*#1565 · Stefano De Luca (University of Parma)* *Preparation of polymer-based composite scaffolds functionalized with titanium dioxide nanoparticles for water remediation.* *Co-authors: Clarissa Facchini; Federica Bianchi; Claudio Suppini; Michele Bocelli; Alessandro Carloni; Roberto Montanari; Daniel Milanese; Corrado Sciancalepore*	#383 · Aya Hosoi (Imperial College London) Functionally graded lattices designed by machine learning: considering material orthotropy Co-authors: Jier Wang; Yuki Fujita; Ajit Panesar	#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 Co-authors: Saullo Giovani Pereira Castro; Clemens Albert Dransfeld; Irene Fernandez Villegas	#492 · Flavie Largenton (LAMPA) Influence of a new sizing on recycled carbon fibres on the fibres and composite mechanical and chemical properties Co-authors: Monica Francesca Pucci; Pierre-Jacques Liotier; Christophe Cruanes; Olivier Mantaux; Laurent Guillaumat; Sébastien Guéroult	◆*#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* *Co-authors: Youngchul Kim; Ji-Hoon Kim; Sang Yi Song; Mungyu Jeong; Jisang Park; Kil Sung Lee; Dong Ho Ha* ◆*#1127 · Defne Deniz Menceloğlu (Istanbul Technical University)* *Tailoring Composite Laminates for Auxetic Behavior via Particle Swarm Optimization* *Co-authors: Kaan Yıldız; Hülya Cebeci*
12:30–13:30	**LUNCH**											
13:30–14:00	**2 KEYNOTES (rooms A & B)**	**★ KEYNOTE · Kim Sjödahl (Exel Composites Plc) Forward-thinking sustainability for composites Chair: Ton Peijs (University of Warwick)**	**★ KEYNOTE · Essi Sarlin (Tampere University) Zooming in on composite structures: Possibilities and challenges of microscale mechanical testing Chair: Ole Thomsen (Bristol Composites Institute)**									
14:00–15:30	**SESSION 14**											
	Session →	**SS02 · Additive manufacturing (3D/4D printing, AFP) for advanced composites Session chair: Ugo Lafont (European Space Agency), Maik Gude (TU Dresden)**	**SS28 · Intelligent Production Technologies for Load-Dedicated Graded Polymer Composite Structures Session chair: Petar Peric (Institute for Plastics Processing), Marco Zichner (TU Dresden)**	**SS16 · Characterisation of recycled composites Session chair: Andrea Bernasconi (Politecnico di Milano)**	**2.4 Interfaces Session chair: Mahoor Mehdikhani (KU Leuven), Souvik Chakraborty (DLR)**	**3.4 Durability, Ageing, and Environmental Effects Session chair: Ignaas Verpoest (KU Leuven), Andrejs Krauklis (Latvia University of Life Sciences and Technologies)**	**5.12 Manufacturing of Discontinuous Composites Session chair: Iryna Tretiak (University of Bristol), Yvonne Aitomäki (RISE)**	**6.6 Sensing, Actuation, Storage Session chair: Daiva Zeleniakiene (Kaunas University of Technology), Dimitrios Bekas (Airbus)**	**2.2 Fibers and Textiles Session chair: Delphine Quereilhac (Université Bretagne Sud), Kalliopi-Artemi Kalteremidou (Vrije Universiteit Brussel)**	**7.7 Environmental Impact, Life Cycle Assessment & 7.13 Sustainability by design Session chair: Nektaria-Marianthi Barkoula (University of Ioannina), Gustavo Quino (Imperial College London)**	**2.1 Bio-Derived and Sustainable Composites Session chair: Alexander Bismarck (University of Vienna), Carlos Fuentes (Luxembourg Institute of Science and Technology)**	**6.5 Self-Healing Session chair: Aaditya Suratkar (University of Augsburg, Germany), Alkis Paipetis (University of Ioannina)**
14:00		#920 · Esra Yalcinkaya (University of Mons) Light-driven pnipam/gold nanoparticle hydrogel nanocomposites for biomedical applications Co-authors: Manon Cassignol; Jean-Marie Raquez; Pierre Lambert; Jérémy Odent	#676 · Petar Peric (Institute and Chair for Plastics Processing at RWTH Aachen University) Coextrusion of profiles with graded mechanical properties to reduce stress peaks Co-authors: Luiz Lise; Jonathan Alms; Kai Fischer; Christian Hopmann	#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 Co-authors: Leif Steuernagel; Carsten Schmidt	#759 · Ross F. Minty (University of Strathclyde) Re-exploring the Importance of Residual Stresses to the Stress Transfer Capability of the Fibre-Matrix Interface Co-authors: Beth Malone; David Bryce; Liu Yang; James L. Thomason	#791 · Andrejs Krauklis (Latvia University of Life Sciences and Technologies (LBTU)) Decoding Environmental Drivers of Glass Fiber Dissolution in Composite Materials Co-authors: Eduards Skukis; Olesja Starkova; Gintars Briedis; Sergejs Gaidukovs; Sotirios Grammatikos	#1171 · Shivdarshan Sherugar (University of Bath) Effect of resin infusion on fibre orientation level of aligned discontinuous fibre composites Co-authors: Het Shah; Edwin Rosario Gabriel; HaNa Yu	#361 · Gabriele Jovarauskaite (Kaunas University of Technology) Rain-erosion damage assessment on wind turbine blades using MXene and carbon nanotube coatings Co-authors: Gediminas Monastyreckis; Daiva Zeleniakiene	#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 Co-authors: Alessia Melelli; Anthony Magueresse; Timm Weitkamp; Mario Scheel; Xavier Falourd; Hoël Tricou Le Pennec; Alain Bourmaud	#632 · Thomas Neumeyer (Leibniz-Institut für Verbundwerkstoffe GmbH) Life Cycle Assessment of a Geometrically Highly Flexible Lightweight Hydrogen Tank Co-authors: Valentine Domengie; Florian Gortner	#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 Co-authors: Morvan Ouisse; Pauline Butaud; Romain Viala; Vincent Placet	#708 · Andrea Dorigato (University of Trento) Smart thermoplastic composite laminates with self-healing capability Co-authors: Laura Simonini; Alessandro Sorze; Giulia Fredi; Pietro Russo; Alessandro Pegoretti

ECCM22 — THURSDAY (08:00–17:30) — TECHNICAL PROGRAMME · VERSION 2 (updated 19 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
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 Co-authors: Naruki Ichihara; Ryo Higuchi; Tomohiro Yokozeki	#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 Co-authors: Tony Krüger; Ricardo Decker; Kenny Pagel; Matthias Klärner; Welf-Guntram Drossel; Lothar Kroll	#1327 · Marina Corvo Alguacil (Lulea University of Technology) Evaluation of the Effect of Re-Sizing for Recycled Carbon Fiber Using Various Pyrolysis Conditions Co-authors: Rudi Reichenbächer; Christina Scheffler; Roberts Joffe	#392 · Rami Alawar (LMGC, IMT Mines Alès) Coupling thermal and interfacial analysis for a deeper understanding of fiber–matrix adhesion in thermoplastic composites Co-authors: Pierre-Jacques Liotier; Olivier De Almeida; Gautier Allusse; Monica Francesca Pucci	#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 Co-authors: Leon Struck; Stefan Schmidt; Wilko Flügge
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 Co-authors: Richard S. Trask	#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 Co-authors: Georgios Tzortzinis; Angelos Filippatos; Maik Gude	#721 · Lorenzo Calervo (POLITECNICO DI MILANO) On the failure mechanisms in discontinuous fiber composites obtained from recycled prepreg scraps. Co-authors: Maheshwara Reddy Jedla; Luca Michele Martulli; Tommaso Maria Brugo; Paolo Bettini; Roberto Palazzetti	#410 · Leandra Schmid (Pforzheim University) Investigation of Interface Optimization Methods in Thermoset–Thermoplastic Hybrid Structures Co-authors: Simon Mörmann; Ingolf Müller; Konstantin Mehl; Sebastian Schmeer	#642 · Anna Kandinskaia (KU Leuven) Time-dependency of self-reinforced polypropylene and biaxially oriented polypropylene laminates Co-authors: Arianna Tavano; Pauline Koslowski; Laurens van Audenaerde; Nathan Vanden Bulcke; Ignaas Verpoest; Yentl Swolfs
14:45		#183 · Quynh Anh Le (ESTACA) A conductive polymer composites (CPCs)-based micron-thick embeddable strain sensor via fused deposition modeling (FDM). Co-authors: Thuy-Quynh Truong-Hoang; Fabienne Touchard; Ahmad Akrad	#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 Co-authors: Nisha Poonia; Anja Winkler; Yun Xu; Shengqiang Zhou; Maik Gude; Thomas Lampke	#762 · David Bryce (University of Strathclyde) Use of Recycled Glass Fibres and Manufacturing Waste in the Production of Sustainable Bulk Moulding Compounds. Co-authors: Liu Yang; Johnattan Vargas; James Thomason; Ramin Moradi; Richard Diskin	#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 Co-authors: Rebecca Lunn; James L Thomason; Ross F Minty	#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 Co-authors: Haruna Maruko; Yi Wan; Jun Takahashi
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. Co-authors: Antoine Le Duigou; Arnaud Perrot; Justin Merotte	#771 · Johannes Keil (TUD Dresden University of Technology, Institute of Lightweight Engineering and Polymer Technology) Realizing Local Coverage Variations in Thermoplastic Tape-Braided Structures Co-authors: York Stuhldreher; Alexander Liebsch; Veit Würfel; Frank Adam; Peter Partzsch; Niels Modler	#491 · Jianqun Hao (Vrije Universiteit Brussel) Upcycling carbon fibre prepreg scraps by optimizing ply-level joining geometry for high-performance laminates Co-authors: Emma Declercq; Konstantinos Giannadakis; Danny van Hemelrijck; Kalliopi-Artemi Kalteremidou	#370 · Jesse Savolainen (Materials Science and Environmental Engineering, Tampere University) Improving the surface properties of recycled glass fibers with supercritical CO2 silylation Co-authors: Essi Sarlin	#1625 · Pietro Agostino (NTNU) On the durability of non-crimp fabric composite exposed to water bath and freeze-thaw aged Co-authors: Sotirios Grammatikos
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 Co-authors: Francesco Di Caprio; Marco Russo; Stefania Franchitti; Rosario Borrelli; Valentino Paolo Berardi; Antonio Langella	#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 Co-authors: Johannes Keil; Alexander Dementyev; Alexander Liebsch; Niels Modler; Steffen Ihlenfeldt	#1335 · Johanna Beckmann (Paderborn University) Processing-Structure-Performance Interactions in Recycled PA6-CF Flake-Based Composite Laminates Co-authors: Paul Kästner; Thomas Tröster; Thorsten Marten	#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 Co-authors: Ross Minty; Stefanos Giannis; Niklas Meyn	#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 Co-authors: Baris Kumru; Santiago. J. Garcia

Time	M1	M2	M4	M5	Balder	Odin
14:15	#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 Co-authors: Mark Battley; Simon Bickerton; Tom Allen	#908 · Tommaso Ternelli (University of Bologna) Impact localization by P(VDF-TrFE) piezoelectric nanofibers scaled up from coupons to real components Co-authors: Francesco Mongioi; Benedetta Baldini; Lorenzo Calervo; Francesco Madaro; Federica Zonzini; Roberto Palazzetti; Emanuele Maccaferri; Alessio Marrani; Claudio Rossi; Tommaso Maria Brugo; Andrea Zucchelli	#347 · Alexia Reynet (GEMTEX) Evaluation of the manufacturing of slivers and rovings from recycled carbon fibers Co-authors: Jean Ivars; Ahmad Rashed Labanieh; Damien Soulat	#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 Co-authors: Christine Bandl	#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 Co-authors: Natalia Victoria Dos Santos; Lucia Gioiella; Giulia Ronconi; Libera Vitiello; Valentina Mazzanti; Sabrina Carola Carroccio; Veronica Ambrogi; Martina Salzano de Luna	#591 · Kota Kanauchi (Tokyo University of Science) Self-Healing Mechanisms and Mechanical Property in Polyrotaxane-Modified Epoxy Vitrimers: A Molecular Dynamics Study Co-authors: Yutaka Oya; Kimiyoshi Naito; Junichi Hukuda; Jun Koyanagi
14:30	#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 Co-authors: Paulo Antunes; Helena Rocha; João Ribeiro; Renato Reis; Daniel Rodrigues; Ana Ruivo; Andreia Vilela; Sofia Oliveira	#340 · Tommaso Maria Brugo (University of Bologna) Smart luminescent coating for indentation damage detection on composite laminates Co-authors: Francesco Mongiòi; Tommaso Ternelli; Emma Contini; Lorenzo Gatti; Lucai Maini; Damiano Genovese; Andrea Zucchelli; Chiara Gualandi	#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 Co-authors: Leonid Gurevich; Lars Rosgaard Jensen; Brian Lau Verndal Bak; Esben Lindgaard	#620 · Sabrina Diniz (German Aerospace Center (DLR)) Mind the gap: Improvement of the life cycle inventory for epoxy resins Co-authors: Jens Bachmann; Karina Kroos; Steffen Opitz	#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 Co-authors: Alexander Behrens; Hans-Jörg Gusovius; Carsten Lühr; Kolja Ostendorf; Michaela Eder; Jörg Müssig	#77 · Daniele Rigotti (University Of Trento, Department of Industrial Engineering) Design Of Advanced SelfHealing Mechanism In Fiber Reinforced Composite Co-authors: Andrea Dorigato; Alessandro Pegoretti
14:45	#125 · Burak Ogun Yavuz (University of Bristol) The effect of curing pressure on consolidation of aligned discontinuous fibre-reinforced composites (ADFRCs) Co-authors: Mihai Ilinca; Hao Yuan; Yuncong Feng; Stephen R. Hallett; Ian Hamerton; Jonathan P.-H. Belnoue; Byung Chul Kim	#1791 · Natalia Violari (AmaDema) Development of structural supercapacitors for integrated energy storage in composite materials	#1447 · Jean Rougé (Bernal Institute) Wet-Spinning and Carbonisation of Water coagulated Lignin/Bio-Based Thermoplastic Polyurethane Precursor Fibers. Co-authors: Anne Beaucamp; Maurice Collins	◆#515 · Karina Kroos (DLR - German Aerospace Center) Parameters of autoclave processes and their influence on the energy consumption Co-authors: Jens Bachmann; Steffen Opitz --- ◆#312 · Soon Ho Yoon (Korea Institute of Science and Technology) A complete design of ultra-lightweight composite structures using topology optimization and additive manufacturing Co-authors: Thuan Ho-Nguyen-Tan; Minkook Kim	#668 · Marc Gadinger (Engineering Design, Friedrich-Alexander-Universität Erlangen-Nürnberg) Deviations in laminates with local reinforcement patches: Transferable to plant fibre composites? Co-authors: Stephan Freitag; Pascal Greger; Maximilian Schäfer; Hannah Rabe; Ewald Fauster; Sandro Wartzack	#1701 · Han Zhang (University of Warwick) Smart and repeatable easy-repairing composites enabled by thermoplastic interleaves Co-authors: Thomas Thorn
15:00	#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. Co-authors: Michael R. Wisnom; Michael O'Leary; Petar Zivkovic; Iryna Tretiak	◆#569 · Dajeong Kang (Korea Advanced Instituite of Science and Technology) Development of the two-way shape memory alloys and polymer composite smart actuator Co-authors: Kiyaranu Putra Pakartiwan; Grace X. Gu; Seong Su Kim --- ◆#1504 · Abhishek Kumar (Leonardo SpA) Towards Green Sensing in Composite Aerostructures: European Ecosystem for Green Electronics Co-authors: Federico Danzi; Muhammad Zahid; Federico Capone	#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 Co-authors: Woong-Ryeol Yu	◆#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. Co-authors: Maria-Paraskevi Belioka; Yvonne van der Meer --- ◆#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 Co-authors: Georges CHALLITA; Houssem BADREDDINE; Akram ALHUSSEIN	#1033 · Mitchell Jones (University of Vienna) Mycelium-Textile Prepreg Analogues for Fungal Composites Co-authors: Maidu Silm; Qixiang Jiang; Anu Kisand; Alexander Bismarck	#1137 · Josep Costa (AMADE - University of Girona) Bridging Material- and Structural-Scale Characterization of Self-Healing Polymer Composites Co-authors: Ahmed Saleh; Daniel Sanchez-Rodriguez; Jordi Farjas; Alaitz Rekondo; Alaitz Ruiz de Luzuriaga; Pere Maimí
15:15	#390 · Christina Neeser (HEAD) The Impact of Reuse and Remanufacturing on Mechanical Properties of Alpine Skis Co-authors: Jens Hertrich; Andrea Bernasconi; Herfried Lammer; Luca Martulli		#739 · Emmanuel Lopez (Airbus, CANOE, I2M) Towards sustainable, lightweight, high-performance and cost effective carbon fibers Co-authors: Célia Mercader; Giuseppe Sciume; Jean Lachaud; Lisa Feuillerat; Caroline Petiot	◆#1609 · Egemen Erçimen (TOBB University of Economics and Technology) Sustainability-Based Design Optimization of a Cruise Missile Canister Co-authors: Erdem Acar --- #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 Co-authors: Jean-Baptiste Desbrest; Véronique Michaud; Davide S.A. De Focatiis	#1635 · Cheng-Ying Li (National Taiwan University, Department of Chemical Engineering) Bacterial cellulose composites for the next decade: From fabrication to application Co-authors: Ying-Chih Liao	

15:30–16:00 **COFFEE BREAK**

16:00–17:00 **SESSION 15 – SHORT-ORAL RAPID SESSION · ESCM AWARDS SESSION (room A)**

Time	A–C	D	Forum	M1
Session →		**5.12 Process Modelling and Simulation** **Session chair: Frédéric Laurin (ONERA, Paris-Saclay University), Emmanuel Baranger (Université Paris-Saclay)**	**SS07 · Cryogenic Testing, Material Characterisation & Durability** **Session chair: Andrew Rhead (University of Bath), Stefanos Giannis (National Physical Laboratory)**	**T5 · Manufacturing** **Session chair: Benjamin Alcock (Sintef)**
16:00	ESCM AWARDS SESSION (16:00–17:00)	◆#902 · Lucas Sardo (Sciences Computers Consultants) Optimisation of fibre-reinforced polymer extrusion with numerical simulation and AI Co-authors: Corentin RIVAUX; Laurent RATTE	◆#795 · Suzanne Laik (CETIM) Development of quasi-static testing and characterization of CF/PEI composite under Liquid Hydrogen immersion Co-authors: Vivien André; David Clainchard; Sébastien Arnaud	◆#1514 · Julian Schuster (Fraunhofer IGCV) Fiber path optimization for highly challenging surfaces in AFP manufacturing Co-authors: Klaus Prof. Drechsler
16:07		◆#1017 · Lingxiao Yang (beihang university) Effects of Residual Stresses on the Load-Bearing Performance of Asymmetric Foam Sandwich Structures Co-authors: Xiaodong Wang; Zengshan Li; Zhidong Guan	◆#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 Co-authors: Marc Nardone; Steven Marguet; Stéphane Orieux; Nicolas Laurien; Abdelaziz Zitouni; Mathieu Barragan; Claire Morel; Olivier Dorival; Laurent Bendichou; Pablo Navarro; Jean-François Ferrero	◆#659 · Ehshan Ul-haq (Delft University of Technology) Local Assessment of Electrical Behavior of Thin-Ply CFRP for Aerospace Manufacturing Co-authors: Dennis Colaianni; Oguz Eryilmaz; Clemens Dransfeld; Baris Caglar
16:14		◆#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 Co-authors: Martin Lambrechtse-Reid; Simon Bickerton; Tom Allen	◆#918 · Maria Fernanda Betanco (Universidad Carlos III) Transverse mechanical behavior of unidirectional composites under extreme low-temperature conditions Co-authors: Maria Fernanda Betancourt Soto; Adrián Cimadevilla; José Manuel Rodriguez; Álvaro Vaz; Fernando Naya	◆#1605 · Ahmed Elsayed (NTNU) Robotic Processing of Reclaimed Timber Co-authors: Sotirios Grammatikos
16:21		◆#1808 Yingjiang Guo (Northwestern Polytechnical University) Multi-Scale Modeling of Peri-Hole Damage Evolution During Dynamic Installation of Interference Bushings in CFRP	◆#1150 · Lewis Kelly (University of Strathclyde) Effect of Humidity on the Fibre-Matrix Interface During Cryogenic Cycling Co-authors: Liu Yang; John Liggat; Ross Minty	◆#1433 · Yichen Wu (Northwestern Polytechnical University) In-situ Curing of FRP Composites via Joule Heating Using Embedded Carbon Nanotubes Co-authors: Yaqi Wang; Xudan Yao
16:28		◆#1804 Hanxing Zhao (Harbin Institute of Technology) Numerical prediction and experimental analysis of the buckling loads of smpc cylindrical shells and its application in pyrotechnics vibration attenuation	◆#1311 · Yonggun Park (National Insititute of Forest Science) Durability of Wood-Based Panels after 3 Year of Natural Weathering in Three Korean Climates Co-authors: Min Lee; Sang-Min Lee; Eun-Chang Kang	◆#1676 · Chrysoula Tzina (NTNU) Development of Quality Control Strategies for Reclaimed Timber towards Optimized Upcycling Co-authors: Christina Podara, Tatjana Kosanovic Milickovic, Costas Charitidis, Tom Svilans, Sotirios Grammatikos
16:35		◆#1805 Qinyu Li (Harbin Institute of Technology) Impact dynamics properties of woven hemp/epoxy composites		

Time	M2	M4	M5	Balder
Session →	**2.7 Hybrid and Hierarchical Composites** **Session chair: Stergios Goutianos (NTNU), Georgios Foteinidis (Luxembourg Institute of Science and Technology)**	**3.9 Fracture and Damage** **Session chair: Mohamed Loukil (Linköping University), Kamran Khan (Khalifa University)**	**5.14 Sustainable Manufacturing & 7.11** **Session chair: Julie Teuwen (Delft University of Technology), Kalliopi-Artemi Kalteremidou (Vrije Universiteit Brussel)**	**2.1 Bio-Derived and Sustainable Composites** **Session chair: Vahid Movahedi-Rad (ETHZ), Spyridon Psarras (University of Patras)**
16:00	◆#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 Co-authors: Umer Hayat	◆#675 · Aristea Giannakopoulou (Linköping University) Thermal and Mechanical Influence of Interlaminar Defects in RTM-Manufactured Carbon Fiber-Reinforced Polymer Laminates Co-authors: Mohamed Loukil; Marie Jonsson; Sibin Saseendran	◆#582 · Christian Bülow (German Aerospace Center (DLR)) Sustainability and Cost Assessment of Structural Components for Cryogenic H2 Aircraft Tanks Co-authors: Steffen Opitz	◆#644 · Paula Bucci (FUNDACION CIDAUT) Process Platform and Sustainability from Agro-Industrial Residues to Circular High-Performance Elastomers via an Integrated Hydrothermal-Catalytic Platform Co-authors: Alberto Blanco Rodriguez; Adrián Pedrosa Valbuena; Maria Fernandez Peña; Esteban Cañibano Alvarez
16:07	◆#564 · Go Masuda (The University of Tokyo) Enhanced Damping Behaviour in CFRP Laminates Enabled by a Novel Polyurea Interleaf Concept Co-authors: Tomohiro Yokozeki	◆#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 Co-authors: Kamel Moussaoui; Frédéric Lachaud	◆#1404 · Georgios Pappas (Department of Mechanical and Process Engineering, ETH Zurich) Sustainable, Circular, and Performing FR-PET Composites Co-authors: Oliver Vetterli; Reto Krüger; Paolo Ermanni	◆#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 Co-authors: Michael Feuchter; Katharina Resch-Fauster
16:14	◆#1046 · Georgios Foteinidis (Luxembourg Institute of Science and Technology (LIST)) Development and Evaluation of Hybrid Sandwich Composites for Enhanced Low-Velocity Impact Resistance Co-authors: Georgios Kotsinis; Levent Kirkayak; Lucas Binsfeld	◆#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 Co-authors: Jules Arnaud; Samuel Geniaut; Astrid Filiot; Mickaël Abbas	◆#252 · Elise Mathouillot (Polymers Composites and Hybrids (PCH), IMT Mines Alès) Feasibility of Flax/Recycled PolyEthylene Terephthalate (PET) Thermoplastic Tapes: Manufacturing and Characterization Co-authors: Monica Francesca PUCCI; Pierre-Jacques LIOTIER	◆#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 Co-authors: Michael Mauersberger; Chris Fischer; Falk Hähnel; Johannes Markmiller
16:21	◆#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 Co-authors: Hyo Seop Kang; Seoung Yoon Lee; Woong-Ryeol Yu	◆#342 · Hélène Brunet (Institut Clément Ader / CNES) Damage Modelling of Thick Composite by Non-Intrusive Global/Local Approach Co-authors: Pablo Navarro; Claire Morel; Steven Marguet; Jean-François Ferrero; Kévin Mathis; Ange Rogani	◆#295 · Shristi Ghosh (Georgia Institute of Technology) Lightweighting, recycled and renewable materials towards sustainable composites for automotive applications Co-authors: Kim Anh Pham; Andrew Geda; Angelo DiLisio; Kyriaki Kalaitzidou	◆#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 Co-authors: Tobias Breitfeld; Cornell Wüstner; Mandy Thomas; Sven Winter; Frank Walther
16:28	◆#1155 · Tom Hill (WMG, University of Warwick) Implications of Dissimilar Resin Systems and Fibre Architectures on Mechanical Performance of Hybrid Composites Co-authors: Muhammad Khan; Neil Reynolds; Richard Groves; Hao Yuan; Andy Bools; Ton Peijs	◆#1667 · Marcus Welsh (RWTH Aachen) Multiscale statistical failure analysis of filament wound unit cells accounting for process induced variation Co-authors: Vinzent Grün; Thomas Gries	◆#225 · Anaïs Barasinski (IMT Mines Albi - ICA) Toward rheological characterisation of thermoplastic pre-impregnated UD tape, for its recycling and reuse. Co-authors: Lucas Sieger; Camilo Cruz	◆#69 · Jiayi Sun (Imperial College London) Converting wood particles into monolithic cellulose reinforced lignin composites Co-authors: Koon-Yang Lee
16:35			◆#444 · Natalie Mähling (Baden-Wuerttemberg Cooperative State University) Investigation of the Mechanical and Thermal Properties of Recycled PLA in the 3D Printing Process Co-authors: Lasse Kaiser; Nico Bendel; Johannes Pfrommer; Daniel Stehle	◆#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. Co-authors: Kardelen Pekgöz; Thomas Gries

17:00–17:30 **CLOSING CEREMONY & AWARDS CEREMONY**