

PROGRAMME AT A GLANCE

MONDAY

Start	End		Munich (MUC)	Seville (SEV)	Venice (VEN)	Budapest (BUD)	Stockholm (STO)	Biarritz (BIA)	Rhodes (RHO)	Bruges (BRU)	Brighton (BRI)	Naples (NAP)	London (LON)	Bordeaux (BOR)	Stuttgart (STG)	Augsburg (AUG)	Ingolstadt (ING)	Athens (ATH)
8:30	9:00		Opening Ceremony															
9:00	9:50		Plenary Lecture 1 - Tony Kelly Lecture (MUC) by Ignaas Verpoest, Katholieke Universiteit Leuven, Belgium: COMPOSITES RESEARCH: INSPIRED BY PEOPLE, CHALLENGED BY NATURE															
10:00	11:00	MON-1	3.01 Fracture and Damage - Micromechanics (1/8)	3.07 Thin Ply Composites (1/3)	3.06 Textile Composites (1/6)	3.04 Delamination (1/4)		3.11 Dynamic Loading - Impact, Crash, Blast (1/6)	3.23 Maintenance and Repair (1/2)	2.02 Polymer Matrix Materials (1/4)	2.07 Graphene, Graphene-Based Composites (1/4)	2.06 Nano Composites (1/7)	5.11 Upscaling and Automation (1/1)	5.08 Liquid Composite Molding (1/2)	5.09 Manufacturing Processes for Thermoplastic Composites (1/7)	4.02 X-ray Computed Tomography (1/2)		1.01 Aerospace (1/6)
11:00	11:30		Coffee Break															
11:30	13:10	MON-2	3.01 Fracture and Damage - Micromechanics (2/8)	3.07 Thin Ply Composites (2/3)	3.06 Textile Composites (2/6)	3.04 Delamination (2/4)	3.21 Effects of Manufacturing Effects (EoE) (1/2)	3.11 Dynamic Loading - Impact, Crash, Blast (2/6)	Industry Session 1: Presentations of the Sponsoring and Exhibiting Companies	2.02 Polymer Matrix Materials (2/4)	2.07 Graphene, Graphene-Based Composites (2/4)	2.06 Nano Composites (2/7)	5.07 Pultrusion and Filament Winding (1/1)	5.08 Liquid Composite Molding (2/2)	5.09 Manufacturing Processes for Thermoplastic Composites (2/7)	4.02 X-ray Computed Tomography (2/2)	6.01 Smart Structures (1/2)	1.01 Aerospace (2/6)
13:10	14:10		Lunch Break															
14:10	14:50		Keynote lecture 1 (MUC) by Francisco Chinesta, Ecole Centrale de Nantes, France: ADVANCED MODELING AND REAL TIME SIMULATION OF COMPOSITES MANUFACTURING PROCESSES: REALIZING TECHNOLOGICAL DREAMS				Keynote lecture 2 (BIA) by Stepan V. Lomov, Katholieke Universiteit Leuven, Belgium: MULTI-SCALE MODELLING OF SPATIAL VARIABILITY IN TEXTILE COMPOSITES: UNCERTAINTY QUANTIFICATION BASED ON EXPERIMENTAL DATA OF INTERNAL GEOMETRY				Keynote lecture 3 (NAP) by Jinson Leng, Harbin Institute of Technology, China: ACTIVE DEFORMABLE COMPOSITE STRUCTURES: OPPORTUNITIES AND CHALLENGES				Keynote lecture 4 (STG) by Gerald Pinter, Montanuniversität Leoben and Polymer Competence Center Leoben, Austria: ADVANCED TECHNIQUES FOR THE CHARACTERIZATION OF FATIGUE IN SHORT AND CONTINUOUS FIBRE REINFORCED POLYMER MATRIX COMPOSITES			
15:00	16:20	MON-3	3.01 Fracture and Damage - Micromechanics (3/8)	3.07 Thin Ply Composites (3/3)	3.06 Textile Composites (3/6)	3.04 Delamination (3/4)	3.21 Effects of Manufacturing Effects (EoE) (2/2)	3.11 Dynamic Loading - Impact, Crash, Blast (3/6)	Industry Session 1: Presentations of the Sponsoring and Exhibiting Companies	2.02 Polymer Matrix Materials (3/4)	2.07 Graphene, Graphene-Based Composites (3/4)	2.06 Nano Composites (3/7)	5.06 Automated Placement Technologies (1/5)	5.02 Process Simulation II - Curing & PID (1/2)	5.09 Manufacturing Processes for Thermoplastic Composites (3/7)	4.04 Micro- and Nano-Scale Test Methods (1/1)	6.01 Smart Structures (2/2)	1.01 Aerospace (3/6)
16:20	16:50		Coffee Break															
16:50	18:30	MON-4	3.01 Fracture and Damage - Micromechanics (4/8)	3.03 Fracture and Damage - Laminate Level (1/5)	3.06 Textile Composites (4/6)	3.04 Delamination (4/4)	3.15 Analysis and Design of Damage Tolerant Composite Structures (1/2)	3.11 Dynamic Loading - Impact, Crash, Blast (4/6)	ESCM Council Meeting 1	2.02 Polymer Matrix Materials (4/4)	2.07 Graphene, Graphene-Based Composites (4/4)	2.06 Nano Composites (4/7)	5.06 Automated Placement Technologies (2/5)	5.02 Process Simulation II - Curing & PID (2/2)	5.09 Manufacturing Processes for Thermoplastic Composites (4/7)	4.01 Full-Field Methods (1/3)	6.03 Structural Power Composites (1/1)	1.01 Aerospace (4/6)
18:30	19:00		Speeches (MUC): Gerhard Müller, Senior Vice President Academic and Student Affairs Technical University of Munich, Germany Franz Josef Pschierer, State Secretary in the Bavarian Ministry of Economic Affairs and Media, Germany Herbert Zeisel, MinDirig. "Key Technologies for Growth" at the Federal Ministry of Education and Research, Germany															
19:00	20:00		Round Table (MUC): THE RELEVANCE OF COMPOSITE MATERIALS FOR THE INDUSTRY AND GERMANY AS A BUSINESS LOCATION															
20:00			Welcoming Reception															

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9:00	9:50		Plenary Lecture 2 (MUC) by Thomas Wolff, BMW AG, Germany: PROCESS CHAINS OF COMPOSITE TECHNOLOGIES FOR AUTOMOTIVE LIGHTWEIGHT DESIGN																
10:00	11:00	TUE-1	3.01 Fracture and Damage - Micromechanics (5/8)	3.03 Fracture and Damage - Laminate Level (2/5)	3.06 Textile Composites (5/6)	3.05 Multiscale Modeling (1/5)	3.15 Analysis and Design of Damage Tolerant Composite Structures (2/2)	3.11 Dynamic Loading - Impact, Crash, Blast (5/6)		2.10 Environmental Effects (1/1)		2.06 Nano Composites (5/7)	5.06 Automated Placement Technologies (3/5)	5.14 Manufacturing of Short/ Long Fiber Composites (1/2)	5.09 Manufacturing Processes for Thermoplastic Composites (5/7)	4.01 Full-Field Methods (2/3)	7.02 Recycling of Fibres and Composites (1/5)	1.01 Aerospace (5/6)	
11:00	11:30		Coffee Break																
11:30	13:10	TUE-2	3.01 Fracture and Damage - Micromechanics (6/8)	3.03 Fracture and Damage - Laminate Level (3/5)	3.06 Textile Composites (6/6)	3.05 Multiscale Modeling (2/5)	3.14 Novel Composite Microstructures: Design and/or Prototyping (1/2)	3.11 Dynamic Loading - Impact, Crash, Blast (6/6)		2.09 Non-Polymer Matrix Composites (1/1)	2.08 Fiber-Hybrid Composites (1/1)	2.06 Nano Composites (6/7)	5.06 Automated Placement Technologies (4/5)	5.14 Manufacturing of Short/ Long Fiber Composites (2/2)	5.09 Manufacturing Processes for Thermoplastic Composites (6/7)	4.01 Full-Field Methods (3/3)	7.02 Recycling of Fibres and Composites (2/5)	1.01 Aerospace (6/6)	
13:10	14:10		Lunch Break																
14:10	14:50		Keynote lecture 5 (MUC) by Pedro Camanho, University of Porto, Portugal: ANALYSIS MODELS FOR POLYMER COMPOSITES ACROSS DIFFERENT LENGTH SCALES				Keynote lecture 6 (BIA) by Markus G. R. Sause, University of Augsburg, Germany: ADVANCES IN IN-SITU MONITORING OF FIBER REINFORCED COMPOSITES				Keynote lecture 7 (NAP) by Leif Asp, Chalmers University of Technology, Sweden: NEXT GENERATION MULTIFUNCTIONAL COMPOSITES				Keynote lecture 8 (STG) by Peter Mitschang, Universität Kaiserslautern and Institut für Verbundwerkstoffe GmbH, Germany: INDUCTION WELDING - A FLEXIBLE TECHNOLOGY FOR VARIOUS APPLICATIONS				
15:00	16:20		Poster Session 1																
15:00	16:20	TUE-3	3.01 Fracture and Damage - Micromechanics (7/8)	3.03 Fracture and Damage - Laminate Level (4/5)	3.18 Hybrid Materials and Structures (1/4)	3.05 Multiscale Modeling (3/5)	3.14 Novel Composite Microstructures: Design and/or Prototyping (2/2)	3.12 Dynamic Loading - Vibration and Damping (1/1)		2.14 Foams, Cellular and Lattice Materials (1/2)	2.04 Bio Composites (1/6)	2.06 Nano Composites (7/7)	5.06 Automated Placement Technologies (5/5)	5.12 Online Process Monitoring and Controlling (1/3)	5.09 Manufacturing Processes for Thermoplastic Composites (7/7)	4.05 Novel Test Methods and Concepts (1/2)	7.02 Recycling of Fibres and Composites (3/5)	1.04 Renewable Energies (1/1)	
16:20	16:50		Coffee Break																
16:50	18:30	TUE-4	3.01 Fracture and Damage - Micromechanics (8/8)	3.03 Fracture and Damage - Laminate Level (5/5)	3.18 Hybrid Materials and Structures (2/4)	3.05 Multiscale Modeling (4/5)	3.02 Fracture and Damage - Lamina Level (1/5)	3.09 High-Performance Discontinuous Fibre Composites (1/1)		2.14 Foams, Cellular and Lattice Materials (2/2)	2.04 Bio Composites (2/6)	2.03 Interfaces and Interphases (1/3)	5.01 Process Simulation I - Draping & LCM (1/3)	5.12 Online Process Monitoring and Controlling (2/3)	5.03 Experimental Methods for Process Characterisation (1/3)	4.05 Novel Test Methods and Concepts (2/2)	7.02 Recycling of Fibres and Composites (4/5)	1.02 Ground-Based Transportation (1/4)	
18:30			General Assembly (MUC)																
20:00			PhD Student Event																

TUESDAY

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9:00	9:50		Plenary Lecture 3 (MUC) by Gerd Wingefeld, SGL CARBON SE, Germany: COMPOSITE MATERIAL SOLUTIONS: PROGRESS OF THE PAST, SOLUTIONS OF TODAY, CONCEPTS FOR TOMORROW																
10:00	11:00	WED-1	3.02 Fracture and Damage - Lamina Level (2/5)	3.22 Ductile and Pseudo-ductile Composites (1/4)	3.18 Hybrid Materials and Structures (3/4)	3.10 Fatigue of Composites (1/6)	3.20 Joining and Joints (1/6)	3.08 Short Fibre Reinforced Thermoplastics (1/4)	3.05 Multiscale Modeling (5/5)	2.12 Lightning Strike, Fire Behavior and Fire Retardance/Resistance of Composites (1/3)	2.04 Bio Composites (3/6)	2.03 Interfaces and Interphases (2/3)	5.01 Process Simulation I - Draping & LCM (2/3)	5.12 Online Process Monitoring and Controlling (3/3)	5.03 Experimental Methods for Process Characterisation (2/3)	4.03 Structural Health Monitoring and Control (1/3)	7.02 Recycling of Fibres and Composites (5/5)	1.02 Ground-Based Transportation (2/4)	
11:00	11:30		Coffee Break																
11:30	13:10	WED-2	3.02 Fracture and Damage - Lamina Level (3/5)	3.22 Ductile and Pseudo-ductile Composites (2/4)	3.18 Hybrid Materials and Structures (4/4)	3.10 Fatigue of Composites (2/6)	3.20 Joining and Joints (2/6)	3.08 Short Fibre Reinforced Thermoplastics (2/4)	3.16 Fibre, Resin and Laminate Design for Optimized Performance and Manufacture (1/3)	2.12 Lightning Strike, Fire Behavior and Fire Retardance/Resistance of Composites (2/3)	2.04 Bio Composites (4/6)	2.03 Interfaces and Interphases (3/3)	5.01 Process Simulation I - Draping & LCM (3/3)	5.03 Experimental Methods for Process Characterisation (3/3)	4.03 Structural Health Monitoring and Control (2/3)	7.01 Sustainability - Resource Efficient Technologies and Supply Chains (1/1)	1.02 Ground-Based Transportation (3/4)		
13:10	14:10		Lunch Break																
14:10	14:50		Keynote lecture 9 (MUC) by Silvestre Pinho, Imperial College London, UK: MECHANICS OF COMPOSITES: FROM NANO TO MACRO AND FROM SIMULATION TO ACTUALLY ENGINEERING NEW MICROSTRUCTURES				Keynote lecture 10 (BIA) by Alexander Bismarck and Paul Robinson, Imperial College London and University of Vienna, UK and Austria: EXPLOITING COMPOSITE INTERPHASES: CONTROLLABLE STIFFNESS, SHAPE-MEMORY AND REPAIR				Keynote lecture 11 (NAP) by Paolo Ermanni, ETH Zürich, Switzerland: MULTIFUNCTIONAL COMPOSITE STRUCTURES FOR MORPHING APPLICATIONS			Keynote lecture 12 (STG) by Pascal Hubert, McGill University Montreal, Canada: TOWARDS SUSTAINABLE MANUFACTURING OF COMPOSITE MATERIALS					
15:00	16:20		Poster Session 2																
15:00	16:20	WED-3	3.02 Fracture and Damage - Lamina Level (4/5)	3.22 Ductile and Pseudo-ductile Composites (3/4)	3.17 Sandwich Structures (1/4)	3.10 Fatigue of Composites (3/6)	3.20 Joining and Joints (3/6)	3.08 Short Fibre Reinforced Thermoplastics (3/4)	Industry Session 2: Presentations of the Sponsoring and Exhibiting Companies	2.12 Lightning Strike, Fire Behavior and Fire Retardance/Resistance of Composites (3/3)	2.04 Bio Composites (5/6)	2.01 Fibers (1/4)	5.13 Additive Manufacturing (1/2)	1.05 Civil Engineering (1/4)	5.04 Textile Composites (1/2)	4.03 Structural Health Monitoring and Control (3/3)	6.02 Self-Healing and Bio-Inspired Designs (1/3)	1.02 Ground-Based Transportation (4/4)	
16:20	16:50		Coffee Break																
16:50	17:50	WED-4	3.02 Fracture and Damage - Lamina Level (5/5)	3.22 Ductile and Pseudo-ductile Composites (4/4)	3.17 Sandwich Structures (2/4)	3.10 Fatigue of Composites (4/6)	3.20 Joining and Joints (4/6)	3.08 Short Fibre Reinforced Thermoplastics (4/4)	ESCM Council Meeting 2		2.04 Bio Composites (6/6)	2.01 Fibers (2/4)	5.13 Additive Manufacturing (2/2)	1.05 Civil Engineering (2/4)	5.04 Textile Composites (2/2)		6.02 Self-Healing and Bio-Inspired Designs (2/3)	1.03 Marine (1/1)	
19:30			Gala Evening																

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9:00	9:50		Plenary Lecture 4 (MUC) by Christian Weimer, AIRBUS Group, Germany: THE FUTURE COMPOSITE MATERIALS CHALLENGE IN AERONAUTICS															
10:00	11:00	THU-1	3.13 Durability, Ageing, Creep, Environmental Effects (1/2)		3.17 Sandwich Structures (3/4)	3.10 Fatigue of Composites (5/6)	3.20 Joining and Joints (5/6)	3.19 Buckling and Stability (1/2)	3.16 Fibre, Resin and Laminate Design for Optimized Performance and Manufacture (2/3)	2.11 High Temperature Polymer Composites (1/2)		2.01 Fibers (3/4)	5.05 Tailored Preforms (1/2)	5.10 Machining (1/2)	1.05 Civil Engineering (3/4)	8.01 Composite Clusters and Networks (1/2)	6.02 Self-Healing and Bio-Inspired Designs (3/3)	1.08 Industrial Applications (1/1)
11:00	11:30		Coffee Break															
11:30	13:10	THU-2	3.13 Durability, Ageing, Creep, Environmental Effects (2/2)		3.17 Sandwich Structures (4/4)	3.10 Fatigue of Composites (6/6)	3.20 Joining and Joints (6/6)	3.19 Buckling and Stability (2/2)	3.16 Fibre, Resin and Laminate Design for Optimized Performance and Manufacture (3/3)	2.11 High Temperature Polymer Composites (2/2)	2.13 Electrical Properties of Continuous Fibre Reinforced Composites (1/1)	2.01 Fibers (4/4)	5.05 Tailored Preforms (2/2)	5.10 Machining (2/2)	1.05 Civil Engineering (4/4)	8.01 Composite Clusters and Networks (2/2)		
13:10	14:10		Lunch Break															
14:10	14:50		Keynote lecture 13 (MUC) by Philippe Boisse, Institut National des Sciences Appliquées Lyon, France: COMPOSITE FORMING SIMULATIONS AT MACRO AND MESO SCALES				Keynote lecture 14 (BIA) by Bent F. Sørensen, Technical University of Denmark, Denmark: CHARACTERIZING DELAMINATION RESISTANCE IN TERMS OF MIXED MODE COHESIVE LAWS				Keynote lecture 15 (NAP) by Hubert Jäger, Technische Universität Dresden, Germany: CARBON FIBRES - FROM HYPE TOWARDS REALITY FOR FUTURE LIGHTWEIGHT CONCEPTS				Keynote lecture 16 (STG) by Volker Altstädt, University of Bayreuth, Germany: THERMOPLASTIC LIGHTWEIGHT STRUCTURES - TRENDS AND DEVELOPMENTS TOWARDS SERIAL PRODUCTION			
15:00	15:50		Plenary Lecture 5 - Albert Cardon Lecture (MUC) by Juan José Vilatela, IMDEA Materials Institute, Spain: MULTIFUNCTIONAL COMPOSITES WITH MACROSCOPIC CNT FIBRES															
15:50	16:00		Closing Ceremony (MUC)															

THURSDAY



ICM Munich

picture: Messe München GmbH