TECHNICAL SCHEDULE
November 4th, Monday

November 3rd, Sunday
19:00 Welcome Party
*Hôtel OCEANIA 4*****
Aéroport Nantes Atlantique
44340 BOUGUENAiS

08:30 – 09 : 00	REGISTRATION
	OPENING ADDRESS
09:00 – 09 :10	**Jacques RENARD**, *Ecole des Mines ParisTech*
09:10 – 09:20	**Henri VANDAMME**, *Scientific Director, The French Institute of Transports*
09:20 – 09:30	**Laurent MANACH**, *Cluster of Competitiveness, EMC²*

	1st session chaired by K. UZAWA, J. RENARD
09:30 – 10 :00 **Keynote Lecture**	"Today's and Tomorrow's Composite Technologies for Automotive applications" **T. ODA**, *Organic Material Department, Materials Engineering Division, TOYOTA MOTOR EUROPE NV/SA, Zaventem, Belgium*
10:00 – 10:20	"Rheological approach of the rubber-to-metal vulcanization bonding process" **E. LEROY, A. SOUID, A. SARDA, R. DETERRE**, *University of Nantes, France*
10:20 – 10:40	"Current Japanese Activity in CFRTP for Automotive Application" **J. TAKAHASHI**, *The University of Tokyo, Tokyo,Japan*

10:40 – 11:00 Coffee Break / Poster session

	2nd session chaired by E. RODRIGUEZ-VIDAL, J. TAKAHASHI
11:00 – 11:20	"DCNS experience about metal/composite assemblies on board of navy ships" **F. DUBOIS,** *DCNS, France*
11:20 – 11 :40	"Basic Study of CFRTP Joints for Automotive Applications" **K. UZAWA**, *Kanazawa Institute of Technology, Kanazawa, Japan*
11:40 – 12:00	"Characterization of atmospheric-pressure plasma treatment made to improve adhesion between composite and short glass fibre reinforced PA6" **E. PHONGPHINITTANA[1], P. NIMDUM[1], V. GANTCHENKO[1], J. RENARD[1], D. BEN-SALEM[2], J. PULPYTEL[2], F. AREFI-KHONSARI[2], Th. RENAULT[3], F. FACON[3],** *(1) Mines ParisTech, (2) Chimie ParisTech, (3) Faurecia Automotive Seating, France*
12:00-12:20	"Investigation of the fatigue behavior of adhesively bonded spars of wind turbine rotor blades" **M. WOLF, R. KNAACK, F. SAYER[1], A. ANTONIOU[1], P. WANG[1], C. NAGEL,** *Fraunhofer Institut für Fertigungstechnik und Angewandte Materialforschung (IFAM), (1) Fraunhofer Institut für Windenergie und Energiesystemtechnik (IWE), Germany*

12:20 – 13:20 Lunch

TECHNICAL SCHEDULE
November 4th, Monday

	3rd session chaired by W. KNAPP & T. ODA
13:20 – 13:40	1 "New experimental techniques and several micro mechanical models for assessing the out-of-plan shear modulus properties of short glass fibre reinforced polyamide", **E. PHONGPHINITTANA, P. NIMDUM, S. JOANNES, J. RENARD, V. GANTCHENKO,** *Mines ParisTech, France*
13 : 40 – 14 : 00	2 "Rapid determination of the fatigue limit curve of carbon fiber epoxy matrix composite laminates by thermographic methodology" **L. GORNET,** *GEM-Ecole Centrale Nantes, France*
14 : 00 – 14 : 20	3 "Energy director free ultrasonic process for composites welding : modeling the heating stage", **S. Le CORRE,** *Polytech' Nantes, France*

	4rd session chaired by C. SATO, M. QUARESIMIN
14:20 – 14:50 **Keynote Lecture**	"Laser welding of polymers and hybrid laser joining of polymer-metal" **E. RODRIGUEZ-VIDAL**, **C. SANZ, I. QUINTANA,** *IK4-TEKNIKER, Spain*
14:50 – 15:10	"Development of low cost preform for aircraft application" **T. TANAMURA, N. SAKAKI**, *Central research Laboratory, Shikibo ltd.,Shiga, Japan*
15:10 – 15:30	"Joining of metals to fiber reinforced composites by ultrasonic welding? Property analysis and microstructure" **F. BALLE**, *University of Kaiserslautern, Institute of Materials Science and Engineering, Germany*
15:30 – 15:50	"Damage Simulation of High-Velocity Projectile Impact of CFRP laminates" **A. YOSHIMURA[1], K. NAGAKURA[2], S. FUKUDA[2], T. OKABE[3], T. OGASAWARA[1], S. OGIHARA[2],** *(1) Japan Aerospace Exploration Agency, Tokyo, Japan, (2) Tokyo University of Science, Chiba, Japan, (3) Tohoku University, Sendai, Japan*

15:40-16:00 Coffee break / Poster session

TECHNICAL SCHEDULE
November 4th, Monday

	5th session chaired by A. TORRES MARQUES, A. YOSHIMURA
16:00 – 16:30 **Keynote Lecture**	"Adhesively Bonded Joints, a Key Technology for Fabricating Multimaterial Car Structures" **C. SATO**, *Precision and Intelligence Laboratory, Tokyo Institute of Technology, Japan*
16 : 30 – 16 : 50	"Laser processing of fiber reinforced composite materials", **W. KNAPP**, *CLFA Fraunhofer Institut für Laser Technology (ILT), Germany*
16 : 50 – 17 :10	"Intralaminar Crack Growth Properties of Interlayer Toughened CFRP Laminate under Mode I Loading" **N. SATO[1], M. HOJO[2], M. NISHIKAWA[2],** *(1)Toray Industries Inc., Ehime, Japan, (2) Kyoto University, Kyoto, Japan*
17:10 -17:30	"Fibre reinforced composites with a nano particle enhanced polymer matrix outline from properties to application" **B. FIEDLER,** *Institute of Polymers and Composites, Technische Universität Hamburg, Germany*
17:30 -17:50	"Mixed-mode fatigue of composite bonded joints **M. QUARESIMIN,** Università di Padova, Vicenza

POSTER SESSIONS
Posters (dimensions 90cm x 120cm) sessionswill be heldduring coffee breaks

1 "The use of degraded LLDPE as a compatibilizer in wood-LLDPE composites"
A**. SHEBANI[1], A. VAN REENEN[2], M. MEINcKEN[3],**
1 - Libya, 2 - South Africa, 3 - South Africa

2 "Competitive Lightweight Structures with Increased Thermal Stability for tribological Applications"
R. GADOW, P. WEICHAND, H. BESSAM,
GraduateSchool of Excellence advanced Manufacturing Engineering, Germany

3 "Investigation of multiple delaminations in L-shaped composite structures",
G. MERT,*Middle East Technical University, Turkey*

4 "Fabrication of carbon-based composite materials with SP2/SP3 hybridization",
M. VARGA[1], V. VRETENAR[2], A. ARTEMENKO[3], V. SKAKALOVA[4], A. KROMKA[5],
(1) Institute of Physics of the ASCR,v.v.i. (Czech Republic), (2) Danubia NanoTech, s.r.o. (Slovakia), (3) Institute of Physics, Slovak Academy of Sciences (Slovakia), (4) Charles University (Czech Republic), (5) University of Vienna (Austria)

5 "Development and characterization of light-weight backing of polymer composite laminates for ballistic protection with SiC tiles"
BESSAM, H.E.ab; P. WEICHAND.a; R. GADOW.a
(a) Institute for Manufacturing Technologies of Ceramic Components and Composites (IMTCCC), University of Stuttgart, Allmandring 7b, D-70569 Germany
(b) Graduate School of Excellence advanced Manufacturing Engineering (GSaME), University of Stuttgart, Nobelstr. 12, D-70569 Stuttgart

19:00 Banquet
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TECHNICAL SCHEDULE
November 5th, Tuesday

	6th session chaired by T. KUSAKA, L. ASP
09 : 00 – 09 : 30 **Keynote lecture IV**	"Structural health monitoring of composite overwrapped pressure vessels using FBGS" **A. TORES MARQUES** *Faculdade de Engenharia da Universidade do Porto, Portugal*
09 : 30 – 09 : 50	"Dynamic measurement of strain distributions in bonded joints by embedded FBG sensor" **H. MURAYAMA**, *Department of Systems Innovation, School of Engineering, The University of Tokyo, Tokyo, Japan*
09 : 50 – 10 : 10	"Deformation distribution measurement of a CFRP structure using a digital camera" **H. TSUDA, S. RI**, *National Institute of Advanced Industrial Science & Technology, Ibaraki, Japan*
10 : 10 – 10 : 30	"Fatigue Behavior of Smart Continuous Fibers and Nano-Reinforced Polymer Composites – Importance of Adhesion" **M. DRISSI HABTI**[a*], Y. Guéguen[b*], JC Sangleboeuf[b*], JF Feller[c*], X. Chapeleau[a*] *[a]The French Institute for Transports, IFSTTAR, [b]LARMAUR Rennes 1 University and [c]Smart Plastics Group – LIMAT[B], University of South Brittany, France – GIS DURSI**

10:30 – 10:50 Coffee Break / Poster session

	7th session chaired by P. BOISSE, H. MURAYAMA
10 : 50 – 11 : 10	"Multi materials joining for automotive seats" **Th. RENAULT**, *FAURECIA Automotive Seating, France*
11 : 10 - 11 : 30	"Stain monitoring of structural composites using embedded conductive polymer nanocomposites (CPC) sensor", **M. CASTRO, S. CHOWDHURY**,*Laboratoire d'Ingénierie des Matériaux de Bretagne, France*
11 : 30 – 11 : 50	"Key factors for characterizing delamination fatigue properties" **M. HOJO, M. NISHIKAWA** *Department of Mechanical Engineering and Science, KyotoUniversity, Kyoto ,Japan*
11 : 50 – 12 : 10	"Experimental characterization of interfacial adhesion of an optical fiber embedded in composite material" **J.C. SANGLEBOEUF, R. EL ABDI, P. CASARI, M. DRISSI HABTI,** *LARMAUR Rennes 1 University, GEM-NantesUniversity, The French Institute of Transports, France*
12 : 10 – 12 : 30	"Fracture Behavior and Toughening Mechanism in Zanchor Reinforced Composites" **T. KUSAKA[1], M. HOJO[2], K. WATANABE[1], T. FUKUOKA[3], M. ISHIBASHI[4],** *(1) Ritsumeikan University, Shiga, Japan, (2) Kyoto University, Kyoto, Japan, (3) Mitsubishi Aircraft Corporation, Aichi, Japan, (4) Shikibo Ltd., Shiga, Japan*

12:30 – 13:30 Lunch

TECHNICAL SCHEDULE
November 5th, Tuesday

	8rd session chaired byH. TSUDA, M. DRISSI HABTI
13 :30 – 14:00 **Keynote lecture V**	"Prediction of Process-Induced Deformation and Setting the Design Tolerances for Manufacturing Composite Parts of Aerospace Structures" **T. SHIMIZU, H. KOINUMA, K. NAGAI,** *Mitsubishi Heavy Industries, LTD, Aichi, Japan*
14 :00 – 14:20	"Meso modelling for composite preform shaping – Simulation of the loss of cohesion of the woven fibre network" **S. GATOUILLAT, A., BAREGGI, E. VIDAL-SALLE, P. BOISSE** *University of Lyon, LaMCoS, INSA Lyon, France*
14:20 – 14:40	"Resin flow monitoring for VaRTM by an approach integrating electrical measurements and stochastic simulation" **R. MATSUZAKI[1], M. MURATA[2], A. TODOROKI[2], Y. MIZUTANI[2],** *(1) Tokyo University of Science, Chiba, Japan, (2) Tokyo Institute of Technology, Tokyo, Japan*

14:40-15:00 Coffee break / Poster session

	9th session chaired by C. BATHIAS, M. HOJO
15:00 – 15:30 **Keynote lecture VI**	"Innovative composites titanium joints" **L. ASP,D. MATTSSON, E. MARKLUND, U. LJUNGBLAND,***Swerea SICOMP, Sweden*
15:30 - 15:50	"Nonlinear Mechanical Response in CFRP Angle-Ply Laminates" **S. OGIHARA**, *Tokyo University of Science, Chiba, Japan*
15:50 – 16:10	"Multifunctional biocomposite for lightweight structure: high performance materials and health monitoring with conductive nanocomposites" **F. VINCENT**, *Laboratoire d'Ingénierie des Matériaux de Bretagne, Lorient, France*
16:10 – 16:30	Application of Three-Dimensional Fiber-Based Simulation to Strength Prediction of Fiber Reinforced Composite with Process-Induced Microstructural Heterogeneities, **M. NISHIKAWA, M. HOJO,** *Department of Mechanical Engineering and Science, Kyoto, Japan*
16:30 – 16 : 50	Thermography observation on damage behaviour of discontinuous carbon fiber composite", **J. BALE, Cl. BATHIAS,** *LEME, University P10, France*

16:50- 17:10 Closing address

Wednesday, November 6th
9:30 – 11:30
Guided Tour – TECHNOCAMPUS EMC2 (Invitation)