

Day 1 - June 4th

08h00 - 09h00

REGISTRATION

09h00 - 09h15

WELCOME ADDRESS

Jean-Luc MACRET, Conference Chairman - ArianeGroup - FRANCE
Thierry LEVEUGLE - ThiReX Ingénierie - FRANCE

INTRODUCTION KEYNOTES

09h15-09h45

Chairpersons : Jean-Luc MACRET, Thierry LEVEUGLE
Composites Market Overview
Franck GLOWACZ, JEC MAGAZINE - FRANCE

09h45-10h15

GIFAS French Thermoplastic Initiative
Loïc LE LAY, Stelia Aerospace / IRT Jules Verne - FRANCE

10h15-10h45

Considerations on a New Design Paradigm : Get Rid of Old Legacy Laminates !
Thierry MASSARD, Stanford University - USA

10h45-11h15

Ultimate Lightweight Solutions
Bertrand FLORENTZ, HUTCHINSON PAULSTRA - FRANCE

11h15-11h45

COFFEE BREAK

SESSION 1 : EFFICIENT MANUFACTURING - 1

Chairpersons : Guy LARNAC, Michel TOUSSAINT
Keys for Designing the Most Efficient
and Robust In-situ TP ATP
Anaïs BARASINSKI, Ecole Centrale Nantes - FRANCE

11h45-12h10

Automated Dry Preform Manufacturing
Asier GANDARIAS MINTEGI
Danobat S.Coop. - SPAIN

12h10-12h35

Innovative Heating Solution for Automatic Fiber Place-
ment of Dry Fibers & Thermoplastics Prepreg
Simon DESEUR, COMPOSITADOUR - FRANCE

12h35-13h00

SESSION 2 : STRUCTURAL ASSEMBLY

Chairpersons : Martine DUBE, Thierry LEVEUGLE
Conductive Nanocomposites as Heating
Elements for Resistance Welding
David BRASSARD, École Polytechnique de Montréal -
CANADA

Development of a Sandwich Panel with Carbon Fiber
Reinforced Thermoplastic Skins for Space Applications
Marina HEIM, CNES - FRANCE

Aeronautical Structures by Automatic Lay-up with
Thermoplastic Composites and Material Behavior
Fernando RODRIGUEZ-LENCE,
FIDAMC - SPAIN

13h00-14h30

LUNCH

PLENARY SESSION 1

14h30-14h55

Chairpersons: Marie JACQUESSON, Thierry LEVEUGLE
Review of Additive Manufacturing Polymer for Next Launchers Generation
Franck LAFFARGUE, ArianeGROUP - France

SESSION 3 : DYNAMICS AND DAMAGE CONTROL

Chairpersons : Slahedinne FRIKHA, Jean-Luc MACRET
Machine Learning Techniques Applied to Health
Monitoring of Composites Structures
Yann DUPLESSIS KERGOMARD, ESI Group - FRANCE

14h55-15h20

CFRP Repair Doubler Manufactured
on 3D Printed Tooling
Asunción BUTRAGHEÑO, Airbus - SPAIN

15h20-15h45

Short Beam Strength Tests on Woven
Composite Specimens
Augustin GAKWAYA, Laval University - CANADA

15h45-16h10

Low Velocity Impact Modelling on Laminate Compo-
site : Industrial Application to Impact at Hole Edge
Patrick PERES, ArianeGroup - FRANCE

16h10-16h35

SESSION 4 : ADDITIVE MANUFACTURING

Chairpersons : Guy LARNAC, Thierry MASSARD
Advanced Simulation to Leverage the True Additive
Manufacturing Potential
Guillaume BOISOT, e-Xstream - LUXEMBOURG

Solutions for additive Manufacturing
of Polymers Parts
Frédéric VERLON, EOS - FRANCE

Composite Additive Manufacturing
Eric MONTERO, Stratasys - FRANCE

Additive Manufacturing in High Performances Plastics
Marialuisa GERAMO, ROBOZE - USA

16h35-17h05

COFFEE BREAK

Day 1 - June 4th

17h05-18h00

ROUND TABLE 1

Moderator : Philippe BRIANT, Ariane Group

Design & Manufacturing : How to Transition from Expensive Handcrafting to Affordable Perspectives for Composites Applications ?

Participants : Francis SEDEILHAN, COMPOSITADOUR – Christophe CHAMPENOIS, CETIM – Laurent PÉRINET, ArianeGroup

20h00-23h00

CONFERENCE GALA DINNER

Day 2 - June 5th

PLENARY SESSION 2

Chairpersons : Ludger FROEBEL, Thierry LEVEUGLE

09h00-09h30

Composite Structures for Launchers : Challenges in Design, Dimensioning and Qualification for Gain of Costs and Adaptation to Market
Florian LAVELLE, CNES - FRANCE

09h30-10h00

Shaping The Future of Access to Space
Jean-Luc MACRET, ArianeGroup - FRANCE

10h00-10h30

COFFEE BREAK

SESSION 5 : LOW COST DESIGN / RECYCLING / BIOSOURCING

SESSION 6 : ADVANCED DESIGN & SIMULATION

10h30-10h55	Chairpersons : Martine DUBE, Xavier COQUERET The FORCE Project : Biobased Low-cost Carbon Fiber for a More Intensive Use of Composites Celia MERCADER, CANOE - FRANCE	Chairpersons : Thierry MASSARD, Frédéric DAU Virtual Prototyping of Hybrid Composite-metal Parts Using ESI VPS Patrick DE LUCA, ESI Group - FRANCE
10h55-11h20	3R-COMPO: Reprocessable, Repairable and Recyclable Thermoset Composites for Aeronautics and Automotive Nerea MARKAIDE, Cidetec - SPAIN	Water Vapor Transmission Through Bagging Materials for Composite Processes Anja HÄBERLE, Faserinstitut Bremen e.V. - GERMANY
11h20-11h45	FORTAPE Project: From Lab-scale Impregnation Line to Pre-industrial Manufacturing of GF and CF-based UD Tapes for Transportation Industries Thibaut SAVART, ARKEMA - FRANCE	Experimental Characterization of the Viscoelastic Behavior of a Curing Epoxy Matrix Composite from Pre-gelation to Full Cure. Application to Simulate Residual Deformation Alain VINET, Airbus CRT - FRANCE
11h45-12h10	Carbiso M and Carbiso TM: ELG Carbon Fibre Turns Recycled Carbon Fibres into Reinforcements for Thermoset and Thermoplastic Composites Marion FLAHAUT, ELG - UNITED KINGDOM	Fiber/Matrix Interfacial Analysis of Thermostable Thermoplastic Composites Aurélien MALHO RODRIGUES, IRT Saint-Exupéry - FRANCE
12h10-12h35	Development of a Bio-based Ablative Resin for Thermal Protection Systems Robin POUYET, ArianeGroup / ICMR-URCA - FRANCE	Large Amplitude Non-linear Free Vibrations of Sandwich Plates Using a Semi-analytical Method Hanane BHAR, Mohammed V University - MOROCCO

12h35-14h00

LUNCH

SESSION 7 : EFFICIENT MANUFACTURING - 2

SESSION 8 : COMPOSITES FUNCTIONALIZATION - 1

14h00-14h25	Chairpersons : Marie JACQUESSON, Philippe BRIANT Thermoplastic Composites For Laser Filament Winding Benoît COURTEMANCHE, CETIM - FRANCE	Chairpersons : Jason TAVARES, Eric DANTRAS Effect of Electro-less Pure Nickel Plating on Carbon Micro Fibers in Light Weight Metal Matrix Composites Material Produced by Induction Melting and Centrifugal Casting Method Danilo MARINI, Sapienza University of Rome - ITALY
14h25-14h50	Automated Collaborative Process for Aerospace Omega Stiffeners Manufacturing Guillaume FOURAGE, COMPOSITADOUR - FRANCE	Composites Functionalization and Deformation Monitoring Guillaume TIBERGHEN, TIBTECH - FRANCE
14h50-15h15	Demonstrator of an Aileron Fabricated from out of Autoclave CF/Epoxy Prepregs – Piotr CZARNOCKI, Warsaw Univ of Technology - POLAND	Solutions for Production and Properties of Thermoplastic Composites Dragan VELJANOSKI, Mikrosam AD - MACEDONIA

Day 2 - June 5th

15h15-15h45

COFFEE BREAK

SESSION 9: EFFICIENT MANUFACTURING - 3		SESSION 10: COMPOSITES FUNCTIONALIZATION - 2	
	Chairpersons : Guy LARNAC, Michel TOUSSAINT		Chairpersons : Xavier COQUERET, Jason TAVARES
15h45-16h10	Developments of Carbon / Thermoplastic Composites Amélie BRIENTIN, AVIACOMP - FRANCE		Carbon Nanotubes-modified Carbon Fibre Reinforced Polymer (CFRP) Composites with Tailored Interfaces Raquel SANTOS, INEGI - PORTUGAL
16h10-16h35	Thermoplastic Composites Manufacturing Luis RUBIO GARCIA, AIRBUS - FRANCE		Thermal Conduction Analyses in PEKK / CARBON Fiber Composites – Mike COULSON, CIRIMAT - FRANCE
16h35-17h00	Development of Competitive Prepreg and Welding Thermoplastic Technologies at IRT Saint-Exupéry Mathieu CHEVALIER, IRT Saint-Exupéry - FRANCE		Using Zinc Oxide Nanoparticles to Improve the Thermal Stability of a High-performance Benzoxazine Resin Jérémy HORION, Université Catholique de Louvain - BELGIUM
17h00-17h25	Thermoplastics for AIRBUS Structures : Status, Challenges and Perspectives Christophe PARIS, AIRBUS - FRANCE		Electrical Characterization of High Conductive Coating for CFRP Lightning Strike Protection Vincent BEDEL, IRT Saint Exupéry - FRANCE

17h25-18h10

ROUND TABLE 2

Moderator : Guy LARNAC, ArianeGroup
What Credible Perspectives for Composites Functionalization ?
Participants : Guillaume TIBERGHEN, TIBTECH – Luis QUIROGA CORTES, IRT Saint-Exupéry

Day 3 - June 6th

PLENARY SESSION 3

Chairpersons : Marie JACQUESSON, Slahedinne FRIKHA

09h00-09h30

Modeling of Liquid Composite Molding (LCM) Process for Ceramic Matrix Composites (CMC) Manufacturing – Marta PEREZ, ESI Group - FRANCE

09h30-10h00

VINCI Engine Thermo-Structural Composite Nozzle Extension for Ariane 6
Hervé COPÉRET, ArianeGroup - FRANCE

10h00-10h30

Materials and Processes Used to Manufacture Efficient SRM Components and Parts
Didier BOURY, ArianeGroup - FRANCE

10h30-11h00

COFFEE BREAK

PLENARY SESSION 4

Chairpersons : Jean-Luc MACRET, Thierry LEVEUGLE

11h00-11h30

Thin Ply Material for Space and Aero Applications
Fredrik OHLSSON, TeXtreme - SWEDEN

11h30-12h00

Development of CFRP Technologies for Application in the Vinci Engine Frame of Ariane 6 Evolution
Javad FATEMI, AIRBUS DS NETHERLANDS - THE NETHERLANDS

12h00-12h30

ARIANE 6 Structures Composites
Thomas KHALFI, ArianeGroup - FRANCE

12h30-12h45

CONCLUSION

6th IC3 Conclusion
Jean-Luc MACRET, Conference Chairman - ArianeGroup - FRANCE
Thierry LEVEUGLE - ThiReX Ingénierie - FRANCE

12h45-14h00

FAREWELL LUNCH