For any matter related to the conference, please contact the Conference Secretariat:

AVANTAGE-AQUITAINE
42 rue de Tauzia - 33800 Bordeaux FRANCE
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Email: jfb@avantage-aquitaine.com

Coordination
INNOVALIS Aquitaine
www.innovalis-aquitaine.org

Supported by

/// CONFERENCE PROGRAM
This international conference, held in the heart of Bordeaux – Toulouse Aerospace Valley, will bring together scientists, designers and end users from the academic, institutional and industrial “Carbon Fibre Composites World”.

It will constitute a unique opportunity to bring together all players in the use of Carbon Fibre Composites.

Emphasis will also be given to the relationship between Schools, Universities and Industry, including education and training of professionals. There will be outstanding presentations and also many formal and informal opportunities for exchanges, networking and cross-fertilization.

The conference will address a wide range of domains such as:
- Aeronautical, space and defence sectors
- Transport and automotive applications
- Industry, off-shore, windmills, construction and buildings
- Sailing
- High-end and general public sport goods

The presentations will cover the complete spectrum of related activities:
- From material properties and conceptual design to verification and qualification
- Efficient manufacturing techniques
- Cost assessment and reduction
- Life cycle, maintenance
- Repair and overhaul, waste treatment

Topics will encompass the whole range of materials, from carbon fibre and fabric, carbon fibre reinforced plastics to carbon ceramics and the latest nano-technologies based on innovative solutions.

With the support of the following partners:
AIRBUS, AMAC, ARKEMA, ASTRIUM, ENSAM, ENSCPB, ESCM, GFEC, INNOVALIS Aquitaine, Snecma Propulsion Solide, SOFICAR, SONACA, Universities of Bordeaux and Toulouse.

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### SEPTEMBER 17TH

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<td>CMC, a Class of Versatile and Smart Composite Materials</td>
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<td>J. LAMON - LCTS</td>
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<td>11.45 - 12.15</td>
<td>World Carbon Fiber Market</td>
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<td>M. BRISSON - SOFICAR</td>
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<td>12.15 - 13.45</td>
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<td>Multiscale and Multilevel Analysis of Composite Structures: an Overview of the America Project</td>
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<td>N. CARRERE - ONERA</td>
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**Session 2**
**Design Research and Tools 1**
14.30 - 15.00  
Application of Evolutionary Algorithms to the Optimal Design of Composite Aircraft Structures Regarding Laminate Stacking Sequence Rules  
P. KALETTA - AIRBUS

**Session 3**
**Efficient Manufacturing Techniques 1**
14.30 - 15.00  
Thermal Protection Systems Technologies For Re-entry Vehicles  
T. PICHON  
Snecma Propulsion Solide

15.00 - 15.30  
Ablation of C/C Composites: Roughness and Reactivity  
G.J. VIGNOLES - LCTS

15.30 - 16.00  
Aeronautic Carbon Brake: Braking Under Severe Conditions  
G.B. MAZET  
MESSIER BUGATTI

16.00 - 16.30  
New Tools for the Design of Composites Accelerated Testing Methodology is Access to Durability Prediction  
T. MASSARD  
Think COMPOSITE

16.30 - 17.00  
**COFFEE BREAK**

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**Session 4**
**Design Research and Tools 2**
17.00 - 17.30  
Influence of Intralaminar Damage on Composite Laminates Delamination Onset  
J.C. WAHL - Bordeaux I Univ.

17.30 - 18.00  
Some Topics on the Strength Prediction of the Structural Bondings: Space Applications Examples  
R. VIALLE - THALES ALENIA

18.00 - 18.30  
Characterization and Life Duration of CMC Based on Carbon Fibers  
M. CATALDI  
Snecma Propulsion Solide

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**Session 5**
**Efficient Manufacturing Techniques 2**
17.00 - 17.30  
The RTM Process Evolutions at AIRBUS Nantes  
M. DUBLINEAU  
AIRBUS

17.30 - 18.00  
Advanced Composite Technologies for Solid Rocket Motor Nozzle  
M. DAUCHIER  
Snecma Propulsion Solide

18.00 - 18.30  
Fibre-reinforced Carbon Materials for Flow Stabilization over the Multilayered Surface  
N. KISILOVA  
Kharkov National Univ.

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**Session 6**
**Design Research and Tools 3**
09.00 - 09.30  
Mechanical Behaviour of 2D C/SiC Composites, Relations Between Microstructures/Properties  
M.A. DOURGES - CNRS

09.30 - 10.00  
Damage Tolerance of Launchers Composite Structures  
A. BERGEROT  
ASTRIUM ST

10.00 - 10.30  
Friction and Wear of Carbon/Carbon Composites: the Role of Mechanic and Physicochemistry  
S. BONNAMY - CNRS

10.30 - 11.00  
A Numerical Simulation Method for the Failure Behaviour of Carbon Fibre Reinforced Plastics  
P. LINDE - AIRBUS

11.00 - 11.30  
**COFFEE BREAK**

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**Session 7**
**Efficient Manufacturing Techniques 3**
09.00 - 09.30  
Thermostructural Composites Nozzles: Off the Shelves Breakthrough Technology to Improve Upper Stage Rocket Engine Performance  
M. LACOSTE  
Snecma Propulsion Solide

09.30 - 10.00  
Numerical Modeling and Simulation of Liquid Composite Molding Processes  
C.H. PARK - Le Havre Univ.

10.00 - 10.30  
Preparation of C/C Composites by Chemical Vapour Infiltration: Benefits from Process Modelling  
G. VIGNOLES - LCTS

10.30 - 11.00  
Multi-Cells CFRP Insert Conception: From the Idea to Applications  
P. TAQUET - SONACA

11.30 - 12.00  
A Micromechanical Discrete Damage Based Model for Woven Composite Materials  
G. COUEGNAT - LCTS

12.00 - 12.30  
Optimal Reinforcement of the Carbon Composites in a Known State of Load Distribution  
N. KISILOVA  
Kharkov National Univ.

12.30 - 14.00  
**LUNCH**

14.00 - 15.00  
ROUND TABLE  
Moderator: F. CANSELL - Ecole Nationale Supérieure de Chimie et de Physique de Bordeaux  
What Are the Needs for Education and Training in Composite Materials Science for the Next 15th Years  

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**Session 8**
**Design Research and Tools 4**
11.30 - 12.00  
What Solution for Carbon Composites Waste Treatment and what Mass Available  
A. PARISSE - COMPOSITEC

12.00 - 12.30  
Recycling Used Composites  
P. JEULIN - GEMAB

12.30 - 14.00  
**LUNCH**

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**Session 9**
**Waste Treatment**
14.00 - 15.00  
Micro-composites and Nanocomposites  
P. LADEVEZE - LMT Cachan

08.15 - 09.00  
Invited Lecture  
Carbon-based Polymer Composites and Nanocomposites  
P. LADEVEZE - LMT Cachan

09.00 - 09.30  
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What Are the Needs for Education and Training in Composite Materials Science for the Next 15th Years
### Session 10
**Design Research and Tools 5**
- 15.30 - 16.00
  - Advanced Composite Materials for Current and Future Space Propulsion and Non-Aerospace Applications
    - S. BEYER - ASTRIUM ST

### Session 11
**High Performance Applications 3**
- 15.30 - 16.00
  - Helium High Pressure Tanks at ASTRIUM Space Transportation
    - F. BENEDIC
    - ASTRIUM ST

### Session 12
**Advanced Composite Materials for Current and Future Space Propulsion and Non-Aerospace Applications**
- S. BEYER - ASTRIUM ST

### Session 13
**Characterization and Qualification Tests 1**
- 09.00 - 09.30
  - Improving Performance in Composites Drilling
    - L.M. DURÃO
    - Lab. de Ensaios Mecánicos

### Session 14
**High Performance Applications 4**
- 09.00 - 09.30
  - Fabrication and Mechanical Property Testing of Sisal and Glass Fiber Composite Materials
    - P. SIVASUBRAMANIAN
    - A. K. College of Engineering

### Session 15
**Characterization and Qualification Tests 2**
- 11.00 - 11.30
  - Experimental Study of Forces and Moment during Carbon Epoxy Drilling Process
    - M. CHERIF
    - Bordeaux 1 Univ.

### Session 16
**High Performance Applications 5**
- 11.00 - 11.30
  - C2 : a Sustainable Carbonized Rayon for Solid Rocket Motor Nozzles
    - B. BROUQUER
    - Snecma Propulsion Solide

### Session 17
**Carbon Nanotubes 1**
- 14.15 - 14.45
  - Efficient Use of Carbon Nanotubes in Thermoplastics and Elastomer Composites
    - P. PICCIONE - ARKEMA

### Session 18
**High Performance Applications 6**
- 14.15 - 14.45
  - Design and Analysis of a Full Composite Rigid Wing for Ultra light “Trike”
    - L.L. CANNONE
    - Politecnico di Torino

### Session 19
**Carbon Nanotubes 2**
- 16.15 - 16.45
  - Nacomat project Overview
    - M. BOURGEON - Snecma Propulsion Solide

### September 19th
- 09.00 - 09.30
  - Nanosafe
    - F. SCHUSTER - CEA

- 09.30 - 10.00
  - From Metallic Materials to Composite Materials : COMUT Initiative in Aquitaine Region
    - J. PASSEMARD - 2ADI

- 10.00 - 10.30
  - A New Way to Switch From Metal to Composite : CARBOSTAMP
    - M. GELI - SOFICAR

- 10.30 - 11.00
  - Improving Performance in Composites Drilling
    - L.M. DURÃO
    - Lab. de Ensaios Mecánicos

- 11.00 - 11.30
  - The Determination of Carbon Fiber Reinforced Plastics Porosity in Aircraft Constructions by Laser-Acoustic Method
    - V. MURASHOV - VIAM

- 11.30 - 12.00
  - Experimental Study of Forces and Moment during Carbon Epoxy Drilling Process
    - M. CHERIF
    - Bordeaux 1 Univ.

- 12.00 - 13.30
  - Pitch Based High Modulus Carbon Fibres for Thermal Solution
    - H. OHNO - Nippon Graphite Fiber Corporation

- 13.30 - 14.15
  - Invited Lecture : Is there a Future for Carbon Nanotubes in Composites ?
    - M. MONTHIOUX - CNRS

- 14.15 - 14.45
  - Tiny Tubes Provide Real Material Improvement/Better Thermal Composites for High-Performance Applications
    - K. SCHIERHOLZ
    - Nanoledge Technical Center

- 14.45 - 15.15
  - Composite Materials on Falcon Planes Family
    - C. SOURDET
    - DASSAULT AVIATION

- 15.15 - 15.45
  - Process and Performance Enhancement in Thermoset Composites using Acrylic Block Copolymers and Carbon Nanotubes
    - P. GERARD - ARKEMA

- 15.45 - 16.15
  - Bordering Concrete Columns with Carbon Fibers Reinforced Polymers
    - R. BENZAID - Jijel Univ.

- 16.15 - 16.45
  - Airbus Structure Technology
    - B. BERAL - AIRBUS

- 16.45 - 17.15
  - Nacomat project Overview
    - M. BOURGEON - Snecma Propulsion Solide

- 17.15 - 17.45
  - Carbon Nanotube Composite Fibers
    - Ph. POULIN - CNRS
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(Numbers in front of the name of the hotel are references to determine the position of the hotel on the map)

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Email: ____________________________

NUMBER OF PERSON
☑ 1 pers
☑ 2 pers

☑ Single     ☑ Double     ☑ Twin (2 beds)

Arrival on: ____________________________
Departure on: ____________________________
Number of nights: ____________________________

I enclose to this form a one night deposit cheque of ________ euros

Date and place: ____________________________
Signature: ____________________________