

## Aims & Scope

*This workshop on the use of optical fibres for the monitoring of composites manufacturing process was an original idea of our regretted colleague Prof. Alain VAUTRIN († June 2011).*

The actual conditions of manufacturing may affect the geometry and ultimate strength of composites structures. They are nevertheless poorly taken into account for predicting the mechanical behaviour of the manufactured parts. These conditions and their effects are indeed complex to assess and to model. In this context, embedded optical fibres offer the opportunity to enrich the continuous monitoring of the curing process with bulk measurements.

This workshop aims to contribute in a state of the art of the recent advances in the field of cure monitoring of composite structures. In situ measurements, preferably combined with those made in the mould, will be emphasized. The focus will be mainly put on the relationship between the measures and the state of the material. Both the cure cycle (e.g. pressure, temperature, polymerisation, etc.) and the initial state of the structure (e.g., residual strains, etc.) after production can be examined. Different processes (e.g., Autoclave, RTM, VARI, filament winding, etc.), with their specificities, could be tackled.

## Call for papers

### Important Dates

- ❑ 02 November 2012: Deadline for abstract submission
- ❑ 12 November 2012: Notification of acceptance to authors

### Abstracts

An abstract template is available at:

[http://perso.mines-albi.fr/~jeanjose/European\\_Workshop\\_Optical\\_Fibres\\_Composites/](http://perso.mines-albi.fr/~jeanjose/European_Workshop_Optical_Fibres_Composites/)

2 pages (A4) abstracts should be sent by e-mail to:

[jean-jose.orteu@mines-albi.fr](mailto:jean-jose.orteu@mines-albi.fr)

Please, send only ".doc" or ".rtf" format files.

## Scientific Committee

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## Registration

[http://ampere-colloque.com/?inscription&section=formColloque&action=display&col\\_id=41&lang=en](http://ampere-colloque.com/?inscription&section=formColloque&action=display&col_id=41&lang=en)

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### **Registration Fees (including VAT)**

- SFO, Club CMOI and AEMAC Members: 100 €
- Students: 75 €
- Others: 150 €
- Second attendee from the same company/organisation : 100 €

*Registration fees include coffee breaks, 28 and 29 November Lunches and Conference proceedings.*

### Workshop Venue:

Institut National des Sciences Appliquées de Toulouse – Amphithéâtre Fourier  
[http://www.insa-toulouse.fr/en/acces\\_to\\_insa.html](http://www.insa-toulouse.fr/en/acces_to_insa.html)

*INSA is located within a walk distance (5 minutes) from underground Line B – Station Faculté de Pharmacie.*

### Transportation usefull links

- From Toulouse Blagnac Airport  
<http://www.toulouse.aeroport.fr/airport/access-transport-car-park/access/public-transportation/navette-city-centre>
- Toulouse Public transportation (in French):  
<http://www.tisseo.fr/>

### Accommodation

Participants are supposed to make their own hotel room reservation. A wide choice of hotels is available in Toulouse centre

## **Local Organising Committee**

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## **Call for papers**

European Workshop on the

# **Use of Optical Fibres for the Monitoring of Composites Manufacturing Process.**

**Wednesday 28 and  
Thursday 29 November 2012**

**Toulouse – FRANCE  
INSA - Amphi FOURIER**