

## Aim of the conference and workshop

Conference and workshop are primarily organised as the final events of the running EU project COCOMAT demonstrating its results. The scientific community and industry in general are invited to attend. Both events aim to promote discussion and exchange of information between scientists and engineers in the field of buckling, postbuckling and collapse behaviour of composite structures.

The **conference** aims at presenting scientific achievements from the COCOMAT project. In addition, papers with recent results on the same topic but from outside the project are as well accepted.

Within the **workshop** new fast design tools and improved commercial tools, developed within COCOMAT, are presented and demonstrated.

The present conference follows the *1<sup>st</sup> Int. Conference on Buckling and Postbuckling Behaviour of Composite Laminated Shell Structures* which was held in Eilat, Israel, 1-2 March 2004. There the achievements of the COCOMAT forerunner project POSICOSS were highlighted.

## Topics

New achievements in the following topics on buckling, postbuckling and collapse behaviour of composite laminated shell structures are presented:

- Experimental methods and results
- Degradation models
- Failure criteria
- Advanced finite element tools for certification
- Fast design tools
- Influence of imperfections
- Structural optimisation
- Design guidelines

All topics will focus on curved panels and shells (unstiffened and stiffened ones) under various states of loading.

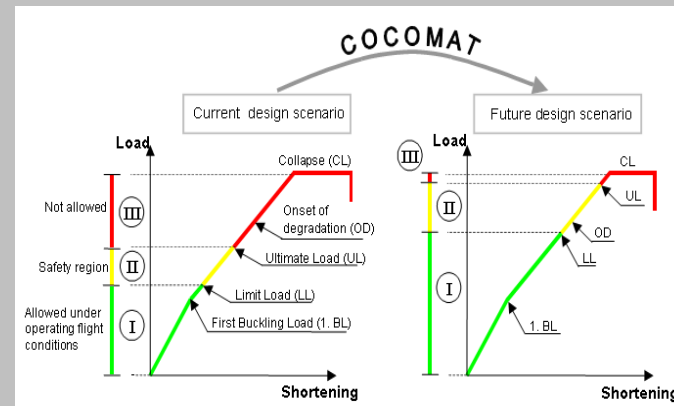
## EU project COCOMAT

The running EU project COCOMAT (Improved MATerial Exploitation at Safe Design of Composite Airframe Structures by Accurate Simulation of Collapse) is a Specific Targeted Research Project within the 6th Framework Programme. It started 2004 and will be finished in October 2008.

COCOMAT aims to exploit considerable reserves in the capacities of composite aircraft panels by accurate simulation of collapse. The main objective of COCOMAT is a future design scenario for composite curved stiffened panels which are understood as parts of real aircraft structures (cf. figure below).

The project results comprise an experimental data base, improved slow certification tools, fast design tools as well as design guidelines.

More details can be found at [www.cocomat.de](http://www.cocomat.de).



Current and future design scenario for stiffened CFRP panels

COCOMAT builds up on the finished EU project POSICOSS (*Improved Postbuckling Simulation for Design of Fibre Composite Stiffened Fuselage Structures*) which developed fast procedures for buckling and postbuckling analysis of fibre composite stiffened panels of fuselage structures, created experimental data bases and derived design guidelines.



2<sup>nd</sup> Int. Conference on



**Buckling and Postbuckling  
Behaviour of Composite  
Laminated Shell Structures**



with  
**COCOMAT<sup>1</sup> Workshop**



**3-5 September 2008**

**Draft**  
**First Announcement and  
Call for Abstracts**

### Organiser:

**DLR (German Aerospace Center),  
Institute of Composite Structures and  
Adaptive Systems, Braunschweig, Germany**

### Conference Place:

**Technical University of Braunschweig,  
Pockelsstrasse, Braunschweig, Germany**

[www.cocomat.de](http://www.cocomat.de)

<sup>1</sup>COCOMAT is a running EU project and stands for:  
Improved **M**ATerial Exploitation at Safe Design of **C**omposite  
Airframe Structures by Accurate Simulation of **C**ollapse



AERnova



SMR  
Engineering &  
Development



POLITECNICO  
DI MILANO



## Call for abstracts

Prospective authors are requested to submit an extended abstract of up to 4 pages (including figures) by 1 May 2008. The abstract should contain sections addressing the objective of the work presented, the methods employed, and conclusions. Abstracts must be submitted online at: [www.cocomat.de](http://www.cocomat.de).

Authors of accepted abstracts will be notified electronically by 1 June 2008.

### Abstract details

1. Submission of an abstract implies a firm commitment to present the paper at the conference.
2. All speakers will be required to be registered participants of the conference.
3. Accepted abstracts and presentations will be published as proceedings on a CD.
4. Guidelines for the abstracts are available online.
5. Selected presentations of high quality will be proposed for publication in a special issue of the *Int. Journal of Structural Stability and Dynamics*.

### Key dates

1 May 2008	Abstract submission deadline
1 June 2008	Notification of acceptance
1 July 2008	Early registration deadline
1 Aug. 2008	Hotel reservation deadline
3-5 Sep. 2008	Conference + workshop

## Registration

Please register online at [www.cocomat.de](http://www.cocomat.de).

The *registration fees* are:

Early registration by 1 July 2008	
- Regular rate:	250 €
- DGLR members	200 €
- Speakers, COCOMAT partners, students	150 €
Registration after 1 July 2008	300 €

The registration fee contains full catering, the conference dinner, a DLR technical visiting tour and a CD with the conference proceedings.

## Hotel reservation

A block of rooms at special rate for the conference participants has been reserved at 5 different hotels. You will find details to the hotels, a map with their location and the accomodation form for the booking at [www.cocomat.de](http://www.cocomat.de).

These rooms are reserved until 1 August 2008.

## Committees

### Chairman

Dr Richard Degenhardt, DLR, Braunschweig, D  
E-mail: [richard.degenhardt@dlr.de](mailto:richard.degenhardt@dlr.de)

### Conference Secretariat / Local arrangements

E-mail: [cocomat@dlr.de](mailto:cocomat@dlr.de)

### Organisation Committee

Mrs Doris Ries, DLR, Braunschweig, D  
Mrs Ursula Schönyan, DLR, Braunschweig, D  
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## This conference is supported by:

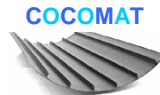
European Commission  
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[www.dlr.de](http://www.dlr.de)



COCOMAT consortium  
[www.cocomat.de](http://www.cocomat.de)



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