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IMT Mines Albi-Carmaux
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INSA
TOULOUSE

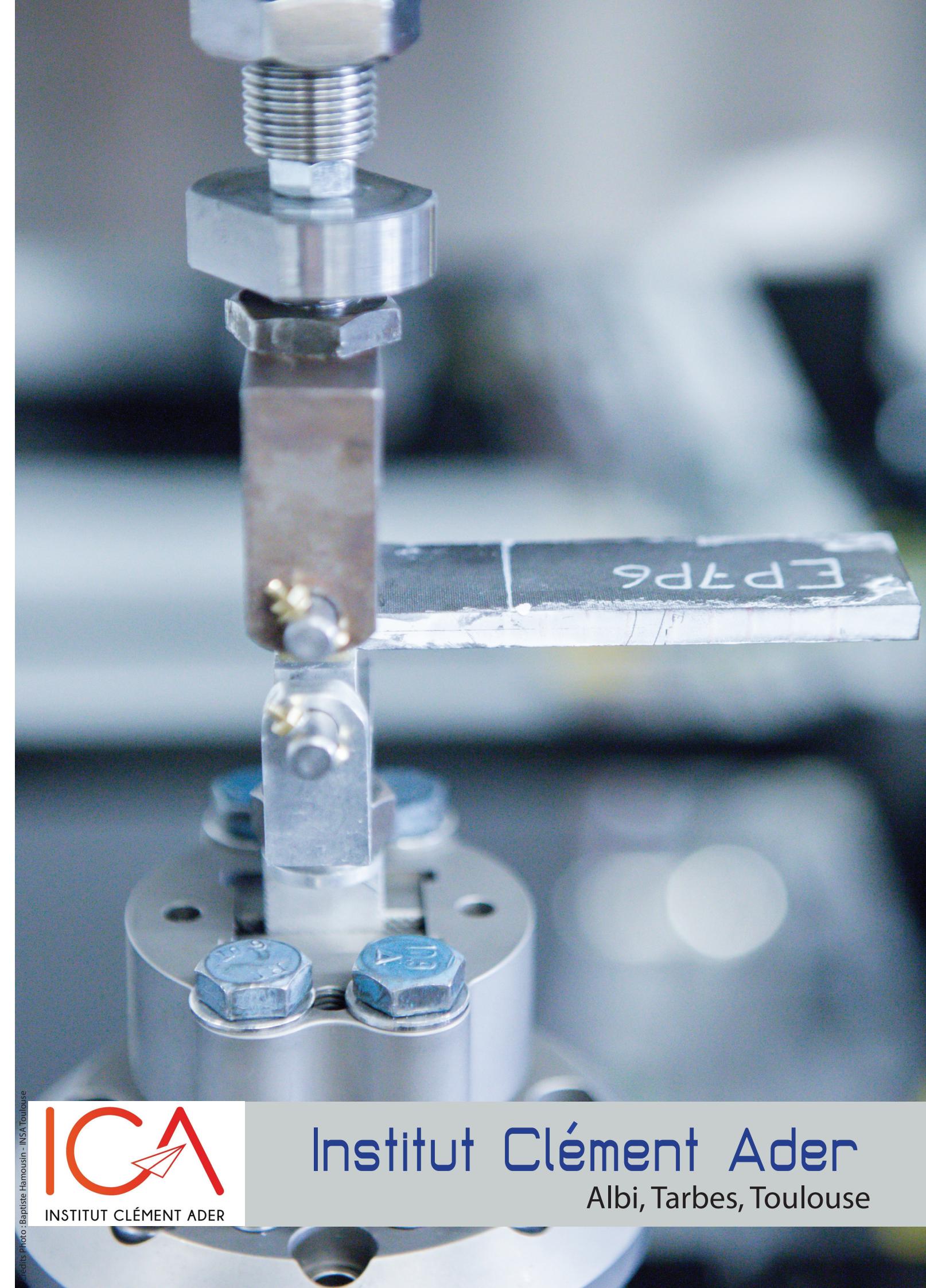
ISAE
Institut Supérieur de l'Aéronautique et de l'Espace
SUPAERO

UNIVERSITÉ
TOULOUSE III
PAUL SABATIER


Université
de Toulouse

ICA
INSTITUT CLÉMENT ADER

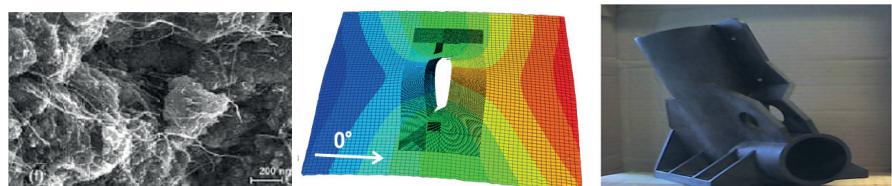
Institut Clément Ader
Albi, Tarbes, Toulouse



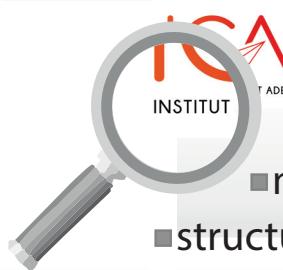
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Modelling of Mechanical Systems and Microsystems

Composite Materials and Structures

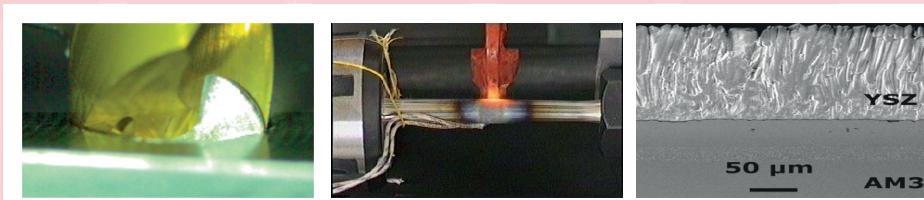


- » Structures, Impact, Modelling, Machining of composites
- » Materials @ structure scale, Manufacturing, Processes



ICA is a research lab studying
■ mechanics of materials,
■ manufacturing processes,
■ structures and systems,
with a particular attention paid toward aeronautics
and space.
Our work generally concerns process modeling,
devising instrumentation and studying durability.
We regularly combine experiment with modelling.

Surface, Machining, Materials and Tools



- » Functionnal properties and Microstructural relationships of advanced materials
- » Fatigue, Wear Damage, Modelling
- » Machining and Metal forming

MSC

Matières et Structures Composites

SUMO

Surface, Usinage, Matériaux, Outilage

Assemblies
Transverse axes

Machining of Multi-Materials Stacks

MS2M

Modélisation des Systèmes Mécaniques et Microsystems

TEAM

100 PhD students
100 permanent scientists
30 technical staff
10 post-doctoral scientists



- » Dynamic behaviour of structures
Preliminary design
- » Fluidic Microsystems
Modelling under deterministic or uncertain environment

- Testing labs
- Manufacturing facilities
- House Softwares
- Plateforms :
MIMAUSA, STIMPACT



MICS

Métrie, Identification, Contrôle et Surveillance



Metrology, Identification, Control and Monitoring

- » Identification and Control of thermal and mechanical properties
- » Innovative optical methods for dimensional and thermal metrology