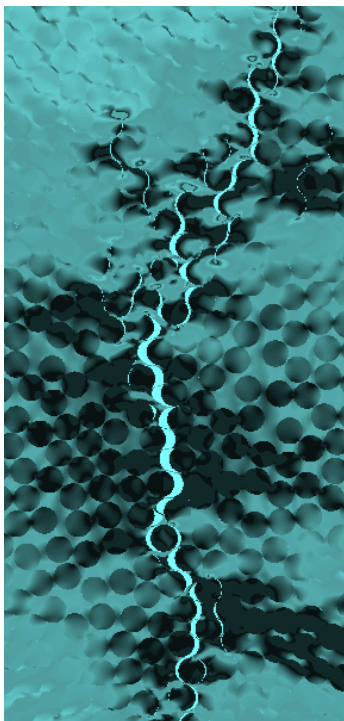# SUMMER SCHOOL ON
COMPOSITE MATERIALS

GETAFE (SPAIN) 11 – 13 JULY 2017

Composite materials are nowadays extensively used in applications where outstanding mechanical properties are necessary in combination with weight savings. Their increased use has presented new challenges to engineers, largely due to the highly complex failure mechanisms of composite materials but also due to the many uncertainties that can exist in their manufacturing process.

This summer school aims providing young engineers and researchers a **rapid knowledge of the state-of-the art** in the field (nature and structure, processing, properties and applications in different sectors) via a hands-on training experience.

MARIE CURIE ACTIONS

DYNAcomp

institute iMdea materials

TRAINERS

Renowned experts in the field of composite research, producers of advanced composites and developers of testing equipment from **IMDEA Materials Institute**, **HEXCEL Composites** and **Airbus**. Speakers from other industries will also participate (see the program).

This event is organized as part of the DYNACOMP (Dynamic behaviour of composite materials for next generation aeroengines) training network, funded by the Marie Skłodowska-Curie actions under grant agreement nº 722096.

REGISTRATION FEE

The registration fee is **€ 200,00** (VAT included) per participant, including coffee, lunch, shuttle service from central Madrid and course materials. Attendance is **limited to 30 people** in order of registration.

PROGRAM

TUESDAY 11 JULY 2017

Time	Title	Speaker
9:00-9:15	**Welcome**	**Javier Llorca** Director of IMDEA Materials
9:15-11:15	**Introduction to composites**: structure, properties, processing.	**Martin Simmons** Hexcel Comp. Ltd.
11:15-11:45	Coffee break	
11:45-12:15	**Physical characterization**	**Juan Pedro Fernández** IMDEA Materials
12:15-12:45	**Mechanical testing**	**Carlos González** IMDEA Materials & UPM
12:45-13:15	**Non-destructive evaluation**	**Federico Sket** IMDEA Materials
13:15-14:15	Lunch	
14:30-17:30	**Hands-on practice**: laboratory demos on processing of composite materials, mechanical testing and non-destructive evaluation and testing	

WEDNESDAY 12 JULY 2017

Time	Title	Speaker
9:00-10:00	**Virtual testing of composites**	**Javier Llorca** IMDEA Materials
10:00-11:00	**Micromechanical testing**	**Jon Molina** IMDEA Materials
11:00-11:30	Coffee break	
11:30-12:15	**Computational Micromechanics**	**Carlos González** IMDEA Materials & UPM
12:15-13:00	**Computational Mesomechanics**	**Claudio Lopes** IMDEA Materials
13:00-13:30	**Computational Mechanics**	**Claudio Lopes** IMDEA Materials
13:15-14:15	Lunch	
14:30-17:30	**Hands-on practise**: Multiscale simulation of composite materials by the finite element method	

THURSDAY 13 JULY 2017

Time	Title	Speaker
9:00-10:00	**Mulfunctional composites**	**Juan José Vilatela** IMDEA Materials
10:00-11:00	**Applications of composite materials**	**Martin Simmons** HEXCEL Composites
11:00-11:30	Coffee break	
11:30-12:30	**Composites in the space sector**	**Jesús Rodríguez** AIRBUS Defense & Space
12:30-13:30	**Composites in the aeronautical sector**	**Tamara Blanco** AIRBUS Operations Materials and Processes
13:15-14:15	Lunch	
14:30-17:30	**Visit to an industrial facility** (TBC)	

DATE, LOCATION AND REGISTRATION PROCEDURE

DATES — July 11 – 13 2017

LOCATION — **IMDEA Materials Institute** (seminar room)
Eric Kandel 2, Tecnogetafe
28906, Getafe (Madrid)
SPAIN
http://materials.imdea.org/

REGISTRATION PROCEDURE AND CONTACT — Please **fill the registration form** and send via email to mariana.huerta@imdea.org **before 03/05/2017**. After registration, an invoice will be issued to the attendee (to be paid via bank transfer).

Mariana Huerta
Public relations and events management
mariana.huerta@imdea.org
+34 91 5493422 (extension 1049)

More information about the workshop can be found at http://dynacomp-project.eu/worlshop-on-composite-materials/

ORGANIZERS

COLLABORATORS

SUMMER SCHOOL ON
COMPOSITE MATERIALS

GETAFE (SPAIN) 11 – 13 JULY 2017

REGISTRATION FORM

FULL NAME		
ORGANIZATION		
EMAIL		
PHONE		
INVOICING ADDRESS	COMPANY NAME	
	FULL ADDRESS	
	VAT NUMBER	

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