





# D-STANDART SECOND TRAINING WORKSHOP


 5 March 2025

 Paris Nord Villepinte Exhibition Centre  
– ROOM 612, Hall 6  
[ZAC Paris Nord 2,](#)  
[93420 VILLEPINTE, France](#)

 JEC WORLD 2025

**JEC WORLD**  
**2025** The Leading International Composites Show

March 4-6  PARIS-NORD VILLEPINTE

 The workshop is aimed at industry professionals (e.g. Product Designers or R&D engineers) and researchers involved in structural design of composites.

In particular, we offer 3 distinct sessions on (A) surrogate modelling, (B) simulation workflows in commercial FEA software, and (C) incorporating sustainability and life cycle analysis in design.

## THE D-STANDART PROJECT AIMS TO

Develop **rapid and robust methods to characterise fatigue damage in composites** and **sustainability of composite supply chains** and thereby model the durability and sustainability of large-scale composite structures with arbitrary layouts **under realistic conditions** (loads, environment, manufacturing imperfections).

- › **Through minimal and accelerated testing** of generic specimens thereby reducing reliance on feature-based tests.
- › Applying **artificial intelligence and machine learning** to develop methods for analysis of large-scale structures using the results of the experiments and meso-scale models.
- › Integrating Life-Cycle Assessment (LCA) in the design process.

To support this ambition, the **D-STANDART consortium is offering a free workshop to help researchers and design engineers in optimizing composite structural design and integrating life-cycle thinking in their design processes.**

## LEARNING OBJECTIVES

This workshop will be formed of 3 different sessions where you will:

- › **Session A: A1.** Explain the **Fundamentals of Linear Dynamics in Composite Systems**; **A2.** Introduce **Surrogate Modelling** and apply it to the Dynamics of Composite Structures; **A3.** Apply and Interpret **Sensitivity Analysis** in the Dynamics of Composite Structures.
- › **Session B:** Learn **simulation workflow from experimental data to material models** for fatigue of UD composite structures with Digimat™ and Marc™.
- › **Session C:** Understand the Importance and **Challenges of Sustainable Composites**; Explore **Design Principles** for Sustainability; Incorporate **Lifecycle Thinking**; Analysis of **Real-World Case Studies** (Aerospace and Wind Energy).

## TOP-CLASS RESEARCH EXPERTS WILL DELIVER THE TRAINING



**F. Talagani** Senior R&D Engineer of NLR - Netherlands Aerospace Centre



**V. Yaghoubi** Assistant professor in Faculty of Aerospace Engineering of Delft University of Technology



**F. Malgioglio** Solution Engineer and **M. Gruppelaar** Simulation Engineer (FEA) at Hexagon Manufacturing Intelligence



**S. Sykes** Senior Technology Project Lead and **K. Kostova** Engineering Capability Lead at National Composites Centre

Look out the updates on the event on our website and LinkedIn:

 [www.d-standart.eu](http://www.d-standart.eu)

 [@d-standart](https://twitter.com/d-standart)

 **An EMMC related initiative**

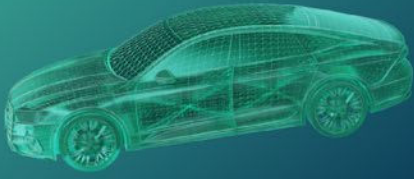
The event is public and without any other registration fees than the possible ones for your badge to JEC 2025. **However, registration is mandatory.**



To sign up, please use the following form:

**SIGN UP**





## PRELIMINARY PROGRAMME

#	Start time	End time	Session (title/ overall objectives)	Organizer
<b>A</b>	9:10	10:30	<p><b>Uncertainty quantification and surrogate modeling in the Dynamics of Composite Structures :</b></p> <p><i>Get a comprehensive understanding of surrogate modeling and uncertainty quantification techniques and their application to the dynamic behavior of composite structures</i></p>	<p><b>F. Talagani</b>, Netherlands Aerospace Centre  <b>V. Yaghoubi</b>, Delft University of Technology</p>
<b>B</b>	10:40	11:50	<p><b>Composite material modelling with Digimat and Marc: failure and fatigue -</b></p> <p><i>From experimental data to virtual testing of UD composite structures</i></p>	<p><b>F. Malgioglio and M. Gruppelaar</b>, Hexagon Manufacturing Intelligence</p>
<b>C</b>	12:00	12:45	<p><b>Designing Sustainable Composites and Unlocking Their Potential</b></p> <p><i>Incorporating life cycle thinking and sustainability in design processes for composite structures.</i></p>	<p><b>S. Sykes and K. Kostova</b>, National Composites Centre</p>

### PREREQUISITES AND ORGANIZATION ASPECTS:

The room capacity being limited, participants are asked to register to each of the training sessions (A/B/C) they intend to attend.

Kindly note however that participants shall get their badge to access JEC ([here](#)): this will be left to their responsibility.

For full participation in Sessions A/B/C, bringing a laptop is highly recommended.

To get the most out of Session B, affinity with mechanical behaviour and analysis of composite materials, and experience with finite element software (e.g., Marc, Nastran, Digimat) is beneficial.

### ANY QUESTIONS?

Feel free to get in touch with us at:

 [contact@d-standart.eu](mailto:contact@d-standart.eu)



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