



The Strategic Research Centre for the Manufacturing Industry

PROGRAMME

Metamaterials to provide lightweight NVH solutions: realisation through thermoforming

Results from the Flanders Make research project "Integration and manufacturability aspects of lightweight structures exploiting inherent dynamic properties"

Thursday, 28 September 2017

12h00 **Sandwich Lunch**

13h00 **Introduction**

Claus Claeys, Project Manager, Flanders Make/KU Leuven

13h15 **Thermoforming and acoustic challenges for harvesters**

Steven Meyns, Business Unit Manager Acoustics, Vitalo

We will explain the production process and advantages of thermoforming and address the current acoustic challenges when designing panels for harvesters.

13h40 **Metamaterials as light compact NVH solution**

Claus Claeys, Project Manager, Flanders Make/KU Leuven

We will discuss the rationale behind and the design process of metamaterials and highlight the differences between metamaterials and traditional vibro-acoustic solutions.

14h05 **Production of metamaterials through thermoforming**

Noé GR Melo Filho, PhD Researcher, Flanders Make/KU Leuven

The design concept of metamaterials will be applied to the thermoforming process. We will discuss the results of a plate produced in collaboration with Vitalo.

14h30 **Wrap-up & Conclusions**

Claus Claeys, Project Manager, Flanders Make/KU Leuven

14h45 **Q&A**

15h00 **Coffee Break**