



Leuven, October 15, 2021

Concerning:

SAMPE BeNeLux Fall meeting 2021 about 3D lightweight structures on November 16th, hosted by the Luxembourg Institute of Science and Technology (LIST)

Dear SAMPE Benelux friend,

it is my pleasure to announce you the program for the 2021 SAMPE BeNeLux Fall meeting. We will meet at the Kulturhaus Käerjenger Treff in Bascharage (LUX) for the presentation program that we have built together with our host LIST, the Luxembourg Institute of Science and Technology (LIST). The central meeting theme will be **3D lightweight structures**. Later in the day we'll visit the joint laboratory of **LIST** and **Gradel** as well as **Airtech**'s new large scale tooling additive manufacturing facility!

Please find out more about our host and the visit highlights here:

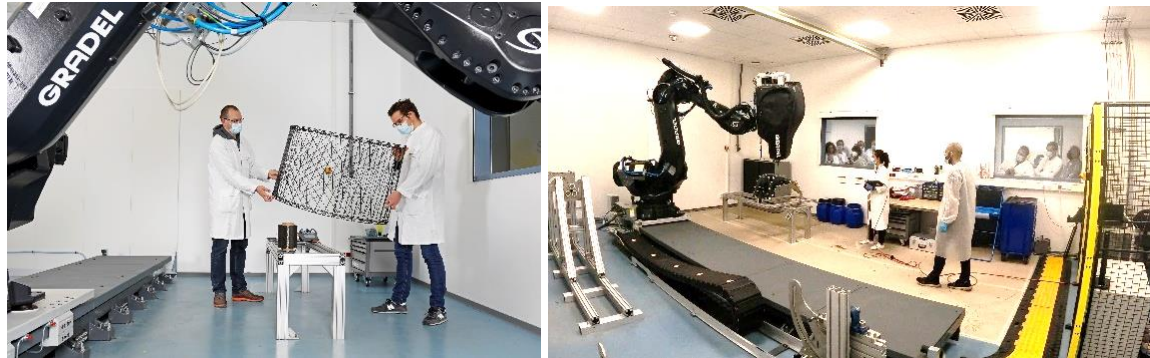
The **Luxembourg Institute of Science and Technology (LIST)** is a mission-driven Research and Technology Organization that develops competitive and market-oriented product/service prototypes for public and private stakeholders, and works across the entire innovation chain: fundamental and applied research, incubation, transfer of technologies. By transforming scientific knowledge into technologies, smart data and tools, LIST empowers citizens in their choices, public authorities in their decisions and businesses in their strategies.

Through its research into advanced materials and processes, the "**Materials Research and Technology**" (**MRT**) department, with its 200 researchers and engineers, contributes to the emergence of enabling technologies that underpin the innovation processes of local and international industry. MRT's activities hinge on **four thematic pillars**: nanomaterials and nanotechnology, scientific instrumentation and process technology, structural composites, and functional polymers.

The department also includes **four high-tech platforms**, focusing on composites manufacturing, advanced characterization, and prototyping & testing. These platforms serve both LIST research staff, and other stakeholders in Luxembourg.



Since January 2021, LIST hosts a joint lab with the Luxembourg based company **Gradel**, to research and produce ultra-lightweight structures for the aeronautics and space industry. Large-scale **robotized 3D winding** is under development and in validation in this framework.



The **Airtech Advanced Materials Group** is the largest manufacturer of vacuum bagging and composite tooling materials for prepreg/autoclave, resin infusion, and wet lay-up processes up to 425°C. Our product line consists of vacuum bagging films, release films, pressure sensitive tapes, mold releases (non-liquid), peel plies, breathers & bleeders, sealant tapes, vacuum bag connectors & hoses, rubber, pressure pads, cutting tools, vacuum leak detectors, shrink tape, PTFE coated fiberglass, tooling prepregs, resins, and carbon and glass reinforcements.

With nearly 50 years of extrusion experience, we've taken the next step into Additive Manufacturing. Print-Tech® is our new **Large Format Additive Manufacturing (LFAM)** or 3D printing tooling service for composites. Large-scale tooling in the form of trim fixtures, holding fixtures, and layup molds can be designed, tooled, and built faster without compromising quality. Also, we manufacture a full line of **Dahltram® tooling** and **Dahlpram® purging resins** for the additive manufacturing industry. Airtech will present to the visitors the Large Format Additive Manufacturing machine and the different 3D print and purge resins.



Please find hereby the proposed agenda for the SAMPE Benelux Fall meeting:

- 9.00 Registration & coffee
- 9.30 Welcome and introduction by Aart Van Vuure, SAMPE BeNeLux
- 9.45 Welcome and introduction to LIST by Dr. Damien Lenoble, Director of Materials Research and Technology department, LIST
- 10.00 "*Vitrimers composites: From fundamental science to practical application*", Prof. Daniel F. Schmidt, Group Leader (Sustainable Polymers Group) LIST
- 10.25 "*The Airtech development process for Dahltram Large Scale Additive Manufacturing compounded resins*", Oliver Bottler, European Technical Manager, Airtech Europe Sarl.
- 10.50 Coffee break
- 11.10 "*Fast Prediction of the effective properties of 3D woven composites*", Anthony Cheruet, Business Developer Engineer - Aeronautics, e-Xstream
- 11.35 "*The possibilities with Large scale 3D printing for industry applications*", Lucas Janssen, CEO, CEAD
- 12.00 Lunch
- 13.30 "*Composites 4.0 at SAM|XL*", Kjelt van Rijswijk, CEO, SAMXL
- 13.55 "*Lightweight structures and composite tooling created with Metal Powder Bed Fusion and SLA technology*", Robin Ska, Senior Application Development Engineer, 3D Systems
- 14.20 SAMPE Benelux member meeting
- 14.40 Coffee break
- 15.00 Visits by bus to LIST/ Gradel labs and the Airtech 3D print facility
- 17.00 Closure with networking drink at the Kulturhaus Käerjenger Treff

You can register to this event until November 5 by registering via following link (please note that the procedure requires the creation of a username and password):

<https://list.ungerboeck.com/PROD/emc00/register.aspx?OrgCode=10&EvtID=5645&AppCode=REG&CC=121100403651>

Participation is for SAMPE members only. Non-members are requested to fill out their SAMPE application forms at: <https://sampe-membership.eu/>

We want to inform you that the entrance to the Airtech facilities is subject to approval by Airtech personnel and can be denied to persons affiliated to their competitors.

The meeting will take place at the **Kulturhaus Käerjenger Treff** at following address:
54C, AVENUE DE LUXEMBOURG - BASCHARAGE - LUXEMBOURG

If you wish to stay overnight nearby, we recommend the following hotels:

- Beierhaascht hotel: <https://www.beierhaascht.lu/hotel/> (1 min by car)
- Hotel N° 151: <https://www.hoteln151.com/> (10 min by car)
- Hotel Gulliver: <https://www.gulliver.lu/> (5 min by car)
- Hotel Carpini: <http://carpini-hotel.lu/home.html> (1 min by car)

SAMPE Benelux is grateful to LIST and Airtech for organizing this event with us.

We hope to see many of you in Luxembourg on November 16,

with best regards,

Aart Van Vuure
SAMPE Benelux chairman
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