
MISSION
Infopack Dutch Delegation
OCTOBER 14, 15 & 16, 2024 - LORIENT & RENNES
rai
AUTOMOTIVE
INDUSTRY NL
ID4
MOBILITY

WELCOME TO FRANCE !

We are looking forward to welcoming you **in Rennes and Lorient** from Octobre 14th to 16th!

☎ If you have any question, don't hesitate to contact us.
Véronique ROTTIER - +33 7 62 95 02 04 - veronique.rottier@id4mobility.org

DAY 1

Before 16h00 : Arrival at Rennes
16h00 – 18h00 : Travel to Lorient by bus
19h00 – 19h30 : Informal opening session giving a broad picture of the ecosystem by ID4Mobility (30 min max) – restaurant TBD
From 19h30: unofficial **kick-off dinner** – Bar Restaurant La Base

DAY 2

08h00 – 10h00 : Visit of the company **CORIOLIS** and afterwards, time to **pitch your companies**.
10h30 – 12h30 : Visit of the laboratory **COMPOSITIC** (University of Southern Brittany) and afterwards, time to **pitch your companies**.
12h30 – 13h30 : Lunch
14h00 – 16h00 : Presentation by ENSTA (National School of Advanced Techniques – Brittany) and **working group** on assembly.
16h30 – 18h30 : Travel to Rennes
From 19h30 : Network Dinner in Rennes – restaurant TBD

DAY 3

07h15 – 08h15 : Travel to St Malo
08h15 – 10h15 : Visit of the company **FORVIA** (ex: FAURECIA)
10h15 – 11h15 : Travel back to Rennes
11h15 – 13h15 : Visit of the company **CONTITECH**
13h30 – 15h30 : Lunch and visit at **EXCELCAR**

TRAVEL INFO TO FRANCE

🚄 Train Thalys/TGV, change in Paris, every day of the week

Amsterdam – Rennes

14/10

- 06:08– 12:25
- 08:08 – 14:25
- 09:08 – 15:25

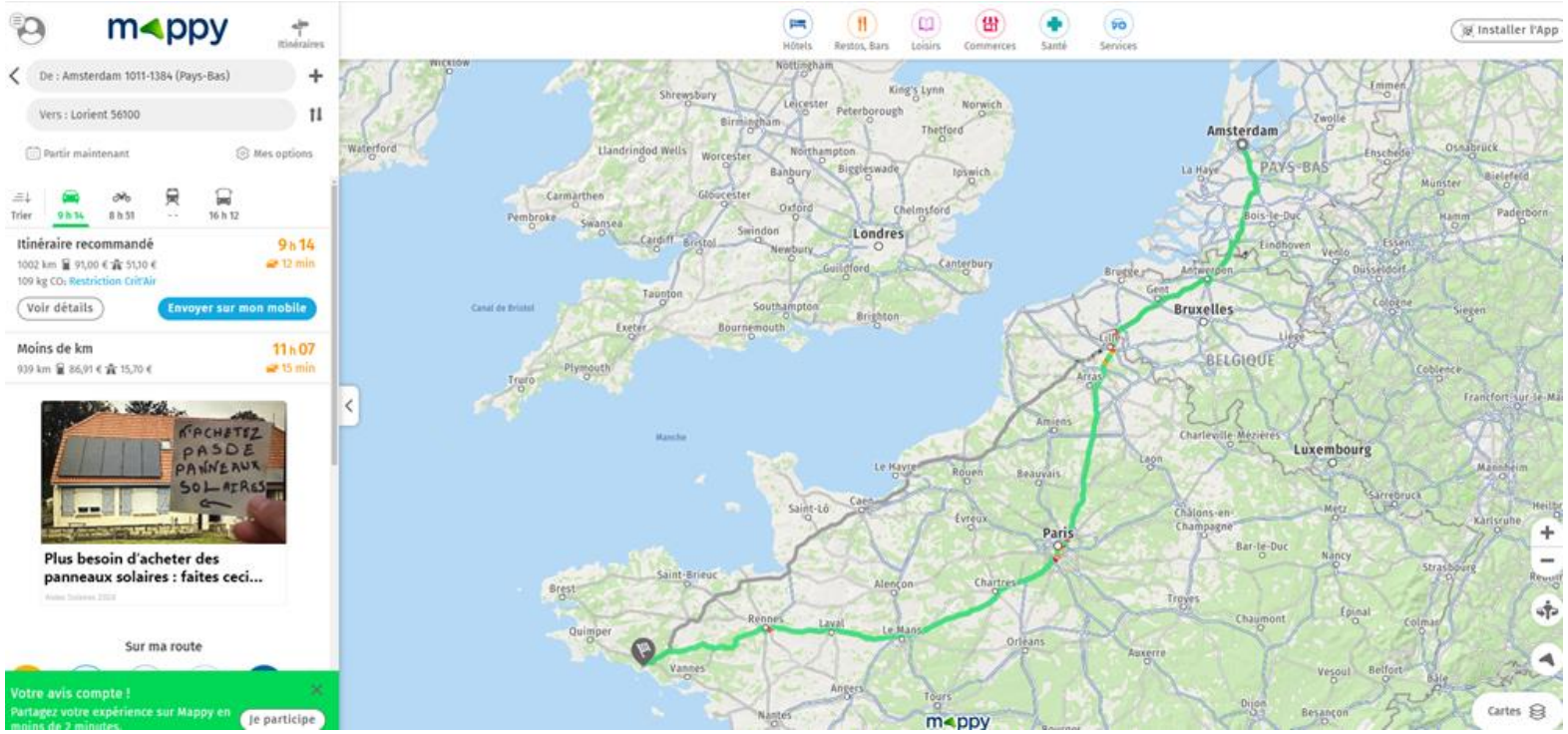
Rennes – Amsterdam

16/10

- 15:35 – 21:53
- 16:35 – 22:53

17/10

- 06:35 – 12:53
- 07:35 – 13:53
- 09:35 – 15:53



🚗 By car

Amsterdam – Lorient is 1002 km

✈Direct Flight KLM/Air France, flights are every day of the week

Amsterdam – Rennes:

- 14:30 – 16:00

Rennes – Amsterdam:

- 16:30 – 18:05

TRAVEL INFO IN FRANCE
LOGISTICS

DAY 1

Around 16:00 : Arrival in Rennes

16:30 – 18:30 Travelling by bus to Lorient

18:30 Arrival at the Hotel Les Rives du Ter, Larmor Plage, 15 Boulevard Jean Monnet, 52260 Larmor Plage

19:00 Walking to Meeting room (La Base sous-marin Keroman - TBC)

19:20 Introduction to the 2 days mission, presentations Eco-system composites materials in Bretagne by ID4Mobility and Doing business in France by NBSO Nantes

20:15 Kick-off Dinner at Bar Restaurant La Base, Base sous-marin Keroman, 56100 Lorient. Restaurant is 15/20 minutes' walk from the hotel

DAY 2

During the day: Transport from one company to the other by bus. Lunch will be in the form of a buffet.

16h30 – 18h30 : Travelling by bus to Rennes

18:30 Hotel Mercure Rennes Centre Place Bretagne

Official Network dinner in Rennes. Restaurant TBD

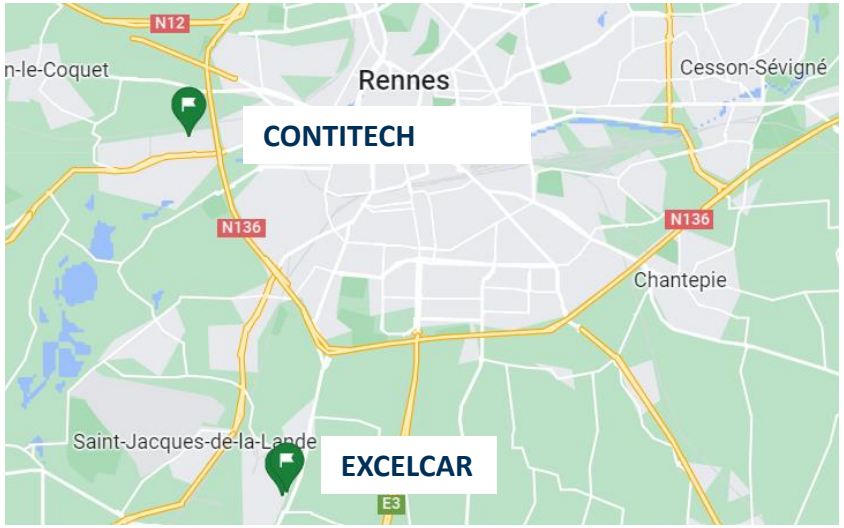
DAY 3

During the day: Transport from one company to the other by bus. Lunch will be in the form of a buffet.

From 16:00 : Departure

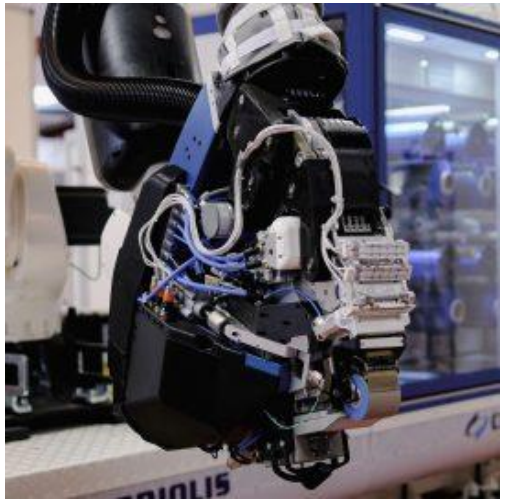
ROAD MAP

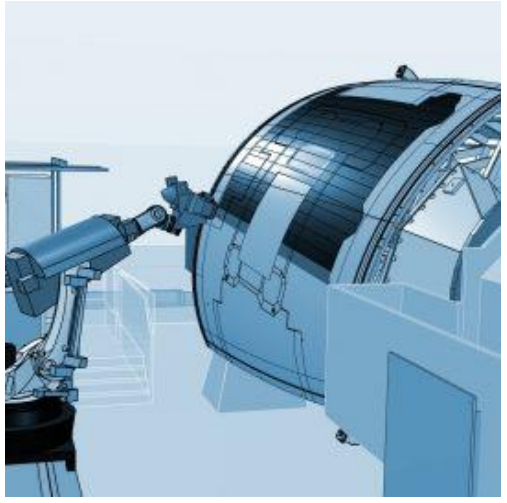

ENSTA (meeting at Lorient)
FORVIA (ex-FAURECIA)
CONTITECH
EXCELCAR
COMPOSITIC
CORIOLIS COMPOSITES
Saint-Pol-de-Léon
Guingamp
Ploudalmézeau
Landerneau
Brest
Parc naturel régional d'Armorique
Carhaix-Plouguer
Loudéac
Dinan
Le Mont-Saint-Mic
Douarnenez
Quimper
Pontivy
Ploërmel
Concarneau
Quimperlé
Auray
Vannes
Châteaub
E50
E401
E60


CONTITECH
EXCELCAR
Rennes
Cesson-Sévigné
Chantepie
Saint-Jacques-de-la-Lande
N12
N136
E3


CORIOLIS COMPOSITES
COMPOSITIC
Quéven
SAC'H QUÉVEN
Lanester
Lorient
KERCHATON
Ploemeur
Riantec
Larmor-Plage
N165
D781

CORIOLIS





WEBSITE

Coriolis Composites develops, produces and commercializes robotic cells and value-added software for automated composite additive manufacturing.
Its strong expertise in composite technologies allows Coriolis Composites to offer off-the-shelf and tailored solutions to your industry.

FIBER PLACEMENT MACHINES

20 years of experience in automated fiber placement with over 100 machines in operation across North America, Europe and Asia.

COMPOSITE ENGINEERING

Assisting clients with the development of their projects from a feasibility study through to the start of production process.

SOFTWARE SOLUTIONS

Coriolis Composites is also a software editor developing solutions for off-line programming of automated manufacturing of composite part since 2007.

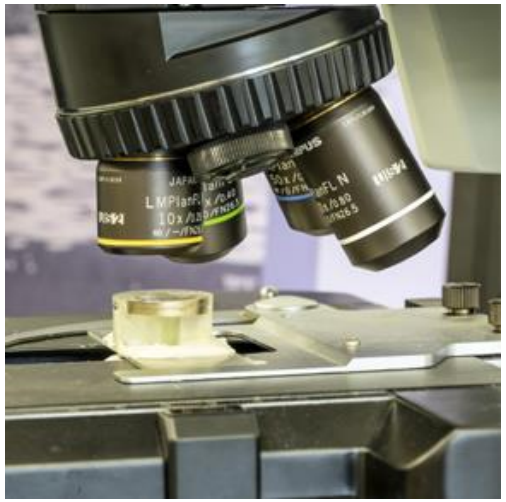
TECHNICAL CENTERS

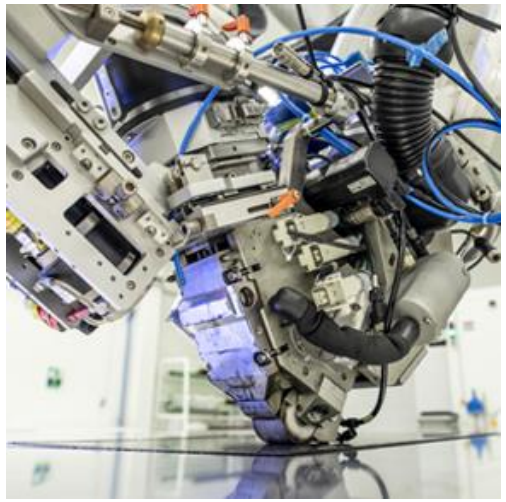
Coriolis Composites is carrying its own R&D projects to push the limits of its expertise. It also forms partnerships with research centers to build the future of composite as a game changing industrial activity.

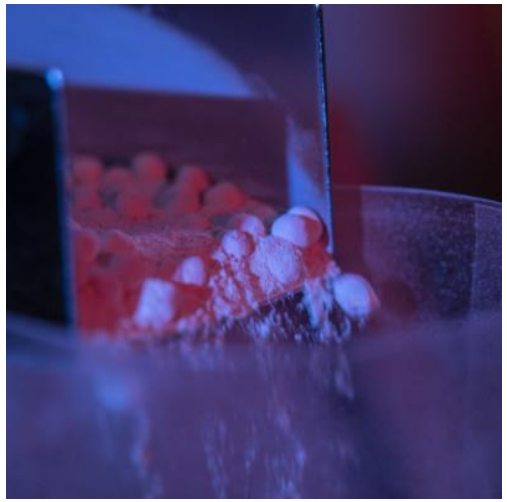
CUSTOMER SERVICE

Dedicated to your activity to keep your machines perfectly running and to provide efficient troubleshooting or rapid supply of spare parts.

COMPOSITIC







WEBSITE

The Compositic technical centre specialises in the use of innovative composites through the design of automated materials and processes based on robotised fibre placement technology. Using additive processes for fibre and material placement, the aim of the composiTIC technical platform is to initiate research and development programmes on the design and qualification of composite and eco-composite parts with complex shapes, and the industrialisation of their manufacture.

ADDITIVE MANUFACTURING

At ComposiTIC, using two methods (FDM - Fuse Deposition Modeling) and (AFP - Automated Fiber Placement), additive manufacturing can be used to design parts for :

-Specific tools used in the aeronautical or automotive industries

-Prototype

-Small production runs (less than 100 parts)

THE CREATION OF NEW MATERIALS

In 3 stages, new materials are designed to manufacture parts with specific properties (mechanical, thermal or magnetic, for example) Three types of innovative materials are designed at ComposiTIC :

-Hybrid metal or ceramic materials

-High-performance materials

-Bio-sourced material

THE NEW DIGITAL MANUFACTURING CHAIN

Digital simulation enables mechanical predictions to be made about structures before they are produced.

ENSTA

WEBSITE

As a multidisciplinary graduate and postgraduate engineering school and research institute, ENSTA Bretagne delivers training and conducts research activities in high level ICTs (information and communication technologies), mechanical sciences and human sciences.

Situated in Brest, this state establishment works in close relationship with numerous industrial and academic partners in France and abroad. Its activities contribute to innovation in numerous fields of application: the maritime, defense and more generally hi-tech sectors (transport, aerospace, energy, digital technologies, research…).

The IRDL's thematic research hub "Multi-material assemblies" seeks to develop innovative assembly processes, characterize their long-term strength in harsh environments and develop hybrid techniques.

RESEARCH AREAS

-Study and optimize assembly processes, by assembling different types of material, treated with new surface preparations.

-Perform in-core instrumentation of assemblies (FGB, QRS, CIN, etc.) and use original experimental devices.

-Develop sizing tools for adhesively-bonded assemblies and factor in the parameters associated with the bonding processes.

-Characterize long-term strength of assemblies in harsh environments.

-Develop hybrid techniques (e.g. weld-bonding) for multi-material structures, to achieve high performance in terms of mechanical characteristics.

EXPERTISE

-Assembly instrumentation

-Characterizing the multi-physical properties of materials and the long-term behavior of bonded and welded assemblies

-Multiscale modeling of physical phenomena during and after assembly, until failure

FORVIA (ex: FAURECIA)

WEBSITE

FORVIA was created in 2022 by bringing together two automotive technology leaders: Faurecia and HELLA. Both brands share complementary performance-driven cultures and are guided by a shared vision for a sustainable future.

A plant dedicated to Clean Mobility through materials

The site of St Malo designs and manufactures parts for sports and luxury cars, as well as small series for trucks, construction equipment and agricultural vehicles. These parts are made of composites.

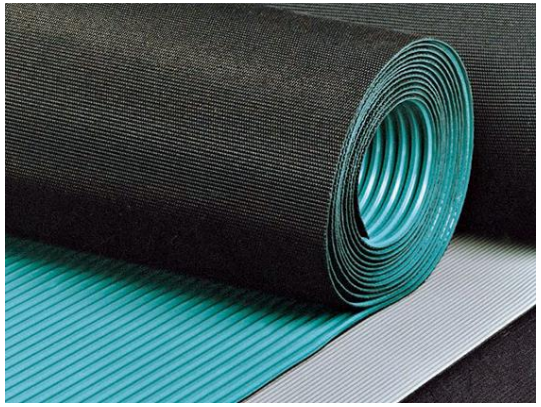
A R&D facility is located nearby the factory. Through MATERI'ACT, they develop new compounds and bio-based or recycled materials that enable significant CO_2 reductions compared to industry standards.

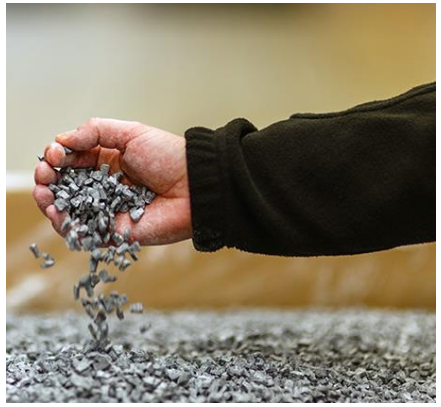
A world leader in sustainable materials

FORVIA leads the industry in sustainable materials for automotive interiors. First launched in 2011, new generations of the NAFILean® family, which incorporate natural fibers in non-visible plastic interiors components, offer significant reductions in weight (up to 41%) and CO2 emissions (up to 108% - effectively rendering the product CO2 negative). Around 13 millions vehicles are equipped with NAFILean® products.

Building on this track record, FORVIA has also developed the NFPP family manufactured which enable up to 50% weight reduction and can halve the CO2 emissions associated with these products.

CONTITECH (Continental)





WEBSITE

ContiTech is one of the world's leading industrial specialists. Its customers can be found in key industries such as machine and plant engineering, mining, the agricultural industry, and the automotive industry. With around 46,000 employees, the company uses its development and material expertise for products and systems made of rubber, polyamide, metal, textile, and electronic components to combine these with individual services. ContiTech also offers functional and design-oriented living solutions and is always searching for customer-friendly and environmentally-friendly answers – going well and truly beyond its roots as a producer of rubber products.

RUBBER

From solid to soft and from elastic to plastic: rubber compounds form the basis of many modern products. In addition to tire compounds, there are also silicone elastomers, fluoroelastomers and many other variants. We are a specialist in the development and manufacture of reliable rubber compounds for high-quality elastomer products, functional parts, components, and systems. Our rubber and silicone compounds are used worldwide in various areas of application. For example, we produce rubber compounds for hoses, rubber-metal products and seals. These are constantly being refined by our chemists and development engineers and thus comply with a wide range of standards.

ELASTOMER SHEETING

Our versatile elastomer sheeting – manufactured, for example, using SBR, NR or EPDM – enables us to meet virtually every individual customer requirement. Features include high temperature and media resistance and availability in almost any color and with surface textures ranging from ultra-smooth to highly textured.

PRODUCT END OF LIFE TREATMENT

We take responsibility for our own product recycling or ensure our products are circular within industry recycling pathways.

EXCELCAR

WEBSITE

EXCELCAR is an Industrial Fablab and an open collaborative innovation platform. The Excelcar platform was founded in 2015, on the initiative of the ID4MOBILITY and players from the industrial and academic ecosystems, to address the problem of underinvestment in innovation at the pre-industrial stage.

Excelcar's mission is to accelerate the transformation of industrial design and production systems, through a global product-process approach and scale 1 resources, on 3 Technologies. A place that brings together resources and skills to accelerate your projects :

4.0 THEMES :

-Robots, cobots, automats…

-RFID, digital vision, sensors, NDT

-Multi-purpose gripper systems

-AGVs Operator assistance, augmented or mixed reality

DIGITAL AND DATA :

-Virtual prototyping

-Data science tools

-Virtual reality equipment

-Workstations

-Computing clusters.

- **ASSEMBLY AND MATERIALS :**
  - Robotic islands,
  - Mechanical, EPS and laser technologies,
  - Prototyping facilities,
  - Characterisation laboratory.