

## PRESS RELEASE

Paris, February 8<sup>th</sup>, 2022

### JEC COMPOSITES STARTUP BOOSTER A SPRINGBOARD FOR ENTREPRENEURS IN THE COMPOSITES INDUSTRY

In a few years, JEC Composites Startup Booster has become a reference for entrepreneurship in the composites industry worldwide. Each year before JEC World, among the startups that submitted their application, 20 of them are selected. 20 finalists from all over the world who will join the leading composites trade show to pitch their project on stage before a panel of expert judges.

This competition is a unique opportunity to network and shine a light on what will be the future of the composites industry so save the date: the two pitches sessions will happen on May 3<sup>rd</sup>, and the winners will be named on May, 4<sup>th</sup> at 2.45 pm at JEC World 2022 in Paris as well as online on JEC World Connect platform. This year's competition is sponsored by Airbus & Mercedes-Benz (Main Innovation Partners) as well as Magna Exteriors (Innovation Partner).

#### Source of inspiration and networking in the composites industry

Launched in 2017, Startup Booster celebrates its fifth Anniversary in 2022. The competition has been organized in three different regions (Europe, USA and Asia) and has already fostered the emergence of 500+ innovative projects from 50+ countries, 80 finalists and 30 winners, including Arevo, Continuous Composites, ComPair, Fortify and Vartega...

This challenge not only represents an opportunity to the winners of the trophy – who will benefit from an unrivalled visibility and contacts with key decision-makers- but to all the parts involved: participants, jury, official partners and the worldwide audience of JEC World. It brings the entire composites value chain together, creating future business opportunities.

#### A strict selection process and a prestigious jury

The 20 finalists are divided into two categories:

- Process, Manufacturing & Equipment
- Materials & Products

The jury includes representatives from major manufacturers and investors:

- **Jelle BLOEMHOF**, Head of Manufacturing Technologies of Composite, **Airbus**
- **Karl-Heinz FULLER**, Head of Future Outside & Materials **Mercedes-Benz AG**
- **Florent ILLAT**, Head of Safran Corporate Ventures, **Safran**
- **Brian KRULL**, Global Director of Innovation, **Magna Exteriors**
- **Tim VORAGE**, Founder and Manager Growth Garage Accelerator , **Mitsubishi Chemicals Advanced Materials**

Two pitch sessions of 10 presentations each will be held in the Agora stage (Hall 5), on Tuesday, May 3, from 10am to 11.25am (Category: Products & Materials) and from 4.30pm to 5.55pm (Category: Process, Manufacturing & Equipment). Three winners will be chosen by the jury and one winner for the sustainable aspects of the project. The awards ceremony will be held on Wednesday, May, 4<sup>th</sup> at 2.45 pm.

#### MAIN INNOVATION PARTNERS



#### INNOVATION PARTNER



#### SUPPORTING PARTNER



## Startups Booster Finalists JEC World 2022

### Category “Products & Materials”

- **Blackleaf** (France)
- **Dongnam Realize** (South Korea)
- **FibreCoat** (Germany)
- **FVMat** (Israel)
- **Ora Graphene Audio** (Canada)
- **Pangolin Defense** (France)
- **Phononic Vibes** (Italy)
- **Revolve** (Germany)
- **Smart Resilin** (Israel)
- **Space Walker** (Japan)

### Category “Process, Manufacturing & Equipment”

- **Antefil Composite Tech** (Switzerland)
- **ANYBRID** (Germany)
- **Atomic-6** (USA)
- **Carbon-Drive** (Germany)
- **Continuum** (Denmark)
- **Fibrworks** (Germany)
- **Herone** (Germany)
- **RVmagnetics** (Slovakia)
- **Touch Sensity** (France)
- **XARION Laser Acoustics** (Austria)



### Category “Products & Materials”

#### **Blackleaf** (France)

<https://www.blackleaf.fr/>

#### **Graphene for climate**

Many have tried to make graphene possible, but cost, quality and quantities never allowed this material to become a real business case. BLACKLEAF closes the business case thanks to a 2-pillars technology:

1. A green and water-based production process. BLACKLEAF produces up to 50 kg of high-quality graphene daily.
2. A set of patents to apply graphene as a coating on any substrates with a conventional spraying technique



#### **Dongnam Realize** (South Korea)

<https://dongnamrealize.com>

#### **We Realize What We Dream: CXP Bioplastic for a Green Future**

Dongnam Realize produces ‘CXP wood’, made with disposals from agriculture and forestry. It can be produced in general plastic production plants and replace normal plastic, is biodegradable and carbonized easier than regular plastics. We’re selling our products through zero-waste shops with our brand, Carbon Storage



#### **FibreCoat** (Germany)

<https://www.fibrecoat.de/>

#### **Making High Performance Materials Affordable**

FibreCoat develops and markets high-performance fibre materials. The aluminum basalt fiber "AluCoat" is the first market-ready product. Unlike currently used conductive polymer yarns, AluCoat is thermally and electrically conductive as well as temperature resistant up to 600°C. Compared to pure aluminum fibers, AluCoat can be produced at one-tenth the cost. As a result, the material has the potential to become the much-needed, affordable shielding material for the electromagnetic shielding of electric cars and 5G devices of the future.





**FVMat (Israel)**

<https://fvmat.com/>

**Taking Composites Beyond Their Capabilities Through Intelligent Design of Meta-Materials**

FVMat invented a new concept of meta-materials that enables the production of materials with extraordinary characteristics. They design and manufacture materials with controllable density, stiffness, heat transfer, electro-magnetic coefficients and additional physical properties.

Our novel meta-materials are dynamically adjusted to the environment and can adapt to external conditions. Manufacturing of these meta-materials combines traditional 3D printing with a unique additive manufacturing technology. The basic concept is ground-breaking, and the applications are vast!

**Ora Graphene Audio (Canada)**

<https://www.oragraphene.com/>

**Advanced Nanomaterials for High Performance Audio**

Ora Graphene engineers and manufactures advanced diaphragm materials used in acoustic transducers. Their patented nanomaterial, GrapheneQ™ is one of the world's first high-content graphene technologies commercially available, the first in the audio industry. With a very rare combination of being both rigid and lightweight, GQ™ allows for smaller, louder, more energy efficient loudspeakers; all while producing new levels of sound quality. Ora is the global leading producer of graphene oxide membranes and continues to grow through R&D explorations of future high-impact applications outside of audio.



**Pangolin Defense (France)**

<https://pangolin-defense.com/>

**Developing Flexible Ballistic Protection for Vehicles, Platforms, and Personal Protection**

Thanks to different patented solutions, we can now protect any type of structure with lightweight and cost-effective solutions against the most advanced threats. By working with the finest materials and developing our own patented technologies in composites, ceramic, and glass technology, we are developing a complete set of ballistic protection, entirely made in France.



**SPACE WALKER (Japan)**

<https://www.space-walker.co.jp/>

**Space Travel is no Longer a Dream**

SPACE WALKER Inc. (Tokyo Japan, CEO Akihide Manabe) is a university startup conducting research and development of winged reusable suborbital space planes. The company's mission is to make commercial space transportation as accessible as boarding an airplane today.



**Phononic Vibes (Italy)**

<https://phononicvibes.com/>

**New Patented Metamaterial Technology with Unprecedented Performances in Vibration and Noise Control, with a Circular Economy Approach**

Noise is present in our everyday life and can seriously impact our health and living environment. A bypassing train, a nearby construction site, noisy home appliances or neighbors are just some examples. Phononic Vibes is introducing meta-material technologies to prevent you from those disturbances. Meta-materials "go beyond" the raw material itself, by achieving unprecedented noise and vibration reducing effects through physical shapes and geometries; independent from the chosen material itself. This makes the solution material agnostic, suitable to the specific use-case in different industries: for example, light weight (automotive, home appliances), transparent (infrastructure) and always recycled and environmentally friendly.



**REVOLVE AIR (Germany)**

<https://www.revolve-wheel.com/>

**The Wheelchair in a New Form**

REVOLVE AIR approaches the wheelchair in a new revolutionary way that makes it the world's first active wheelchair that fits the standards of a universal cabin luggage size restriction. It folds in the same amount of time as a common foldable wheelchair, but it saves up to 60% more space when both revolutionary 24 inches foldable wheels collapse along the same hub together with the seat and the backrest, guaranteeing a unique compactness and transportability, not found elsewhere.



**Smart Resilin (Israel)**

<https://www.smartresilin.com/>

**Resilin, a bio-based super-performing material for sustainable applications with superior features**

SMART RESILIN produces Resilin and develops Resilin containing products. Resilin is an elastomeric protein found in the cuticle of most insects. It exhibits high resilience and fatigue resistance that insects utilize for leaping and flight. Having near-perfect elasticity, resilin can be implemented within a wide range of products such as: sports goods, flexible screens, hair straightening, 3D printing, etc. Resilin can replace plastic, nylon and rubber in many products. As it is a non-toxic material, these resilin-based products are environmentally beneficial game changers for multiple applications.



## Category “Process, Manufacturing & Equipment”

### Antefil Composite Tech (Switzerland)

<https://www.antefil.com/>

#### Reinforcement and matrix. In every fibre.

Antefil's affordable and sustainable hybrid fibres enable a more cost- and energy-efficient production of composites with a guaranteed high laminate quality. Our glass fibres, which are individually clad in a precise amount of thermoplastic matrix polymer, save cycle time and can be welded and recycled - at any scale!



### ANYBRID (Germany)

<https://anybrid.de/>

#### ROBIN, the world's first mobile injection moulding machine, completely rethinking the production of hybrid components

With lightweight engineering, we have transformed a stationary injection moulding machine into a mobile one that can move freely in space. With this unrivalled technology, we unite the benefits of polymer processing with the flexibility of robotics to completely rethink the production of the future.



### Atomic-6 (USA)

<https://www.atomic-6.com/>

#### Manufacturer of the World's Highest Performance Composites for the Most Demanding Environments

Atomic-6 is an advanced composites manufacturing firm. Our proprietary process brings composites to the next stage of innovation; creating highly customizable products that are stronger, lighter, and produced faster than ever before. Atomic-6 is committed to bringing next-generation composites to the forefront of Aerospace, Defense, Space and Logistics.



### Carbon-Drive (Germany)

<https://www.carbon-drive.de/>

#### Shaping the Next Generation of Light and Powerful Electric Drives

We are the world's first manufacturer of ultra-light electric drives made entirely out of advanced carbon composites. Our technology overcomes the physical limits of steel and sets new standards regarding power-density, dynamics, durability and energy efficiency.



### Continuum (Denmark)

<https://www.continuum.earth/>

#### Building the World's First 36.000-ton Wind Blade / Composites Recycling Factory

Continuum have developed the most advanced mechanical composites transformation technology in the world that allows us to sustainably turn End-of-Life composite materials and manufacturing waste into valuable, high performance and fully circular products for the built environment. We are currently designing our first 36.000-ton factory together with the Port of Esbjerg, Denmark, to open in 2023. A second UK factory is planned.



### Fibrworks (Germany)

<https://fibrworks.com/>

#### Revolutionizing the large-scale production of multiaxial thermoplastic cross-ply laminates

Winding the Future is both company motto and lived practice at Fibrworks. Contributing to a greener future is the core of our corporate vision. We offer ideal composite solutions by providing tailored products, our so-called Organo-Coils, out of a patented, continuous, cost- and waste effective winding process with fiber-orientations and lay-ups our customers really need.



### herone (Germany)

<https://herone.de/>

#### herone develops and produces ultralight profiles with tailored performance from recyclable composites

herone - innovate composites for sustainable living. We invent ultralight composites profiles with tailored performance to provide solutions to overcome limits and contribute to solve global societal challenges like making aviation emission free. Our technological core is the herone technology. It combines automated textile preforming of thermoplastic tapes with efficient press forming to produce recyclable parts at scale and provide cost-effective solutions to our customers.



### **RVmagnetics (Slovakia)**

<https://www.rvmagnetics.com/>

#### **The Smallest Custom Passive Sensor in the World**

RVmagnetics has developed the smallest passive sensor in the world - MicroWire. It measures pressure, temperature, position, vibration etc. in contactless. Final applications are tailor-made according to client's requirements in Composites, MedTech, IIoT, Industry 4.0 and other industries.



### **Touch Sensity (France)**

<https://touchsensity.com/>

#### **The Sensity Tech: The Innovative Touch Sensity Technology Making Materials Speak**

Touch Sensity develops the Sensity Tech, an innovative technology that makes materials sensitive to physical interactions. This non-invasive technology allows to recover in real time all the data from pressure, extension and deformation on a material, while respecting the topology and without using any sensors.



### **XARION (Austria)**

<https://xarion.com/en/>

#### **Laser Ultrasonic Sensors for Inspection of Composite Materials**

XARION is the world's first company to measure ultrasound based on its property to change the speed of light. In combination with a pulsed laser for signal generation, XARION's Optical Microphone is appraised by leading air and space companies for ultrasonic composite inspection. In contrast to conventional methods, XARION's technology requires no coupling liquids such as water or gel and works completely contact-free. This feature allows easy robot-integration and perfectly matches the industries need for automated non-destructive inspection methods.



**APPLY FOR YOUR ACCREDITATION TO JEC WORLD 2022**

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**JEC World 2022 • Paris Nord Villepinte**

**3-5 May 2022**

**[www.jec-world.events](http://www.jec-world.events)**

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#### **About JEC Group**

JEC Group is the world's leading company dedicated entirely to the development of information and business connections channels and platforms supporting the growth and promotion of the composite materials industry. Publisher of the JEC Composites Magazine - the industry's reference magazine, JEC Group drives global innovation programs and organizes several events in the world, including JEC World (the foremost and world-leading international exhibition dedicated to composite materials and their applications), which takes place every spring in Paris.

[www.jeccomposites.com](http://www.jeccomposites.com)