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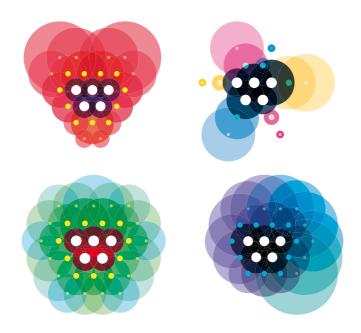
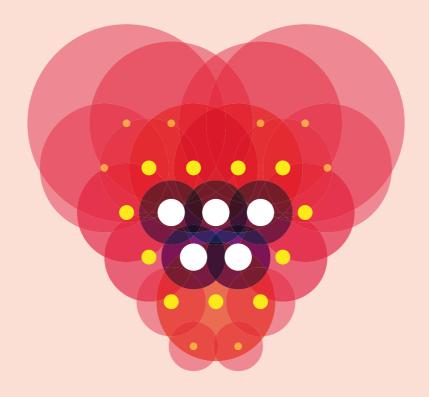


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COORDINATORS



5

WALLONIE-BRUXELLES INTERNATIONAL (WBI)

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In attendance at Hannover Industrie Messe :



Pascale DELCOMMINETTE CEO



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As a public administration, Wallonie-Bruxelles International (WBI) is responsible for the international relations of the Walloon Region and the Wallonia-Brussels Federation, in Belgium. Thanks to its exclusive capacities in various and essential areas (amongst others: education, economy, energy, culture, research, environment, etc.) and the international extension of these fields, WBI developed a particularly dense network abroad. Widely open to the world, the Walloon Region and the Wallonia-Brussels Federation have signed multiple bilateral cooperation agreements with countries and regions. These agreements support bilateral collaboration projects, mainly focused on the academic, scientific and cultural sectors.

The main objective of the Research & Innovation Unit of WBI is to actively build networks between research and innovation actors of Wallonia, Brussels and other countries. By promoting partnerships in international research projects and stimulating an open innovation approach in the field of international scientific and technological cooperation, the Unit supports synergies in the internationalisation of academia, research institutes and businesses.

The Research & Innovation Unit is also coordinating the Research & Innovation Platform, which brings together all the research and innovation operators of Wallonia and Brussels (universities, research centers, competitive clusters, public bodies). The Platform's objective is to facilitate the further development, implementation and monitoring of the international dimension of the regional research policy by the sharing of information and consultation between all the partners. The aim is to identify common priorities which could lead to coordinated or joint initiatives towards third countries and within international networks. The Platform benefits from a network of scientific liaison officers based in innovative ecosystems (in Germany, the Scientific Liaison Officer is based in Munich). They have the responsibility of liaising with various key international initiatives, networks and infrastructures on behalf of the Platform.

WALLONIA EXPORT-INVESTMENT AGENCY (AWEX)

Wallonia.be

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www.awex-export.be www.investinwallonia.be www.wallonia.be EXPORT INVESTMENT

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The Wallonia Export-Investment Agency (AWEX) is in charge of the development and management of Wallonia's international economic relations. With regards to foreign trade, the Agency has a promotion and information mission with regard to both the international and Walloon business community.

Intended for purchasers, decision-makers, importers and foreign prospects, the Agency can, on request:

- Pass on economic data regarding Wallonia and its export potential;
- Provide information on the products and services of Walloon businesses;
- Seek Walloon businesses for the conclusion of international partnerships;
- Distribute lists of Walloon exporters.

Vis-a-vis Walloon businesses, the Agency is their comprehensive international partner, providing a range of services and activities covering the entire export process:

- General and commercial information on foreign markets;
- Production of individual market studies on request;
- Organisation of commercial canvassing operations (participation in international shows;
- Organisation of economic missions, sector-based contact days, etc.);
- · Contacts with international organisations;
- Promotion of Wallonia and its export potential:
- Financial support and funding for exports;
- Training and raising awareness of international professions.

With regards to foreign investment, the Agency provides general expertise in the areas of promotion, prospecting and informing potential investors. It also ensures active monitoring of investors based in Wallonia, as well a mission to find foreign buyers for Walloon industrial sites in the process of restructuring.

AWEX is also competent for the strengthening of the Wallonia brand image overseas. AWEX has a workforce of more than 400 people and about one hundred offices overseas.

DIGITAL WALLONIA HUB GERMANY



In attendance at Hannover Industrie Messe :



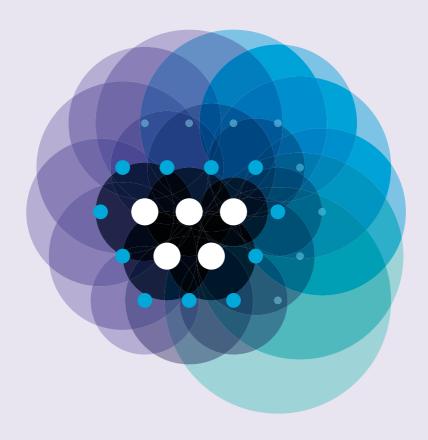
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Wallonia's digital strategy, platform and brand, Digital Wallonia sets the framework for all of the Walloon Government's actions in terms of Wallonia's digital transformation. Made Different Digital Wallonia is one the project from the strategy.

This program is aimed at supporting the creation of new businesses, and is designed to speed up the digital transformation through awareness raising, diagnostics and support around the theme of "Industry 4.0", "smart manufacturing", "factory 4.0", etc.

The program mainly focuses on advanced technologies such as Artificial Intelligence, Cyber Physical systems, advanced robotic, and so on.

THE WALLONIUM DEMONSTRATOR



THE WALLONIUM DEMONSTRATOR











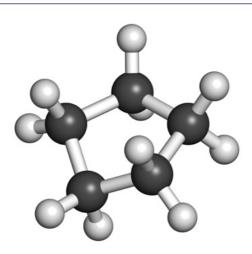




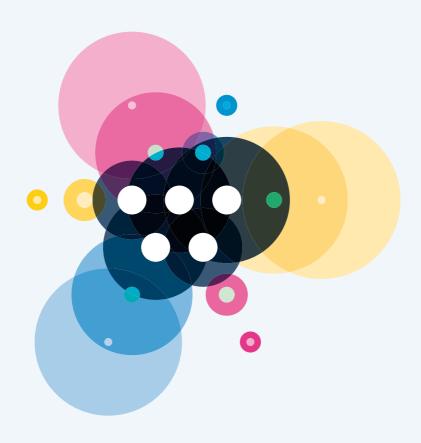
«Wallonium» is a technological artwork highlighting the Walloon region's expertise and know-how in different Industry 4.0 related fields: innovative materials engineering, surface engineering, printed electronics, simulation techniques, ICT, additive manufacturing, embedded systems, signal processing, gas measurements,... In addition to the participation of the accredited research centres Sirris, CRM Group, CETIC, Multitel, Materia Nova and Cenaero, the young startup VOCSens has also joined forces on this joint demonstrator to illustrate the industrial valorization of research carried out upstream in Wallonia and in relation to the development of the industrial and economic fabric.

Taking its inspiration from the famous Atomium monument in Brussels and under the impetus of WBI's Research & Innovation department and through the representation of silicon crystal, Wallonium invites you to get to know and experiment with many technologies. Curious to discover this technological achievement? Come and interact with Wallonium via an augmented reality application or Twitter (@wallonium).

If you wish to discuss with the creators of this project, the Sirris, the CRM Group and VocSens will be present on our booth to provide you with more information.



RESEARCH CENTERS AND UNIVERSITIES



CENAERO

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Tariq BEN AMARA Senior Research engineer

Cenaero is a private non-profit applied research centre and provides to companies involved in a technology innovation process numerical simulation methods and tools to invent and design more competitive products. Internationally recognized, Cenaero is mainly active in the fields of aeronautical design, spacecrafts, manufacturing processes, and buildings and smart cities.

Cenaero provides expertise and engineering services for high performance composites, optimization and uncertainty quantification, multidisciplinary topology optimization, metallic manufacturing processes modelling, high resolution computational fluid dynamics, hypersonic flows and ablative materials, thermo-fluid processes and systems modelling, turbomachinery design, and high-performance computing.

Cenaero also provides software through its massively parallel multi-physics platform Argo, its manufacturing process simulation and crack propagation platform Morfeo and its design space exploration and optimization platform Minamo.

Cenaero operates a high-performance computing infrastructure (14,000 computing cores, http://tierl.cenaero.be/en), soon upgraded to 2.6 PFlops for fundamental, applied and industrial research.

CRM GROUP

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CRM Group activities are centered on the production, transformation, coating and use of metallic materials. Since 1948 CRM Group offers R&D and technology solutions focusing on the development of innovative processes and products that create value for our industrial partners.

The group combines skilled and experienced research teams with unparalleled testing facilities covering the whole manufacture chain of metals, from raw materials to advanced steel applications, ranging in size from laboratory scale to pilot and even semi-industrial production lines.

CRM Group is also active in the domains of environment and renewable energy, recycling and resource efficiency, advanced 3D manufacturing and construction...

SIRRIS

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Sirris is the collective centre for and by the Belgian technological industry. $\protect\endsymbol{\protect}$

The technical support provided yearly to 1300 companies is mainly focused on product, process and business innovation. In this context, Sirris has 3 key assets:

- 70 years of experience in a wide range of companies;
- High Tech infrastructure spread throughout the country and accredited laboratories:
- A large network of partners (academic, industrial, research centres... in Belgium and abroad)

With 150 experts, Sirris cover 20 domains of expertise around 3 action lines: Product of the Future, Factory of the Future & Business of the Future.

In addition to our technological skills and through our network, Sirris offers support for the definition of innovative projects, reinforced by internal technological monitoring and patent support (Patlib).

UNIVERSITY OF NAMUR - INNOVATIVE COATING SOLUTIONS (ICS)

INNOVATIVE COATING
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In attendance at Hannover Industrie Messe:

ICS is the surface optimization partner to transform customer's ideas/needs in real surface-enhanced products.



ICS's clients are interested to add values to their products by tailoring and enhancing their characteristics such as high hardness, wear and corrosion resistance, low friction, and specific optical or electrical properties as well as decorative colours. Often a complex combination of those properties is requested to ICS to customize.

Valentin JOB Researcher valentin.job@unamur.be +32 472 61 37 58

ICS's end Customer markets today are house appliance, jewellery, luxurious hardware, technical ceramics, powder compression, automotive accessories mostly via PVD or PCVD coatings.



For several years ICS built up its experience in the field of surface analysis, process simulation and coating directly from its own production activities as well as from working with various Coating Machine Builders. As a Client you benefit from uniting all of these competencies into ONE company.

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In attendance at Hannover Industrie Messe :



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Through its quality research and excellence, UMONS is a nationally and internationally recognised institution. Research at UMONS relies on more than 900 researchers in 10 research institutes.

UMONS is among the Top 150 for the number of international citations. Since 2018, UMONS has also been included in the famous Shanghai University Ranking. In fields such as science and materials engineering, chemistry and physics, it ranks UMONS as one of the best Belgian universities.

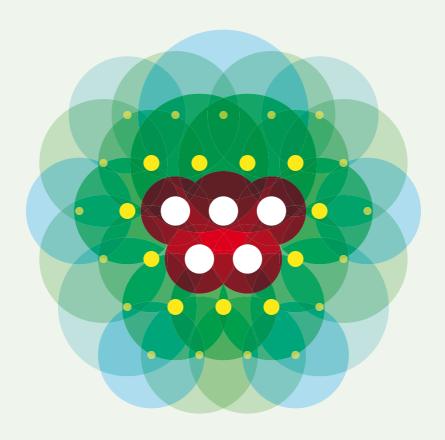
UMONS has recently launched the UMONS Innovation Center label to highlight the close partnership it has with various types of research center: *Materia Nova, Multitel*, le *CLICK*.

Materia Nova is an research center with the purpose of developing innovative, high-performance, sustainable solutions through R&D in multifunctional materials and surfaces, materials and processes in the fields of energy, the environment, mechanics, transport and health.

Multitel is an research centre and a major player in the digital transformation of Wallonia, specialising in applied photonics, artificial intelligence, IoT and embedded systems, networks and telecommunications, and aspects of digital security.

CLICK is a place, a team and a community dedicated to stimulating creativity and innovation, particularly in the digital and creative industries. It is also a structure that brings together a Fablab, a Hub, a Living Lab and Click N'Start (an incubator for student/researcher entrepreneurs).

EXHIBITING COMPANIES



AEROSINT

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In attendance at Hannover Industrie Messe 2022 :



Maxime SCHOENMAKERS Marketing and Business Developper maxime.schoenmakers@ aerosint.com

Since its foundation in 2016, Aerosint has been developing a solution allowing multi-material additive manufacturing. This makes it possible to 3D print with different materials inside the same part and thus combine material properties.

This major breakthrough in AM was made possible by a technology called "Selective Powder Deposition". This technology selectively deposits two (or more) powders to form a single layer containing several materials.

Our solution can be integrated into any powder bed Additive Manufacturing process (LPBF, Binder Jetting, SLS...) giving them multi-material properties and is already in use in several prestigious research centers and companies in the entire world.



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GENIEVISION BY AGC

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GenieVision is a corporate startup from AGC Glass Europe.

In the construction industry, the failure cost is about in average 10% of the total budget. The impact on margin is very high, as it is between 1 and 3%.

With « GenieVision by AGC », those compagnies can save up to 50% of their failure's costs.

Another parameter is that those companies have invested a lot in 3D BIM design (Hardware, software, people and intelligence) but then when the execution starts, they run it using 2D paper plans. All intelligence by avoiding errors start again by misunderstanding and collaboration issues.

The solution is a software that brings the 3D investment on-site (on the work site) thanks to Augmented Reality and gives the capability to detect errors in real time.

GenieVision is a 3D BIM based on augmented reality directly on the work site. This technology overlay the real world with the 3D BIM model at scale 1:1:it is called Saas software.



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CALYOS

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Calyos is one of the world's leading experts in two-phase (liquid to vapour) heat transfer technologies. Our mission is to solve the greatest thermal challenges by enabling the adoption of the best, passive two-phase cooling solutions. Ensuring and delivering a sustainable approach to thermal management in the data-driven and electrified world we are creating.

Calyos has developed a number of loop heat pipe and heat pipe solutions for specific cooling applications: power electronics, processors and batteries. Calyos also develops custom solutions beyond those applications for example, engine oil heat recovery. Calyos primarily targets the E-Mobility and Computing markets, where electrification and data processing are creating ever-rising demand for new, disruptive thermal solutions.



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In attendance at Hannover Industrie Messe 2022 :



Benoît DESCHAMPS
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Emphase is a Tech Start-up active in the development of Products and the implementation of integrated monitoring Services in the field of Fiber Optic Sensing Applications. Already recognized as a reference medium for telecommunications, Fiber Optic is now used as an extended sensor, allowing the measurement of Temperature, Strain, Vibrations and even sounds on long distances, avoiding the use of multitude of individual sensors. It provides high sensibility, EM immune and prone for harsh environment.

Emphase is now commercializing a proprietary, patented technology, the TPhase. TPhase provides averaged temperature variation along the full length of the Fiber Optic, which can be deployed over several hundreds of meters. TPhase uses a unique analysis methodology, based upon Interferometry, which allows Emphase commercializing this technology at a significantly lower cost than conventional Optic Fiber Technologies.

TPhase doesn't limit to the sensor hardware. This integrated monitoring solution manages the data (Local, Cloud) and distribution (Ethernet, Wifi, Bluetooth,...) to Process or Building Management systems to allow the final user to complete detailed data analysis. Threshold values can be determined to trigger alarming. TPhase is easily connected to Fire Detection Center. The field of applications includes Smart Building Transitions, Infrastructures, Transformation Process Monitoring, Environmental applications.

MANGOGEM

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www.mangogem.com



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Michel PREAT Sales Director Michel.preat@ mangogem.com +32 472 77 05 73



Ben RODRIGUEZ CTO Ben.rodriguez@ mangogem.com +32 475 74 92 82

MangoGem is an innovative provider of intelligent systems solutions for very challenging problems in enterprise operations. Our strong scientific and technological expertise covers a wide range of computer science and engineering topics, and we help industries to apply new concepts from research into business, bridging the gap between theory and implementation.

If you want to improve performance, improve efficiency and reduce costs, ORITAMES is for you. If you want to migrate from messy spreadsheets, or are stuck with hard to implement complex programs, ORITAMES is for you, ORITAMES APS Scheduler is a powerful Advanced Planning and Scheduling system including a versatile scheduling optimizer. ORITAMES is simple to use but can handle large and complex problems in areas such as multiple projects planning, manufacturing, event organization, routing, maintenance, staff assignment, software development, ...

ORITAMES is innovative, using the most recent advances in the science of operations research to tackle challenging real-life domain-specific cases and generic problems.

VOCSENS

Chemin du Cyclotron 6 +32 479 54 23 52 1348 Louvain-la-Neuve Belaium

www.vocsens.com

VOCSens creates your future gas sensing solutions tuned for re-

mote environmental monitoring, industrial, security and health applica-

tions, from device to system level. Founded in 2019 as a spin-off of the UCLouvain, our company is deeply focused on the development of a novel ultra-low-power, multi-pixel and CMOS integrated gas sensing

Our first product, EnviCam®, reflecting the concept of «environmental camera», is a multi-sensor measuring the concentration of various gases and volatile organic compounds, particulates, humidity and temperature, connected to Internet of Things networks and the

VOCSens developments are pioneering in terms of autonomy, accu-

racy, versatility and portability, while ensuring continuous measure-

ments in an active way, helping companies and institutions to unveil their environmental parameters, strengthen safety and health. The EnviCam® sensor is placed within the pedestal of the Wallonium structure, highlighting the skills of the Wallonia Accredited Research



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Sylvain PETRE **Electronics & Operations** Engineer sylvain.petre@vocsens.com +32 499 19 50 16

Centres, for continuously measuring the indoor air quality, as well as selectively detecting volatile compounds emitted from one dedicated sphere and generating alarms on an electrochromic film, in collaboration with Materia Nova. Finally, data are remotely sent through IoT networks such as LoRa or Bluetooth for live visualization on a dedicated dashboard in the cloud.

platform.

Industry 4.0.



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HANNOVER MESSE MAP AND WALLONIA BOOTH



Engineered Parts & Solutions Hall 3-4

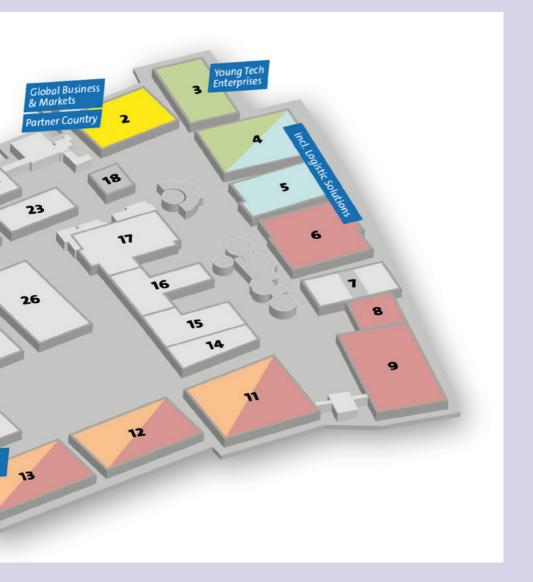
Digital Ecosystems Hall 4-5

Automation, Motion & Drives Hall 6 / 8-13

Energy Solutions Hall 11-13



Wallonia - Belgium National Pavilion Hall 2 - B22



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