### wallonia and brussels

pring 2019

Discover a region that combines technical knowhow with quality of life

# DINNER IS SERVED

### DESIGNER CHARLES KAISIN KNOWS HOW TO THROW A PARTY

- University spin-offs are transforming innovation into economic success
  - Wallonia's lakes, rivers and spas take centre stage for tourists

### **CONTENTS**



# Editorial

A recurring element in this issue is the success of start-up and spin-off companies in fuelling the Walloon economy. A collaborative network enables research and innovation to be transformed into viable businesses. In our Focus we examine the mechanisms that strengthen the links between the region's universities and industry, while in our Q&A we meet entrepreneur Mohamed Takhim (pictured above), who created his business aged just 20.

For its tourism campaign this year, Wallonia shines a light on one of its most glorious resources – water. From meandering rivers to strategic waterways and man-made lakes that have metamorphosed into nature beauty spots, there are myriad activities and events attracting visitors to the region. Meanwhile, both home and abroad, Charleroi designer Charles Kaisin shows he knows how to lay on a party in the fabulous dinners he stages for companies and private clients. Creativity and surrealism combine in what can only be described as a winning combination. Daring to dream is perhaps another motif running through this issue!

Don't forget to download **the WAB magazine app,** available for Android and iOS. Go to Google Play or iTunes and keep up-to-date with news and events in Wallonia and Brussels

#### Wallonia and Brussels - Contact

AWEX Wallonia Export-Investment Agency **www.awex.be** 

WBI Wallonie-Bruxelles International **www.wbi.be** 

Welcome Offices www.investinwallonia.be



INVESTMENT

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**4** News and business updates from around the region

**6** Profile: Mohamed Takhim is a scientist and entrepreneur forging eco-friendly phosphate technology

**8** Texere Biotech shows the way in automating bone grafts

**10** Cutting it: AGC Glass invests in energy-saving glazing

**12** The Digital Wallonia Startup Awards celebrate the region's best up-and-coming businesses

**14** Local digital companies network on the worldwide stage at Las Vegas electronics event

**16** Meet the Brussels expat: Why retired accountant Christopher Thubron appreciates life in Belgium

**17** Universities in Wallonia are a breeding ground for pioneering spin-offs. We investigate how they turn research into economic success

**21** Belgian beef: Wallonia's quality meat is increasingly appreciated abroad

**23** The region adopts water as the theme for its tourism campaign

**26** Designer Charles Kaisin stages show-stopping parties and events

**28** Panorama: Spotlight on Dinant, officially a European Best Destination

**30** Our pick of cultural events in Wallonia and Brussels

Nicolas Lobei



### DREAMWALL PROVIDES VIRTUAL DECOR BACKDROP TO THAI ELECTIONS

A Charleroi design studio has helped TV viewers in Thailand better understand their country's elections, with tailor-made virtual scenery. DreamWall was commissioned by Spring News to provide the backdrop for its live coverage of the election results in March. Designers and engineers flew to Thailand to manage the virtual studio, which was built around a glass dome inspired by Bangkok's democracy monument. Election results were displayed in augmented reality using virtual technology.

#### en.dreamwall.be

### EUROPE'S LARGEST VIRTUAL REALITY PARK OPENS IN MOUSCRON

A new leisure park dedicated to virtual and augmented reality has opened in Mouscron and claims to be the biggest of its kind in Europe. Visitors to Virtual Park put on a VR headset and immerse themselves in 4,000m<sup>2</sup> of game space. There are seven virtual and augmented reality worlds, some suitable for children as young as three. Prices start at  $\notin$ 40 for children and  $\notin$ 50 for adults. Virtual Park will be open six days a week and can accommodate up to 300 players a day.

#### virtualpark.eu



# Alibaba inaugurates train line between Liège and China

Chinese e-commerce giant Alibaba came one step closer to forging its ambitious transport plan linking Wallonia with China when it opened the Cainaio Line in March. The railway between Liège Airport's multimodal platform and Zhengzhou will enable Alibaba to economise 30% of its logistic costs. "We celebrate this important step in the setting up of a world-class logistical infrastructure solution in the heart of Europe, here in Liège," said Michel Kempeneers, inspector-general for overseas export and investment at the Wallonia Export Investment Agency (Awex).

### **BENEO INVESTS IN PLANT PROTEINS**

Food and nutrition firm Beneo has invested €4.3 million in a new production facility for meat substitutes in Wanze, Liège province. The unit, based within Belgium's largest bioethanol producer, BioWanze, will produce textured wheat protein, a popular alternative to minced meat. "Market figures confirm that this is the right path to take," said Beneo manager Christoph Boettger, pointing to a general decline in meat consumption as consumers seek alternatives. "Wheat proteins are the most commonly used plant proteins for meat substitutes."

### ANTI-SNORING DEVICE TO BE SOLD IN US

A Liège inventor's anti-snoring device is set to be mass-produced and sold in the US this summer. Tony Cavaleri has spent three years developing Soft Night, a silicon device that reduces the noise of snoring and prevents sleep apnoea. Cavaleri has now found an American industrial partner to produce 2.5 million units, which will be manufactured and marketed in 40,000 US sales points.



### NEW MULTIMEDIA BOARD GAME WITH €210,000 PRIZE MADE IN WALLONIA

The multimedia board game Guardians of Legends, created in Liège, offers the winner a prize worth  $\pounds$ 210,000 in the form of a 24-carat golden egg. Via a unique code contained in each box, which looks like a traditional board game, players are sent on a virtual treasure hunt around the world. "Clues hidden in the game lead to buried treasure somewhere in the world," says co-designer Vincenzo Bianca, from Liège. While the egg, designed by Liège jewellery designers Olivier Gangi and Cédric Sanse, will be on display in a city museum, players will be searching for a treasure chest. Launched on 2 April, the game has already received 8,000 orders. The game is suitable for ages eight and up and costs  $\pounds$ 36. It is available in 10 languages, including English, Chinese and Russian. The duration of the game is estimated at three years.

#### guardiansoflegends.com

#### **BUSINESS BRIEFS**

Walloon astrophysicist Arnaud Stiepen has won his third Nasa medal, for his work studying Mars. Stiepen was a participating scientist in Nasa's Maven mission in 2013, which orbited Mars to gather data on its atmosphere and presence of water. He now plans to go into teaching.

Austrian airline Laudamotion, a subsidiary of Ryanair, will begin direct flights from Brussels South-Charleroi Airport to Vienna in October, becoming the ninth passenger airline to serve Charleroi. A 180-seater Airbus A320 will operate six flights a week. Tickets are already on sale, starting at €20 each way before taxes.

**Technology incubator WSL** has been ranked in the top incubators in the world. Supporting engineering science projects across Wallonia, it has been recognised by intelligence community UBI-Global for the help it offers to tech start-ups. Director general Agnès Flémal underlined the future role of deep technology and sustainable and environment-friendly innovations. WSL employs 866 people directly and 2,000 indirectly.

#### DUBUISSON BREWERY CELEBRATES 250TH ANNIVERSARY WITH MAJOR FACELIFT

Wallonia's oldest working brewery is celebrating its 250th anniversary, with a major renovation and a new beer museum. Brasserie Dubuisson is best-known for producing Bush and Cuvée des Trolls, which are exported to more than 40 countries. The brewery has been on the same site in Pipaix, Hainaut, since 1769 and has passed through nine generations, witnessing the French Revolution and the birth of Belgium and surviving two world wars. The castle where it all began is undergoing extensive renovation and will be inaugurated at the anniversary celebrations in October. A new interactive museum experience will guide visitors through the brewery's history and offer a behind-the-scenes look at the production process.



# IN THE SPOTLIGHT Mohamed Takhim

Scientist and entrepreneur Mohamed Takhim created Ecophos when he was 20 and still a student. Based in Louvain-Ia-Neuve, it now has a turnover in excess of €135 million and is internationally renowned for cleaner, greener, phosphate extraction

# I find nature inspires me very much

#### You filed your first technology patent before you were 20. Did you realise then how far you would go in developing phosphate technology?

I always had it in my mind that we could find more environmentally friendly and efficient ways to extract phosphates, to reduce the waste we create and the cost of extraction.

# At what point did you know it was going to be a success?

The industrial development of Ecophos accelerated around 2010. It took time for it to take off – around 15 years and  $\notin$ 45 million of investment have produced processes that are efficient and very cost-effective at recovering phosphate in ores that are both rich and low in phosphates.

#### What has been one of your successes?

The reduction of the volume of waste with the extraction of phosphates. Instead of generating 6 tons of waste for 1 ton of phosphates, Ecophos promises to generate just 30kg.

### What do you still want to achieve with Ecophos?

I want to carry on growing the company with the establishment of several phosphate plants worldwide and increase the number of clients who buy our technology licence. We have three plants in Europe, in Bulgaria, the Netherlands and France, and 10 reference plants worldwide. We are actively planning the construction of three future plants in China, India and Egypt.

### What do you take inspiration from in your life?

I find nature inspires me very much. My favourite quote is by Albert Einstein: "Look deep into nature, and then you will understand everything better."

#### What's the best piece of advice you've ever been given?

To follow my dreams.

#### What excites you about the future?

The progress of science in general and the progress that will produce clean technologies that go towards protecting the earth.

### What worries you about the future? Extremism.

### How do you like to spend your free time?

I love to spend it travelling with my family.

#### Do you have a favourite book?

Reinventing Organizations by Frederic Laloux.

#### ecophos.com

# How did you get interested in phosphates at such an early age?

You could say I was born to it, as I was born and raised in the city where the world's largest phosphate mine is located, in Khourigba, Morocco. All around me I could see phosphate rock. On top of that, I was inspired by the chemistry and complexity of phosphate extraction by my father, who had a position at the world's largest phosphate producer there, Office Chérifien des Phosphates.

# Hard graft

# Innovative start-up is set to revolutionise bone tissue transplantation

By Saffina Rana

alloon start-up Texere Biotech has created the world's first automated robotic bone graft production system, which revolutionises the processing of human tissue.

Bone tissue is the second most transplanted part of the human body after blood. Bone grafts are useful for fixing bones damaged by trauma and growing new bone where a loss has occurred after a fracture or around an implant such as a knee replacement. Depending on the type of injury, the bone used for a graft can come from a patient's own body, can be synthetic or can be an allograft – tissue from a living or deceased donor that has been stored in a tissue bank.

Allograft bone transplants are commonly used in hip and knee reconstruction. The risk

of infection associated with using allografts is low since additional surgery is not needed to acquire the bone, and the risk of rejection is minimal as the bone contains no living cells. There's also no need to match blood types between the donor and recipient, since the allograft contains no living marrow.

However, preparing the allografts themselves from donated bones is a lengthy and costly



manual process, which also carries a risk of contamination. This motivated cell and tissue engineering specialist Denis Dufrane to research other production methods, while he was the head of a tissue bank in Belgium. "I experienced so many difficulties in producing allografts manually that I wanted to automate the process, simplify it and improve their quality," he says.

In 2016, with his father, Jean-Jacques, and robotics expert Olivier Bühlmann, Dufrane set up Texere Biotech in Frasnes-lez-Gosselies, Hainaut. In less than three years, they have created the world's first fully functioning, fully automated robotic processing system for creating allografts from bone tissue held at tissue banks.

The production line consists of six robots that progressively treat femur bone heads. Living bone marrow matter is made inert and the bone is decontaminated using viral inactivation and sterilisation processes. Using computerised visual recognition techniques, it is whittled away to produce small, freeze-dried bone allograft blocks, which can then be stored by the tissue bank until needed. The robots even take care of labelling the final product.

Compared with existing techniques, the automated process is cheaper and triples the amount of tissue recovered. "Our process offers full traceability and guarantees the safety and quality of the final product by way of an independent and personalised treatment for each femoral head, to a level unmatched before today – with a revolutionary improvement in quality and with reduced processing time and cost," says Dufrane.

The first production line was inaugurated in December 2018, in the presence of Pierre-Yves Jeholet, vice-president of Wallonia's government and minister of economy, industry, research, innovation, digitalisation, employment and training. Loans and recoverable advances from Sambrinvest and the Walloon Region played a key role in the project. "Without Walloon support we couldn't have completed the project," says Dufrane.

The production line is capable of producing

30,000 bone grafts each year and the company is offering its services to bone banks. Texere also foresees exporting its technology as a plug-in, ready-to-start turnkey solution for tissue banks in other countries, which includes training personnel and full technology transfer through a licensing agreement.

Starting with European markets, Dufrane hopes the automated process will "benefit the greatest number of patients worldwide".

#### texerebiotech.com



# "

# Our process guarantees the safety and quality of the final product

#### **Denis Dufrane**

# **Glass act**

# Glassmaker invests in high-tech glazing for energy-efficient buildings

By Betina Kiefer

GC Glass Europe is investing €10 million in the group's plant in Wallonia, to build a production unit for its new vacuum glazing. The technology, called Fineo, will be produced primarily to thermally and acoustically insulate windows in both residential and office buildings.

Fineo is being produced as part of Reno Window, a joint venture between AGC and the Walloon region, with Wallonia providing about 45% of the funding. RenoWindow will also provide a service in Wallonia to replace older glazing with more advanced technologies such as Fineo directly in consumers' homes. The investment in the plant in Lodelinsart, a district of Charleroi, should initially create 20 jobs, with more expected from the glazing service.

For this venture, Wallonia is drawing from its Kyoto funds, made available for projects relat-



ed to energy conservation and environmental protection. The construction sector accounts for more than 20% of greenhouse gas emissions in the region. Investing in more advanced glazing technologies helps improve the energy efficiency of buildings, aligning with Wallonia's broader emissions reductions goals.

"RenoWindow is fully in line with the government of Wallonia's long-term strategy for building renovation and energy saving, aimed at reducing overall emissions of greenhouse gases by 80 to 95% between now and 2050," says Jean-Luc Crucke, Wallonia's energy minister.

Likewise, AGC Europe invests about half of its R&D budget on environmentally friendly technology, and has been developing Fineo's technology for some time. "Everything linked to energy savings, environment, sustainability, that's a huge part of development in our portfolio," says Marc Foguenne, the company's VP for technology and innovation. Fineo was designed to provide acoustic and thermal insulation that is equal to or better than triple glazing. With a thickness of 8mm, it is about a fifth to a quarter smaller than similarly sized units, and a third lighter. It is composed of two 4mm glass sheets, with 0.1mm of vacuum in between. Thanks to its thinness, Fineo can be used to replace glazing in older windows while completely preserving the frame, leading to a much faster, cheaper replacement process with little to no waste material.

RenoWindow's glazing replacement service will be AGC's first B2C activity and will be tested in Wallonia first. "The goal now in Wallonia is to test the market, and if it works our goal is to expand in other countries," says Foguenne. "Basically it could be in the whole of Europe."

Reglazing can be completed within a day or less. The service can be accessed through a helpline, as well as a web portal offering free estimates and bespoke assistance. Customers can submit a picture of the windows they wish to have reglazed, receive a visit from an expert who will draw up an estimate, and complete the renovation in a final appointment. "We try to make it extremely simple and seamless," says Serge Martin, new business development manager at AGC. "RenoWindow offers to the end-user to do the reglazing of the window to achieve better energy performance, with a competitive cost at the same time."

AGC Glass Europe has its headquarters in Louvain-la-Neuve, and procudes and markets glass for the construction and automotive sectors. Formed in 1961 as the glass industry boomed in Wallonia and formerly known as Glaverbel, it was bought in 1981 by AGC Group, the Japanese glassmaker. It has a revenue of  $\pounds$ 2.4 billion and about 16,000 employees across Europe, with 2,000 in Wallonia

agc-glass.eu

# The goal now in Wallonia is to test the market, and if it works our goal is to expand in other countries

**Marc Foguenne** 

# Star turns

# E-Peas named Start-up of the Year at second Digital Wallonia Startup Awards

By Andy Furniere

The second Digital Wallonia Startup Awards have honoured outstanding exponents of the start-up scene in the region's digital sector. Energy saver specialist e-Peas was the big winner, while Wallonia's export agency Awex rewarded five businesses in the International category.

The ceremony took place during the Shake

event in Namur, the festival for the digital sector in Wallonia. It was organised by the government's strategic cluster organisation Digital Wallonia and the Walloon Digital Agency (AdN), in collaboration with various partners. "You could see the awards as the Oscars for the digital start-up ecosystem in the region," says Guy Vanpaesschen, digital sector specialist at Awex. "Not only can the start-ups win prizes, they also gain a lot of publicity during the ceremony, as the event was followed by a lot of media organisations."

The main prize of the evening, Start-up of the Year, went to e-Peas from Mont-Saint-Guibert, with the award presented by Wallonia's minister of digital technology, Pierre-Yves Jeholet. E-Peas was also featured in an article



published in the influential Trends-Tendances magazine and a report on radio broadcaster La Première.

The company, a spin-off of the Catholic University of Louvain (UCL), specialises in the development of microsystem solutions – known as semiconductors – that allow the batteries of connected devices to last longer and ultimately even become energy-autonomous or self-powered. It receives funding from Digital Wallonia and The Faktory – a tech start-up accelerator, incubator and venture capital seed fund – among others.

"The products of e-Peas are not only very innovative but they can play a crucial role in our society, answering the needs of Internet of Things applications," says Vanpaesschen. "The innovations can have a huge impact on different economic sectors and also on our environment, since they reduce our need for energy."

Awex rewarded five companies in the International category, for start-ups who are developing innovative products with international potential and who took part in at least one of Awex's missions in 2018. Chantal De Bleu, general director of Awex, awarded the prizes.

"The winners came from very diverse sectors," says Vanpaesschen. ALX Systems is active in the drone sector, CyanView in broadcasting and cinema, Digiteal in accountancy, Herrmutt Lobby in music and Tessares in telecommunications. All the laureates received support worth €10,000 for missions abroad.

In the Acceleration category, start-ups that had received guidance or funding through one of the relevant Walloon support facilities were shortlisted. This award was presented by Christophe Demain, chief investment officer at Belfius Insurance and member of the investment committee of Digital Wallonia's investment fund W.IN.G (short for Wallonia Innovation and Growth). The prize consisted of an article in Trends-Tendances and a report on La Première.

Brussels company Tricount took home this award, as recognition for its rapid growth, achieved with limited means. Tricount developed an app that makes it easy to split group bills and expenses. The company is supported by W.IN.G. Finally, an honorary award was given to Odoo, based in Grand-Rosière, which offers businesses a series of open-source apps that support all their needs – for example accounting, inventory, project management and e-commerce. "Odoo is already an important player internationally and it was the perfect occasion to put that exceptional performance in the spotlight," says Vanpaesschen (see our profile of Odoo founder Fabien Pinckaers in the winter 2018 issue of the magazine).

#### digitalwallonia.be



**66** Not only can the start-ups win prizes, they also gain a lot of publicity

**Guy Vanpaesschen** 



# Viva Las Vegas

# Walloon delegation heads to world's biggest consumer electronics event

By Andy Furniere

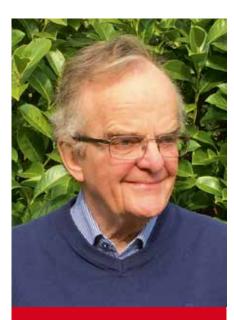
In January, Digital Wallonia travelled to the US to take part in the biggest consumer electronics event in the world, as nine SMEs and six start-ups represented the region at the Consumer Electronics Show in Las Vegas.

The stands were organised by Awex, the official partner and international spearhead of Digital Wallonia's strategy. "CES is the key event of its kind, where the whole world gathers and all the important media outlets report on it," says Guy Vanpaesschen, digital sector and North America specialist at Awex. "Companies there can get hold of crucial contacts that they would otherwise never reach and attract the interest of the major companies and investors in their business sector." Walloon minister Pierre-Yves Jeholet, whose portfolio includes digital technology, travelled to Las Vegas to support Digital Wallonia's delegation. Digital Wallonia set up its own event, Belgian Beer Time, which hosted a delegation from Quebec in Canada. Digital Wallonia was also very active at the Village Francophone, an event for the wider French-speaking digital community.

Awex's representatives in San Francisco and Montreal, two of the 10 experts who steer the Digital Wallonia International Hubs, helped organise the stands and involve the delegation from Quebec. This network of hubs is active in cities and regions that are leading the way in digital innovation. It has a presence in Barcelona, San Francisco, Shenzhen, Montreal, Berlin, Tel Aviv, Singapore, Paris, Stockholm and London.

The local participants at CES were: speech technology specialist Acapela Group, drone company ALX Systems, refurbished smartphone expert Back2Buzz, brandtech agency Big Bad Wolf, 3D specialist Cabin3D, vision systems business Capflow, power conversion specialist CE+T, home automation innovator Domestia, healthcare software enterprise Intersysto, image technology expert IntoPix, battery docking storage developer Linedock, medical monitoring business MintT, cooling solutions innovator Monster Labo, smart pillbox developer P-Heal and optical communication specialist Skylane Optics.

### MEET THE BRUSSELS EXPAT



Christopher Thubron is a retired accountant who lives in the Walloon Brabant village of Lasne with his Danish wife B ecome a chartered accountant and see the world: that was the mantra that brought me to Brussels. As soon as I qualified, I left the north-east of England and joined an international firm of accountants in their Brussels office with the opportunity to spend lots of time in their international offices travelling the globe.

My specialisation was based in Brussels because it was the geographic and cultural centre for the Europe/Africa region. Next, setting up a small accounting, tax and business advisory firm was a great opportunity to use my international experience, while spending more time in Belgium, which was rapidly becoming the springboard for US, British and other companies for their European operations. Belgium gave them many advantages - location, highly qualified and multilingual people, financial incentives and, above all, a great welcome. Locals were very patient and would speak English, helping me to master French from a basic English school level.

These were exciting times (even for an accountant!). For clients, setting up a business, managing it, developing a market are never easy in one's own country, but doing it in a foreign language with different laws, customs and culture is something else. The reward was seeing the businesses grow. Of course there were problems, but the openness and ease of access to the right people at a high level simplified the process. A solution would nearly always be found. Compromise is a powerful component of the local culture.

I met my wife here and life took off. We met through a group of Belgian mutual friends. That was the start of our Danish/British family and we moved to Lasne. Our three children were all born in Belgium and are working for Belgian and international companies abroad, but would be happy to return. The multicultural experience children get here helps set them up for life.

It is very easy to live here, which is why many people stay. All the activities one could want are available, from a worldclass opera, theatre and cinema in many languages to sports clubs, arts and crafts and learning opportunities to study almost any subject. Then there is the food, drink and the countryside of the Ardennes where it is like being on holiday. The quality of life is without equal. I came to Belgium for work but am staying for pleasure.

**C** I came to Belgium for work but am staying for pleasure

# In a spin

Spin-off companies from local universities are creating economic value out of their cutting-edge research



By Ian Mundell

niversities have three basic missions. They educate, they carry out research, and they turn knowledge into economic value. An important part of that third mission is the creation of new companies, known as spin-offs.

Figures collected up to the end of 2016 show that 286 spin-offs had been created by Belgium's five francophone universities, in Liège, Brussels, Louvain, Namur and Mons. Of those companies, 235 are still active, accounting for more than 3,000 jobs. And those numbers continue to grow. An academic's first conversation about commercialising research will probably be with the university's technology transfer office. Sometimes they take the initiative, but most offices or their partners will also be looking out for ideas with commercial potential. "We have access to the research projects, and we follow them very closely," says Michel Morant, chief executive of Gesval, a company set up by the University of Liège to manage commercialisation activities.

If a technology is ready to use, the best commercialisation route might be to license it to a large company with the expertise and resources to make the most of it. But in many cases more work is needed – research, development and business planning – to bring out an idea's commercial potential. This can be achieved by a spin-off.

Support for creating spin-offs comes through companies such as Gesval or Sopartec, its equivalent at the Université Catholique de Louvain (UCLouvain). Another source is specialist business incubators, such as the Brussels South Biopark Incubator, part of a biotechnology cluster set up near Charleroi by the Université Libre de Bruxelles (ULB).



# **66** More and more, we find the expertise we need within the members of the Biopark

#### Florence Bosco

SPRING 2019





Panepinto Elisabeth

"ULB represents more than 60% of our pipeline, but we also have projects from other Belgian and European universities, and spin-outs from local companies," says Florence Bosco, the incubator's chief executive. "We're mainly a seed accelerator, so our role is to help researchers turn their R&D results into a business plan that is ready to present to venture capitalists." This might take from six months up to two years, after which other structures take over. "Once the seed round is completed, we keep supporting the growth of the spin-off via our organisation Biopark Dev, providing market study, real estate and talent acquisition support."

Companies such as Gesval and Sopartec accompany spin-offs for longer, until they bring a product to the market or attract significant outside investment. "That can be as little as five to seven years, but typically it requires at least ten to fifteen years to deliver the final product," says Morant. One of the first priorities is to build a team around the project. "We organise a kind of steering committee with the researchers, our staff and business mentors, in order to define the business model and check the feasibility of turning the technology into a product," says Philippe Durieux, co-director of UCLouvain's technology transfer office and chief executive of Sopartec.

The Biopark Incubator also draws on outside advice. "We have a network of experts, people from big pharmaceutical companies or biotech companies, and also people from regulatory agencies," Bosco explains.

Good knowledge of the market can be important in positioning a spin-off. For example, Liège's Bone and Cartilage Research Unit had some important results relating to arthritis, but decided to create two spin-offs - Artialis and KiOmed Pharma - rather than one. "They come from the same research, but one is for diagnostics and the other is for therapeutics," says Morant. "The business models for these sectors are different, and the investors are different, so you shouldn't mix the two in one company."

Senior academics remain closely involved once a spin-off company is established, but the chief executive is likely to come from outside. "Generally the researchers do not have the mindset for leading a business," says Morant. The aim therefore is to recruit an engineer or business

" We have access to the research projects, and we follow them very closely

**Michel Morant** 

developer from industry, someone looking for a fresh challenge. "We have to find a CEO with a lot of experience and expertise, and who fits with the researcher," Durieux adds.

Even so, there are exceptions. Didier Sertyn, professor of equine anaesthesia and surgery at Liège, was chief scientific officer and is now CEO of his spin-off, Revatis, which is developing a system of regenerative veterinary medicine.

Junior researchers make the transition from university to spin-off more often, a move encouraged by the Walloon Region's First Spinoff programme. This supports them while they work on a new product or service, and develop complementary business skills. Nearly half of the projects supported result in a spin-off. "It's rare to have that kind of success rate," says Morant.

One of these successes is e-biom, spun off from the University of Namur (see box, right). And support from the region can also play a broader strategic role, as in the case of A-Mansia, a UCLouvain spin-off developing nutrition supplements to control obesity and diabetes. These are based on a bacterium discovered at Wageningen University in the Netherlands, whose effects were revealed by a team at UCLouvain. "We had the possibility to attract this company to Belgium because we received grants and subsidies, and because the PhD and professor received money to pursue their research through the incubation phase via the First Spin-off programme," Durieux says.

In addition to public funding, the universities have established investment funds to support their spin-offs. Liège has Spinventure, UCLouvain has the Vives Louvain Technology Fund, and ULB has the Theodorus Fund. The aim is to kick-start the spin-offs, rather than control them.

"Vives Louvain Technology is a minority shareholder, and we try to raise funding with external shareholders who have expertise in the specific area where the spin-off is active," says Durieux. Over six years, the Vives Louvain Technology Fund has invested  $\notin$ 20 million in 17 companies, attracting more than  $\notin$ 268

### A NEW VIEW ON BIODIVERSITY

After completing a PhD in ecological science at the University of Namur, Jonathan Marescaux looked for work in the private sector. He picked up a consultancy contract in aquatic ecology, and this made him think there might be a business opportunity in the molecular ecology techniques used in his PhD.

Every organism leaves traces of its DNA behind in the environment. "From a simple sample of water or soil, it's possible to recover this DNA and quickly and accurately determine the biodiversity present in the ecosystem," he explains. "Although this method has been used in scientific projects since the end of the 2000s, it had not been commercialised in Belgium."

With a First Spin-off grant from the Walloon Region, he validated the method as a commercial proposition and tested the market. Further support came from the university, Namur Province and the WBC biotech incubator, with funding from Namur Invest, the UNamur Venture investment fund and private investors. In 2019, e-biom was born.

The greatest challenge has been convincing potential clients to trust the method. "Building a biological inventory from a water sample? They thought we were crazy." But comparison with traditional methods has shown the DNA results to be reliable.

One of e-biom's major projects involves examining 1,000 ponds across Wallonia for two endangered species of amphibian – the midwife toad and the great crested newt. Other work has involved tracking the progress of invasive species and environmental impact studies. With contracts such as these from public services and companies in Belgium, e-biom is now looking into international opportunities.

e-biom.com



### MORE THAN MEDICINE

**Axinesis (UCLouvain)** is developing a robotic device for the rehabilitation of adults suffering from a disability of the upper limbs following a stroke, and children with cerebral palsy. **axinesis.com** 

**Tessares (UCLouvain)** is developing software that optimises internet connections by aggregating available fixed, mobile and wireless signals. **tessares.net** 



SmartNodes (ULiège/UCLouvain) has an innovative approach to street lighting control that creates a light bubble around road users, allowing energy savings where there is no traffic (pictured above). smartnodes.be

Ampacimon (ULiège) has technology that optimises the use of overhead powerlines by accurately forecasting their capacity, based on historical data and the weather. ampacimon.com



**Gambit (ULiège)** has used social science data to build software for investor profiling, portfolio optimisation and risk management (pictured above). In 2017 it was acquired by BNP Paribas. **gambit-finance.com** 

**MaSTherCell (ULB)** optimises industrialisation processes used in cell therapy, allowing these therapies to reach the market more rapidly. **masthercell.com** 

**Calyos (ULB)** has developed new cooling methods for electronic components in data centres, plus transport and energy applications. **calyos-tm.com** 

million from blue-chip corporates and large co-investors. "The multiplier effect is huge."

The Biopark Incubator works closely with Theodorus and Sambrinvest's Butterfly Fund. "Our acceleration programme goes together with this pre-seed funding, which takes some of the risk out of the project before the seed round takes place," says Bosco. Its current stars are Epics Therapeutics, a drug discovery company spun off from the work of François Fuks at ULB on epigenetic mechanisms involved in cancer development, and ChromaCure, which is developing drugs that will slow tumour initiation and progression, based on research from Cédric Blanpain's lab, also at ULB.

All the universities offer incubators and space on their science parks for new enterprises. Even as they become independent, spin-offs are encouraged to maintain an intellectual and physical connection with the university, becoming part of the innovation ecosystem.

For example, UCLouvain's cancer immunotherapy spin-off, iTeos Therapeutics, has been based on the Brussels South Biopark since 2012. Last year it raised additional investment of  $\epsilon$ 64 million and created a subsidiary in Boston to run clinical trials and develop its US business. "But it will keep R&D activities here, so the team remains, along with the head of drug discovery," says Bosco. Maintaining this ecosystem helps create even more spin-offs. "More and more, we find the expertise we need within the members of the Biopark."

Meanwhile, spinning off benefits the university as a whole. "The creation of spin-off companies represents an extraordinary opportunity for UCLouvain to truly fulfil its mission of transferring knowledge to society and to forge new ties between the researchers and entrepreneurs," says Durieux. And most important of all, it brings prosperity to the region. "University spin-offs may be small companies that take time to generate employment, but when they do, they transform the economy," says Morant.

biopark.be iteos.be revatis.be



# Prime cut

# New campaign aims to promote free-range Belgian beef abroad

By Sarah Crew

to 1.2 million grazing cattle, Wallonia is rightly proud of its beef. The region is now promoting one of its best home-grown assets abroad.

The Belgian Beef, Tailor-Made Beef campaign, launched by the Wallonia Export Investment Agency (Awex) and its counterparts in Flanders, is also drawing attention to the eco-friendly, free-range farming methods in Wallonia as well as stringent hygiene and animal welfare conditions.

The dominant breed is the lean but muscular Belgian Blue, which accounts for more than 80% of livestock in the country. "For many reasons, the Belgian Blue is perfectly in line with consumer tastes in Belgium," says Dominique Tourneur, Awex deputy general manager, Europe and Central Asia. "It's quality beef, lean and tender with lots of nutritional benefits." And it's a firm favourite with locals who profess a nostalgic taste for the meat. In a blind test by Apaq-W, Wallonia's agency for promoting quality agriculture, a majority of Walloons preferred it to Argentinian and Irish beef.

The qualities of Belgian Blue are now being promoted in the Middle East and Asia, as Awex and Apaq-W prepare to attend a series of major fairs in key countries to promote the breed. While meat consumption is dropping in Europe as people reduce the amount they eat, it is rising in other parts of the world, and though some countries in the Middle East require additional certification, Belgian Blue is authorised to be sold there.

The breed's particularity is what's known as double muscling, an inherited condition that gives it its sturdy stature and high meat yield. While Belgians have a penchant for lean meat, it's possible to produce marbled cuts, such as Bleue des Prés that are becoming more popular among customers. Hence the title of the campaign, which also presents the nutritional advantages of meat as a source of protein and iron.

Wallonia is leading the way in responding to environmental concerns, too. "Livestock are largely raised on small family farms in a non-intensive way. This means the production of carbon dioxide is lower," says Tourneur. The abundance of green spaces in the south of the region provides pasture land for the Belgian Blues, who are natural grazers, thereby maintaining biodiversity.

Belgium's legislation on quality control is boosting the industry. Tourneur cites the rigorous work of AFSCA, Belgium's federal agency for the safety of the food chain, on guaranteeing the traceability of meat in the region, and Wallonia's agriculture minister, René Collin, for improving conditions for animals. But there's a recognition that for Belgian beef to continue to be successful at home while conquering new markets abroad, the industry must evolve. Tourneur: "The sector needs to combine production methods that innovate and are respectful of the environment, while positioning itself as a high-quality product."

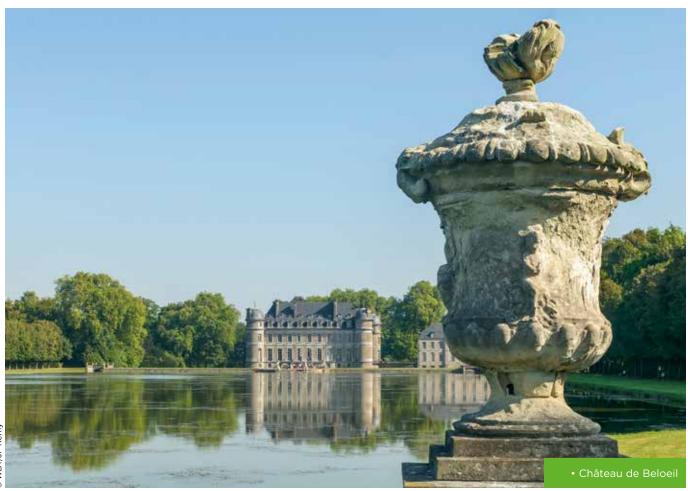
Wagralim, the region's agri-food competitive pole based at Gosselies, is focusing on that innovation. Among the projects it is financing are improving the fertility of herds and new ranges of feed for reproductive cows and to increase Omega 3 in meat. There are also plans to develop the organic sector.

walfood.be



# **C** Livestock are largely raised on small family farms in a non-intensive way

**Dominique Tourneur** 



# Into the blue

# Wallonia looks to its water to promote tourism in the region in 2019

By Sarah Crew

n 2019, Wallonia is indulging in its passion for water. Wallonia: Land of Water is the theme the region is focusing its tourism campaign on this year, encompassing water-based attractions and offbeat activities. It spotlights the many rivers, lakes and waterways that have shaped the region's industry, culture and social history.

Visitors are invited to cool down and relax thanks to a programme of attractions and events such as kayaking, boat cruises, swimming, spa retreats and more. From urban escapades on the once industrial Meuse and Escaut rivers and rural pleasures in towns on the Semois and Ourthe, to exploring the extensive canal network and artificial lakes surrounded by nature, there's aquatic fun for all the family. The activities are split into three categories: On the Water, By the Water and Benefits of Water. And they're ideal for a short trip, weekend away or a longer break. On the Water gathers water sports and cruises on the river Meuse in Liège, Namur and Dinant. At the Wildtrail Basecamps near La Roche-en-Ardenne, thrill-seekers can kayak, raft, pot-hole, quad bike, enjoy aerial activities and play laser games. An equally full range of sports is laid on at Adventure Valley Durbuy, which has numerous accommodation options. Events include a weekend on the water of the Canal du Centre near La Louvière in June and the Namur Marathon along the Meuse

#### .TOURISM



on 12 May. Or you could cycle along the unique Ravel tracks that follow disused railway lines and canal towpaths or take to the rolling hills of the Ardennes.

Get the full experience of being on the water by kayaking one of the many rivers. There are no shortage of spots to test your skills or just admire the scenery. Namur, Liège and Luxembourg provinces are the places to head for the Semois, Ourthe, Viroin and Lesse rivers, where companies rent out equipment and organise transport to bring you back to where you started.

By the Water is a showcase for walks and visits to attractive towns and villages, waterfront restaurants and hotel stays. Lompret, near Chimay in Hainaut, lies on the bend of a river and is one of the most beautiful villages in Wallonia. Once the site of a Gaul and Roman fortification and a feudal castle, it boasts numerous houses

of architectural interest, all surrounded by beautiful countryside.

Belgium's largest artificial water is the nearby Lacs de l'Eau d'Heure. Five lakes offer more than 25 activities, including sailing, stand-up paddle-boarding, diving, cable water-skiing, jet-skiing, windsurfing and more. On 1 and 2 June, it hosts its own triathlon.

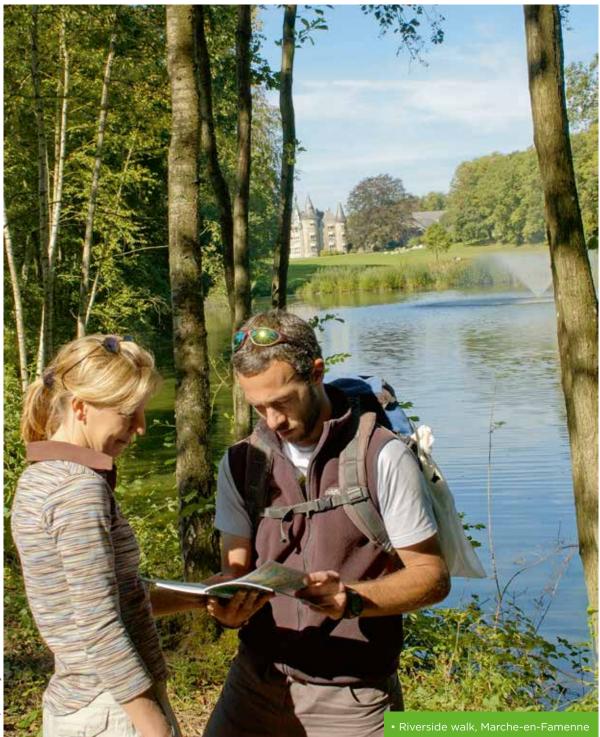
The Han-Sur-Lesse domain is an underground world of grottos near Rochefort and one of Namur province's most important tourist sites. And from a phenomenon of nature to a testament to the region's industry and logistic prowess: the sloping lock of Ronquières on the Brussels-Charleroi canal. Boat tours and a visitor centre are among its attractions.

Among the jewels of Wallonia's heritage are the many castles and stately homes. They all have water features or enjoy privileged locations overlooking rivers and streams. The Château de Beloeil in Hainaut is in the style of Versailles. In addition to the historic and treasure-adorned interior, the 25-acre landscaped gardens are a perfect and finely balanced blend of water and greenery. The site hosts numerous events, including the prestigious Amaryllis flower festival from 27 April to 5 May and the spectacular sound and light show Les Féeries de Beloeil on 17 August.

Benefits of Water is all about relaxation, wellbeing and good food. Among the highlights are the thermal baths of Spa and Chaudfontaine, local fish recipes like escavèche de Chimay, and traditional regattas and family water parks.

There's no shortage of places for luxury pampering: the Robertville Hotel des Bains & Wellness in the eastern cantons; the fivestar Martin's Chateau du Lac hotel in Genval, south of Brussels; Hotel Bütgenbacher





Hof, a gastronomic and wellness resort in the Hautes-Fagnes; the Royal Snail Hotel with its renowned gourmet restaurant overlooking the Meuse in Namur; Hotel Naxhelet, a golf club and spa in Liège province; and Osmose, a wellness space in Liège's heritage Hotel Les Comtes de Méan.

Wallonia: Land of Water was chosen as

the theme following a number of surveys and research into what tourists seek when they visit the region.

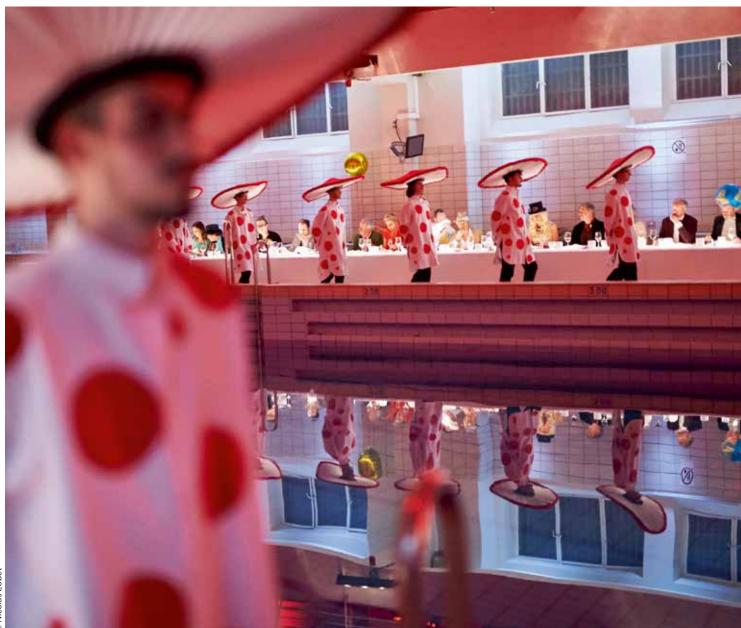
The popular tourist destination of Spa is receiving an additional boost in a project recognising thermal cities as Unesco world heritage sites. The town is joining the Communauté des Accros du Peignoir (Community of Fans of the Peignoir), a movement aimed at revitalising the image of thermal spas. Created in 2016, the worldwide campaign combines reality, imagination and humour to promote water-based resorts. For the full programme of activities and events, see the website.

wallonialandofwater.com

# The art of the party

# Designer Charles Kaisin creates once-in-a-lifetime dinners that tap into Belgium's surrealist streak

By Clodagh Kinsella



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hen luxury brands, collectors or heads of state want to throw a dinner party their guests won't forget, they turn to Charleroi-born designer Charles Kaisin. Whether it's conjuring up the cosmos for a Cartier jewellery launch – waiters wore silver-foil suits and gravity itself was suspended – or inviting guests to fish for ducks (à table) in the Brussels metro, Kaisin's parties have a madcap, whimsical air straight from the pages of Alice in Wonderland.

A trained architect, Kaisin studied under Israeli designer Ron Arad at the Royal College of Art in London, before internships with French starchitect Jean Nouvel and British sculptor Tony Cragg. Since then he has forged a singular, mercurial path – his 20-strong Brussels office tackles the dinners and three other main areas of activity: object design, architecture and scenography.

Projects have ranged from creating chocolates for Pierre Marcolini to bags for Delvaux and designing an interior wing of contemporary art museum MAC's, near Mons (he's currently working on a listed farm in Wallonia for private clients). He's also known for his spectacular installations – such as recreating Rolls-Royce's 'spirit of ecstasy' bonnet ornament from 2,500 pieces of miniature origami, something that's been a fascination since he was an exchange student in Kyoto.

"I try to work on the identity of objects be-

cause it's the strongest way to touch people's emotions," he explains. "I'm interested in things that can be domesticated, that you can interact with and inflect with personality." In the case of the Almaha Marrakech hotel, for instance, that translated into animating Charles Baudelaire's exotic poem L'Invitation au voyage by recruiting a cast of local artisans to deck its walls with Bedouin textiles or sew silk squares into an abstract representation of the local Jemaa el-Fna market place.

Themes of recycling, metamorphosis and movement unite his disparate output. One early project, long predating the current trend for recycling, was the honeycomb-structured polypropylene K-bench, which could be extended and placed inside or outside. He has also made a newspaper version. His latest creation for the Brussels contemporary deisgn fair Collectible is a reversible glass akin to a chalice designed to take both wine and champagne.

The Surrealist Dinners, appropriately, happened by chance. The first, held at his Brussels studio, was to thank supporters; almost a decade on, Kaisin has hosted 55 events in 18 countries, from the Monte-Carlo Casino to the Château de Chambord – France's second biggest castle after Versailles – and for Belgian brand Ice-Watch.

"In Brussels, the objective of the dinners was to create something like a performance or happening, and to valorise Belgian culture using surrealism," he says. "That's also what we do abroad." Given the costs involved, most events are for luxury brands such as Hermès or individuals of means.

All start with a theme – be it madness or a love of play, say – that's fleshed out by extensive research and meticulously brought to life. "The theme is the thread, which we articulate – via a client, a brand, a birthday – in a surprising manner. It must be linked to the person, their values or universe."

An art director by nature, Kaisin oversees every detail, from the epic sets to the service. "There's one waiter for every one or two people, so everyone is served at the same time," he says. "There's a star chef, and there's always an extraordinary location – we've had dinners in pools, in churches."

For Kaisin, suffering a dull dinner party is akin to torture. But staging one on behalf of cultured VIPs means the sky is the limit – or not, in the case of his cosmic Cartier dinner. And, as with the objects he makes, the point isn't functionality but conjuring a world of dreams. "My dinners are about the idea of poetry and surprise," he says. "What we do is appeal to people's childlike sides, create an astonishment that's primordial and sublime."

charleskaisin.com

# **66** My dinners are about the idea of poetry and surprise

### .PANORAMA

# DESTINATION DINANT

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Dinant, the pearl of the Meuse, is among the top 15 cities to visit in 2019, according to European Best Destinations. The organisation, which promotes tourism and culture around Europe, ranked it in 11th place based on an online poll of more than half a million people. The Hungarian capital, Budapest, took first prize, but Dinant outclassed cities such as Athens, Paris, Berlin and Vienna. The city, in Namur province, is recognisable for its dramatic cliff-edge location, soaring medieval citadel and the onion-shaped dome of its collegiate church. Visitors can ride a cable car to the top of the citadel where they can explore the 1,000-year-old site, complete with dungeons and a weaponry museum, while the riverside promenade offers a colourful choice of cafes, restaurants of shops. It's also the birthplace of saxophone inventor Adolphe Sax and will now be promoted to the organisations millions of visitors via its networks.

dinant.be europeanbestdestinations.com



### .AGENDA





Max Charrue

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### FESTIVAL RESONANCES

Every year, some 20 musicians are invited to the gorgeous Halloy castle in Ciney for some intense rehearsals, leading to intimate performances of chamber music in the 12th-century manor's former stalls. This 10th edition features British cellist Steven Isserlis and violinist Katharine Gowers and Hungarian pianist Dénes Várjon. The themed morning and afternoon performances include works by Haydn, Schubert and Beethoven, played to audiences of no more than 250. The renovated manor's bar and restaurant are open after every performance, and the atmosphere couldn't be more perfect.

30 MAY-2 JUNE, CHATEAU DE HALLOY, CINEY festival-resonances.be



### EXHIBITION THE ORIGINS OF **2** BELGIAN SURREALISM

While art enthusiasts are all familiar with the names René Magritte and Paul Delvaux when it comes to Belgian surrealism, they are less likely to have seen the work of Italian Giorgio de Chirico. And yet his influence on 20th-century artists cannot be underestimated. A forerunner of the modern avant-garde, he was a revelation to the Belgians, who took his approach to the next level, even as he altered his artistic course in the 1930s. Bam is staging the country's first solo exhibition dedicated to the artist.

UNTIL 2 JUNE, BAM, MONS bam.mons.be

#### FAMILY NAMUR EN MAI

This late spring festival in Namur is endless fun. Simply wander the streets to see acrobats, jugglers, magicians and gravity-defying acts of all sorts. Costumed entertainers delight and embarrass, fire performers amaze, and musicians get you in on the act. There are also ticketed performances, which feature some of Europe's finest circus and acrobatic acts, as well as ribald cabarets for adults only. A party that seems to never end, Namur en Mai is one of Belgium's most entertaining street theatre festivals.

30 MAY-1 JUNE, ACROSS NAMUR namurenmai.org

### CLASSICAL LES FESTIVALS DE WALLONIE ON TOUR

Les Festivals de Wallonie takes place throughout the summer and autumn, with cities and provinces hosting their own versions of classical and new music festivals. A bit of spring fever has hit the programme: Les Festivals are on tour. This means even the smallest villages and unlikely venues get in on the act. Check out, for instance, the duelling percussions and accordions of Sphère Trio and the Hybris Quintet, followed by a DJ after-party at the Mundaneum. Or the classical jazz band Music 4 A While in Lamorteau at the very southern tip of Belgium.

27 APRIL-2 JUNE, ACROSS WALLONIA lesfestivalsdewallonie.be

### IN IT TOGETHER

Amy Norrington is a British cellist in Brussels and founder of the Resonances Festival, which takes place every spring on the grounds of the historical Halloy castle in Ciney. She hand-picks the musicians, who come together for an intense few days of rehearsal before staging performances in the castle's former stalls.

"I always wanted to create a festival in Belgium along the lines of some of the festivals I had experienced in other parts of Europe. I had the luck of meeting a wonderful Belgian woman called Florence Gillon, and together we created Resonances. My idea was to find a place where a group of musicians could live together for a week, away from the usual pressures of regular concert life, and feel at home, as well as inspired by beautiful surroundings. We found the Château de Halloy near Ciney purely by chance because the owners are classical music-lovers.

I invite around 20 musicians from all over the world to come for a week to Ciney. We all arrive at the château on the Monday and start rehearsing. The concerts begin on the Thursday and end on Sunday. I make a programme in advance and let them know which pieces and with whom they will be playing. One of the delights of my job is to think up a programme that I feel certain musicians would like to play and to think about who they would like to play with. It's a bit like planning a dinner party. I only invite individual musicians, even if they are part of a group, because this way they can meet new musical friends and come out of their comfort zone. I once had the pleasure of inviting a renowned solo violinist to play a Beethoven string quartet for the first time in his life!

I believe what the audience respond to so positively is the intimacy of the concerts. When they arrive, they immediately feel part of the whole musical experience. The musicians mingle with the audience, have a drink and discuss their experiences. We are all in it together."

festival-resonances.be



# **Feel inspired**

AVAILABLE WORKFORCE



