

Igniting the creative spark?

Simply download the eBook on
www.fribourgnetwork.ch
to find out more.

The eBook also features a wealth
of additional articles, images and videos.



CONNECTER LES COMPÉTENCES – CRÉER UNE PLUS-VALUE

Steiner est l'un des leaders des entrepreneurs généraux et totaux en Suisse. Nous saisissons chaque occasion pour connecter les compétences, réduire les interfaces et encourager la collaboration.

Nous vérifions en continu le potentiel d'optimisations tant au niveau de la qualité et des coûts qu'en matière de délais impartis. Ainsi, nous nous assurons que chaque projet crée une plus-value pérenne. Pour tous les partenaires.



By Beat Vonlanthen,
Fribourg State Councilor,
Minister of Economic Affairs

INNOVATION COMES IN ALL SHAPES AND SIZES



For many years now, the canton of Fribourg has placed innovation at the heart of its development strategy. Namely, the opening of the zero-carbon innovation quarter blue-FACTORY, greater specialization in fields such as smart homes, biotech and human health; cluster policy; promotion of technology transfer and support for innovative firms. All in all, our canton has become a veritable hub of innovation, which will help secure our place as a key player the economy of the future.

I am more than ever convinced that we have made the right choice, at the right time. As Klaus Schwab, founder of the World Economic Forum (WEF), declared in his opening address to the 2016 WEF in Davos, "We are at the dawn of a fourth industrial revolution, which will transform entire production, distribution and consumption systems." If we are to rise to the challenges that the future holds, it is imperative that we increase and bolster our capacity to innovate.

The present issue of *Fribourg Network Freiburg* (FNF) reflects this ambition. It explores innovation from three distinct angles: product, processes and markets. The choice of subject came about during the Fribourg Economic Summit, held in September 2015 and attended by over 200 participants.

Co-inventor of the Swatch watch, Elmar Mock, reminded everyone that innovation "is not a natural process" and demands courage and expertise. Many Fribourg entrepreneurs already have the courage and skills needed to innovate, and do so on a daily basis. This issue features profiles of 50 of the most innovative, creative and dynamic firms operating in Fribourg today. FNF is also no stranger to innovation. In a bid to conquer new markets, the magazine will be published, for the first time in its history, in Mandarin Chinese. I am delighted that *Fribourg Network Freiburg* once again demonstrates the buoyancy and resourcefulness of our cantonal economy.

“FRIBOURG, SWITZERLAND'S BEST KEPT SECRET”*

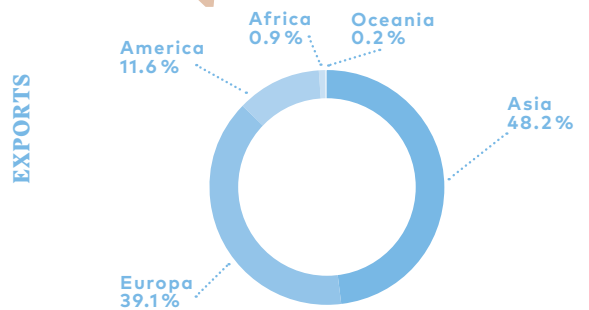
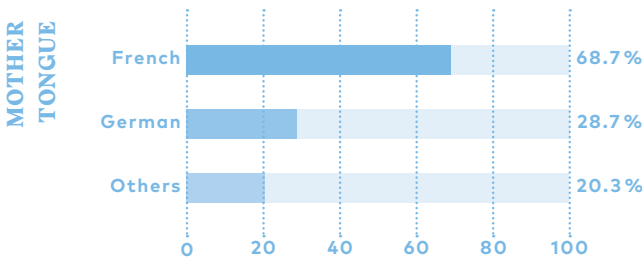
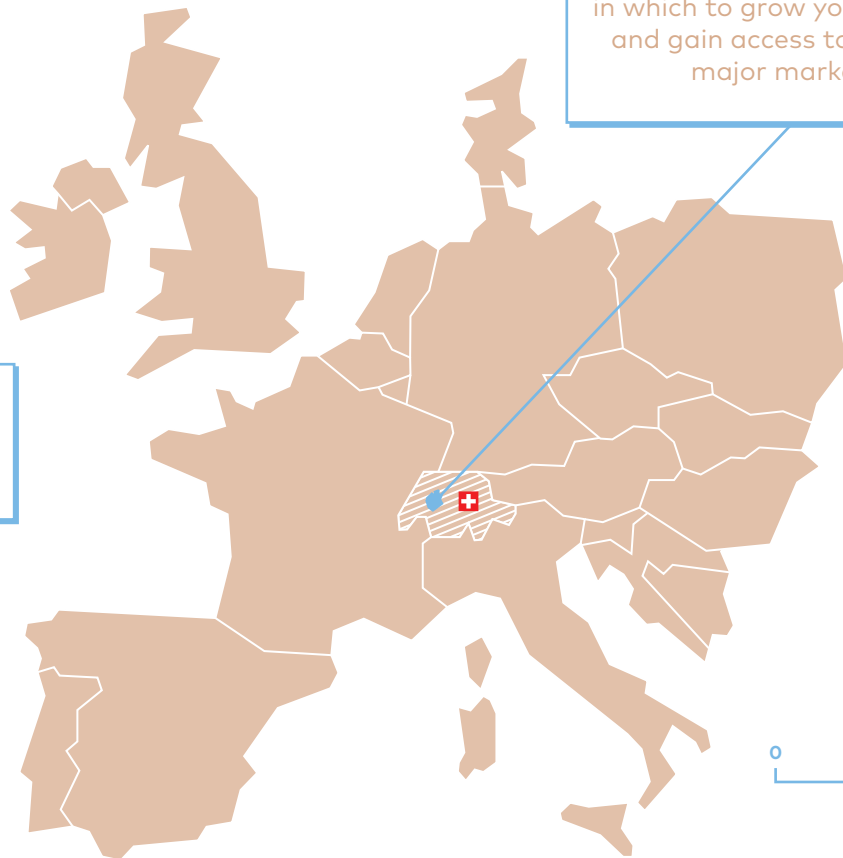
* Sheikha Lubna Al Qasimi, Government Minister, United Arab Emirates

Fribourg offers  the perfect environment in which to grow your business and gain access to Europe’s major markets.

13.72 %
future income tax rate

1.5 million
Inhabitants within a 45-minute radius

23.1 %
are under 20, making it the youngest population in Switzerland



TECHNOLOGY PARKS

- BLUEFACTORY**
→ www.bluefactory.ch
- LE VIVIER**
→ www.vivier.ch
- MARLY INNOVATION CENTER**
→ www.marly-innovation-center.org



TECHNOLOGY PLATFORMS

- BIOFACTORY COMPETENCE CENTER**
→ www.bcc.ch
- SWISS INTEGRATIVE CENTER FOR HUMAN HEALTH**
→ www.sichh.ch
- SMART LIVING LAB**
→ www.smartlivinglab.ch
- INNOSQUARE**
→ www.innosquare.com
 - Swiss Plastics Cluster
 - Cluster Energie & Bâtiment
 - Cluster Food & Nutrition
 - Robust and Safe Systems Center (ROSAS)
 - Digital Printing Competence Center
 - Plastics Innovation Center

UNIVERSITY

- UNIVERSITY OF FRIBOURG**
→ www.unifr.ch
- ADOLPHE MERKLE INSTITUTE**
→ www.am-institute.ch
- SCHOOL OF MANAGEMENT**
→ www.heg-fr.ch
- SCHOOL OF ENGINEERING**
→ www.heia-fr.ch
- EPFL FRIBOURG**
→ fribourg.epfl.ch



“The Fribourg Development Agency is here to assist you!”

Jean-Luc Mossier
Director

TESTIMONIALS

Phonak Communications

Scott Sports

INNOVATION AWARD A SHOWCASE OF ENTREPRENEURIAL CREATIVITY



Organized by the Fribourg Development Agency under the auspices of the Ministry of Economic Affairs of the canton of Fribourg, the biennial Innovation Award provides leading-edge companies with an opportunity to raise their profile and boost their reputation in Switzerland. Since its launch in 1991, the award has showcased the entrepreneurial creativity of some 30 companies based in Fribourg. In turn, the winners have gone on to enjoy much greater name recognition and higher visibility for their products.

The 13th Innovation Award, which will take place in 2016, is divided into two categories: companies that have been in operation for more than five years, and “start-ups” who have been operating five years or less. The entrant considered to be the “greenest” innovator will be awarded the special Cleantech distinction.

→ www.innovationfr.ch

Bumotec won in the SME category of the 2014-2015 Innovation Award.



WINNERS

2014	Winner	Bumotec SA
2014	Start-up	Bcomp Ltd
2014	Cleantech	Liebherr Machines Bulle SA
2012	Winner	JESA SA
2012	Start-up	Morphean Ltd
2012	Cleantech	Johnson Electric International Ltd
2009	Winner	ACL Instruments AG
2009	Winner	Asyrl SA
2007	Winner	Emerell Ltd
2007	Special Prize	InterBioCard SA
2005	Winner	Extramet AG
2005	Special Prize	3D Systems Ltd
2005	Special Prize	Medion Grifols Diagnostic Ltd
2003	Winner	Contrinex Ltd
2003	Special Prize	Frewitt Printing AG
2003	Special Prize	UCB Farchim Ltd
2001	Winner	Meggitt SA
2001	Special Prize	MagiXys SA
1999	Winner	Dartfish Ltd
1999	Special Prize	HID Global Switzerland SA
1999	Special Prize	Fillistorf Couleurs SA
1997	Winner	Digi Sens SA
1997	Special Prize	Ilford SA
1995	Winner	Ilford SA
1995	Special Prize	Phonak Communications Ltd
1993	Winner	Johnson Electric SA
1993	Special Prize	Zbinden Posieux SA
1991	Winner	Meggitt SA
1991	Special Prize	Perss Ingénieurs-Conseil SA
1991	Special Prize	Samvaz SA
1991	Special Prize	Charpentres Vial SA

Academic Excellence, Competitiveness,
Fribourg-Freiburg, Innovation, Leadership,
Strategy, Switzerland, Technologies, R&D,
blueFACTORY, Quality, Research, Science,
Management, Education, University, Master,
Vocational Training, International, Employment,
Universities of Applied Sciences, Profitability,
Center of Excellence, Interdisciplinary Research,
Technology Transfer, Swiss Integrative Center for
Human Health, Smart Living Lab, Multilingualism,
Technology Parks, Biofactory Competence Center,
Energy & Construction Cluster, Supply Chain, Skills,
Digital Printing Competence Center, Innosquare,
Marly Innovation Center, Robust and Safe Systems
Center, Food & Nutrition Cluster, Applied Research,
Adolphe Merkle Institute, Technology Platform,
Swiss Plastics Cluster, Competence Centers, BCC,

Added Value,
Bilingualism,
Investment,
Knowledge,
EPFL, MIC,
Dynamism,
Efficiency,

Office 37,

Students,

Le Vivier,

Blue Hall,

Success,

Schools,

Start-up,

Spin-off,

ROSAS,

SICHH,

WWW...

Fribourg / Switzerland : The Place to Grow



ETAT DE FRIBOURG
STAAT FREIBURG
STATE OF FRIBOURG



Fribourg Development Agency FDA
Switzerland

Bd de Pérolles 25, P.O. Box 1350
CH - 1701 Fribourg
T +41 26 304 14 00
www.promfr.ch

In September 2015, the cantonal Ministry of Economic Affairs organized the Fribourg Economic Summit on the subject of innovation, and invited Elmar Mock to give a keynote speech at the inaugural event.



ELMAR MOCK

“A SENSE OF INJUSTICE KILLS CREATIVITY”

In 1980, Elmar Mock co-invented the Swatch watch. He went on to found Creaholic, an engineering consultancy firm specializing in innovation support. He has made creativity his philosophy, as well as his trademark. Here, he discusses his take on innovation, using, as always, some vivid and highly effective metaphors to illustrate his point.

How do you incorporate innovation and creative thinking in a company?

First of all, it is important to distinguish between incremental innovation – or renovation – and breakthrough innovation. The first is the gradual improvement of an existing product in response to customer demands. I like to see it as akin to an animal’s survival instinct: hunt, eat and live to see another day. Most of society, and industry too, views tomorrow as an extension of today. Breakthrough innovation, in contrast, is driven by the view that tomorrow will be different from yesterday. It’s about making the impossible possible, like accepting that one day birds will swim and fish will fly. However, there is a conflict between the power to survive in the short term and the aspiration to live in the longer term. True innovation is essentially based on the latter.



So, are you saying that companies have to make a break with the present?

Many companies, including some that seemed to be totally stuck in their ways, have managed it. Take Nestlé, for example. Nespresso has allowed the company to completely distance itself from its other coffee brand, Nescafé. I'm quite sure that the people at Nescafé were totally opposed to the idea of selling freshly ground coffee in capsules. Yet, management prevailed. The rest is history, as we say!

Is innovation the exclusive preserve of executives then?

Innovation is only possible if the decision-makers want and support it. This is an absolute prerequisite. A management board that doesn't want a product won't let it be developed. Only a mother can decide to have another baby or not. You can't impose this choice.

Though, sheer will alone is not enough...

A baby is not conceived in the brain. The mother needs to have the right organs to procreate. In the business world, R&D centers are a bit like the womb, a natural incubator in which the baby grows. But these structures fear the mother and tend to clone her, reproduce a copy of her. You see, the mother is slightly narcissistic. She likes the image she has of her younger self. Worst of all for her, though, is realizing that the daughter is a complete copy of her mother.

Is this why external input is so important?

Yes, because an external gene will prompt or facilitate a different approach. It can come in the shape of a company like Creaholic, a university, a service provider or even an employee. But a body has antibodies to protect it. These search out and destroy everything that is different from the mother. Middle management is always opposed to innovation because it's often not an original part of the company DNA. You need to find a way to square this circle.

Switzerland excels in international innovation rankings? How do you explain this?

Innovation can only thrive in a climate of trust. A sense of injustice kills creativity. To be imaginative and put forward ideas requires you to believe that schools will work, that there are hospitals, that the police are not corrupt and that your neighbor is not your enemy. To build its nest, a bird finds a safe place where predators can't attack it. This feeling of security is not down to good policing, money or sound policy. It is a state of mind, a kind of emotional confidence that lets creativity flourish.

EXTRA CONTENT ONLINE

The digital edition of Fribourg Network Freiburg comes with a host of multimedia features. Just click on the icon (*see opposite*) to access additional content like articles, photos and videos. To read the magazine online or to download the eBook, simply go to the address below. Enjoy!

→ www.fribourgnetwork.ch

Our interactive content delivery partner:

→ www.publiwide.com



For more articles,
go to fribourgnetwork.ch

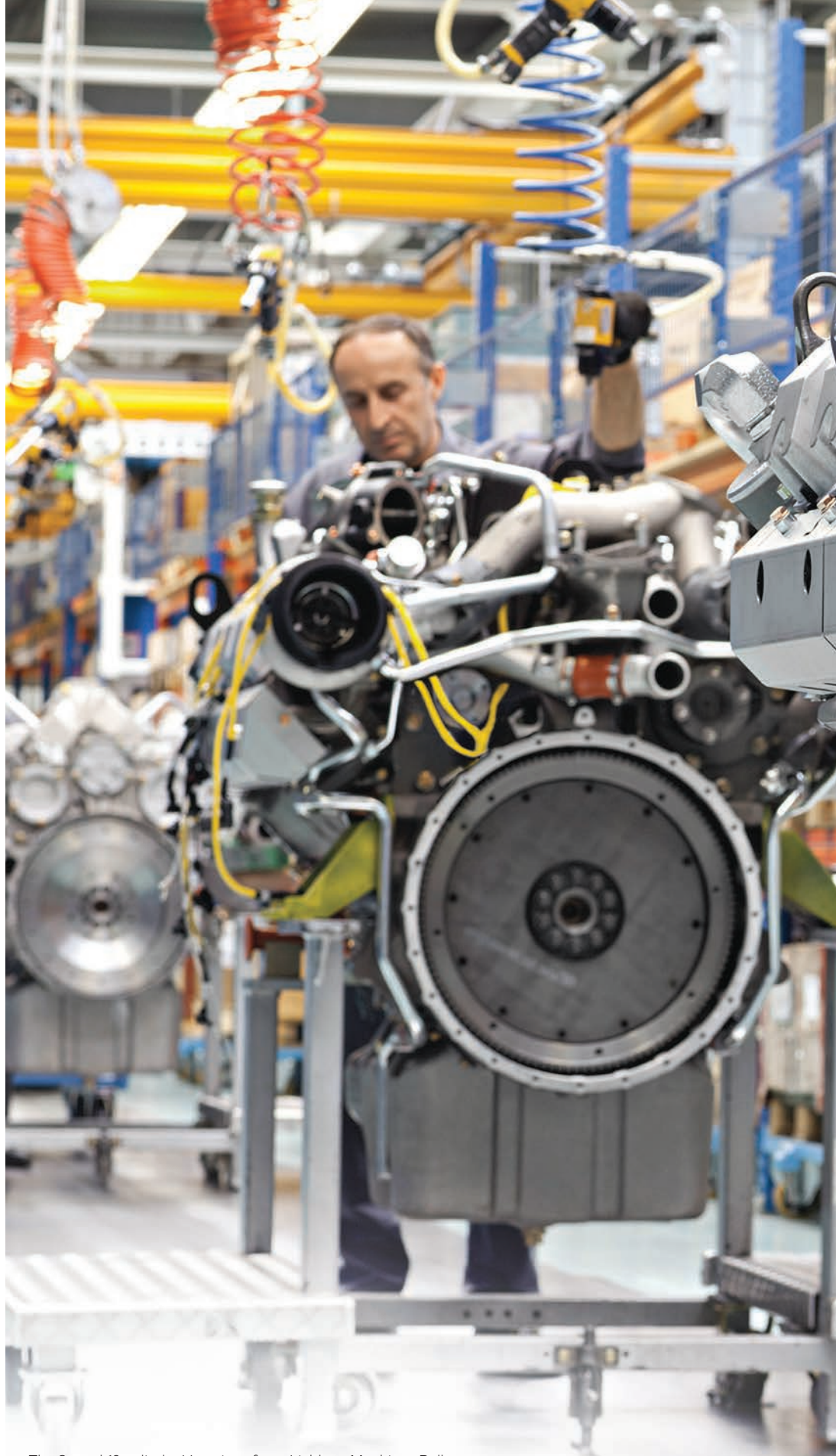


For more photos,
go to fribourgnetwork.ch



To watch the video,
go to fribourgnetwork.ch

- 13 DRIVERLESS BUSES TO GO THE LAST MILE**
TPF
- 15 DOUBLING THE RANGE OF ELECTRIC VEHICLES**
Swiss Hydrogen
- 15 TECHNOLOGY THAT FACILITATES INTEGRATION**
Phonak Communications
- 17 HELPING PRINTED AND DIGITAL BOOKS LIVING HAPPILY EVER AFTER**
Publiwide
- 17 GLOBALLY UNIQUE APPLIANCES**
LS Instruments
- 19 CORNERING THE MARKET**
Samvaz
- 19 HOW MODULAR FURNITURE CAN OPTIMIZE FLOWS**
PMF-System
- 20 JOËL MESOT**
Focus
- 20 NADINE GOBET**
Focus
- 21 FLYING AHEAD OF THE COMPETITION**
Fribourg-Freiburg Challenge
- 23 REDUCING THE SIDE-EFFECTS OF CHEMOTHERAPY**
InnoMedica
- 23 TAKING 3D BIOPRINTING TO A WHOLE NEW LEVEL**
RegenHu
- 25 TAKING INNOVATION TO NEW HEIGHTS**
Scott Sports
- 27 SCALABLE WRISTBANDS TO ENHANCE VISITOR EXPERIENCE**
Fribourg Region
- 27 A FRIBOURG START-UP IS TACKLING A PUBLIC HEALTH SCOURGE**
M3AT
- 29 MODULAR THINKING SETS FRIBOURG RESEARCH CENTER ON GLOBAL PATH**
BioFactory Competence Center



The 8- and 12-cylinder V engines from Liebherr Machines Bulle come in either a diesel or a gas version. They mostly power heavy-duty construction machinery like excavators and cranes. But they have also been used in Kamaz Master racing trucks, which finished second in the Dakar Rally and first in the Africa Eco Race in 2016.



LEADING EDGE PRODUCTS

Product innovation comes in all shapes and sizes. Take breakthrough innovation, for example. This refers to the emergence of an entirely new product or service that is completely distinct from anything else on the market. In contrast, incremental innovation does not involve radical change but is concerned rather with adding new features to an existing product or improving its technical features, components or proprietary software.





**TRAIN
SUSHI**



www.tpf.ch

"PROVEN" ENTHUSIASM AT THE SERVICE OF YOUR PROJECTS



◀ The prize-winning staff of the FRhappy Awards

Photo C. Rappo / FRhappy / Trimming Espace Gruyère

Espace Gruyère SA is very proud to represent the positive dynamic of Fribourg's economy, and looks forward to putting this attitude at your service for your next event.

**ESPACE
GRUYERE**

1630 Bulle | +41 26 919 86 50 | info@espace-gruyere.ch

www.espace-gruyere.ch



TPF

DRIVERLESS BUSES TO GO THE LAST MILE



As part of a project that could revolutionize public transport in Switzerland, a driverless bus has been shuttling visitors to the Marly Innovation Center (MIC) since summer 2015. In partnership with a start-up from the Federal Institute of Technology in Lausanne (*Ecole polytechnique fédérale de Lausanne – EPFL*), the canton's public transport provider, *Transports publics fribourgeois* (TPF), have come up with a 15-seat bus that transports travelers from the final stop of the existing bus route to the technology park. "This is an innovative answer to the last-mile problem faced by our sector", adds Vincent Ducrot, Managing Director of TPF, enthusiastically. In the end, the TPF chose an electric vehicle designed by French firm Navya. With a speed of around

25 km/h, the self-driving bus has been programmed to comply with the rules of the Swiss Road Traffic Act and to stop when it detects any obstacles in its path. During off-peak times, it can be called from a terminal or via a smartphone application. Its battery charges overnight.

Fribourg and the town of Sion are the first places in Switzerland to make this move. In Sion, CarPostal has introduced two driverless shuttles, one in the town itself, the other in a tourist area. "There has been much talk in the public transport sector about the potential of autonomous vehicles. But an idea like this has no future if it is not applied in practice", adds Vincent Ducrot. If the MIC experience proves positive, TPF will carry

out trials in other parts of the canton. "What we want is to give people with no links to the bus or rail networks an alternative transport option to the car." Unsurprisingly one of the primary benefits of the driverless bus is its costs. While a conventional bus usually requires an investment of somewhere between 400,000 and 500,000 francs, the bill for an autonomous vehicle (and its operating system) is half the price. "If, after a couple of years, demand for this bus route exceeds capacities, we still have the option of replacing the driverless bus with a conventional vehicle. A fully automated transport network is by no means our ultimate goal."

→ www.tpf.ch



groupe 

celsius
groupe 

connect
groupe 

entretec
groupe 

greenwatt
groupe 

groupe 
plus

ENERGY EFFICIENCY FOR YOUR COMPANY

If your company consumes over 500 000 kWh of electricity or more than 5 GWh of heat per year, you will be considered as a «large-scale consumer» and thus be subject to the requirements of the Canton of Freiburg Energy Law.

Groupe E and its subsidiaries provide a comprehensive range of products and services to support you in this area.

From audit to implementation and maintenance, we cooperate with you and use our know-how and experience in order to reduce your energy consumption and operating costs.

We will be delighted to provide further information.
Please call **026 352 51 21** or email us at **verkauf@groupe-e.ch**.



Partner and advisor EnAW

 **ENERGIE-AGENTUR**
DER WIRTSCHAFT EnAW

SWISS HYDROGEN
DOUBLING
THE RANGE
OF ELECTRIC
VEHICLES

The Swiss Hydrogen Fiat 500 covered a distance of just under 100,000 km, powered only by a hydrogen fuel cell and electric battery.



Many drivers are put off buying an electric automobile because of its limited range. Thanks to its hybrid technology that combines an electric battery and a hydrogen fuel cell, Swiss Hydrogen has managed to double the distance – nearly 400 km – that a clean vehicle can travel before its battery needs recharging. “When the driver notices that the battery will not last for the entire journey, he simply activates the fuel cell, which converts hydrogen into electricity”, explains Alexandre Closset, Managing Director of the company which recently moved to the blueFACTORY technology park. Prompted by positive test results on a Fiat 500 (see photograph), Swiss Hydrogen began its commercial operations in 2015. “We already have two large orders”, confides Alexandre Closset. “Based on the discussions we’re involved in at the moment, our battery could be fitted in standard vehicles as early as 2016.”

→ www.swisshydrogen.ch

PHONAK COMMUNICATIONS

TECHNOLOGY THAT FACILITATES INTEGRATION



“There have been huge advances in the hearing solutions industry. Today, quality aids allow the hearing impaired to have normal one-to-one conversations. The problem, though, is background noise, such as you get in a classroom or a conference environment”, explains Evert Dijkstra, Managing Director of Phonak Communications. Engineers at the company were convinced that they could solve this problem and set about perfecting Roger, the company’s digital wireless technology (see photograph). It powers a system made up of

receivers that clip on to the person’s hearing aid, as well as a tiny emitter worn by the teacher, colleague or conference speaker. According to Dijkstra, “Thanks to this technology, hearing-impaired children can attend mainstream schools.” The company, which employs 120 people at its Morat site, also produces intelligent hearing protection systems, micro earpieces and radio receivers.

→ www.phonak-communications.com

INNOVATION
CREATION
EXCELLENCE

ASPHALTE-DESIGN.CH

blueFACTORY
Fribourg – Freiburg

www.bluefactory.ch

PUBLIWIDE

HELPING PRINTED AND DIGITAL BOOKS LIVING HAPPILY EVER AFTER

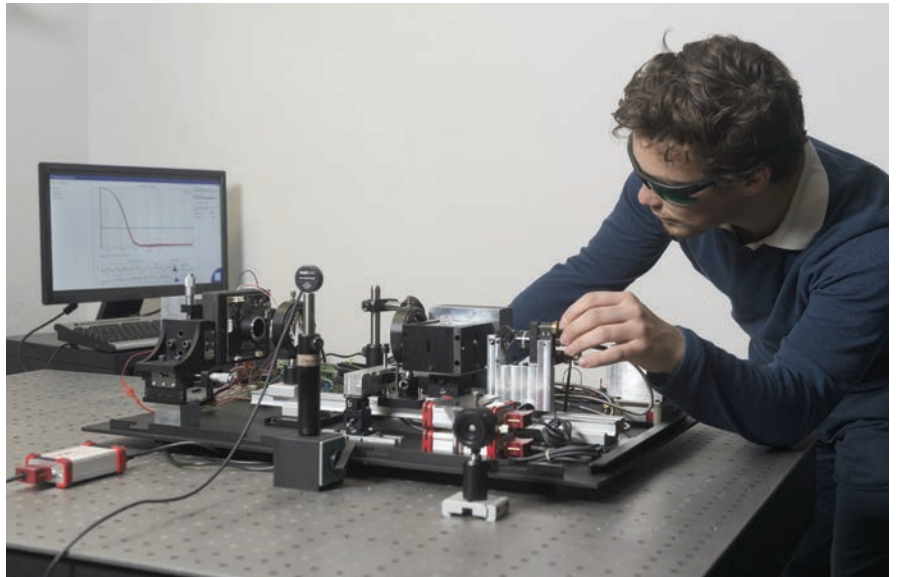
"It's often said that the end of printed books is near. But we have come up with a new model that should ensure its survival. Our solution combines actual paper with extra customized digital content." Since it was founded in 2010, Publiwide has helped a leading Italian publisher of university text books to overhaul its strategy. "Each printed book now comes with an access code to a website that features enriched and personalized content created by professors for their students", explains Sébastien Dubuis, Managing Director of the Fribourg-based start-up. Publiwide also produces and distributes interactive eBooks. "We're currently working with five major European publishing

houses to develop tailor-made solutions, such as breaking down books into thematic units." One of Publiwide's Swiss customers is the publishing house of the Federation of Technical Schools (FET). "We work on a content-sharing platform which lets our customer share these resources with an extensive community of teachers."

→ www.publiwide.com

LS INSTRUMENTS GLOBALLY UNIQUE APPLIANCES

The DSALS (Dynamic Small Angle Light Scattering) technology, developed by LS Instruments as part of the European research project Eurostars, characterizes micro- and nanoparticles.



LS Instruments operates in a highly specialized niche market. According to Managing Director Andreas Charles Völker, the company, founded in 2000 and now based at the blueFACTORY technology park, owes its outstanding reputation to "products that no-one else on the planet offers". This former spin-off from the Physics Department of the University of Fribourg designs and develops rheometers and optical instruments to analyze suspended particles. "Our first-ever devices were designed by Professors Frank Scheffold and Peter Schurtenberger specifically for use in their own laboratory. However, they soon realized that other universities could also benefit from their work." Some 15 years later, universities and research institutes still make up the customer base, but in recent times LS Instruments has started to acquire new clients; "primarily industry, pharmaceutical companies and food manufacturers".

→ www.lsinstruments.ch



Gugler Elektronik AG is investing in the future!

Gugler Elektronik AG understood very early that a provider of electronic manufacturing services has to extend his services beyond the assembly of electronic modules.

The company therefore invested in the last months in a flexible assembly line, combined with manual and automatic workstations. The new assembly line consists of 8 workstations with an integrated soldering robot cell. Plastic housings and plastic packages can be ultrasonic welded on two of the eight different workstations. Another workstation is equipped with a laser marking system for marking plastic housings.

The concept of the assembly line allows to be set up easily for different assembly and manufacturing jobs. Simple workpiece holders are responsible for the correct positioning of the workpieces. Different manufacturing or assembly jobs can be completed economically, thanks to short changeover times and low changeover costs.

The soldering robot is responsible for soldering stripped strands efficiently and cosmetically clean.

Another very important investment was made in a clean room of a surface of 44 m² and a purity class according to ISO 8 standards. More and more medical technology orders request a purity that can only be guaranteed, when manufactured in clean rooms. Gugler Elektronik AG will be certified by ISO 13485 towards the end of April 2016.



Gugler Elektronik AG

Route de Chésalles 62, CH-1723 Marly
+41 26 435 31 31 – info@gugler-elektronik.ch

www.gugler-elektronik.ch

SAMVAZ

CORNERING THE MARKET



On the outside, it looks like any other corner angle. But it is on the inside that the innovation lies – a foam core that reduces sound propagation without comprising the stability and application range of the product. “Like our other flagship products, we developed the sound-absorbing corner angle based on our on-site observations”, explains Patrik Wuillemin, Sales and Marketing Director at Samvaz. Compared to traditional acoustic insulation solutions, the major advantage of this product is that “a joiner can mount it in half the time it would take to put up a double wall”, continues Wuillemin. Made from laminated wood and insulating foam, the acoustic corner angle by Samvaz (see photograph), a family-run firm based in Châtel-Saint-Denis, has already been tested by EMPA (Swiss Federal Laboratories for Materials Science and Technology) and “produced really promising results”. Since it came to market at the end of 2014, “demand has grown rapidly, particularly abroad”.

→ www.samvaz.ch

PMF-SYSTEM

HOW MODULAR FURNITURE CAN OPTIMIZE FLOWS

“A lot of companies are currently optimizing their production flows with a view to shortening their lead times. Our products fit this optimization process perfectly”, states Lino Peverada, a graduate of the Fribourg School of Engineering and Architecture (HEIA-FR) and now Managing Director of PMF-System. The start-up’s quick assembly system, which is frequently compared to the famous interlocking Lego bricks, “makes it possible to adapt industrial furniture to changing needs on the ground”. Created in 2013 and based at the Marly Innovation Center, PMF-System has devised a plan which it hopes will put it on the fast track to becoming an important industry player both in its home canton and nationally. However, no matter what happens, it will never lose sight of its core business:



exhibition and interior design solutions. “Our products let people design and assemble their own structures, even if they don’t have welding equipment.”

→ www.pmf-system.ch



DIRECTOR (ORIGINALLY FROM FRIBOURG) OF THE PAUL SCHERRER INSTITUTE (PSI) IN AARGAU

JOËL MESOT

What is the research environment like for scientists at the PSI, the largest research center for natural and engineering sciences in Switzerland?

In the previous century, Swiss researchers enjoyed a great deal of freedom and had access to almost endless supply of funding. It is a completely different story for researchers working in the United States, who are constantly under pressure to come up with results. Today, Switzerland is somewhere between these two extremes. Thankfully, basic research is still well-regarded here. Don't forget that it takes decades to develop revolutionary technologies like our spot-scanning system (ed.: a proton beam therapy used in cancer treatments). This is why it is so important that Switzerland maintains its good research conditions.

Given that we are regularly at the top of international innovation rankings, Switzerland's research support system clearly works...

Absolutely! The Swiss Innovation Park was developed precisely to help Switzerland maintain its lead, particularly given the rising number of patents filed by BRICS nations. The PSI's PARK innovAARE is part of this innovation cluster.

Technology transfer appears to be an integral part of PSI activities...

Indeed. Every year, licenses generate millions of Swiss francs for the Institute. But we currently take a pragmatic case-by-case approach to technology transfer. Our hope is that PARK innovAARE will help to make this transfer more systematic and create more PSI spin-offs.

→ www.psi.ch



DIRECTOR OF THE FRIBOURG EMPLOYERS' FEDERATION (FPE)

NADINE GOBET

What is unique about innovation from Fribourg?

The sheer diversity of Fribourg's economy sets it apart from that of other regions. An innovative spirit permeates all business sectors in the canton. But innovation does not necessarily imply a breakthrough of spectacular proportions. What it boils down to is improving a product so that it outperforms anything else on the market and therefore better serves the needs of the customer. Many companies in Fribourg could be described as everyday innovators.

Is it not a drawback for Fribourg that SMEs dominate its economy?

Quite the opposite, in fact! When it comes to innovation, small companies can react much more quickly; for larger firms, change of any kind often means setting in motion a relatively long and complex process. Many Fribourg SMEs work as subcontractors for major Swiss and international concerns, precisely because of their high degree of flexibility and adaptability.

How can Fribourg companies capitalize on their adaptability?

Industry and academia need to step up their cooperation, especially given the outstanding quality of education in the canton. This should become a normal and natural state of affairs for entrepreneurs and faculty heads alike. The creation of several clusters constitutes a significant step in this direction.

→ www.federation-patronale.ch



The 59th Gordon Bennett started in Pau (France) on 27 August and ended on 4 September 2015. This prestigious gas balloon race dates back to 1906.

FRIBOURG-FREIBURG CHALLENGE

FLYING AHEAD OF THE COMPETITION



"Our strength lies in our systematic approach. We never stop questioning ourselves, analyzing our performances and using the results to become better." Nicolas Tièche, together with colleague Laurent Sciboz, took third place in the 2015 Gordon Bennett Cup. He vividly recalls his amazement at the quality of the competition when he first took part in the race back in 2004, and again in 2011. "I understood that to excel in this race, which is a bit like the America's Cup for gas balloons, you had to progress quickly and regularly by competing again and again and again." His project – Fribourg-Freiburg Challenge – was backed by extremely supportive sponsors "and had a social network-based communication strategy". The combination of the two meant that, in a very short space of time, the visibility of the project was sky-high.

It was not only the incredible discipline of the two men that allowed them to fly ahead of the competition in this prestigious and oldest gas balloon race in the world. Piloting "one of the lightest balloons" played a major part in their success. "A standard basket usually weighs around 70 kg but ours weighed only 20." Aluminum, Cordura and carbon were used to make the prototype basket. An inno-

vative high-frequency welding process was used instead of the usual wide outer banding. "We worked on every single feature of the balloon and managed to shave off a kilo here and there." Instead of the logos being painted directly on to the envelope, an ink-jet printer was used. "This lightened the balloon considerably!"

During the race, there were no fewer than 10 people back on terra firma assisting the two pilots. "Our team included meteorologists, routers, air controllers and IT specialists." In the next Gordon Bennett Cup race (which could be held in 2017 in Fribourg), the Fribourg-Freiburg Challenge team will have a new and innovative tool in their kit: a mathematical model of a gas balloon flight. "We developed it with the help from a number of Fribourg universities. No other team will have anything quite like it."

→ www.frchallenge.ch



Automation
technology park



Villaz-St-Pierre
www.vivier.ch



www.cpagroup.ch

Votre spécialiste en électro-érosion
par fil depuis plus de 30 ans

Tel : +41 (0)26 552 14 20
elefil@elefilswiss.com
www.elefilswiss.com

ELEFIL SWISS Z.I. du Vivier 22 - CH-1690 Villaz-St-Pierre



glass 2
energy

www.avectact.ch

*Une vision claire
des actions à entreprendre*

pour développer
l'entreprise, la clientèle, les ventes.



Lausanne | Villaz-St-Pierre | Vevey

INNOMEDICA REDUCING THE SIDE-EFFECTS OF CHEMOTHERAPY



"Current oncology research focuses heavily on immunotherapy. Yet, most cancer sufferers still have to undergo chemotherapy treatment. This is why we decided to buck the current trend and plough our energies into chemotherapy innovation", explains Peter Halbherr, Managing Director of InnoMedica. At its production facility at the Marly Innovation Center (see *photograph*), the young pharmaceutical company has developed a target-specific liposome technology that significantly reduces the side-effects of this invasive treatment. The active substances are protected by a lipos-

omal coating which slows down the rate at which they are metabolized by the liver and the kidneys. A chain of special sugar molecules ensures that the medication targets only the affected tissue. "This technology quite literally hits all the right spots", continues Halbherr. Although this innovative drug delivery system has been developed specifically with cancer in mind, InnoMedica sees the possibility of using it in the treatment of a range of inflammatory diseases like arteriosclerosis and rheumatism.

→ www.innomedica.com

REGENHU

TAKING 3D BIOPRINTING TO A WHOLE NEW LEVEL



"We provide the tools to enter the third dimension" is how regenHU describes its 3D printers developed specifically for the biomedical market. This spin-off of the University of Applied Sciences Bern, which joined the CPA Group in 2012, provides the biotech, medtech and cosmetics industries with the tools "that can practically recreate in vivo biological environments", explains Managing Director Marc Thurner. "Our machines could be used in an extremely broad range of applications, from the construction of soft and hard tissue (bone, skin etc.) to drugs testing and right up to the interaction between health and cancerous cells. The only limitation is biology itself!" Based in the Le Vivier

Technology Park in Villaz-St-Pierre, regenHU is one of the world's leading bioprinting specialists. "Because we've been involved from the early days of this technology, we have built up a robust network of partners and customers around the world."

→ www.regenhu.com



SEBASTIAN KIEBLE

NO SHORTCUTS

It's those days where your legs are firing on all cylinders, the watts are boosting and it seems like you could go on forever. All the preparation, the recovery, and the planning to make sure that that perfect day comes around when it really matters. It's on days like these where champions are made.

SCOTT-SPORTS.COM

© SCOTT SPORTS SA 2016 | Photo: Michael Rauschendorfer



FIDUCONSULT

ACCOUNTING FIRM FOR EXPERT OPINIONS AND AUDIT LEGAL AND TAX ADVICE

PARTNER FOR LOCAL BUSINESS



Fribourg

Fiduconsult Fribourg Ltd.
Rue des Pilettes 3
1705 Fribourg
Phone +41 26 422 72 00
fiduconsult@fiduconsult.ch



Bulle

Fiduconsult Bulle Ltd.
Rue Lécheretta 11
1630 Bulle
Phone +41 26 913 00 40
bulle@fiduconsult.ch

WWW.FIDUCONSULT.CH

CERTIFIED AUDITORS

FIDUCIAIRE | SUISSE

Membre d'EXPERTsuisse

Membre indépendant de EuraAuditInternational

FRIBOURG | BULLE | LAUSANNE | YVERDON | GENEVA | NEUCHÂTEL | LA CHAUX-DE-FONDS | SAIGNELÉGIER

SCOTT SPORTS TAKING INNOVATION TO NEW HEIGHTS

Givisiez-based sports manufacturer Scott Sports is constantly pushing the innovation envelope, according to its Vice President, Pascal Ducrot. Since the firm introduced its revolutionary carbon fiber mountain bike twenty years ago, it has celebrated a number of milestones, thanks to the innovative approach of its team. "Innovation is key", said Ducrot. "For us, it offers another differentiator, especially when you're talking about an expensive, high-quality product."

Scott Sports actively encourages its team to think creatively by talking to end users and going to events to keep apprised of latest developments in the market. "We also encourage our R&D people to use our products in their downtime, so that they get a feel for them", said Ducrot. In addition, Scott Sports also collaborates

with a number of universities to come up with innovative solutions. "We work regularly with various universities, such as Adelaide University in Australia on aerodynamic issues. We also have an ongoing project with the University of Fribourg about vibration damping on bikes and we work with high level motorsport companies on various carbon projects", said Ducrot.

Next up is the group's new carbon mountain bike, which is being brought out in June ahead of the Olympic Games in Rio de Janeiro in August. It's a racing bike that is also designed for regular sports enthusiasts", said Ducrot.

In September last year, Switzerland's Nino Schurter took the fourth Elite men's cross-country world title of his career in Vallnord, Andorra, on a Scott

bike called "Spark", defeating his long-term French rival Julien Absalon, who finished second. Schurter's tenth victory last year cemented the 29 year old Scott Sports athlete's best ever season.

→ www.scott-sports.com

It was on his Scott Spark 700 that Nino Schurter won his fourth world cross-country title in 2015.



Your meeting point at the language border!

Looking for a place set in the green to hold successful meetings, conferences, seminars or incentives?

Visit our website www.fribourgregion.ch/mice



Gruyères Party

Discover the magic of a medieval village and its castle, surrounded by mountains and green pastures. The town, privatised to your attention, offers a wide variety of stands, traditional and cultural activities and local specialties.



Vorsprung durch Technik **Audi** 

Le progrès. Intensément. La nouvelle Audi A4 Avant.

L'avance en matière de design et de technologie. Sportivité et avant-gardisme. Confort routier élevé, dynamisme fascinant et efficacité exemplaire. Avec, en prime, un habitacle généreux pour tous les occupants et un coffre incroyablement spacieux. L'Audi A4 Avant. Conçue et construite pour répondre aux plus hautes exigences: les vôtres.

Votre avantage: 10 ans de service gratuit.*

*Audi Swiss Service Package+: service 10 ans ou 100 000 km. Au premier terme échu.

Plus d'informations chez nous

amag

AMAG Fribourg

Rte de Villars 110, 1701 Fribourg
Tél. 026 408 41 42, www.fribourg.amag.ch

Point de vente

AMAG Bulle

Rue de Vuippens 55, 1630 Bulle
Tél. 026 916 13 11, www.bulle.amag.ch

FRIBOURG REGION SCALABLE WRISTBANDS TO ENHANCE VISITOR EXPERIENCE



The Fribourg Region wristband is a sightseeing pass that offers discounts to many local attractions like the Espace Jean Tinguely-Niki de Saint Phalle, as shown here.



Since 1st January 2016, visitors to the canton receive a special guest card when they pay the hotel board tax ("taxe de séjour"). In fact, it is not a card but a wristband, similar to those proudly worn by music festival goers in the summer months. Not only does it look smart, it acts smart too. With 500,000 produced for 2016, these wristbands, which are made exclusively in Fribourg, let visitors benefit from discounts offered by the 35 participating attractions like the *Maison Cailler* in Broc, the *Musée du papier peint* (wallpaper museum) in Mézières, not to mention the mini-train in Morat. According to Nicolas Schmid, project manager with the Fribourg Tourist Board (Fribourg Region), the value-added of the product lies in its scalability. Users can download an application to their smartphone and benefit, in real time, from offers posted online by participating service providers. "The possibilities are endless, both in terms of partners and activities!"

→ www.fribourgregion.ch

M3AT

A FRIBOURG START-UP IS TACKLING A PUBLIC HEALTH SCOURGE



"Urinary problems can be caused by a whole host of diseases, including diabetes, heart failure, obesity, not to mention pregnancy. Worldwide, one person in three suffers from urinary incontinence. Yet, it is still a taboo subject!" When he started work on a revolutionary technology for a portable, catheter-free, single-use urine bag, Benoît Cailleteau found himself battling against "the 2,000-year-old demon that is the urinal bottle". According to the CEO of M3AT, one in eight hospital care staff spends most of their working hours on patient urine management. Urocomfor (for men) and Urinex (for women) require neither washing

nor maintenance. Both products were developed by M3AT, which is based in Botterens, and are manufactured by neighboring company Mecaplast. Thanks to this innovative and discreet bag, mobile and bed-bound patients alike can relieve themselves in complete dignity and whenever they need to. The company also hopes that, at some point in the future, biodegradable material will replace the transparent polyethylene currently used to manufacture both Urocomfor and Urinex.

→ www.urocomfor.com



blueFACTORY
Fribourg – Freiburg

Fribourg
www.bluefactory.ch

Free your mind from manufacturing limitations, go Additive!

multi
metalup³

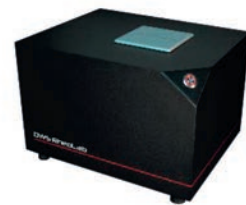
Your Metallic Additive Manufacturing Partner in Fribourg (Switzerland)
Passage du Cardinal 11, CH-1700 Fribourg
Phone: +41 77 404 34 45
www.metalup3.ch - info@metalup3.ch



FRIUP

SUPPORT PME KMU START-UP

LS instruments



Optical Rheology

biofactory competence center

TRAINING

Provides theoretical and practical training at all levels to the biopharmaceutical industry

biofactory competence center

SERVICES

Provides services, testing, process optimisation and R&D to the biopharmaceutical industry

biofactory competence center

FACILITY DESIGN

Designs and builds modular facilities for the production of biopharmaceuticals, R&D and training

BIOFACTORY COMPETENCE CENTER

MODULAR THINKING SETS FRIBOURG RESEARCH CENTER ON GLOBAL PATH



Based at the blueFACTORY technology park, the cutting-edge BioFactory Competence Center facility offers customers an insight into pharmaceutical manufacturing conditions.

The BioFactory Competence Center (BCC) in Fribourg might still be in its infancy but its ability to think big has set it on a global path. The not-for-profit company – which is based in the *Halle Bleue* (Blue Hall) of Fribourg's Blue Factory – operates under an innovative umbrella that is supported by both the Swiss and cantonal governments to provide support to the pharmaceutical industry. The BCC's role includes designing, constructing and operating flexible research, training and production facilities. Indeed, it is the center's ability to offer a unique kind of modular factory that is likely to introduce it to a whole new audience.

"Our innovative idea has been to come up with a new product: a modular factory facility that is designed to appeal to both pharma firms and start-ups alike", said Ian Marison, Director of the BCC and professor of engineering at the University of Fribourg. "We'd like to export this modular factory to other people and ship them around the world."

The modular factory units are typically much smaller than conventional pharmaceutical facilities at between 200 m² and 600 m², compared to around 3,000 m² for typical fac-

tories. "Our modular factories are 10 to 20 times cheaper and only take a year to build as opposed to four years for existing factories. Our goal is to make everything more efficient, which includes making drugs cheaper to produce."

The BCC has already designed a modular factory for an Israeli company and has had several talks with start-ups who are interested in commissioning a unit. "The modular units are also being used by the BCC for training and research purposes. They are GMP compliant facilities built to the standard used to manufacture pharmaceuticals. They are very unique. It allows us to simulate making pharmaceuticals by teaching both the theory and practical skills under GMP conditions. We train people from the pharma industry in Switzerland and Europe and our goal is also to attract people from further afield. We want to make Fribourg the center of excellence in biopharmaceutical manufacturing training and services", Marison said.

→ www.bcc.ch

- 33 COLLEGIALLY AND THE CREATIVE PROCESS**
Da Motus!
- 35 HELPING BUSINESS PUT PEOPLE FIRST**
BeeYoo
- 35 AN EASY WAY TO SHARE PROGRESS REPORTS**
Dartfish
- 37 INNOVATION, MADE TO MEASURE**
COMET
- 37 SETTING THE PACE IN A FAST-MOVING SECTOR**
CISEL Informatique
- 39 SHARING IDEAS THE AGILE WAY**
Scout24
- 41 NEVER FORGET THE FINAL PRODUCT**
Adolphe Merkle Institute
- 41 PUTTING PARTNERSHIPS FIRST**
Emerell
- 42 INFOGRAPHICS**
- 43 IN SEARCH OF OPERATIONAL EXCELLENCE**
Meggitt Sensing Systems
- 43 PREVENTING CORPORATE KNOWLEDGE LOSS**
JESA
- 45 NURTURING CREATIVITY AND INVENTIVENESS**
Innovation Lab
- 47 A PLATFORM FOR GREATER COLLABORATION**
Digital Printing Competence Center
- 47 STATE-OF-THE-ART DIAGNOSTICS**
Geberit
- 49 A NEW LEAN PHILOSOPHY**
Liebherr Machines Bulle



The technicians at the biotech production unit of UCB Farchim in Bulle use ultrafiltration and diafiltration to purify Cimzia®, one of the group's blockbuster drugs.



INNOVATIVE PROCESSES

In most cases, process innovation refers to the optimization of existing methods of production and/or distribution, or the development and adoption of brand new ones. Yet, an overhaul of a company's strategy or organizational structure – working methods, personnel training, workplace design, production chain management and customer/supplier relations – also comes under the process innovation banner.





Haute école d'ingénierie et d'architecture Fribourg
Hochschule für Technik und Architektur Freiburg



ARCHITECTURE CIVIL ENGINEERING CHEMISTRY COMPUTER SCIENCE TELECOMMUNICATIONS ELECTRICAL ENGINEERING MECHANICAL ENGINEERING TECHNICAL SCHOOL OF CONSTRUCTION

THE SCHOOL OF ENGINEERING AND ARCHITECTURE OF FRIBOURG, YOUR PARTNER FOR EDUCATION AND INNOVATION

ChemTech - Institute of Chemical Technology

ENERGY - Institute for Applied Research into Energy Systems

HumanTech - Technology for human well-being institute

iCoSys - Institute of Complex Systems

iPRINT - Institute for Printing

iRAP - Institute for Applied Plastics Research

iSIS - Institute of Smart and Secured Systems

iTEC - Institute of Construction and Environmental Technology

SeSi - Sustainable Engineering Systems Institute

TRANSFORM - Institute of Architecture: Heritage, Construction and Users

School of Engineering and Architecture of Fribourg
Boulevard de Pérolles 80 | CH - 1705 Fribourg
+41 26 429 66 11 | info@hefr.ch | www.heia-fr.ch

Hes·SO

Haute Ecole Spécialisée
de Suisse occidentale
University of Applied Sciences
Western Switzerland

DA MOTUS! COLLEGIALITY AND THE CREATIVE PROCESS



"In our business, you quickly become history if you mess up a performance once or twice in a row. This is why it is so important to keep reinventing yourself." According to Antonio Bühler, co-founder of the dance company Da Motus!, creativity goes hand in hand with innovation. "The challenge lies in being able to come up with new ideas all the time, but never compromising your identity - your brand - in the process." This is a tall order, but one that the company has addressed with aplomb. Since it was established 30 years ago by Brigitte Meuwly and Antonio Bühler, Da Motus! has performed in 44 countries, and in 2015 won the Swiss Dance Award for its work "*souffle*". "We've never followed trends, which maybe explains our longevity", reflects the dancer and choreographer. "Reinvention requires you to tap into your sixth sense and to be sensitive to everything around you. Then, the ideas start to flow." Of course, trial and error is always a part of the innovation process, "because you don't always know where this journey is going to take you. As well as a healthy dose of self-confidence, you need to take a few risks along the way even though you will inevitably have a few doubts!"

As Antonio Bühler explains, Da Motus! often draws inspiration for its original dance works from "the ideas and thoughts that are on our mind at the time. In some ways, the act of performing allows us to exorcise them". Though the two artistic directors are the main drivers of innovation in the company, the choreographer is quick to point out the important contribution that the dancers make to the creative process. "They move forward with us as part of a collegial rather than vertical relationship. It would be a real shame if we missed out on their creative input." Another reason behind the success of Da Motus! is its two-pronged creative strategy which involves devising works specifically for the stage, as well as urban dance works which are performed outside, on the public highways and byways. "These performances don't need scenery or heavy infrastructure. We can showcase them at festivals, especially in Asia and Latin America, which would probably be out of bounds to us under normal circumstances."

→ www.damotus.ch

"*souffle*" won the Swiss Dance Award 2013-2015, with one member of the jury (Brigitta Luisa Merki) declaring it "an outstanding current dance work".



CORE

Treuhand Cotting
Cotting Revision
Fiduciaire Revicor
Spörri MAS Treuhand



**Wenn es um die Zukunft geht,
zählt Erfahrung.**

Mit Standorten in Düringen, Fribourg und Bern betreuen wir KMUs, Grossunternehmen, Privatkunden, öffentlich-rechtliche Verwaltungen sowie NPOs, Verbände, Vereine und Stiftungen in der deutsch- und französischsprachigen Schweiz.

Unsere rund 60 Mitarbeitenden sind bestens ausgebildet und verfügen über eine langjährige Erfahrung. Zusammen bieten wir Ihnen ein breites Spektrum an Dienstleistungen in den folgenden Branchen:

Treuhand

Wirtschaftsprüfung

Steuern

Unternehmensberatung

Öffentliche Verwaltung / NPO

Management / Outsourcing

**Quand il s'agit d'avenir,
l'expérience compte.**

Dotés de sites à Guin, Fribourg et Berne, nous assurons un suivi pour les PME, les grandes entreprises, les particuliers, les administrations de droit public ou NPO, les associations, les fédérations et les fondations aussi bien en français qu'en allemand.

Nos quelques 60 collaboratrices et collaborateurs jouissent d'une excellente formation et bénéficient d'une expérience de longue date. Ensemble, nous proposons un large éventail de prestations dans les branches suivantes:

Fiduciaire

Révisions de comptes

Fiscalité

Conseils en gestion d'entreprise

Administration publique / NPO

Management / Outsourcing



**Partner
Partenaires**

v.l.n.r./d.g.à.d. Martin Gyger, Beat Mauron (Sitzleiter Düringen), Markus Jungo (verantwortlich für den Sitz Fribourg), Monika Hasler Kunz, Heinrich Cotting, Rinaldo Jendly, Christian Stritt (Sitzleiter Bern), Michael Münger, Harro Lüdi

Düringen

Chännelmattstrasse 9
3186 Düringen
T +41 26 492 78 78

Fribourg

Route des Arsenaux 41
1705 Fribourg
T +41 26 347 28 80

Bern

Eigerstrasse 60
3007 Bern
T +41 31 329 20 20

www.core-partner.ch

BEEYOO HELPING BUSINESS PUT PEOPLE FIRST



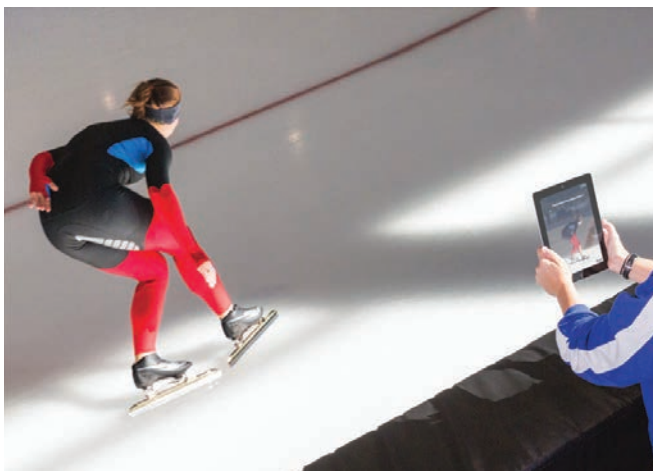
"Our approach focuses on putting people back at the heart of business. This in turn encourages a system whereby command and control is not a manager's primary job." Before founding BeeYoo in 2011, engineer Gaëlle Grand-Clément spent 12 years as an executive in the aeronautical and automotive industries. Her coaching firm also offers training programs designed specifically with managers in mind and include modules such as interpersonal communication, yoga and mindfulness meditation. The aim of these courses is to help executives redefine their role in the workplace and thus enhance staff empowerment and commitment. "We advocate a hierarchy that is based on

subsidiarity. This is far from being a recipe for anarchy! Inspirational leadership takes time to develop", explains Gaëlle Grand-Clément. This kind of change also presupposes "that the manager first works on him/herself so that he/she has the necessary self-awareness to move away from a role based on control to one that is built on trust".

→ www.beeyoo.ch

DARTFISH

AN EASY WAY TO SHARE PROGRESS REPORTS



Dartfish, a sports video software developer, has always kept pace with the latest information technology trends. "Initially we concentrated on PCs, then on smartphones. Today, it's all about the cloud", explains Serge Ayer, co-founder of this company that made its name thanks to image sequencing technology. In order to anticipate the needs of customers and their increasingly interconnected approach to work, Dartfish developed novel solutions offering multiple users – athletes, trainers, analysts – the possibility to share their progress. The company, which has around 60 employees worldwide, makes full use of one of many benefits of cloud computing: "Our tools can be accessed from any device (computer, tablet, smartphone) and users can move easily from one to the other, any-time, anywhere (see photograph). They also come with an offline function, which means that no internet connection is needed to use them."

→ www.dartfish.com

Profitez de notre offre exceptionnelle.

Modèles spéciaux PME avec jusqu'à 27% de rabais. Dans la limite des stocks disponibles.
Autres modèles avec équipement additionnel disponibles. Interrogez nos conseillers de vente.



Citan 109 CDI fourgon long 21 965.-

Peinture blanc arctique · Tissu noir · 90 ch · Boîte mécanique 5 vitesses. y c. climatisation, cloison traversante, hayon vitré

moins avantage de prix 18,5% **4065.-***

Prix au comptant 17 900.-

Vito 111 CDI fourgon court 32 270.-

Peinture blanc arctique · Tissu noir · 114 ch · Boîte mécanique 6 vitesses. y c. climatisation, hayon vitré, plancher bois, double

moins avantage de prix 22,8% **7370.-***

Prix au comptant 24 900.-

Sprinter 316 CDI fourgon toit normal 50 675.-

Peinture blanc arctique · Tissu noir · 163 ch · Boîte mécanique ECO Gear 6 vitesses. y c. climatisation, toit surélevé, cloison traversante, rétroviseur intérieur, hayon vitré, marchepied porte arrière, casier de rangement, habillage de l'espace de chargement

moins avantage de prix 27,2% **13 775.-***

Prix au comptant 36 900.-

SUCCURSALE VOITURES PARTICULIÈRES GRANGES-PACCOT (FRIBOURG)
Route d'Englisberg 4 · 1763 Granges-Paccot
T 026 460 28 28 · www.merbagretail.ch/granges-paccot

MERBAGRETAIL.CH
MERCEDES-BENZ AUTOMOBILES SA

* **Citan** 109 CDI fourgon 2897 mm long, 5 portes, 90 ch (66 kW), 1461 cm³, boîte mécanique 5 vitesses, poids total admissible 1950 kg. Prix de vente au comptant CHF 17 900.- (prix de base du véhicule CHF 20 600.- + équipement spécial CHF 1365.- = prix catalogue CHF 21 965.- moins rabais Merbag, valable jusqu'à révocation. Dans la limite des stocks disponibles. Consommation mixte: 4,8 l/100 km, émissions de CO₂: 123 g/km (moyenne de tous les véhicules neufs vendus en Suisse: 139 g CO₂/km), catégorie de rendement énergétique: A. **Vito** 111 CDI fourgon 3200 mm court, 5 portes, 114 ch (84 kW), 1598 cm³, boîte mécanique 6 vitesses, poids total admissible 3029 kg, prix de vente au comptant CHF 24 900.- (prix de base du véhicule CHF 29 100.- + équipement spécial CHF 3170.- = prix catalogue CHF 32 270.- moins rabais Merbag, valable jusqu'à révocation. Dans la limite des stocks disponibles. Consommation mixte: 6,4 l/100 km, émissions de CO₂: 169 g/km (moyenne de tous les véhicules neufs vendus en Suisse: 139 g CO₂/km), catégorie de rendement énergétique: D. **Sprinter** 316 CDI fourgon 3665 mm S, 5 portes, 163 ch (120 kW), 2143 cm³, boîte mécanique ECO Gear 6 vitesses, poids total admissible 3500 kg. Prix de vente au comptant CHF 36 900.- (prix de base du véhicule CHF 45 050.- + équipement spécial CHF 5625.- = prix catalogue CHF 50 675.- moins rabais Merbag, valable jusqu'à révocation. Dans la limite des stocks disponibles. Consommation mixte: 7,8 - 7,0 l/100 km, émissions de CO₂: 265 g/km (moyenne de tous les véhicules neufs vendus en Suisse: 139 g CO₂/km), catégorie de rendement énergétique: E. Recommandation de prix sans engagement. Offre uniquement valable pour un usage commercial. Tous les prix en CHF hors TVA. Prix sans forfait de livraison. Offre limitée. Sous réserve d'erreurs involontaires et de modifications.

CISEL Informatique

L'expertise et l'innovation informatique à votre service depuis plus de 45 ans.

Eco-responsable, CISEL vous accompagne avec des solutions adaptées à vos besoins :

- Conseil, intégration de systèmes SAP ERP
- Infrastructure et système
- Solutions Cloud (CRM, RH, SAP HANA, Analytics,...)
- Hébergement dans 2 DataCenters 100% suisses
- Délégation de compétences



www.cisel.ch

Matran – Rte de la Sablière 1 – CH-1753 Matran – T +41 26 557 59 00
Morges – Av. Riond-Bosson 12 – CH-1110 Morges – T +41 21 811 25 00

CISEL
IT

Simple et performant

COMET INNOVATION, MADE TO MEASURE

Thanks to its ebeam technology, the COMET Group was able to develop and adopt new and innovative manufacturing processes.



When COMET successfully helped Tetra Pak develop a new process to sterilize its beverage packaging material, it decided to go one step further. The Flamatt-based company went on, in close cooperation with the Swedish multinational, to create an entirely new set of standards. You could say that it 'killed two birds with one stone'. Thanks to ebeam technology, "Tetrapak has been able to increase its production rate by 160%, to 40,000 packs per hour", explains Charles Flükiger, Head of the ebeam Division. Using electron beams, this technology means that the sterilization process is entirely contact-free. The Fribourg arm of the COMET Group believes in innovation for and with the customer. For proof, you need look no further than the work of this specialist in X-ray, radiofrequency and ebeam solutions in the semi-conductor sector "which is evolving at breakneck speed". The company has also opened centers in Silicon Valley and South Korea "so that we are right on our customers' doorstep".

→ www.comet-group.com

CISEL INFORMATIQUE

SETTING THE PACE IN A FAST-MOVING SECTOR

"In our line of business, we operate according to rather special timescales. For us, two years ago is already ancient history. This is why being up to speed with the latest developments is not enough; we always have to be at least one step ahead!" Nonetheless, Nicolas Roch-Neirey, CEO of CISEL Informatique, remains upbeat: "CISEL has always kept pace with technological advances". For example, the company, which specializes in IT outsourcing and ERP (Enterprise Resource Planning) integration, foresaw the cloud-computing revolution. To make sure that it is able to anticipate future customer needs and come up with

appropriate solutions, CISEL has set up "internal technology watch units". In addition, the relationship that CISEL staff develop with software and computer hardware publishers lays the foundations on which "we can build a real relationship of trust with our customers" and to accompany them at informative events like a visit to the IBM Research Center in Rüschlikon (Zurich, Switzerland).

→ www.cisel.ch

THE FIRST ADDRESS

Regional market expertise, professionalism and personal support are a matter of course for us. It's how we provide our customers with **decisive advantages.**



1'082'000

unique users
per month²



6,5 MILLION

average visits
per month in 2015¹



58%

mobile visits in 2015
growth in comparison to the previous year: +13%³



75'000

online ads per day



8,1%

unique users
growth per month in comparison to 2014²

Source: ¹Net-Metrix ²Net-Metrix Profile Publication 2015-2 / 2014-2 ³Net-Metrix October 2014 / 2015 ⁴Net-Metrix Profile Publication 2015-2

immoscout24.ch



CREDIT SUISSE



I want direct
access to investment
professionals.

**Credit Suisse Invest – The New Investment
Advisory Service.**

Our Expert investment solution puts the know-how of globally networked specialists at your disposal. Furthermore, you receive timely and relevant investment ideas and strategic investment advisory services from a single source. All at an attractive price.

Learn more at: credit-suisse.com/invest



This notice does not constitute an offer or a recommendation to buy or sell financial instruments or banking services and does not release the recipient from exercising his/her own judgment. Copyright © 2016 Credit Suisse Group AG and/or its affiliated companies. All rights reserved.

SCOUT24

SHARING IDEAS THE AGILE WAY



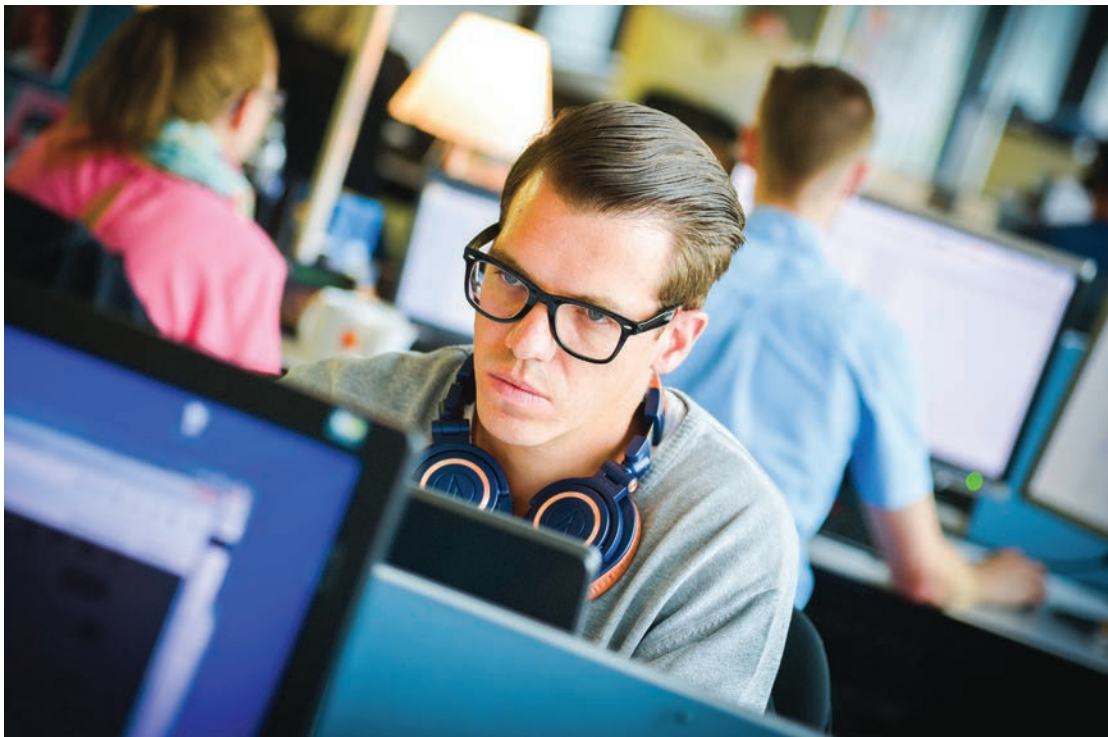
"The only constant thing about us is that we are continually changing!", declares the Managing Director of Scout24, Olivier Rihs. In many ways, this declaration can be seen as a word of caution to future employees, "If they're looking for a routine job, they should look elsewhere", he smiles. In its brightly colored headquarters in Flamatt, the company eats, drinks, and breathes innovation. "Speed is of the essence in our business. If developments come too late, we lose users' trust." For the online advertising specialist, "Innovation doesn't mean reinventing the wheel every time. It's about simplifying services to the extreme in order to make them as convenient as possible for both buyers and sellers." Scout24 has exploited the potential of digital technology, particularly data analysis, to become a market leader. Regardless of whether it is the MedialImpact ser-

vice, ImmoScout24, AutoScout24, MotoScout24, or the Anibis portal, "Every single one of our innovations addresses the answer to the fundamental question 'what does the ordinary woman and man on the street actually want?'"

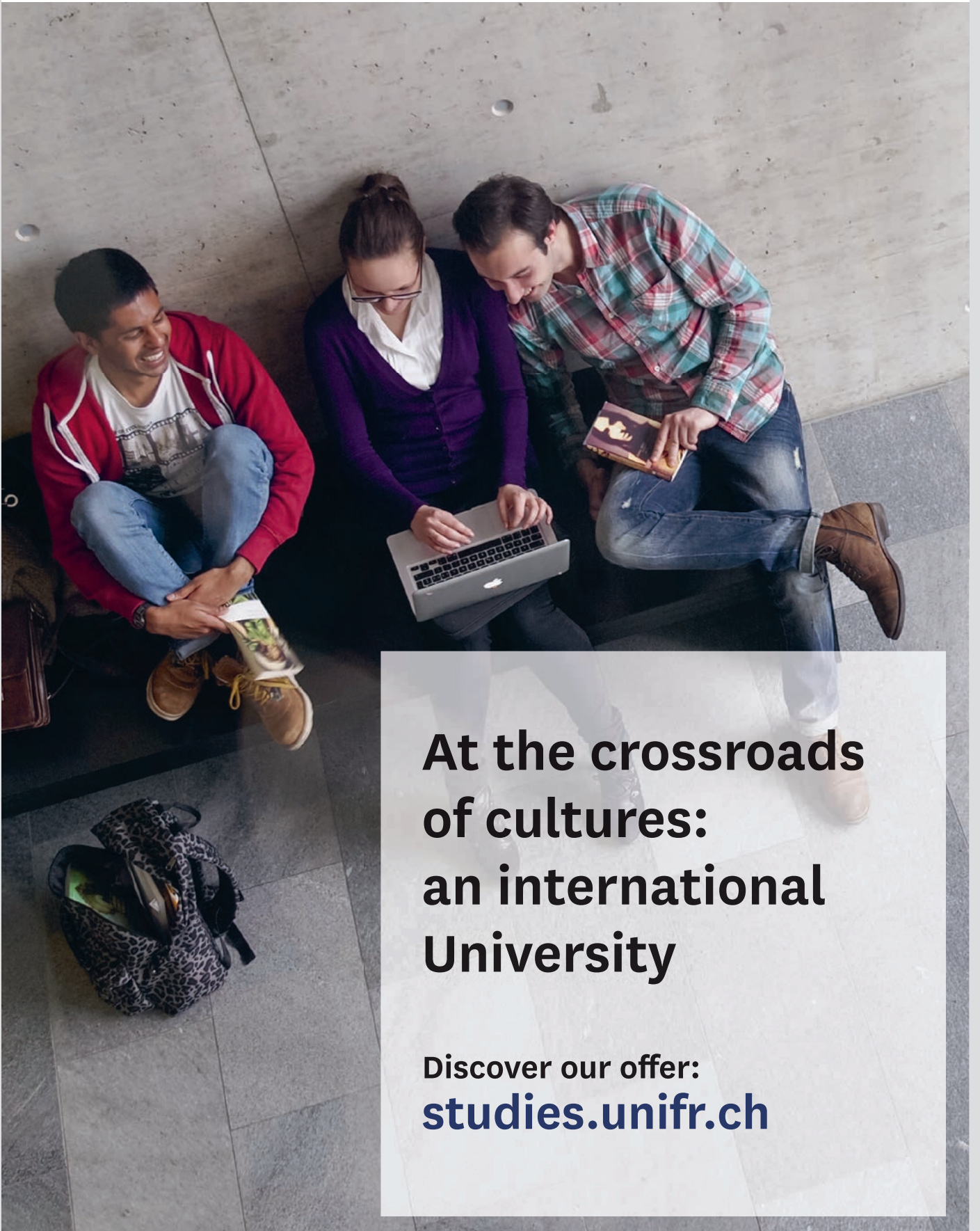
Innovation can also be seen in the corporate culture and structure of the work environment of Scout24. Famous in Switzerland for its Google-like infrastructure (bright colors, company gym, free fruit), the Flamatt-based company has no problems rethinking and revamping its processes if it means improving their efficiency. As the managing director explains, "We decided to shorten our sprints [software project development] from one month to two weeks. Once the sprint is finished, we release the new product on our platform but still continue to develop it." A fur-

ther innovation by management is the introduction of the "agile method, which encourages employees to sit around a table and share their ideas. Every morning, they arrive with their post-its and a pen in hand!" The company has also reorganized the actual work space "so that the developer sits beside the person who is going to market the finished product".

→ www.scout24.ch



The 250-strong workforce of Scout24 are actively encouraged to share their ideas and suggestions.



At the crossroads of cultures: an international University

Discover our offer:
studies.unifr.ch

ADOLPHE MERKLE INSTITUTE NEVER FORGET THE FINAL PRODUCT



The Adolphe Merkle Institute leads the world in nanoscience and material science research. An image from a transmission electron microscope.

"It's important never to forget that there are actual products at the end of the innovation value chain!" points out Marc Pauchard, Associate Director of the Adolphe Merkle Institute (AMI). "To successfully turn an idea into a viable product, academic and industrial partners need to work closely together. That's why we regularly take our students on company visits and develop specific ideas based on these discussions", continues the head of the prestigious center of competence in nanomaterials that is affiliated with the University of Fribourg. Business owners use these visits to talk to AMI researchers about the problems they encounter in their day-to-day work. "Our specialists then start work on finding a solution." Conversely, "Industry sometimes benefits from the basic technologies generated by the fundamental research carried out at AMI. For example, a Liechtenstein company has created an adhesive dental cement using an innovative material developed by one of our doctoral students."

→ www.am-institute.ch

EMERELL PUTTING PARTNERSHIPS FIRST

To become a leading player in the special adhesives and polymers market, Emerell management have made the strategic decision to focus their energies on optimizing manufacturing processes rather than developing and selling their own products. "Our customers come to us with an idea, which we then transform into a viable product that can be mass-produced", explains Adrian Leumann, Managing Director of the company that has four sites in Switzerland and Germany. At its facility in Schmittlen (formerly Collano Services Extrusion), the company spe-

cializes in the manufacture of blown film extrusion. "Many members of the chemical industry feel that they have to do everything themselves; but, not us. We are always on the lookout for new partners, like higher education providers and other companies, to work with." For Emerell, it is about "fine-tuning the production technique" and thereby giving the market precisely what it needs.

→ www.emerell.com

3 TECHNOLOGY PARKS

25

companies

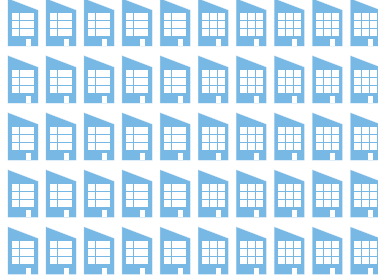
Le Vivier



50

companies

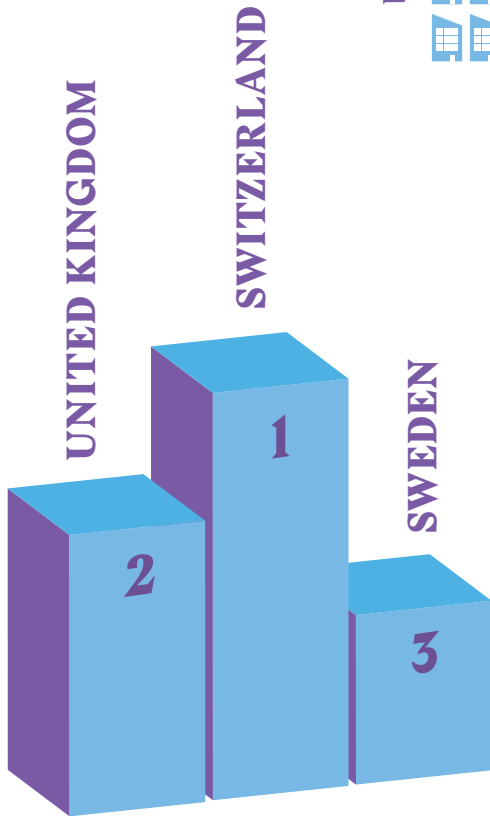
blueFACTORY



112

companies

Marly Innovation Center



33.5%

Contribution of the quaternary sector to cantonal GDP. This sector covers the knowledge-intensive, innovation-driven parts of secondary and tertiary sectors, such as watchmaking (traditionally in the secondary sector) and IT services (tertiary sector).

For the third year running, **Switzerland has topped the Global Innovation Ranking (2015)**, beating off competition from the likes of the United Kingdom, Sweden, the Netherlands and the United States. This annual ranking, published by the World Intellectual Property Organization (WIPO), is based on 79 indicators. Switzerland performs particularly well on the following fronts: environmental performance (1st); market capitalization (1st); Madrid trademark app. holders (1st); PCT resident patent app. (1st); high- & medium-high-tech manufacturers (2nd); political stability (2nd); ICT access (2nd); computer software spending (2nd), QS university ranking, average score Top 3 (3rd); knowledge-intensive employment (3rd); university/industry research collaboration (3rd).

MEGGITT SENSING SYSTEMS IN SEARCH OF OPERATIONAL EXCELLENCE

"Meggitt Sensing Systems (MSS) is renowned world-wide for its technical expertise, though its operational processes are in need of some improvement." Romain Vittot, Operational Excellence Manager at MSS, is in charge of rolling out a lean management system across the Fribourg company that specializes in monitoring solutions. According to Vittot, the main aims are "developing employee skills, optimizing our processes to maximize customer satisfaction, managing day-to-day performance, and ultimately giving ourselves an extra competitive advantage". Launched in 2013, the Meggitt Production System comprises five key elements: strategy,

organization, leadership cultures, tools and methods, and performance management. "As part of its lean management approach, MSS will have to adapt its existing business model to accommodate several specific requirements, namely the use of state-of-the-art technologies to develop and manufacture first-rate products, the manufacture of an extensive product mix that is based on older technologies, as well as shorter turnaround times, improved service delivery and better quality. Quite a challenge, indeed!"

→ www.meggittsensingsystems.com

JESA PREVENTING CORPORATE KNOWLEDGE LOSS



JESA has set for itself the ambitious goal of building a database to store the knowledge it has acquired over the years. The company, which specializes in ball bearings and plastic injection solutions, is relying on its own employees, especially the most experienced among them, to help them safeguard this intangible asset. "Many of our staff members who are nearing retirement are happy to pass on the knowledge they have gained during their careers", explains Thomas Doki-Thonon, leader of the engineering team at the company based in Villars-sur-Glâne. "Preventing knowledge loss means saving valuable time. But a project on this scale doesn't just materialize as if by magic." Management, therefore, have introduced a number of measures. "For example, we have compiled a list of questions to be completed by every staff member involved in project reviews. This standardizes the knowledge and lays a solid foundation for technological innovation, while raising awareness of how important knowledge conservation is."

→ www.jesa.com



Essayez-le vite.

Le nouveau Touran. Toujours à la hauteur.

Polyvalent, ce génie de l'espace vous offre tout le nécessaire pour relever brillamment les défis quotidiens en famille. Design dynamique, systèmes d'assistance innovants et concept d'espace flexible offrant jusqu'à 7 places: le Touran est en tout point synonyme de grand confort de conduite.



Das Auto.

amag

AMAG Fribourg
Rte de Villars 103
1701 Fribourg
Tél. 026 408 41 40
www.fribourg.amag.ch

Partenaire de vente:
AMAG Bulle
Rue de Vuippens 55
1630 Bulle
Tél. 026 916 13 10

**Simplement
là pour les
entreprises**

Votre banque en toute simplicité

VALIANT

INNOVATION LAB

NURTURING CREATIVITY
AND INVENTIVENESS

An old ski gondola, leather armchairs, desks and pallets stacked on top of one another may not seem like conventional office furniture, but then Innovation Lab is not your conventional office. Established in September 2015 in the basement of the Fribourg School of Management (HEG-FR), the Innovation Lab (see photos) is a place where students from the Pérolles campus can meet up, give presentations, work, discuss or just relax. "We also organize events like the 3 Day Startup, which helps young graduates get their business projects off the ground", explains Jean-Marie Ayer, Director of the Innovation Lab Association.

"Engineers, biologists and economists are just some of the students that use the Innovation Lab. Our approach is resolutely multidisciplinary and our one and only goal is to nurture users' entrepreneurial and innovative spirit", declares Rico Baldegger, Director of the HEG-FR and the driving force behind the project. "I drew inspiration from what cities in the United States such as Boston and Cambridge are doing. Our primary objective is not to promote spin-offs. For me, the Innovation Lab is a kind of pre-incubator, which means that there is no overlap between our work and the coaching and support services already offered by Fri Up."

→ www.innovationlabs.ch



Helveticum-Inkasso SA

Your collection expert in Switzerland



Helveticum Inkasso AG / SA
Rue de Romont 12
Case postale 726
CH – 1701 Fribourg

T +41 (0)26 347 58 58
M +41 (0)79 434 90 72
info@helveticum-inkasso.ch
www.helveticum-inkasso.ch

Patrick Haymoz
and his team

HELVETICUM
Inkasso SA-AG



**KNOW
HOW**
INSTALLED

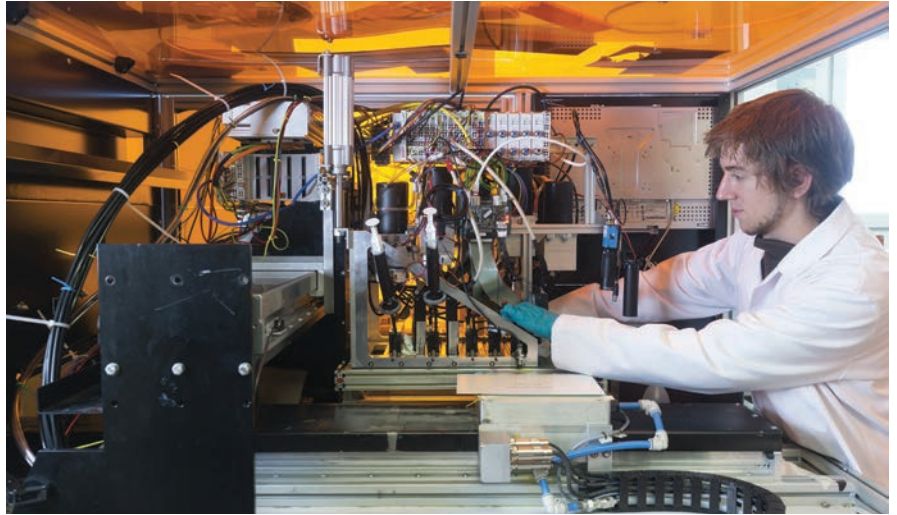
Mepla et PushFit

Des tubes multicouches « Ecodesign » pour une parfaite gestion de l'eau et une meilleure qualité de vie.

Geberit Fabrication SA / 1762 Givisiez / Suisse
www.geberit.com

GEBERIT

DIGITAL PRINTING COMPETENCE CENTER
**A PLATFORM
 FOR GREATER
 COLLABORATION**



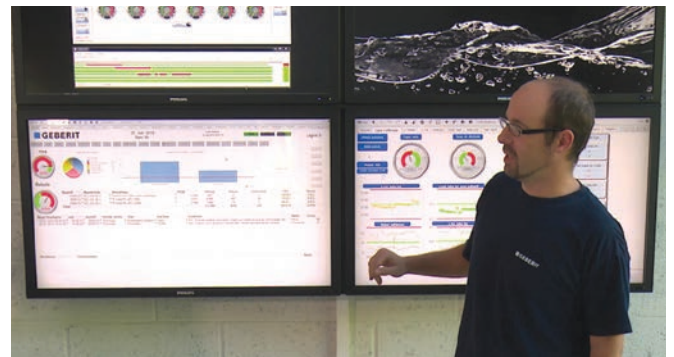
"Inkjet is a key printing technology, yet for many years Europe had only one competence center, in England", explains Fritz Bircher, Director of the iPrint Institute of the Fribourg School of Engineering and Architecture (HEIA-FR). Enter the Digital Printing Competence Center (DPCC), part of the Innosquare technology and innovation platform. The aim of the DPCC is to foster collaboration between the academic community and the private sector on digital printing projects. "Applied research drives everything we do, and it is important that industry is able to leverage the results immediately", adds Professor Bircher, citing the packaging industry and life sciences' fields such as tissue engineering as some of the areas in which this technology is used. "The DPCC also offers international training courses that deal with all aspects of inkjet printing technology."

→ www.innosquare.com

GEBERIT
STATE-OF-THE-ART DIAGNOSTICS



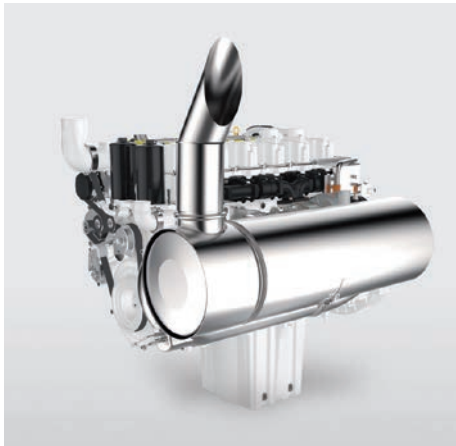
At its facilities in Givisiez, Geberit boasts six production lines fitted with the ultramodern Pulse diagnostics system (see photograph). "This fully automated instrument lets us analyze our entire production process in real time, a bit like the way a doctor would use a stethoscope", as Michel Pittet, Managing Director of the multilayer composite piping manufacturer, proudly explains. "The indicators are continually updated, while we use the resulting statistical data to anticipate problems and optimize our processes." Another advantage of this system is that access is not location-dependent, and operators can make adjustments



to the production line at any time. According to the CEO, "Pulse had already paid for itself within the space of two years and is now absolutely critical for our company's profitability."

→ www.geberit.com

Components for your Equipment.



Liebherr as a strong partner for systems expertise

In Bulle (Switzerland) eleven different categories of diesel engines, from 130 kW to 750 kW and gas engines in performance classes 100 kW to 516 kW are developed and produced. For more than 30 years, Liebherr has also developed and manufactured hydraulic axial piston pumps and motors as well as hydraulic valves and components at this location. A range of gearboxes complete the product portfolio. These complete systems equip our customers with a modern and powerful drivetrain for their machines.

Liebherr Machines Bulle SA
45, rue de l'Industrie
1630 Bulle/FR, Schweiz
Tel.: +41 26 913 3111
www.facebook.com/LiebherrConstruction
www.liebherr.com

LIEBHERR

LIEBHERR MACHINES BULLE

A NEW LEAN PHILOSOPHY

The creation of a lean management department in September 2013 is part of a new long-term strategy for Liebherr Machines Bulle SA (LMB). The aim of this workplace organization method, which originated in Japan, is to eliminate waste and in doing so improve the performance of a production or business unit. "The three main principles are: standard-setting, continual improvement and coordinated working practices. Together, these pave the way for the introduction of process excellence across the entire value chain, which should in turn allow us to meet even the most exacting customer demands", explains Sabine Kitzlinger, Head of Lean Management at LMB.

Claude Ambrosini, one of LMB's four managing directors, is fully aware that gaining the acceptance of the 1,000-strong workforce, including himself, will be a major challenge. "Lean management is a philosophy that must be lived by the company and instilled in every single one of its employees, starting with the management board, of course!"

In the interests of the smooth adoption of the new approach, Sabine Kitzlinger has created a team of "lean scouts" who liaise between the lean management department and the rest of the company. A special

lean management info point has also been set up in the workshop, providing detailed information on lean management and the "lean" advances made by the company. Thanks to the indicators used to track the progress of the reform process, the company is able to measure the improvements that it has made.

Lean management will be first introduced in the production sector before being rolled out across the company. "All services, including accounting, R&D and human resources, play their part in helping us achieve our first and foremost objective: providing our customers with quality products at a fair price", adds Roland Schletter, a member of the LMB's Lean Management Department.

LMB specializes in the development and manufacture of high-performance diesel and gas engines, injection systems, hydraulic components and splitter boxes, but it does not intend to stop there. As Claude Ambrosini explains, "Once lean management is fully up and running, we'll tackle the next item on our list: Industry 4.0. One thing at a time!"

→ www.liebherr.com



Liebherr Machines Bulle has plans to roll out the lean management approach across the company. The first to receive the lean treatment is its production unit. Here, the diesel injection system assembly line in the LMB clean room.

- 53 CONQUERING DREAM MARKETS**
Bcomp
- 55 SOFT BOOTS FOR TOUGH CONDITIONS**
DAHU
- 55 SUCCESS POWERED BY SOLAR PANELS**
Glass2energy
- 57 A NICHE MARKET WITH HUGE POTENTIAL**
Edy Toscano
- 57 A LEADING LIGHT IN THE LED REVOLUTION**
WAGO Contact
- 59 R&D CENTERS IN ITS SIGHTS**
Frewitt
- 59 SECURING THE JAPANESE MARKET WITH ADVANCED ROBOTICS**
UCB Farchim
- 60 PIERROT AYER**
Focus
- 60 ROLF INGOLD**
Focus
- 61 A 19-STORY LANDMARK IN THE HEART OF FRIBOURG**
Steiner
- 63 ONE TECHNOLOGY, MULTIPLE MARKETS**
Morphean
- 65 REACHING NEW AUDIENCES**
Fribourg Chamber Orchestra
- 65 REVOLUTIONIZING THE CLASSROOM**
OLF
- 67 SPIRIT COUNTRIES IN ITS SIGHTS**
Extramet
- 69 NICHE MARKETS - AN ENDLESS SOURCE OF OPPORTUNITIES**
MetalUp3
- 69 DRILLING DEEPER INTO EXISTING MARKETS**
Bumotec





3

NEW MARKETS

Market innovation is when a company offers its services or products in previously unserved regions/territories, market segments or sectors. In other words, the company creates a new use for or provides new access to an existing product without having to make major changes to it beforehand. Behind this novel marketing approach often lies an entirely new economic model.



PROGRESSIA

FIDUCIARY AND MANAGEMENT COMPANY LTD



Management



Accounting



Audit and Expertises



Establishment of Companies



Tax services



Outsourcing

Our role in
your future
is important

- *At your service for more than 50 years*
- *Extensive international experience*
- *English, French, German*

Rue Saint-Pierre 18 | CH-1701 Fribourg
P + 41 26 350 35 00 | F + 41 26 350 35 99
office@progressia.ch | www.progressia.ch



Member of the Swiss Institute of Certified Accountants and Tax Consultants

Member of TREUHAND | SUISSE



PrimeGlobal | An Association of Independent Accounting Firms



Bayer MaterialScience

Shaped by
our history



Defined by
our future

This is a defining moment in our history, creating our future. It's the launch of our visionary new company, one with a pioneering history stretching back more than 150 years. Bayer MaterialScience is now Covestro, with past achievements confidently powering our destiny. It's time for a bold new vision and a more agile organization, one that we can propel forward with greater certainty and speed.

Covestro International SA
Route de Beaumont 10
CH - 1701 Fribourg
Tel: +41 (0)26 422 81 82

covestro.com

The success of its freeride skis has enabled the start-up Bcomp to penetrate new markets.



BCOMP CONQUERING DREAM MARKETS

There is something chameleon-like about Bcomp. It has made inroads into markets as diverse as skiing, aerospace, design and electronics, and in countries as varied as Norway, China, Australia or Canada. The advantages of the natural fiber composites developed by the Fribourg start-up are equally impressive: lightweight, resistant, sustainable and attractively priced. Like the company itself, these materials are highly adaptable and versatile. According to joint Managing Director, Cyrille Boinay, the company is by no means spreading itself too thinly. This is all part of its highly specific market penetration strategy. "Our idea is to start with a niche, a group of pretty similar customers, and offer them

solutions that perfectly match their needs." The businessman cites the freeride skiing segment: "Here, we successfully satisfied two, apparently conflicting, demands of broader yet lighter skis." Freeriders were quickly won over, as were "other kinds of skiers thanks to the transfer of our brand image". According to Boinay, "Freeride skiing is everyone's dream!"

Likewise, Bcomp's work with the aerospace industry, which "is not a particularly interesting sector for us in terms of business volume but captures the imagination of many" attracted the attention of the automotive industry. As a result, Bcomp has started to work with a number of major car manufacturers, includ-

ing BMW. In terms of geographical diversification, "Our aim is to let the supply of raw materials inform our choices", explains the co-director. "Although (European) flax is our standard material, exporting it to the other end of the planet makes no sense at all." Winner of the 2014-2015 Canton of Fribourg Innovation Award in the start-up category, the company therefore sources local alternatives, like sisal in South America or abaca (Manila hemp) in the Philippines. "If volume grows well enough on these markets, we will be in a position to make use of indigenous plants and start manufacturing our products locally."

→ www.bcomp.ch



CREATE YOUR FUTURE

WITH MORE THAN 800 STUDENTS, THE SCHOOL OF MANAGEMENT FRIBOURG (HEG-FR) IS THE PERFECT RESPONSE TO BUSINESS PARTNERS' EXPECTATIONS ON BOTH NATIONAL AND INTERNATIONAL LEVELS. Our school continues to grow by adapting to current economic situations and to the needs of the markets. This approach is evident in our innovation strategy. The range and quality of our training programs (at the Bachelor, Master and executive education levels) as well as the involvement and competences of our internationally recognized faculty are attract an increasing number of new students and applied programs.

HEG-FR, YOUR PARTNER IN INNOVATIVE SOLUTIONS
HEG-FR and its faculty members collaborate with local companies on applied research and development (R&D) projects and mandates. These projects help regional actors become more competitive and innovative by studying and analyzing current issues that will drive growth.

BOLOGNA PROGRAMS

- Bachelor of Science in Business Administration (the only trilingual Bachelor in Switzerland)
- Master of Science in Business Administration, major in Entrepreneurship and Innovation

EXECUTIVE EDUCATION PROGRAMS

- Executive MBA in Integrated Management
- MAS in Marketing-Management
- E-commerce training
- CAS (Certificate of Advanced Studies)
 - Business Management
 - Project Management
 - Supply Chain Management
 - Corporate Communications
 - Public Management
 - Business Management in Social and Sustainable Economy
 - Sustainable Management
 - Strategic Writing
 - Public affairs & lobbying



HAUTE ÉCOLE DE GESTION
HOCHSCHULE FÜR WIRTSCHAFT
SCHOOL OF MANAGEMENT

Fribourg
Freiburg

Chemin du Musée 4
CH-1700 Fribourg

T +41 26 429 63 56
F +41 26 429 63 75

E heg-fr@hefr.ch
W www.hsw-fr.ch

Hes·so
Haute École Spécialisée
de Suisse occidentale
Fachhochschule Westschweiz
University of Applied Sciences and Arts
Western Switzerland

DAHU SOFT BOOTS FOR TOUGH CONDITIONS



The DAHU ski boot is made up of two detachable parts: a rigid exoskeleton and a soft, comfortable inner boot that is suitable for everyday wear.



"A start-up may be at the cutting edge of technology, but it needs to be clear about where it's going if it wants to survive", explains Nicolas Frey, Chairman and founder of Dahu. True to his word, Frey makes sure that his company sticks to its core business – producing multifunctional ski boots. At the same time, he is constantly thinking of ways to improve his product. For example, the company is currently involved in discussions with the French and Italian armies on developing ski boots specifically for their mountain troops. These two major orders would guarantee a comfortable future for both cus-

tomers! "But this won't stop us from exploring other avenues." One market that Dahu has in its sights is children's sports footwear. As Frey explains, "Not only are kids the customers of tomorrow, but they are also the ideal target for our product. When they get to the bottom of the ski slope, they can take off the boot's outer shell and get into a snowball fight without any physical hindrance." The company, which is based in Châtel-Saint-Denis, is also working on "a range aimed specifically at the rental market and slightly easier to use".

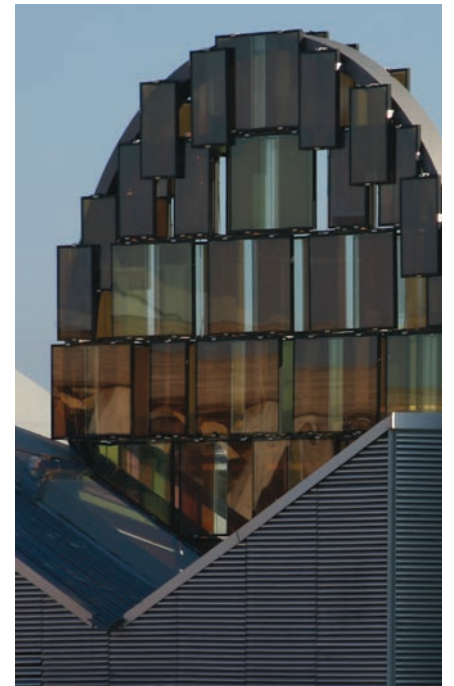
→ www.dahusports.com

GLASS2ENERGY SUCCESS POWERED BY SOLAR PANELS



Commercial greenhouses cover some 44,000 km² of the Earth's surface – an area the size of Switzerland. "The decision by a Chinese investor to use our technology instead of conventional plastic sheeting made us realize that the untapped potential was enormous", recalls Stefan A. Müller, Managing Director of Glass2energy. Until then, the Fribourg company, specializing in the manufacture of glass solar panels and winner of the 2014 *Watt d'Or* award for its dye-sensitized solar cell technology, had targeted almost exclusively the building facade market (see *photograph*). As Müller explains, "Getting involved in the commercial greenhouse business would let us reach an operating critical mass, which would in turn enable us to slash the price of our panels." Glass2energy is currently working with EPFL (Swiss Federal Institute of Technology, in Lausanne) to test how its technology can benefit and optimize plant cultivation.

→ www.g2e.ch





TOUTE LA SUISSE
à l'échelle locale

Brunnen Castione Chur Domdidier Fribourg Genève Lausanne Lugano Mesocco
Pontresina Poschiavo Rivera Schwyz St.Moritz Winterthur Zuoz Zürich

toscano.ch



WAGO is a **PIONEERING** international provider of
electrical connector and automation technology.
It is the **GLOBAL MARKET LEADER** in spring clamp technology.
The family-run company employs more than **6,700 STAFF** worldwide,
around 500 of whom are based in **DOMDIDIER**.

www.wago.ch

**WE
INNOVATE!**



WAGO[®]



The Fribourg office of Edy Toscano specializes in the construction of buildings for the agrofood industry, such as the Mézières cheese dairy (shown here) in the canton of Fribourg.

EDY TOSCANO

A NICHE MARKET WITH HUGE POTENTIAL

When Edy Toscano, an engineering, planning and consultancy firm, merged with C.-C. Ingénieurs Conseils in early 2015, it gained access to a new and very specific kind of market – the design and construction of buildings for the agrofood industry, primarily cheese dairies. Indeed, Guy Chardonnens, Managing Director of the new branch office in Villars-sur-Glâne, has made this his number one mission. “We already have a dozen or so projects in the pipeline. Over the next few years, these will account for up to 45% of our operations.” Currently the leading provider in Western Switzerland, Edy Toscano, which already has 17 offices across Switzerland, has its sights set on capturing a greater share of both the domestic and international market. “We want to replicate our Fribourg model in Central Switzerland. This will considerably help open doors to the Swiss-German market”, explains Chardonnens.

→ www.toscano.ch

WAGO CONTACT

A LEADING LIGHT IN THE LED REVOLUTION

“Because we are imitated so often, we can’t afford to stop innovating.” For Frédéric Riva, Managing Director of WAGO Contact, this strategy ensures that the company stays at least one step ahead of the competition. Over the last few years, the Fribourg company has increasingly specialized in connectors for printed circuit boards and LED technology. “We have made a global name for ourselves thanks to the solutions we’ve developed to aid the transfer from fluorescent lighting with LED technology. This is a real bull market.” The connectors made at the Domdidier site are no bigger than a grain of rice and are manufactured using three processes rarely found in a single production facility, namely plastic injection molding, high-precision metal stamping (copper and steel) and automated assembly. “The upshot is a finished product that is delivered, ready-made and packaged, to the user”, explains Riva. In 2017, WAGO Contact, which employs 6,700 people worldwide, of whom 500 (including 37 apprentices) work at its Fribourg site (see *photograph*), will celebrate 40 years of successful operations in Switzerland.



→ www.wago.ch


FREWITT 

THE FUTURE IS NOW



Grinding, calibrating, dosing, weighing and packing powders form the very basis of our knowledge. Providing reliable and efficient solutions to the manufacturing process in the pharmaceutical, chemical and foodstuff industries is our mission. In-

novation and creativity are the key factors in our success; they form part of the culture of our business. They are strengthened by our partnerships with research institutions and universities.

 WWW.FACEBOOK.COM/FREWITTSA

WE
CARE
ABOUT
MILLING
WWW.FREWITT.COM



Connecting with patients

"There's a mental aspect to sports and a mental aspect to dealing with Crohn's disease. You have to stay positive and you can't focus on the illness. You have to focus on living your life."

Carrie, living with Crohn's disease

UCB has a passionate, long-term commitment to help patients and families living with severe diseases lead normal, everyday lives.

Our ambition is to offer them innovative new medicines and ground-breaking solutions in two main therapeutic areas: neurology and immunology. We foster cutting-edge scientific research that is guided by patients' needs.

www.ucb.com



Inspired by **patients.**
Driven by **science.**

FREWITT

R&D CENTERS IN ITS SIGHTS

In 2015, Frewitt, which specializes in high-tech sieving, dosing and conveying solutions for all types of powder, launched FreDrive-Lab (see photograph), an innovative and worldwide-patented modular system. As Antoine Viridis, CEO of the company based in Granges-Paccot, proudly explains, "This new system provides an unprecedented level of flexibility and combines five different milling technologies in a single piece of equipment." Compact, extremely easy to use and incredibly simple to maintain, the FreDrive-Lab is also ideally suited for smaller laboratories, which "will open up a new customer base, such as R&D centers in the pharmaceutical, food, cosmetics and fine chemicals industries", continues the CEO. To leverage this diversification potential to the maximum, the company has bolstered its presence at industrial trade fairs, an approach that has already proven successful.

→ www.frewitt.com



UCB FARCHIM

SECURING THE JAPANESE MARKET WITH ADVANCED ROBOTICS



Improving its manufacturing processes is the number one priority for UCB Farchim at its state-of-the-art production facility, which opened in 2014 at a cost of CHF 300 million. "Processes are the main drivers of innovation in our company. For example, we recently developed new ultrafiltration cassettes that allow us to increase the concentration of the active ingredient in Cimzia®, one of our blockbuster drugs. The technology was first successfully tested in Bulle (Fribourg) before it was handed over to our manufacturing subcontracting partners, Lonza and Sandoz", explains Nicolas Hug, Managing Director of the Swiss subsidiary of the Belgian biopharmaceutical group UCB. Sometimes, technical innovations can also make it easier for the company to meet the special requirements of certain markets, "At our plant in Bulle, we produce the antihistamines Zyrtec® and Xyzal® for the Japanese market, which has very high standards in terms of product appearance. We have specifically designed a highly advanced robot (see photograph) which individually visualizes and checks various aspects of several tens of millions of pills every month."

→ www.ucb.com



**CHEF AND OWNER OF LE PÉROLLES,
18 GAULT & MILLAU POINTS
AND 1 MICHELIN STAR**

PIERROT AYER

When we think of culinary innovation, molecular gastronomy immediately springs to mind. Yet, you remain resolutely faithful to tradition...

A few years ago, I attended a seminar given by the renowned scientist Hervé This. I realized that I cook with chemistry every single day, and didn't even know it! I am a child of the soil. Work, consistency and respect are the key to my continued success, despite the growing number of new restaurants offering innovative dining concepts. That doesn't mean that I'm not open to change. I'm constantly questioning my work and gladly seek out advice from my colleagues.

Where does your creativity come from?

I move around, I travel and, above all, I listen. I love to share ideas and thoughts – this has always been a great source of inspiration for me. If you were to invite me to a picnic, I'm pretty sure that by the end of the day I would have a new idea for a dish. As an ambassador of *Vacherin fribourgeois* cheese, I have to develop three original recipes every year. Talking to others helps this creative process greatly. A conversation I had with a man from Alsace in France, for example, gave me the idea of creating a *Flammkuchen*, an Alsatian specialty, using Vacherin.

Despite your strong attachment to regional produce, there tends to be a hint of the exotic about your menus. Why is that?

I have tremendous respect for the people who work with me. When an employee from a different culture suggests a recipe to me, I don't think twice about putting it on the menu. Of course, only after I have added my own personal touch to it!

→ www.leperolles.ch



**VICE-RECTOR OF THE UNIVERSITY
OF FRIBOURG (UNIFR) AND HEAD OF
RESEARCH & IT**

ROLF INGOLD

How can UniFR generate added value for its research output?

Basic research is still our primary mission and scientific publications are the first stage in this process. We also hope that the experience acquired will ultimately benefit actual applications. Scientists and the corporate world tend to be on either side of a cultural divide. The more specialized the field is, the deeper this divide becomes. However, by taking targeted action we can remedy this problem.

What instruments do you use to achieve this?

TechTransfer Freiburg was created specifically to make it easier to exploit the full potential of the technologies and knowledge generated by members of Freiburg's academic community – UniFR, the Adolphe Merkle Institute and the Freiburg School of Engineering and Architecture. Technology transfer specialists, who often have a research background themselves, tend to be well-travelled and have industrial experience. They therefore understand the two cultures and are able to come up with possible applications that researchers may never have thought of. For example, a mathematical algorithm originally developed for finance could be used for life sciences applications.

And within UniFR?

We try to instill a real spirit of innovation in our undergraduates and doctoral students. They can take special entrepreneurship and management classes, and join the Innovation Club. A growing number of our students launch their own start-ups.

→ www.unifr.ch



Total rental space in Fribourg's tallest building, the Tour de l'Esplanade, will be in the region of 12,000 m².

STEINER

A 19-STORY LANDMARK IN THE HEART OF FRIBOURG

A 68-meter-high tower is set to radically change the skyline of downtown Fribourg. It is part of an extensive project that will transform and renovate the area around the central train station. Given its growing population and rapidly expanding economy, this is welcome news for the Greater Fribourg area and its 85,000 residents. The cost is estimated at 50 million francs and will be funded entirely by Swiss Federal Railways (SBB), which owns the site. The 19 stories will house apartments, offices, commercial premises and a restaurant with a terrace suspended more than 30 meters above the ground. The project also includes a 2,000 m² plaza, a bike terminal, an underground car park and a shopping area directly under the tracks. The plan is to cre-

ate a motor-free or route from the train station to the Pérolles University Campus. The *Tour de l'Esplanade*, to give it its official title, is the brainchild of the renowned French architect Dominique Perrault, whose designs include the European Court of Justice in Luxembourg, the French National Library in Paris and the Olympic Velodrome in Berlin.

One of Switzerland's leading general contractors, Steiner, will oversee the planning and management of the building work. The Zurich-based company, which celebrated its centenary in 2015, is a force to be reckoned with in the prestigious market of ambitious and sustainable construction projects. "Two examples of our most recent work, in Zurich, are SkyKey, a

commercial high-rise built according to LEED (Leadership in Energy and Environmental Design) Platinum label requirements, and the visionary *Mehr als Wohnen* project comprising 369 apartments that all meet 2000 Watts Society standards", explains Gian Carlo Chiovè, Steiner's of Acquisitions for the Swiss Mittelland region. Of course, the *Tour de l'Esplanade* in Fribourg will also benefit from Steiner's sustainability expertise. "We hope to begin construction work before the end of 2016."

→ www.steiner.ch



CHOISISSEZ VOTRE
CAMPAGNE SUR MESURE

**CAMPAGNE TV
POUR MOINS
DE CHF 5'000.-**



**LES SPÉCIALISTES DE LA PUB DE NOTRE CHAÎNE TROUVERONT
L'IDÉE ET LA SOLUTION POUR UNE COMMUNICATION TV
ADAPTÉE À VOS BESOINS SPÉCIFIQUES**
PRENEZ CONTACT AVEC EUX POUR CONVENIR D'UN ENTRETIEN PERSONNEL

Santino Chillemi
Responsable vente VD
Mobile +41 79 930 66 62
santino.chillemi@latele.ch

Kurt Eicher
Directeur général
Mobile +41 79 250 50 00
kurt.eicher@latele.ch

Arnold Krattinger
Responsable vente FR
Mobile +41 79 373 06 22
arnold.krattinger@latele.ch

MORPHEAN

ONE TECHNOLOGY, MULTIPLE MARKETS



"Our business is growing fast", confirms Rodrigue Zbinden, Managing Director of Morphean, with great delight. Not content with eyeing up new markets in other countries, the company also has plans to expand its current business activities. Based in Granges-Paccot, this former spin-off from Softcom Technologies provides cutting-edge video surveillance solutions. For example, its hosted software platform VideoProtector, which won the 2012-2013 Canton of Fribourg Innovation Award (in the start-up category), can detect unusual behavior and is even equipped with experience-based learning capabilities. "Europe is the first market we want to target. We'll then launch in the United States and Asia." How does Morphean plan to penetrate these new markets? "By being close to our customers. In other words, setting up designated sales and advisory teams in these regions, just as we have already done in the UK, France and Germany. We also want to secure two to three major local partners in each target country."

Rodrigue Zbinden has another market squarely in his sights too: smart cities. "Alongside our security-related products, we can provide towns and cities with new services like public lighting and road management solutions." Assistance for seniors is another area with great potential, as the managing director explains, "Our technology can detect if someone falls and can identify unusual behavior. Coupled with an alarm system to alert family or caretakers, it could allow older people to continue living in their own home." While this market may be a long way off, Morphean is currently making major in-roads in the retail business market. Not only does its system offer retailers conventional video surveillance, but it also enables them to harvest reams of data which can then be analyzed and processed. Retailers can use the findings to hone their marketing strategies and even improve their floor displays.

→ www.morphean.ch





Wer Work-Life-Balance will, sucht in Wahrheit einen Job in Fribourg.

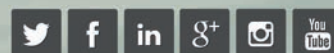
Die Freiburger sind dafür bekannt, dass sie offen und pragmatisch sind. Das erhöht nicht nur die Chancen für Ihren beruflichen Erfolg, sondern auch für Ihr persönliches Glück. Überzeugen Sie sich: www.fribourg.ch

**FRIBOURG | FREIBURG
MACHT GLÜCKLICH**

Un job à Fribourg, c'est trouver l'équilibre entre son travail et sa vie.

Les Fribourgeois sont connus pour être à la fois ouverts et pragmatiques. Ainsi vous avez non seulement plus de chances de réussir votre carrière, mais aussi de gagner le bonheur en plus. Pour vous en convaincre: www.fribourg.ch

**FRIBOURG | FREIBURG
LE BONHEUR EN PLUS**



FRIBOURG CHAMBER ORCHESTRA
REACHING
NEW AUDIENCES



Since it was founded in 2009, the Fribourg Chamber Orchestra (OCF) has become a popular fixture on the Swiss music scene. The 40 musicians who make up this ensemble perform in Fribourg Opera productions and regularly play at the prestigious Avenches Opera Festival, against the unique backdrop of the town's Roman amphitheater. "The OCF also collaborates with vocal ensembles from the region, who are proof-positive of Fribourg's exceptional choral tradition", explains Daniel Margot, Administrative Director. Since 2015, the OCF has worked hard to attract new audiences. "We now play more concerts for schools and families, with the specific aim of getting younger listeners interested in classical music", continues OCF production manager, Moreno Gardenghi. "We've also developed another project with a foundation and institutions working with senior citizens, specifically with this older audience in mind. This has been an extremely rewarding experience."

→ www.ocf.ch

OLF
REVOLUTIONIZING
THE CLASSROOM



At the start of the 2015 academic year, some 2,000 upper-secondary school students in Switzerland were party to a mini-revolution. Instead of the usual course material, they were given a set of "enriched" eBooks, containing digital text books as well as educational content provided by their teachers (notes, links to websites, videos etc.). "Students can now hand in their homework via this tool. Likewise, teachers can use this tool to correct their pupils' work", explains Patrice Fehlmann, managing director of Office du livre de Fribourg (OLF). This pilot project, known as Schoolbag, was inspired by a method originally

developed in the Netherlands and now used in around 200 schools. "We reckon that by the 2016 school year, there will be 10,000 users in Switzerland. A number of cantons have greeted our project with much enthusiasm!" Once Schoolbag is up and running at the entire upper secondary level (16-19 age group), "we'll probably get to work on rolling it out across the rest of the primary and secondary school systems".

→ www.olf.ch
 → www.schoolbag.ch

Around the globe, and right next to you.

At KPMG Switzerland, we assist you in your markets entry. We provide valuable knowledge and support you with experienced specialists. We help you setting up your company and managing tax & legal requirements. Let's get ahead together – talk to us.

Ivo Gut, Partner
+41 58 249 20 60, igut@kpmg.com

kpmg.ch



© 2016 KPMG AG, a Swiss corporation. All rights reserved. The KPMG name and logo are registered trademarks.



UNITS



CUSTOMISED



OVERMOLDED



HIGH PRECISION



ISO RANGE



TOUGH CHALLENGES REQUIRE CUSTOMISED SOLUTIONS

A standard solution won't always be the perfect one. Which is why JESA develops tailor-made systems that fully respond to all customers' requirements. Specifications on the form, load, materials or sealing are responded to, resulting in a product that is ready to integrate. Maximum precision and an innovative approach are used in the process. You benefit from a one-stop solution which saves you time, capital and fixed costs.

JESA.
bearing solutions

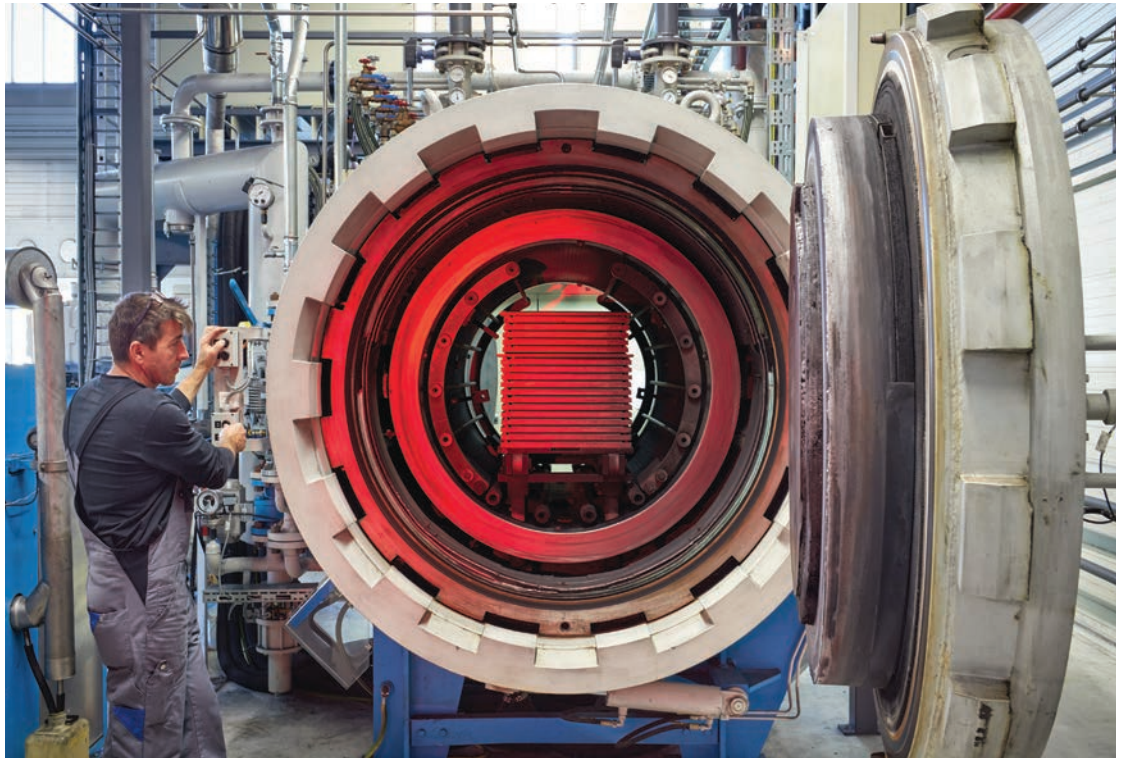
EXTRAMET SPIRIT COUNTRIES IN ITS SIGHTS

While many of its rivals talk of nothing else but BRICS (Brazil, Russia, India, China, South Africa), Extramet has decided to buck this trend and focus on SPIRIT, in other words Singapore, Poland, Indonesia, Russia, India and Turkey. As Hans-Jörg Mihm, the managing director explains, "The potential in these countries is really high and industry there is incredibly stable." According to the boss of the company, which is based in Plaffeien and specializes in the manufacture of extruded tungsten carbide components, "Working with SMEs that already operate in these regions is just as important to us as our relations with major companies that are well-established in more traditional markets." As well as strengthening its position in SPIRIT countries, Extramet has also begun to diversify its activities back home. It has firmly set its sights on adding the food, pharmaceutical and watchmaking sectors to an impressive customer base that already includes the automotive and aeronautical industries.

Its ceaseless search for innovative solutions has enabled Extramet to become a much-valued partner among high-tech firms. According to Hans-Jörg Mihm, "The automotive and aeronautical industries are increasingly using new materials like titanium, CFRP [carbon-fiber-reinforced polymer] and other composites, which in turn requires ever greater precision during the machining process. We've already managed to solve quite a few major problems that our customers faced, like how to efficiently machine the pressure bulkhead for the Airbus A380, to name but one example." The company is also a multi-award winner, As well as the Canton of Fribourg Innovation Award (2005), it was a finalist in the Swiss Venture Club Espace Mittelland Award (2015). Extramet's MD also takes great pride in the fact that the EMT100 grade of tungsten carbide "is considered as the best substrate for diamond-coating applications worldwide".

→ www.extramet.ch

At the end of the forming process, the material is consolidated in high-temperature sinter furnaces.



En cas d'incendie, appelez le...



L'ECAB' attitude!



© www.publideo.ch

Saia PCD®

sbc+
SAIA BURGESS CONTROLS

Automation for highest standards

Flexible, sustainable solutions for energy,
building and infrastructure automation

- ▶ Highest energy efficiency
- ▶ Modular and expandable
- ▶ Open communication along standards
- ▶ Easy handling, maintenance and care



Saia-Burgess Controls AG

Bahnhofstrasse 18 | 3280 Murten, Switzerland
T +41 26 580 30 00 | F +41 26 580 34 99
www.saia-pcd.com | info@saia-pcd.com





METALUP3 NICHE MARKETS – AN ENDLESS SOURCE OF OPPORTUNITIES

"Thanks to additive manufacturing, we're now able to make metal parts that would have been beyond our wildest dreams a few years ago!" Frédéric Boden, founder of MetalUp3, which is based in the Fri Up Incubator, has closely followed the development of this 3D printing technology. The start-up, established in 2015, is equipped with two cutting-edge printers (*see photograph*) that the young entrepreneur hopes will help his company penetrate niche markets: "Plastic injection molds, design, watchmaking, the space industry and the medical sector – the potential applications for this technology are both many and varied! Additive manufacturing has the double advantage in that it allows you to minimize the object's mass as well as produce objects with geometrically complex structures." Unlike classic machining techniques (milling, turning and drilling), this technology adds rather than removes material. With an impressive network of contacts "in the high-end sector", Frédéric Boden feels confident that it will not be long before he too becomes a major industry player in Europe.

→ www.metalup3.ch

BUMOTEC DRILLING DEEPER INTO EXISTING MARKETS

Bumotec definitely has the wind in its sails. Not content with opening its brand new production facility in Vuadens in 2016, the machine-tool manufacturer plans to boost production and expand its activities abroad. Rather than targeting new customers, the company will grow its business "by focusing more on our existing international customers. Our demonstration centers in Germany, the United States and China will be instrumental in achieving this goal", explains Jean-Daniel Isoz, Managing Director of the growing enterprise. However, that is not all that Bumotec, winner of the 2014-2015 Canton of Fribourg

Innovation Award, has in the pipeline. The company, which is part of the Starrag Group, intends to expand other parts of its business. "We've always had a really strong presence in the luxury goods sector, particularly watchmaking and jewelry. Our plan is to strengthen our position in the medtech and micromechanical markets. One way we'll do this is by stepping up our presence at specialist trade fairs."

→ www.bumotec.ch









Specialising in workshop, home and garden equipment!

Impasse de la Sablière 4, 1753 Matran
Tel. 026 301 44 44, Fax 026 301 44 05, info.nl733@bauhaus.ch
Mon-Thur. 7 a.m.-7 p.m., Fri. 7 a.m.-8 p.m., Sat. 8 a.m.-4 p.m.

When it has to be good.



**ESPECIALLY FOR
OUR TRADES-
PEOPLE AND
HOME OWNERS
PLUS CARD
REGISTER NOW TO
START REAPING
THE BENEFITS!**

-  10 % reduction
-  Purchase on account
-  Automatic bonus registration
-  Rewarding special offers
-  Free additional cards
-  Valid at all specialist centres

Yes, I would like a PLUSCARD,
please send me an application form

I would like a personal consultation



Surname/First name

Street

Postcode/town

Place/date/signature

email

Please send the completed coupon to: BAUHAUS Fachcentren AG, Sägetstrasse 5, 3123 Belp

USEFUL ADDRESSES

BUSINESS START UPS AND CONSULTING

Fribourg Development Agency
Bd de Pérolles 25,
P.O. Box 1350, 1701 Fribourg,
T +41 26 304 14 00, www.promfr.ch

Fri Up - SME Start-up Support
Passage Cardinal 1,
P.O. Box 235, 1705 Fribourg,
T +41 26 425 45 00, www.friup.ch

platinn – innovation platform
Rue de Romont 33,
P.O. Box 1205, 1701 Fribourg,
T +41 26 347 48 48, www.platinn.ch

blueFACTORY – Innovation Quarter
Passage Cardinal 1, 1700 Fribourg,
T +41 26 422 37 09, www.bluefactory.ch

**Marly Innovation Center (MIC)
– Technology Center**
Rte de l'Ancienne Papeterie,
1723 Marly, T +41 26 435 31 50,
www.marly-innovation-center.org

Le Vivier – Technology Park
Z.I. du Vivier 22, 1690 Villaz-St-Pierre,
T +41 26 653 72 00, www.vivier.ch

Office 37 – Business Center
c/o CCIF, Rte du Jura 37 B,
P.O. Box 304, 1701 Fribourg,
T +41 26 347 12 20, www.office37.ch

FINANCE AND VENTURE CAPITAL

Venture Capital Fribourg Ltd
c/o Development Agency,
Bd de Pérolles 25, P.O. Box 1350,
1701 Fribourg, T +41 26 304 14 00,
www.capitalrisque-fr.ch

Seed Capital Fribourg Foundation
P.O. Box 1350, 1701 Fribourg,
T +41 26 304 14 14, www.seedcapital-fr.ch

Effort Fribourg Ltd
Rue de l'Hôpital 2, 1700 Fribourg,
T +41 26 351 72 02

**Cautionnement romand
(Loan Guarantee Association)**
Cautionnement Fribourg, 1700 Fribourg,
T +41 26 323 10 20, www.crcpme.ch

New Regional Policy – NRP
c/o Development Agency,
Bd de Pérolles 25, P.O. Box 1350,
1701 Fribourg, T +41 26 304 14 00,
www.innovationregionale.ch

RESEARCH AND TECHNOLOGY TRANSFER

**Technology and Knowledge
Transfer Fribourg**
c/o Adolphe Merkle Institute,
Ch. des Verdiers 4, 1700 Fribourg,
www.tt-fr.ch

**Adolphe Merkle Institute and
Fribourg Center for Nanomaterials**
Ch. des Verdiers 4, 1700 Fribourg,
T +41 26 300 92 54, www.am-institute.ch

**Innosquare – Competence Centers
(ROSAS, DPCC, PICC)**
Passage du Cardinal 1,
1700 Fribourg, T +41 26 429 66 56,
www.innosquare.com/cc/home

**Innosquare Clusters (Swiss Plastics,
Energy & Building, Food & Nutrition)**
Passage du Cardinal 1, 1700 Fribourg,
T +41 26 429 66 52, clusters.innosquare.com

EDUCATION

University of Fribourg
Av. de l'Europe 20, 1700 Fribourg,
T +41 26 300 71 11, www.unifr.ch

**School of Engineering and
Architecture of Fribourg**
Bd de Pérolles 80, P.O. Box 32,
1705 Fribourg, T +41 26 429 66 11,
www.heia-fr.ch

School of Management Fribourg
Ch. du Musée 4, 1700 Fribourg,
T +41 26 429 63 70, www.heg-fr.ch

EPFL Fribourg
Passage du Cardinal 13B, 1701 Fribourg,
T +41 21 693 51 82, fribourg.epfl.ch

**international institute
of management in technology (iimt)**
Bd de Pérolles 90, 1700 Fribourg,
T +41 26 300 84 30, www.iimt.ch

**Vocational School Technology
and Art Fribourg**
Ch. du Musée 2, P.O. Box 41, 1705 Fribourg,
T +41 26 305 26 27, www.emf.ch

eikon, Vocational School of Applied Arts
Rte Wilhelm-Kaiser 13, 1700 Fribourg,
T +41 26 305 46 86, www.eikon.ch

Les Roches-Gruyère
University of Applied Sciences
Rue de l'Ondine 20,
1630 Bulle, T +41 26 919 78 78,
www.lrguas.ch, www.glion.edu

BUSINESS ASSOCIATIONS

**Fribourg Chamber of
Commerce and Industry**
Rte du Jura 37 B, P.O. Box 304,
1701 Fribourg, T +41 26 347 12 20,
www.ccfif.ch

Fribourg Employers' Association
Rue de l'Hôpital 15, P.O. Box 1552,
1701 Fribourg, T +41 26 350 33 00,
www.unionpatronale.ch

Fribourg Industrial Group
c/o CCIF, Rte du Jura 37 B,
P.O. Box 304, 1701 Fribourg,
T +41 26 347 12 34, www.gif-vfi.ch

**Fribourg International
Association of International Companies**
c/o CCIF, Rte du Jura 37 B,
P.O. Box 304, 1701 Fribourg,
T +41 26 347 12 31,
www.fribourg-international.ch

CONVENTION CENTERS

Forum Fribourg - Expo Centre Ltd
Rte du Lac 12, P.O. Box 48, 1763
Granges-Paccot, T +41 26 467 20 00,
www.forum-fribourg.ch

Espace Gruyère Ltd
Rue de Vevey 136-144, P.O. Box 460,
1630 Bulle 1, T +41 26 919 86 50,
www.espace-gruyere.ch

OTHER

Official Website of the State of Fribourg
www.fr.ch

**Websites for Expatriates Living
in the Canton of Fribourg**
www.expats-fribourg.ch
www.expatsconnections.ch
(Expat Connection Fribourg)
www.fewgroup.org
(Fribourg Expat Women's Group)

**Union fribourgeoise du tourisme
(Fribourg Tourism Association)**
Rte de la Glâne 107, P.O. Box 1560,
1701 Fribourg, T +41 26 407 70 20,
www.fribourgregion.ch

**INTERNET
TÉLÉPHONIE**

À VOTRE SERVICE

**Pour chaque PME,
maintenant disponible
dans tout le canton!**



net+

Fribourg / Freiburg



www.netplusfr.ch

INDEX OF QUOTED COMPANIES

Adolphe Merkle-Stiftung	Fribourg	www.am-institute.ch	p. 41
Bcomp Ltd	Fribourg	www.bcomp.ch	pp. 6, 53
BeeYoo	Sorens	www.beeyoo.ch	p. 35
BioFactory Competence Center Ltd	Fribourg	www.bcc.ch	p. 29
Bluefactory Fribourg-Freiburg SA	Fribourg	www.bluefactory.ch	pp. 3, 5, 15, 17, 29, 43
Bumotec SA	Sâles	www.bumotec.ch	pp. 6, 69
CISEL Informatique SA	Matran	www.cisel.ch	p. 37
COMET Ltd	Wünnewil-Flamatt	www.comet-group.com	p. 37
Creaholic Ltd	Bienne	www.creaholic.com	p. 8
DAHU Sports Company Ltd	Châtel-Saint-Denis	www.dahusports.com	p. 55
DARTFISH Ltd	Fribourg	www.dartfish.com	pp. 6, 35
Edy Toscano AG, Engineering & Consulting	Villars-sur-Glâne	www.toscano.ch	p. 57
Emerell SA	Schmitten	www.emerell.com	pp. 6, 41
Extramet AG	Plaffeien	www.extramet.ch	pp. 6, 67
Frewitt Fabrique de machines Ltd	Granges-Paccot	www.frewitt.com	p. 59
Geberit Fabrication SA	Givisiez	www.geberit.ch	p. 47
Glass2energy Ltd	Villaz-Saint-Pierre	www.g2e.ch	p. 55
InnoMedica Holding Ltd	Marly	www.innomedica.com	p. 23
JESA SA	Villars-sur-Glâne	www.jesa.com	pp. 6, 43
Liebherr Machines Bulle SA	Bulle	www.liebherr.com	pp. 6, 49
LS Instruments AG	Fribourg	www.lsinstruments.ch	p. 17
M3AT SA	Botterens	www.urocomfor.com	p. 15
Marly Innovation Center Sàrl	Marly	www.marly-innovation-center.org	pp. 13, 23, 43
Meggitt SA	Villars-sur-Glâne	www.meggitt.com	pp. 6, 24
MetalUp3 SA	Fribourg	www.metalup3.ch	p. 25
Morphean Ltd	Granges-Paccot	www.morphean.ch	pp. 6, 26
OLF SA	Corminboeuf	www.olf.ch	pp. 6, 27
Phonak Communications Ltd	Courgevaux	www.phonak-communications.com	p. 15
PMFch SA	Neyruz	www.pmf-system.ch	p. 19
Publiwide Ltd	Fribourg	www.publiwide.com	p. 17
RegenHU Ltd	Villaz-Saint-Pierre	www.regenhu.com	p. 23
Samvaz SA	Châtel-Saint-Denis	www.samvaz.ch	pp. 6, 19
Scott Sports SA	Givisiez	www.scott-sports.com	p. 25
Scout24 Suisse SA	Wünnewil-Flamatt	www.scout24.ch	p. 39
Steiner Ltd	Zürich	www.steiner.ch	p. 61
Swiss Hydrogen Ltd	Fribourg	www.swisshydrogen.ch	p. 27
Tetra Pak (Suisse) SA	Romont	www.tetrapak.com	p. 37
Transports publics fribourgeois (TPF) SA	Fribourg	www.tpf.ch	p. 13
UCB Farchim Ltd	Bulle	www.ucb.com	pp. 6, 59
Vivier SA	Villaz-Saint-Pierre	www.vivier.ch	pp. 23, 43
WAGO Contact Ltd	Belmont-Broye	www.wago.ch	p. 57

RELIER
L'EXPÉRIENCE
À L'EXCELLENCE

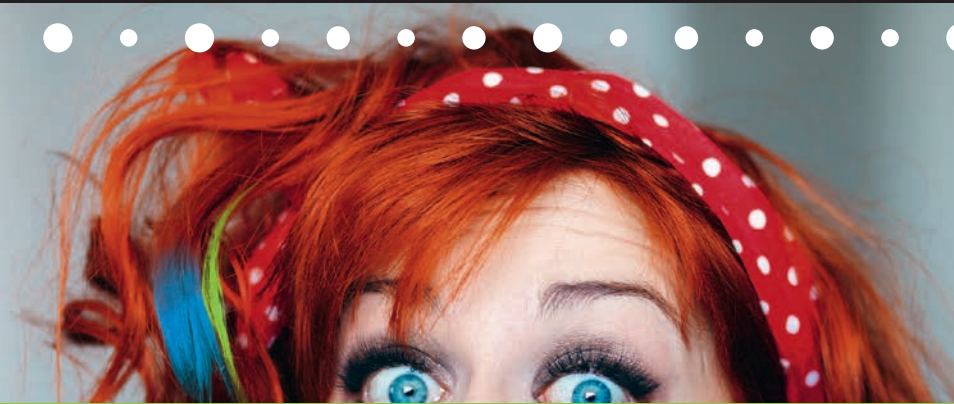
ERFAHRUNG
GEBUNDEN IN
EXZELLENZ

BINDING
EXPERTISE AND
EXCELLENCE
TOGETHER

SCHUMACHER AG
Buchbindereien Reliures



www.saint-paul.ch



Tout finit par une bonne impression.

Parce que nos mesures vertes multiplient les coins de ciel bleu !

Am Ende bleibt der gute (Ein)Druck.

Weil unsere grünen Ziele den Himmel blauer machen !



Saint-Paul
Imprimerie Druckerei

Une entreprise du groupe Saint-Paul

ADVERTISERS

p. 26 and 44, AMAG RETAIL SA, Fribourg / p. 78, Banque Cantonale de Fribourg, Fribourg / p. 38, Banque Credit Suisse SA, Fribourg / p. 77, Banque Privée Edmond de Rothschild SA, Fribourg / p. 44, Banque Valiant SA, Fribourg / p. 70, Bauhaus Fachcentren AG, Matran / p. 16 and 28, blueFACTORY, innovation and technology park, Fribourg / p. 36, CISEL Informatique SA, Matran / p. 52, Covestro International SA, Fribourg / p. 68, ECAB, Granges-Paccot / p. 56, Edy Toscano AG, Fribourg / p. 12, Espace Gruyère Ltd, Bulle / p. 34, Fiduciaire Revicor Consulting Ltd, Fribourg / p. 24, Fiduconsult Ltd, Fribourg / p. 58, Frewitt Holding SA, Granges-Paccot / p. 7, Fribourg Development Agency, Fribourg / p. 64, Fribourgissima, Fribourg / p. 46, Geberit Fabrication SA, Givisiez / p. 14, Groupe E Ltd, Granges-Paccot / p. 18, Gugler Electronic AG, Marly / p. 46, Helveticum Inkasso SA, Fribourg / p. 66, JESA SA, Villars-sur-Glâne / p. 66, KPMG Ltd., Bern-Fribourg / p. 62, La Télé / p. 48, Liebherr Machines Bulle SA, Bulle / p. 36, MERBAG Retail SA, Granges-Paccot / p. 72, Netplus FR, Fribourg / p. 52, Progressia Fiduciary and Management Company Ltd., Fribourg / p. 68, Saia-Burgess Controls Ltd, Morat / p. 74, Schumacher Ltd, Schmiten / p. 54, School of management, Fribourg / p. 24, Scott Sports SA, Givisiez / p. 38, Scout24 Suisse SA, Flamatt / p. 74, St-Paul Imprimeries et La Liberté Médias SA, Fribourg / p. 2, Steiner Ltd, Bern / p. 12, Transports publics fribourgeois (TPF) SA, Fribourg / p. 58, UCB Farchim Ltd, Bulle / p. 26, Union Fribourgeoise du Tourisme, Fribourg / p. 32, University of Applied Sciences and Arts Western Switzerland, Fribourg / p. 40, University of Fribourg, Fribourg / p. 22, Vivier SA, Villaz-Saint-Pierre / p. 56, WAGO Contact Ltd, Domdidier.

PHOTO CREDITS

Charly Rappo, arkive.ch: p. 17, p.19 (above), p. 27, p. 29, p. 41, p. 43, p. 45, p. 47 (above), p. 57 (above), p. 59 (above), p. 60 (right), p. 69 / Frank-Olivier Baechler: p. 15 (above).

p. 3, Etat de Fribourg / p. 5, © fribourgregion.ch & PromFR / p. 6, PromFR / p. 8, PromFR / pp. 10-11, Liebherr / p. 13, Navya / p. 15 (below), Phonak Communications / p. 19 (below), Samvaz / p. 20 (left), © Scanderbeg Sauer / p. 21, Fribourg-Freiburg Challenge © Laurent Sciboz / p. 23, InnoMedica / p. 25, Scott Sports / pp. 30-31, UCB Farchim / p. 33, Da Motus! © Charles Ellena / p. 35, Dartfish / p. 37, COMET / p. 39, Scout24 / p. 47 (below), blue-economy.ch / p. 49, Liebherr / p. 50-51, Fotolia / p. 53, Bcomp / p. 55 (above), DAHU / p. 55 (below), Glass2energy / p. 57 (below), WAGO Contact / p. 59 (below), UCB Farchim / p. 60 (left), © Adrian Ehrbar / p. 61, CFF / p. 63, Morphean © Axis Communications / p. 65, Fribourg Chamber Orchestra / p. 67, Extramet © Remo Zehnder.

COLOPHON

FRIBOURG NETWORK ASSOCIATION,
c/o Fribourg Development Agency,
Bd de Pérolles 25, P.O. Box 1350,
CH-1701 Fribourg

EDITORIAL COMMITTEE

Jean-Luc Mossier,
President, Fribourg
Development Agency

Christoph Aebischer,
Fribourg Development Agency

Marie-Céline Coen,
Fribourgissima Image Fribourg

Anne Maillard,
Banque Cantonale de Fribourg

Chantal Robin,
Sofraver SA

Jean-Nicolas Aebischer,
School of Engineering
and Architecture of Fribourg

Nando Luginbuhl,
Ministry of Economic Affairs

Christophe Nydegger,
Cantonal Vocational Education
and Training Service

Grégoire Raboud,
Fribourg Chamber of
Commerce and Industry

Nicolas Stevan,
eikon

MANAGING EDITOR
Philippe Crausaz
Crausaz & Partenaires SA
CH-1763 Granges-Paccot

CHIEF EDITOR
Frank-Olivier Baechler
CH-1700 Fribourg

AUTHORS
Frank-Olivier Baechler
Patricia Michaud
Sara Seddon-Kilbinger

TRANSLATIONS

Barbara Horber and Elaine Sheerin
from Transit TXT SA

CONCEPT & DESIGN

nuance, CH-1700 Fribourg

AD SALES

Fribourg Network Advertising
Arnold Krattinger

PRINT

Imprimerie St-Paul SA,
CH-1705 Fribourg

© 2016 FNF, annual release
All rights reserved.



Fribourg Development Agency

PROMFR.CH

The Business Magazine of the Canton of Fribourg

FRIBOURGNETWORK.CH