OVERVIEW

CONNECTING GREAT MINDS







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ENABLING AND ACCELERATING YOUR INNOVATION PROJECTS **ALL THE KNOW-HOW AND RESOURCES YOUR PROJECT NEEDS UNDER ONE ROOF** SIPBB is a space with all the necessary resources for innovation projects. Our R&D Centers show and demonstrate the realworld application of new technology, bridging the gap between research and industry - a whole ecosystem dedicated to connecting great minds.



KNOW-HOW AND APPLIED RESEARCH

Discover and exchange with researchers and engineers from our four research centres. Test and validate what technology fits your company and business model with on-site demonstrators. Depending on the requirements of your project, we assemble an interdisciplinary team, providing what you need to overcome whatever slows down your innovation drive. Our expertise ranges from the moment of ideation to validation, development and testing, right up to market entry.



INFRASTRUCTURE AND TECHNOLOGY

This park was built to make your innovation happen. You will find new technologies to create new products and services and all the infrastructure needed for fast development and testing. But it's not just a production site. We also offer long-term office space and flexible coworking in-house. You can create your innovation outpost for your company inside the park, rentable labs included. We are also constantly expanding our space, adding new fields of interest and technologies.



NETWORK AND MEMBERSHIPS

You can become a part of this innovation space. Explore the vast ecosystem of all our industrial, scientific and collaboration partners. Find memberships that help your business to grow and network. We build workshops and events around the focus subjects of our research centres. We teach, inform and connect people who are working or want to venture into new fields, creating new products and services. SIPBB is also an event location with room for up to 200 people.



50 +

Scientific Partners



70 +

Industrial Partners



Applied Research centers



40

Successful Innovation Projects

4

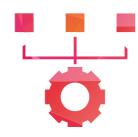
HOW WE ENABLE INNOVATION PROJECTS

WE CREATED OUR SERVICES AROUND THE MOST COMMON PROBLEMS IN INNOVATION

First, there is a lack of knowledge or a lack of expertise. Then, when you want to create a new product or innovate an existing one, you can connect with our research centres to exchange on the subject and tap into their knowledge and the knowledge of our partners.



Second, having people who are successful innovators guiding your project makes all the difference. We can **manage and lead** your team or help out with our researchers and engineers where you need assistance. Understanding the subject matter and translating an idea into an actual product makes us the one-stop solution for innovation projects.



Third, **getting the resources** that you need and the facilities to develop rapidly. We help find the partners, the people, and the financing to create successful projects and products. Our in-house infrastructure makes for fast and state-of-the-art development. Dedicated engineers work across the disciplines and between our research centers for agile project management.

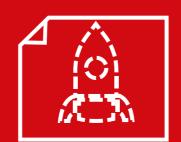


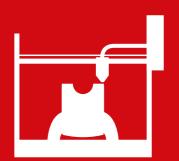
Fourth, thanks to our facilities, **we test prototypes** as fast as we make them. As a result, your project accelerates thanks to a faster pace of iteration. However, entering the market is the last step only for the time being. We all know innovation is eternal. The great thing about SIPBB is that it's not just about one product or service. Together we can plan and create the **subsequent iterations of that product or service**.



OUR PROCESS

To start and accelerate projects, we build on our unique place in the innovation environment. As an incubator for your venture, we help find and connect the right people to help you from ideation to development, testing right up to the market implementation. We use a three-step process to make this happen:









01

02

03

EVALUATE YOUR IDEAS AND NEEDS

How far along on your project are you? Do you need creativity, inputs and examples of available technology? Or maybe you are well on your way and require additional resources, financing and partners – we assess with you what is needed and get the project going faster.

SELECT AND IMPLEMENT THE RIGHT PEOPLE AND TECHNOLOGIES

Connect not just with us but with a whole network of experts from industry and science to evaluate what will get your project running faster. The modular approach gives you the option to choose just what you need to get your product or service to market more quickly.

VALIDATE AND IMPROVE ON THE GO

Innovation does not happen in a vacuum. A good service or product needs to be tested, validated and adapted. SIPBB is built as a one-stop solution to ideate, create, validate and adjust rapidly. People, tech and infrastructure to do so are readily available in house.



SWISS ADVANCED MANUFACTURING CENTER

The Swiss Advanced Manufacturing Center is where you want to go for all things Advanced Manufacturing. It helps both those who wish to learn about the technology and the application in different fields and those who need to overcome problems and find solutions to ongoing projects in Advanced Manufacturing. Because here you find the researchers that specialise in the subject. Engineers who know how to design and develop, and the infrastructure to create usable prototypes.

If you are starting with this technology and are evaluating it, we want to help you with this challenge. It is crucial to assess and understand what advancements in manufacturing are beneficial to your projects. We help you by making the decision process more transparent.

Others already engaged in Advanced Manufacturing profit by having a neutral partner to help overcome issues or build and test solutions. We give you our experience and unique infrastructure to develop, prototype and test new solutions.

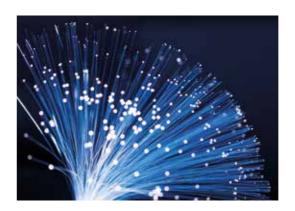
All our centers benefit heavily from the SAMC as Advanced Manufacturing has a massive impact on our ability to rapidly prototype and produce better, more durable prototypes. In addition, the freedom to switch from a professional 3D printer to laser sintering will make a difference for any development.





MODULAR AM EXPERIMENTING PLATFORM

The SAMC operates one of the world's few modular Advanced Manufacturing research machines that uses laser powder bed technology. This system – the only one of its kind in Switzerland – enables subsystems to be assembled into a single industry-standard system to achieve optimal research results. Optics and lasers can be swapped out and proprietary monitoring systems integrated into the system. The build chamber can be preheated to 800° C. The machine is programmed with open-source code; the process parameters can be adjusted as needed.



OPTICAL FIBRE DRAW TOWER

The SAMC, together with our partners the University of Bern and the Bern University of Applied Sciences, is building Switzerland's first optical fibre draw tower. With a height of up to 20 metres, the tower opens up a whole new world of creating different, faster and uniquely structured optical fibres. In addition, this scientific instrument helps find new and improved ways to apply laser technology. It is used and supervised by a team of specialists who are available for project partners.



ADDITIVE UPDATE

The regular event at SIPBB on additive manufacturing! Where is additive manufacturing used, and what are the technical and regulatory requirements and challenges? We discuss these and many other issues in the Additive Update with Swiss and international speakers. As a participant, you will meet people from both industry and science deeply involved in the subject matter. An aperitif and networking follow the event, where discussion on the subject go can continue.



Contact and find out more at www.sipbb.ch/samo

SWISS BATTERY TECHNOLOGY CENTER

Battery technology is one of the most critical subjects of today. In the next decade, the way we use batteries will change drastically.

We need to reduce the carbon footprint and improve the life cycle of every cell. The Swiss Battery Technology Center is where we develop solutions to these questions. In this manner, we help your company to create more sustainable battery systems for your products. In other words, we offer our customers more than production of new batteries; we want to provide customers with end-to-end system development.

As your partner, we offer applied R&D, prototyping, testing facilities for energy production and storage, and innovation services to push sustainability using principles from the circular economy.

That also means creating batteries that can have a second life or can be recycled more efficiently. Building for reuse and building for recycling are vital subjects in our work. We want to show that these things are feasible and make sense for any company that wants to improve product lifecycles – helping to create and manage projects where sustainability is a core value.

SBTC is your choice for companies who want electrification and product innovations that fit with their business model and create forward-looking solutions. Companies interested in creating better products for customers and the world will find a vital partner in the Swiss Battery Technology Center. The Center provides support throughout the product lifecycle and views itself as a long-term partner for the future evolution of the developed product.





BATTERY LAB

The Bern University of Applied Sciences and Switzerland Innovation Park Biel/Bienne partnership makes it possible to create high-end infrastructure like the battery lab. Here, we characterise and model electrochemical battery cells and modules and complete battery system tests for our customers. This laboratory allows high-level research in the field of battery applications in first and second life as well as in the improvement of recycling.



IBAT

SIPBB, with its research center the Swiss Battery Technology Center, with the BFH, the CSEM and the Ökozentrum, founded the iBat Association to promote battery applications and technologies in Switzerland. The founding members decided to build the collaboration because of the well-connected network and the quality of the proposed services. The iBAT Association aims to create radical new inventions together with our partners from science and economy for these leading fields of innovation. SIPBB plays a key role in this network with its unique mix of experts from research and development.



HOLISTIC SOLUTIONS WITH RIKSCHA TAXI

With the rickshaw, goods weighing up to 210 kilograms can be delivered and received quickly, flexibly and around the clock. The young Bernese company "Rikscha Taxi Schweiz AG" develops electric vehicles for the "last mile" in city centres. Together with the Swiss Battery Technology Center from SIPBB, they are developing a battery and overall system for the modular heavy-duty wheel Rikscha RV1.



Contact and find out more at www.sipbb.ch/sbtc

SWISS HEALTH COMPETENCE CENTER

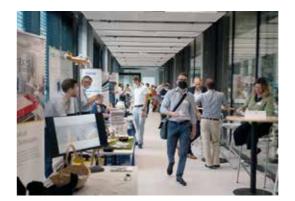
The Swiss Health Competence Center's vision is to be the best partner for applied research and development for digital health in Switzerland. Our customers benefit from the ecosystem of international healthcare organisations both from research and industry. We want to accelerate and facilitate the innovation journey of startups, SMEs and multinational firms with our teams of researchers, engineers and project managers from the idea to verified prototypes ready to be industrialised.

Projects with the SHCC are applying the latest technology in healthcare to foster better therapeutic care for society. Our innovation approach is human-centred, and patient needs are always our primary interest. As we grow with

every partner and project, our steady build-up of expertise and our interdisciplinary work with other research centers in-house, we want to help you advance and expedite the digital transformation of the healthcare sector.

Partners profit from our knowledge in industrial application, regulations, quality management, clinical testing and reimbursement systems. Together, we implement agile project management methods to accelerate and facilitate the success of your innovation. You can also get support in finding and acquiring public funding. With all technologies, facilities and expertise in-house, we specialise in rapid and professional prototyping. As a result, we can test and iterate your product faster than ever before.





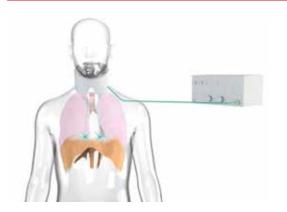
MEDTECH INNOVATION EVENT

The Medtech Innovation Event is the matchmaking event for startups, small and medium-sized enterprises (SME), service providers, investors, and academic and global players from the Medtech sector. Every year, you can listen to pitches by startups/industrial innovators and solution providers. In addition, you can visit a large tabletop and prototype exhibition and have ample scope to network. The matchmaking event where you can choose and talk 1:1 with many participants is especially popular.



CTO MEDTECH CLUB

The CTO Medtech Club brings together technology and innovation managers of the most prominent Medtech companies. Club members stand for an open exchange amongst themselves and for the continuous development of Switzerland as an industrial location. As an innovator/a startup, you get direct access to our members upon request. The SHCC and the Club work closely to connect and extend new and established companies in the medical field in Switzerland.



THE STIMIT PROJECT

STIMIT AG is the first company to develop a non-invasive, user-friendly product to train the respiratory muscle, the diaphragm, through targeted electromagnetic stimulation. The SHCC helped with development from industrial and human-centred design to prototyping, simulation and testing. In addition, we created an interdisciplinary project team to work and manage several successful follow-up projects. Now, an official ongoing Innosuisse project is underway for the next iteration of this technology.



Contact and find out more at www.sipbb.ch/smto

SWISS SMART FACTORY

The Swiss Smart Factory's vision is to become Switzerland's leading, internationally recognised centre of competence in application-oriented research and transfer of Industry 4.0. With every project we make, we expand our ecosystem of partners and knowledge that benefits all participants in the fourth industrial revolution.

Since its opening, the Swiss Smart Factory has established itself as the first test and demonstration platform for Industry 4.0 in Switzerland. It has become a supermarket of ideas where companies of all sizes are welcome to learn and find what technology fits the needs of their company and product. Furthermore, with more and more innovation projects successfully entering the market,

the testing and demonstration infrastructure is continuously updated. Thus, our ongoing evolution fosters the next innovation cycle of our customer's products and services.

The SSF is an open space where startups and large companies can engage and evaluate technologies for their business. We encourage you to share the specific challenges you need to overcome on your journey. This also gives room to companies that want to showcase their answers. The give and take make the Smart Factory a supermarket of ideas. An ideal place to find solutions for those participating in Industry 4.0 and those just looking to get started.





LIGHTHOUSE PROJECT INDUSTRY 4.0

The lighthouse project aims to show how Industry 4.0 can already work today with an entire production ecosystem. The initiator of the project is the Swiss Smart Factory of the SIPBB. The team collaborating with research director Dominic Gorecky and project manager Michael Wendling and the SSF network provide the know-how required. With this lighthouse project, we are heading in the direction of a "transparent factory", and visitors to the SSF fair can follow the entire product lifecycle along with the production ecosystem – from product design to packaging. The big challenge here is to demonstrate this networking in production.



MEMBERSHIP OF THE FUTURE OF INDUSTRY

The membership programme for the Association for the Promotion of the Swiss Smart Factory (AP-SSF) has met with keen interest. As a result, the SSF has already signed up over 60 members from industry and academia. Through memberships, we bring together key players – big corporations, SMEs, startups and research partners – to collaboratively develop, refine and operate a state-of-the-art Industry 4.0 production line that sets a new standard for Switzerland.



DIMOFAC - DIGITAL & INTELLIGENT MODULAR FACTORIES

The Swiss Smart Factory is a partner of the EU DIMOFAC H2020 project. This project aims to establish a collaborative manufacturing environment for all sizes of production, enabling the modularity, adaptability, and responsiveness of production lines for mass customisation. Flexible systems for continuous production adaptation, optimisation, and improvement open the door for new business opportunities.





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PEOPLE

THE SWITZERLAND INNOVATION PARK BIEL/BIENNE TEAM







The SIPBB team on the terrace of the new building in corona-compliant setup

SHAREHOLDERS







creaholic

posalux













FESTO

INTERSYS

mps

RUAG 🚄 🔻

swisscom



be advanced







solothurn.



















sokutec









QUICK LINE ROLLOMATIC

MOTOREX

Sto Stiftung



Alfred Bärtschi | Anita Jörg | Felix Kunz | Michael op de Hipt | Michael Storck | Stephan Schindler

RESEARCH DIRECTORS AND SENIOR MANAGEMENT



Ochsenbein Head of SBTC

CEO (2013-2021)



Dr. Ing. Dominic Gorecky



CEO as per 1.7.21



Head of SHCC a.i.



Partner F&P Group

CF0



Dr. Andreas Burn Head of SAMC





Marketing

BOARD OF DIRECTORS



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Prof. Dr. Sebastian Wörwag Rector Bernese University of Applied Sciences



Felix Kunz Delegate of the BOD and Co-founder of SIPBB



Dr. Sebastian Friess Head of the Office for Economic Affairs of the Canton of Bern



Head of Finance & Controlling TU Milling, GF Machining Solutions AG



BoD President SwissFactory/ Group & EquityNova AG



Contact and find out more at www.sipbb.ch/ueber-uns/

SCIENTIFIC EXCELLENCE

WHY WE EXCEL AT RESEARCH

The SIPBB has established four research centers. With the Swiss Smart Factory, we operate Switzerland's leading and internationally recognised centre of excellence in the field of application-oriented research on Industry 4.0. In 2018, the Swiss Smart Factory became the first Swiss location to be recognised by the European Commission as a "Digital Innovation Hub". With the Swiss Advanced Manufacturing Center, we specialise in lasers and optics. Here we provide the ideal research environment for Switzerland's only glass fibre drawing tower. In close cooperation with the Bern University of Applied Sciences, we have established the Swiss Battery Technology Center, Switzerland's largest battery laboratory open to the private sector. Our fourth research center focuses on digitalisation in the healthtech sector. With our projects, we provide answers at the interface between physical and digital solutions. The focus is always on digital health.

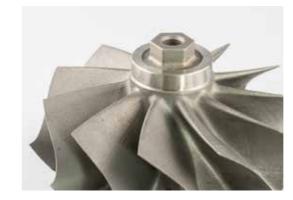
We complement our four research centers with a Research Council. The Research Council members are responsible for the professional and scientific orientation of research activities within the SIPBB.

They provide strategic advice on the direction of research and are responsible for quality assurance for the research direction. As experienced managers, the members of the Research Council contribute significantly to the success of the research programme. They help to define the research topics and monitor the research work at the SIPBB

The Research Council is composed of: Dr. Felix Reinert, Advanced Manufacturing, Advanced Manufacturing Processes and Laser Technologies, Dr. Prof. Andrea Vezzini, Advisor for Energy Storage, Energy Systems, Smart Grid, Electric Drives, E-Storage and Battery Testing, and Dr. Felix Lustenberger, Advisor for the thematic areas of Electronics, Sensors, Computers and Artificial Intelligence. The Research Council seat for the topic area Industry 4.0 and Smart Factories is vacant.



ADVISORY BOARD



DR. FELIX REINERT

Advisor with focus on Advanced Manufacturing and Laser Technology

Felix Reinert holds a diploma in micro-engineering from EPFL Lausanne, received Dr. phil.-nat. degree in physics from University of Bern and has a certificate of higher education in physics from ETHZ Zürich. He worked at the future technology department of Alstom before he founded ProtoShape and the Startup UrbanAlps. From 2015 to 2021 he set up the research activitities in additive manfuacturing with metals at SIPBB as research director Advanced Manufacturing Technologies.



PROF. DR. ANDREA VEZZINI

Advisor for Energy Storage, Smart Grid, Electric Drives, E-Storage, Battery Test

Prof. Dr. Andrea Vezzini has a PhD in Electrical Engineering from ETH Zürich and successfully completed the program for Mastering Technology Enterprises (MTE) at IMD Lausanne.

He is Professor for Industrial Power Electronics at Bern University of Applied Sciences. He holds the position of Head of the BFH Energy Storage Research Center and is the President of www.iBAT.swiss. Since Beginning of 2015 he is member of the Federal Energy Research Commission (CORE). His current research projects cover energy efficient electric machines and drives and advanced battery systems based on lithium-ion technology for industrial and energy storage systems.



DR. FELIX LUSTENBERGER

Advisor for the topic area of electronics, sensor technology, computers, AI

Dr. Felix Lustenberger is an EPFL/ETHZ engineer by training and a serial entrepreneur by heart. Throughout his career, he worked as a technology innovator with a keen interest in entrepreneurial aspects in the domain of microelectronics, semiconductor technology, optical sensing, and imaging as well as micro technology in general. During the past 20 years, he held several senior management and executive positions in startups and technologically driven SMEs with exposure to both, technology development, business development and sales. Currently he is the CEO of epyMetrics AG as well as the President of MindShift Compounds AG.

FOUR FLOORS OF





ENERGY SUPPLY CONCEPT FOR THE BUILDING

The Innovation Park heats and cools using lake water directly from Lake of Biel. For this purpose, two pipes are being laid up to the building with a capacity of 500 kilowatts cooling/200 kilowatts heating. All large waste heat-producing systems (catering, air compressors, temperature cabinets in the battery test laboratory and laboratory cooling) are connected to the internal heat recovery network so that the building can be heated during the winter with the waste heat. 200 KW photovoltaic modules are installed on the roof, which cover the electricity needs of the Innovation Park in summer.



DRONE LANDING SITE ON THE ROOF TOP

A drone landing pad is planned on the building. The landing area leads directly into an enclosed drone waiting area where it can be unloaded and loaded regardless of the weather. The corresponding approvals are in progress.



EVENTS AND CATERING

In the building, we offer a wide range of catering services, including a kitchen area (microwave, dishwashing and preparation facilities), where guests can bring their own food and cook. In cooperation with the Residenz au Lac, the Innovation Park offers several fresh menus daily for lunch and snacks. For events, we offer the appropriate catering in cooperation with our partners.



Situated within a stone's throw of the main railway station, the SIPBB is centrally connected to the city. Around 750 people will study, research and work at the SIPBB in Biel. The facilities available at SIPBB are precisely oriented towards the innovative spirit that lies at the heart of Biel/Bienne and offer both open and closed premises (security areas) in the form of offices, workshops and laboratories.

15 500 m²
GROSS FLOOR SPACE

3000 m²

2000 m² EVENT SPACE 10000 m²
RENTAL SPACE

750 JOBS

4 CLEANROOMS CLASS 6

NEUTRAL PLATFORM WITH AN IMMENSE ECOSYSTEM

SIPBB is for everybody. Companies, universities and non-profits are welcome to work together. Our strength is in our vast ecosystem of industrial and scientific partners. As an independent, neutral platform, we can offer all our customers and partners open access to our know-how and facilities. We further collaboration and joint ventures between businesses, big and small.

Our research centres create membership programmes that give access to exclusive talks and demonstrations. All members come as equals and can exchange and network. We expand our network constantly. New technology and service providers join our park and open up new ways

to bring your prototype to market. It is our great pleasure to help represent the local high-tech and precision manufacturers.

Companies can present and elaborate on new products and technologies at events and exhibit their innovations. The event spaces are also rentable for private functions and can be used by any company.



A NETWORK OF PARKS

WHAT IS SWITZERLAND INNOVATION?

Switzerland Innovation Park Biel/Bienne (SIPBB) is one of six sites which make up the umbrella organisation behind the Switzerland Innovation Foundation. SIPBB is a private, non-profit Swiss organisation, which carries out and supports industrially-oriented and primary applied research and development. As part of the national and

international network of the Switzerland Innovation Foundation, we aim to generate research investments from abroad, foster innovative achievement and startups within Switzerland, and accelerate the process of turning research results into market-ready products.





Contact and find out more at www.sipbb.ch/network

INNOVATION OUTPOSTING IN SWITZERLAND



addition to numerous dialects. The Swiss economy relies on highly qualified work and a well-educated workforce.



IMPORTANT AREAS

- Microtechnology, high technology, biotechnology, the pharmaceutical industry, banking and insurance know-how
- In Switzerland, the highest proportion of employed persons work in small and medium-sized enterprises (SMEs), which play an enormously important role in the economy of the country



BIEL/BIENNE

Biel/Bienne is the largest bilingual city in Switzerland. The city is located in the Seeland, directly on the shores of Lake Biel and at the foot of the Jura. Our city's unmistakable "savoir-vivre" is directly due to the bilingualism so wholly embodied by its population.

SIPBB offers all the advantages of Switzerland:

- High degree of innovation and technology
- Competitive economic location
- A liberal economic system
- Political stability
- Close ties with foreign markets
- Good, dual education system
- Excellent healthcare system
- Excellent infrastructure
- High standard of living

Furthermore, located in the very heart of Switzerland, between the German- and French-speaking speaking regions, Biel/Bienne is a bilingual and export-oriented city.



HIGHLY QUALIFIED AND PRODUCTIVE WORKFORCE



SWITZERLAND OFFERS A VARIETY OF POSSIBLE INVESTMENT GROUPS



INVESTED IN CREATING A SUSTAINABLE ECONOMY



SWITZERLAND IS THE MOST INNOVATIVE COUNTRY IN THE WORLD

Switzerland Innovation Park Biel/Bienne



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CONNECTING GREAT MINDS

Cutting-Edge Infrastructure Inspirational Innovation Ecosystem

JOIN US!

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