



# AHEAD CONNECT

**AHEAD** Empowering  
Hightech Ventures

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# TEAM OVERVIEW

## **BiogenicMatter**

*construction & sustainability*

BiogenicMatter uses CO<sub>2</sub>-absorbing bacteria to produce biogenic limestone that can be molded with various fillers into sustainable components for the construction industry.

## **CAELIA Health**

*health, software & digital*

CAELIA Health empowers people with asthma or COPD to live a life without symptoms. The first “smartwatch for the lung,” is a universal add-on sensor that reveals silent inhalation errors, provides instant feedback, and therapy success.

## **CAPO-IFF**

*construction, software & digital*

CAPO-IFF enhances construction safety and efficiency through remote audio monitoring enabling future capabilities like drone control for smarter sites.

## **Circular Plastics**

*materials & sustainability*

Circular Plastics extracts high-quality, impurity-free polymers from mixed waste streams to offer an affordable recycled alternative to virgin plastics for sustainable packaging.

## **CMID**

*construction*

CMID uses fingerprint-technology to connect building materials with digital data, enabling efficient reuse, reducing waste, and driving a more sustainable and circular construction industry.

## **Dubbing Solutions**

*software & digital*

Dubbing Solutions enables media professionals worldwide to make audiovisual content accessible across all languages quickly, cost-effectively, and without creative compromise through a human-in-the-loop approach.

## **EDENenergy**

*electronics & energy*

EDENenergy enhances sustainability by converting end-of-life batteries into eco-friendly storage, extending their lifespan and reducing ecological impact.

## **FCTRY CLD**

*manufacturing & automation*

FCTRY CLD provides a secure, real-time, local factory cloud solution for manufacturing companies, to deploy innovative technologies on the shopfloor.

## **GECKO**

*life science & biotech*

Gecko develops a stem-cell-based therapy to restore eyesight for people with corneal clouding, reducing implant waiting times and improving patient outcomes.

## **HammerDrum**

*construction*

HammerDrum offers a faster, more reliable, and cost-efficient fluidic hammer technology for trenchless drilling in hard rock, 20% of all HDD projects worldwide.

## **Kiln Coatings**

*sustainability*

Kiln Coatings / CarbonConnect develops and scales high-quality biochar carbon removal projects that create real climate impact while supporting smallholder farmers.

## **Serino Q-Scan**

*material & digital*

Serino develops printed quantum-dot infrared detectors and AI analytics to bring real-time chemical and material sensing out of the lab and into the field through affordable, handheld scanning devices.

# BiogenicMatter



spin-off

pre-launch (MMA)

construction & sustainability

## ABOUT

In BiogenicMatter, we utilize bacteria that extract carbon dioxide from the environment or industrial processes and convert it into  $\text{CaCO}_3$  - limestone. This biogenic limestone then can be combined with filler materials such as sand, concrete rubble, or renewable resources, allowing us to mold it into specific components for various applications for instance in the building and construction industry.



Looking  
for 

demonstration

250k for 1st upscaling

dedicated team

## OPPORTUNITY



Limestone is a key raw material in cement production, traditionally sourced from fossil-based deposits and processed from large blocks into powder. A critical step in its use for cement is calcination, where limestone is transformed into lime. This reaction alone contributes to 11% of global  $\text{CO}_2$  emissions. To make the construction industry more sustainable, particularly given the annual cement demand of 7.5 million tons, innovative and eco-friendly cement alternatives are urgently needed.

## SOLUTION



Our "green" technology not only captures and eliminates  $\text{CO}_2$  but also incorporates it into a product suitable for building and construction. Rather than relying on fossil resources, our limestone is produced through biological processes. This enables the creation of innovative biocement materials for biogenic mortars, plasters, and concretes.

## WHY US



We currently have two pending patent applications focused on producing innovative biogenic calcium carbonate materials using our bacteria-based biologized method. By utilizing recycled materials from the circular economy approaches, we can optimize and adjust the properties of our manufactured components for various applications for instance within the building and construction sector.

## CONTACT

### Contact person

matthias.ahlhelm@ikts.fraunhofer.de

### Located in

Dresden, Germany

### Institute

Fraunhofer IKTS

# BiogenicMatter



## OUR TEAM



**Dr. Matthias Ahlhelm** is planned CTO & visionary, now Head of Group „Biologized Materials and Structures“ with more than 14 years expertise in developing biocompatible materials & structures, R&D and project management.

**Dr. Jörg Opitz**, now Head of department “Bio- & Nanotechnology”, will be responsible for future Business development and R&D in particular regarding bioengineering.

**Prof. Dr. Thomas Härtling** now Head of department “New Business Development” is experienced founder and will be responsible for Business development & investor relations.

## SEARCHING FOR...



As of now we are searching for **starting capital** that finances a proper bioreactor demonstrational setup (10 to 50L scale), including a set of 2-3 design studies, LCA and economical data assessment (also using appropriate sensors for CO<sub>2</sub> fixation measurements).

Above all, BiogenicMatter needs an **early investor** who not only finances the first scaled demonstrator of a above but the logical industrial-scale what would potentially be a 2000m<sup>3</sup> bioreactor estimated to cost around 1,5 Million €.

BiogenicMatter is searching for a CEO that is experienced in sales and financials. We furthermore need a technician with bio process engineering background.

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



We are eliminating CO<sub>2</sub> emissions, and we are doing so not just compressing carbon dioxide under ground with unknown future safety conditions (e.g. earthquakes) BUT in contrast, we will have a product made of out this carbon storage ability. This (biogenic) limestone is a base chemical which is needed for a lot of applications such as fertilizers, fillers for pavement and plastics, as well as plaster/mortar or novel biocement materials (also in combination with renewables such as hemp or wood).

An external awaits an endeavor to a future where limestone is not being mined and nature destroyed but rather nature helps forming new and biogenic limestone by capturing CO<sub>2</sub> from industrial processes, which additionally, helps the carbon dioxide emitting industry reducing their footprint and contributes to a sustainable life.

spin-off

pre-launch

health, software & digital

## ABOUT

Our mission is to enable people with asthma and COPD to live a life without symptoms. CAELIA develops **SereneAir**, a universal smart spacer that works with any standard inhaler (pMDI), and the companion app **SereneCompanion**. Together, they turn one of the least-digitized vital signals – **breath** – into actionable data. We provide real-time feedback, continuous monitoring and telemedical insights for patients, clinicians and partners in pulmonary drug delivery.



Looking  
for 

networking

first contact to investors

co-founder/ CDO

## OPPORTUNITY



Over **650 million** people live with asthma or COPD. **70–90%** use inhalers incorrectly and often receive **less than half** of the intended dose. These “silent errors” drive avoidable symptoms, ER visits and billions in preventable costs. Today, therapy, breath and outcomes are barely linked. The opportunity: make inhalation **measurable and visible** for the first time.

## SOLUTION



CAELIA combines the smart spacer **SereneAir** with the **SereneCompanion** app. The device measures inhalation flow, timing and dose, guides a short **home-spirometry** and streams data in real time. This enables three monitoring areas in one system: **inhalation quality (+ dose), therapy response** and **long-term disease control**. Patients get instant coaching, clinicians receive objective data, and partners gain reliable real-world evidence (e.g. for Phase IV-studies).

## WHY US



CAELIA builds on **Fraunhofer** sensor expertise, proprietary IP and a strong clinical network. The team brings each 10+ years experience each in relevant areas, like: digital health, sensor engineering and venture building. Backed by leading pulmonologists and payers, with **55+ expert interviews** and multiple **LoIs**, we are uniquely positioned to deliver the first universal “**smart watch for the lung**” and scale precision respiratory care globally.

## CONTACT

### Contact person

Björn Götzfried

### Located in

Munich

### Institute

Fraunhofer EMFT

## OUR TEAM



### Vanessa T. G. | CPO

- +12y Digital Health; Clinical Operations

### Björn G. | CEO

- +16y Venture Building Experience

### Rinaldo P. | CTO

- +10y Founder/ CTO, Ultrasound Expert

## SEARCHING FOR...



**MedTech & Digital Health Investors:** Pre-seed / seed investors to co-shape CE path, first clinical deployments and reimbursement strategy in asthma & COPD.

**Business Angels & Family Offices:** With experience in healthcare, reimbursement or international scaling (DACH, GCC, US).

**Co-Founder CDO – Head of System Architecture & AI:** Strong background in health data, ML/AI, and cloud system architecture; passion for building a global respiratory data platform.

**Selected Clinical & Payer Partners:** Clinics and insurers interested in piloting smart inhalation monitoring and remote respiratory care.

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



**Expert Team:** Combination of Fraunhofer deep-tech, sensor-fusion, digital health and reimbursement experience; backed by leading pulmonologists and payers.

**De-Risked Need & Traction:** 55+ expert interviews, 9+ LoIs / expert letters and first clinical study planned with LMU Klinikum (in Q2/26) validate medical need and economic impact.

**Next-Gen Tech:** First universal smart spacer that unites inhalation quality, therapy response and longitudinal control in one system, creating a world's first respiratory data asset.

**Scalable Model:** Clear path from direct sales to reimbursed remote monitoring and high-margin Real-World-Data/Phase IV studies with pharma and CROs.



startup cooperation

launched

software & digital

## ABOUT

We deliver transparency, efficiency, and safety to construction through remote audio-based monitoring. Our system provides real-time insights and automated documentation without on-site presence, reducing costs, improving quality, and streamlining workflows. Our modular Sensor Box is built for future expansion, including drone-assisted progress tracking and defect detection, enabling smarter and safer construction sites.



Looking  
for 

1 mio.€ pre-seed in Q1 2026

pilot partners

strategic partnerships

## OPPORTUNITY



Construction managers face pressure to meet deadlines, control costs, and document progress, but lack the time and tools for efficient monitoring. Manual inspections slow them down. Our remote audio-based monitoring system provides real-time insights and automated reports, helping managers save time, reduce stress, and stay in full control of quality and progress.

## SOLUTION



We provide a remote, data-compliant construction monitoring system based on audio signal analysis. Our modular Sensor Box captures real-time site activities and generates automated reports. Construction managers gain continuous visibility, faster documentation, and better control over processes, while staying flexible for future expansions like drone-assisted inspections.

## WHY US



+35 €/sqm margin improvement through automated progress and documentation. Construction managers can save up to 3 hours/day, reduce stress and stay compliant automatically.

With CAPO and Fraunhofer IFF, we combine deep construction expertise with advanced AI capabilities

## CONTACT

### Contact person

Michael Meyerhofer

### Located in

Passau

### Institute

IFF

## OUR TEAM



**Michael Meyerhofer**  
**CAPO – CEO**  
Bau-/Projekt Manager  
Real Estate Investment Analyst  
Sales



**Ali Karadeniz**  
**CAPO – CTO**  
Senior Full Stack Developer  
API-Entwicklung  
Hardware Entwicklung



**Sergii Kolomiichuk**  
**Fraunhofer IFF**  
KI-Experte & Dozent  
Digitale Transformation



**Sergey Serebranski**  
**Fraunhofer IFF**  
Produkt-Ingenieur  
Labeling & Konzeption



**Stefanie Samtleben**  
**Fraunhofer IFF**  
Gruppenleiterin IFF  
Organisation & Patent



## SEARCHING FOR...



### Pre-Seed Invest

- Developing hardware & optimizing the AI-Model (Recording, Labeling and AI-Training)
- Build Team for sales and development
- Business Angel (> 25k €) and Early-stage VCs for pre-seed (> 200k €)

### Pilot projects & Strategic Partners

- Construction sites for recording noises
- Strategic partnership

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



- **Expert Team** – Years of experience in construction, AI, software & hardware development
- **Full Pipeline** – LOIs and waiting pilot users
- **Anonymous, Secure** – Unique tech solution with audio detection, on edge classification
- **High value** – We bring digital infrastructure to construction sites to enable truly disruptive solutions



spin-off

pre-launch

materials & chemistry, sustainability

### ABOUT

Our mission is to transform recycling and foster sustainable plastics. We focus on extracting polymers from mixed waste streams, which are currently not being recycled. By delivering a pure and impurity-free, high-quality recycled material to an affordable price, we offer a viable alternative to virgin materials for various packaging applications, driving innovation and contributing to a greener future.



Looking  
for 

5 Mio.€ VC for engineering, commercialization

20. Mio.€ VC for flagship site

### OPPORTUNITY



Every year 480 mio. tons of plastics are produced worldwide, yet only 9,5% of the plastics is made from recyclates. With the EU requiring mandatory recyclimate quotes by 2030, a shortfall of 8 mio. tons of high-quality recyclimate is anticipated, only in Europe.

This gap can be filled by offering sustainable, high-purity recycled polymers, positioning Circular Plastics as a key player in the recycling market and supporting a circular economy.

### SOLUTION



We offer two scalable technologies that make premium PE and PP recycling possible and economical. PolySolv converts mixed, unsorted waste into virgin-quality recyclates via selective dissolution and extraction, while PolyClear elevates quality and reduces cost for well-sorted streams with advanced melt filtration.

Together, they close the gap between sustainability targets and the supply of affordable, top-grade recyclates.

### WHY US



With the unique combination of long-term experience in waste management business as well as deep know-how and IP in dissolution-based recycling, Circular Plastics offers reliable and innovative solutions and the ability for their industrial implementation.

The high-quality recyclates are suitable even for most demanding applications. This unique combination positions Circular Plastics as a leader in the sustainable raw materials market.

### CONTACT

#### Contact person

Johannes Schneider

#### Located in

Freising

#### Institute

Fraunhofer Institute for Process Engineering and Packaging IVV

### OUR TEAM



**Matthias Wilhelm**  
(CEO)

Experience in Engineering,  
Sales, Business & Corporate  
Development and M&A processes  
(12+ years)



**Johannes Schneider**  
(BD)

Experience in process  
development & project lead in  
polymer recycling  
(4+ years)



**Johannes Lober**  
(CFO)

Owner and CEO of Lober. More than  
25 years in the business of corporate  
management, waste stream  
management and recycling



### SEARCHING FOR...



- | **Seed Investors** for industrial demo scale plant that allows for engineering & validation of improved equipment and to set up first uptake agreements with customers with a volume of €5 million.
- | **Series A investors** to realize a €20 million investment for an industrial scale flagship plant in a financing round --> first rollout with > €20 million in potential revenue

### WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



The forthcoming EU Packaging and Packaging Waste Regulation (PPWR) requires that by 2030, 35% of plastic packaging is made from Post-Consumer Recycled (PCR) materials. Additionally, EU End-of-life vehicles directive (ELV) is in preparation, proposing shares of recyclates in new vehicles of up to 25% within the the next years. This creates a strong demand for high-quality recycled PE & PP – currently unmet by existing processes.

Unlike competing methods, our approach does not require a single, pure-grade waste stream, making recycling more efficient while still yielding higher-purity and quality materials. Incorporating the whole value chain of waste management – recycling – compounding Circular Plastics can act worldwide & independent from additional infrastructure.

# CMID

## Component + Material Identity



Component + Material Identity

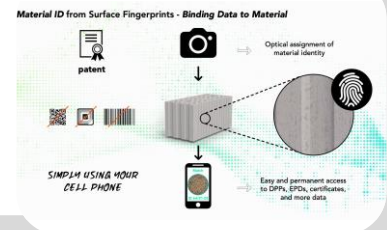
spin-off

pre-launch

construction

### ABOUT

At CMID, our mission is to revolutionize the building industry by bridging the gap between digital data and physical components. We use "fingerprint-technology" to enable efficient reuse of building materials, reduce waste and promote sustainability. By creating a connection between materials and data we empower the industry to fulfil regulatory needs, to build a circular economy and foster a future where resources are maximized, and environmental impact is minimized.



Looking  
for 

pre-seed funding

business angels

manufacturer network

### OPPORTUNITY



At CMID, we give every component a unique identity. This creates a permanent material marker that fulfils the legal link to Digital Product Passes and secures information across its entire journey. This knowledge elevates quality management throughout the supply chain and unlocks new business models for manufacturers, from PaaS to material leasing. Knowledge that is essential for a future where resource value is maximised and environmental impact minimised.

### SOLUTION



We create the interface between digital data and physical materials by assigning each component a unique, permanent identity. This ID is linked to the properties of the material, like a "fingerprint" or a "biometric photo". Without using QR codes, chips or other visible identification symbols, the ID enables solid traceability and a link to data that is tamper-proof and resistant against change. A link that can be established whenever and wherever it is needed.

### WHY US



Our unique system seamlessly integrates into material production lines through a fast, scalable process. Once allocated our ID has a direct impact towards Product Declarations and offers a universally recognizable material identity that boosts sustainability, compliance, and data-driven decision-making – accessible right from your smartphone.

### CONTACT

#### Contact person

Benedikt Bührle & Marcel Winter

#### Located in

Berlin, Bremen, Zürich

#### Institute

IFAM, Hendrik Leibrandt

# AHEAD

 **Fraunhofer**

# CMID

## Component + Material Identity



Component + Material Identity



### OUR TEAM



**Benedikt Bührle**  
**Co-Founder**

Sales & Product Development

Benedikt blends design thinking with strong product development and team building skills. With over 10 years experience, he drives CMID's product vision.



**Marcel Winter**  
**Co-Founder**

Strategy & Operations

Marcel brings over 10 years of leadership and executive experience in architecture. He is driving CMID's growth by drawing on his experience in management and directing projects.



**Alexander Opak**  
**Development**

Software & KI/ ML

With over 15 years' experience in building scalable, real-time platforms and robust data pipelines, Alex is a software architect who makes CMID's infrastructure fast and reliable.



**Hendrik Leibrandt**  
**Researcher**

Fingerprint Technology

M.Sc. Informatics, Researcher at Fraunhofer IFAM Institute  
Focus on data-driven methods and software in the built environment.

### SEARCHING FOR...



#### Business Angels & Early-Stage Investors

We are seeking strategic partners, business angels, and early pre-seed investors to support us in the next phase of development. With our first pilot customers underway, CMID has entered a decisive stage: our technology is validated, the demand is clear and the market need is proven. To keep this momentum, we are now scaling the technical development that underpins our permanent material identity system. This requires targeted funding to accelerate deployment, shorten time-to-market and convert our growing pipeline into commercial roll-outs.

### WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



**Industry Experience** – 10+ years experience in construction, management and software development

**Network** – Longtime relationships in the industry created a strong and valuable network.

**Market pull** – We create a solution for a mandatory permanent datacarrier that links Digital-Product-Passports to materials

**Data as Enabler** – We provide accessible, structured data as an essential enabler for quality management and new business opportunities in the circular economy.

**Achievements** – We rapidly secured pilot customers, gained significant industry and media traction and established deep domain expertise that positions us as a leading force in material identities.

# AHEAD

 **Fraunhofer**

startup cooperation

pre-launch

software &amp; digital

## ABOUT

Dubbing Solutions aims to empower media professionals around the world to make audiovisual content accessible across all languages and cultures — quickly, cost-effectively, and without creative compromise.

With a clear human-in-the-loop approach, we strengthen creative expertise and support sustainable growth in the industry.



Looking  
for 

€250 – 350k investment

multipliers in media industry

## OPPORTUNITY



The streaming and digital media market is expanding rapidly, with an increasing number of creators, studios and content producers looking to distribute their content to a global audience. According to reports, the global streaming market is projected to grow to over \$330 billion by 2030, making multilingual content a critical factor for growth.

## SOLUTION



Our solution is a unified software platform that automates repetitive and time-consuming tasks in media production, such as transcription, translation and voice generation. It integrates seamlessly into existing production workflows and supports creators in navigating an increasingly data- and AI-driven production environment. This allows content creators to work faster and focus on creativity.

## WHY US



Our approach is fully integrated into cloud media workflows which offers customers easy access to Voice AI at low costs. This leads to usability advantages in a competitive market with a growing demand in b2b segments. Besides that our software is designed on a modular approach to be highly flexible and robust for future AI model developments.

## CONTACT

### Contact person

[alexander.wolf@iis.fraunhofer.de](mailto:alexander.wolf@iis.fraunhofer.de)

### Located in

Berlin

### Institute

Fraunhofer IIS



## OUR TEAM



### Alexander Wolf – CEO

Experience in the film and dubbing industry (+3 years) and research associate at Fraunhofer IIS in product and business developmentc (+3 years).



### Sören Hübner – CTO

Experience in software engineering, AI, audio data analysis, infrastructure and scaling a start up (+5 years).

## SEARCHING FOR...



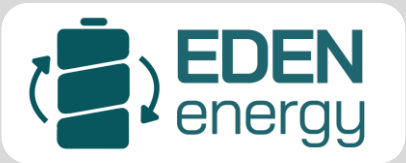
*We're actively seeking €250–350K from:*

- **Early-Stage VCs & Growth Investors** - Funds with media tech or AI expertise who understand European SaaS scaling.
- **Strategic Investors** - Production houses and media tech companies investing in AI solutions for postproduction.
- **Business Angels** - Industry experts and entrepreneurs who can advise on go-to-market.

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



- **Expert Team** - AI audio research, media production and software engineering.
- **Next-Gen Tech** - Modular AI platform orchestrated through one central API.
- **Secure** - GDPR compliance, Privacy-by-design approach, aligned with EU AI Act.
- **Interoperability** - Modular, highly flexible and expandable tech stack.
- **Workflow-Integrated** - Seamless integration into industry-standard software tools.



spin-off

pre-launch

electronics & energy

## ABOUT

Our mission is to give **millions of discarded e-bike and e-scooter batteries** a second life. We turn end-of-first-life modules into flexible, safe and sustainable **stationary storage systems** — reducing Europe's raw-material dependence and cutting the ecological footprint. With a focus on innovation and circular design, **we enable efficient, affordable energy storage for a truly greener future.**



Looking  
for 

250k pre-seed round Q2/26

venture clients

discarded batteries

## OPPORTUNITY



Millions of usable micro-mobility batteries meet a booming need for affordable, safe home storage.

We unlock this untapped resource with a circular, regulation-ready solution.

## SOLUTION



A modular second-life home battery using repurposed E-bike packs, enabled by micro-inverters and our FFCU safety system.

Lower cost, high performance, long lifetime, minimal footprint!

## WHY US



We enable real second-life at scale: safer, more flexible, and more sustainable than existing systems – built on Fraunhofer tech and a patent-pending safety innovation.

## CONTACT

**Contact person**  
Florian Bierwirth

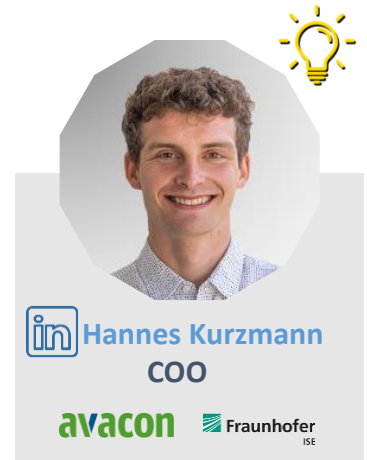
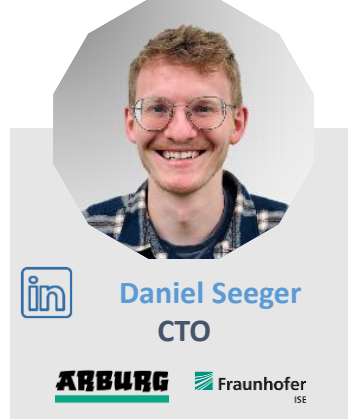
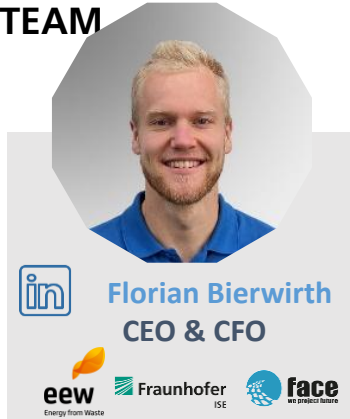
**Located in**  
Freiburg (BaWü)

**Institute**  
Fraunhofer ISE





## OUR TEAM



## SEARCHING FOR...



We are looking for strong partners in **battery sourcing, manufacturing, and distribution**, as well as support in **certification, industrialization, and early market access**. We also seek **investors** who share our vision of safe, scalable and truly sustainable second-life storage.

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



We combine **Fraunhofer-backed deep-tech**, a patent-pending **safety innovation** (FFCU), and a **unique power electronics** architecture **enabling real second-life for millions of micro-mobility batteries**. Our **young, highly skilled team** executes fast, has already built **functioning demonstrators**, strong **industry partnerships**, and operates in a market with **massive demand** and clear regulatory tailwinds.

spin-off

pre-launch

manufacturing and automation

## ABOUT

The FCTRY CLD (Factory Cloud) is an on-premise, real-time capable infrastructure solution for innovative manufacturing applications. It uses cloud technologies to provide a scalable and easy to maintain platform for automation technologies. By providing hardware and software we enable smaller companies a fast start in emerging technologies such as AI, virtual controllers and IoT.



Looking  
for 

hands-on PoCs

customers

investors

## OPPORTUNITY



Manufacturing companies, especially smaller and medium sized, struggle with the adaption of digital technologies in their production processes. Major challenges are outdated IT infrastructures and lack of qualified personal. Often, public cloud solutions are used, which on one hand create high dependencies, and on the other hand cannot meet industrial requirements.

## SOLUTION



We provide a cloud solution, which is made in Germany, independent and transparent. With us, manufacturers can host cloud applications within their companies and are independent from public cloud providers. Using our real-time extensions, even control applications can be hosted as a Service.

## WHY US



The FCTRY CLD, is a managed infrastructure, that offers unique extensions to provide real-time capabilities and high reliability, required for manufacturing processes. Further with the FCTRY APPS we provide smart services that allow fast innovations. As a local solution, the FCTRY CLD is compliant with OT-security regulations, reducing dependencies to cloud providers and increasing data sovereignty.

## CONTACT

### Contact person

Pierre E. Kehl and Talib Sankal

### Located in

Aachen

### Institute

Fraunhofer Institute for Production Technology IPT



### OUR TEAM



#### **Pierre E. Kehl**

*CEO, Business Development*

Experience in digitization of industrial production (+6 years) and management responsibility as research group leader (+4 years)



#### **Talib Sankal**

*CTO, Product Design & Development*

Experience in cloud-native technologies and innovation processes in industrial production (+5 years)



### SEARCHING FOR...

- **Seed Fund Investors (Business Angel, VC, Investors):**
  - Interested in Deep-Tech, experience in B2B and potential go-to-market guidance.
  - Spin-off planned for November 2026.
  - Long term partnership to form next-generation manufacturing.
- **Manufacturing companies interested in digitalization of their production:**
  - Pilot projects in real-world environments to gain hands-on experience.
- **Early adopters which want to:**
  - Enhance product quality and flexibility with cutting-edge digital solutions.



### WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?

Improve your production using cloud technologies together with us:

- **Expert Team** - Years of experience in manufacturing and digital solutions.
- **Next-Gen Tech** - Unique Soft- and Hardware stack using cloud technologies.
- **Real-time** – Suiting industrial requirements even for critical use cases such as virtual PLC.
- **Local, Secure** - Our solution works on-premise offering independence and high security.
- **Interoperability** – Connectivity solutions for easy integration of existing hardware.



spin-off

pre-launch

life science & biotech

## ABOUT

Gecko will provide a therapy for people who suffer from corneal clouding. We will bring back the eyesight to these patients.

Our goal is to reduce the waiting time for corneal implants and improve patient outcomes using our innovative stem cell technology.

We envision a world which everyone can see.



Looking  
for 

investors

strategic partner

mentor for clinical studies

## OPPORTUNITY



4% of the population is affected by corneal clouding. About 12.7 mio people are currently waiting for a DMEK transplant, but only 1 in 70 receives one. The key challenges are limited donor corneas with poor tissue quality leading to long waiting times. GECKO presents an opportunity for advancements in corneal transplantation, improving patient outcomes and reducing waiting times.

## SOLUTION



Gecko follows an approach in which stem cells are obtained from a tissue sample and are then developed into a functional cornea transplant on our biomimetic graft.

The StemCellGraft can then be transplanted (allogen or autolog) using the standard surgical method (DMEK).

## WHY US



Our StemCellGraft technology is unique in corneal transplantation, offering a minimally invasive stem cell solution. This approach reduces reliance on donor corneas and enhances transplant quality.

Additionally, we offer our ready-to-order stem cells, keratinocytes, fibroblasts and human cell-based in vitro test systems for researchers, pharma and cosmetic manufacturers.

## CONTACT

### Contact person

Dr. Claudia Skazik-Voogt

### Located in

Aachen

### Institute

Institute for Production Technology



## OUR TEAM



**Daniel** | Business Model

» Successful application of our Fraunhofer model to transfer technology in biology / regenerative medicine

Automation Engineering, 10+ years of experience in ultra-precision, 6 years as head of department



**Nico** | Application

» Entrusted with the application since day one at Fraunhofer IPT

Medical engineer, 5 years of experience in regenerative medicine, experience in regulatory affairs and ethics



**Claudia** | Scientific Excellence

» Seeing our research have real impact on patients

PhD in biology, S1 & BSL2 lab supervisor, 10+ years of experience in biomaterials, cell culture and operational management

## SEARCHING FOR...



- An investor with in-depth knowledge and understanding of tissue engineering and regenerative medicine
- A strategic, long-term investment perspective coupled with a sophisticated understanding of biotechnology's distinct development and value-creation cycle
- An investor for the founding in Q1 2027 to start preclinical studies
- An investor who wants to take advantage of the opportunity to mirror public funding with the intention of acquiring a share in the company after its founding.

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



Our unique StemCellGraft technology will revolutionize corneal transplantation! This breakthrough offers a minimally invasive stem cell solution, addressing the critical global donor cornea shortage and current procedural limitations. Our approach reduces patient waiting times for corneal transplants while significantly enhancing transplant quality.

Beyond transplantation, we provide ready-to-order stem cells other human cells and advanced human cell-based in-vitro test systems. These serve researchers, pharmaceutical, and cosmetic manufacturers seeking reliable, 3R-conform, and efficient testing alternatives, opening diverse market opportunities.

This dual focus positions us uniquely. Invest in a pioneering company with a clear vision, validated technology, substantial multi-sector market potential, an experienced team, and strong returns through transformative healthcare solutions.

startup cooperation

pre-launch

construction

## ABOUT

HammerDrum, with Fraunhofer IEG, is developing a breakthrough trenchless drilling technology for hard rock, 20% of all HDD projects worldwide. Our fluidic hammer is faster, more reliable, and cost-efficient than conventional tools. Led by long-time collaborators Duarte and Oliver, we combine technical expertise with strong industry connections and are seeking smart-money investors to bring this technology to market.



Looking  
for 

funding

early customers

talents

## OPPORTUNITY



Horizontal Directional Drilling (HDD) is essential for trenchless installation of pipelines, cables, and utilities. But in hard rock or mixed soils, performance collapses: drilling slows by up to 90%, tool wear rises, and fluid use spikes. Because projects are priced per meter, every delay cuts directly into margins. Current tools, mud motors and air hammers, come from oil & gas and weren't designed specifically for HDD.

## SOLUTION



Fraunhofer IEG and HammerDrum have created a fluidic hammer built for HDD. It runs on standard drilling fluids, maintains borehole stability, and adds percussive power that can triple drilling speed while reducing fluid needs. It fits any rig without modification, enabling faster, more predictable drilling in hard rock and mixed soils, turning a two-week borehole into a two-day job.

## WHY US



We deliver faster, more productive drilling with our purpose-built hybrid system that runs entirely on standard drilling fluids.

Our innovative technology works where conventional tools fail, while reducing equipment needs and logistics costs.

Fully compatible with existing rigs, we make long boreholes easier, more efficient, and more profitable.

## CONTACT

### Contact person

Oliver Rau | [oliver.rau@hammerdrum.rocks](mailto:oliver.rau@hammerdrum.rocks)

### Located in

Zug, Switzerland

### Institute

Fraunhofer IEG

## OUR TEAM



**Duarte Santos** (Co-Founder, Tech Lead): MSc Aerospace Engineering (University of Lisbon, ETH Zürich), ex-iRobot, CERN, and Aeris Health. Deep expertise in advanced simulation and hardware development.



**Oliver Rau** (Co-Founder, Biz Lead): MSc Business Strategy (UCD), ex-Digitec Galaxus. Experienced in supply chain, category management, and business development. Venture Leader Cleantech 2024.

## SEARCHING FOR...



We are seeking **smart-money investors (business angels or strategic partners)** to help build our company. With strong industry and manufacturing contacts and clear market demand, we are ready to validate and launch our technology and need funding to reach the market.

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



Our team combines deep technical and business expertise, with a long-standing partnership built on trust and resilience. Duarte and Oliver have worked together for years, tackling complex challenges and delivering results. With strong industry contacts and a clear understanding of HDD, we are committed to bringing a game-changing technology to market efficiently and reliably.



startup cooperation

pre-launch

sustainability

## ABOUT

CarbonConnect develops and scales high-quality biochar carbon removal projects that create real climate impact while supporting smallholder farmers. Our mission is simple: remove CO<sub>2</sub> from the atmosphere, store it safely for over 1,000 years, and ensure communities benefit directly from climate action.

A key part of our work is the development of **our own methane-free biochar technology**.



Looking  
for 

investment / convertible

cooperation partner

buyers of certificates

## OPPORTUNITY



CarbonConnect operates in one of the fastest-growing climate markets, where global demand for durable carbon removal is skyrocketing while supply meets less than **0.01%** of what's needed. Biochar alone has a potential of **up to 3 gigatons** of CO<sub>2</sub> removal per year, yet current global production is only about **350,000 tons**. With methane-free technology and scalable farmer networks, CarbonConnect can unlock this enormous market gap.

## SOLUTION



CarbonConnect builds scalable biochar micro-infrastructure directly with smallholder farmers, turning agricultural residues into permanent carbon sinks. Our digital monitoring, automated payments, ensure every credit is fully traceable, high-integrity for corporate buyers. This creates value by generating new income streams for farmers, delivering reliable long-term carbon removal for companies, and unlocking a decentralized global supply of high-quality CDR at scale.

## WHY US



CarbonConnect delivers one of the first **methane-free, fully traceable, high-integrity biochar carbon removal** produced by empowered smallholder farmers. Every credit is independently verified, transparently tracked, and permanently retired. Companies choose us for **real climate impact with guaranteed quality and direct community benefits**.

## CONTACT

### Contact person

Tim Künzel

### Located in

Hamburg

### Institute

CarbonConnect GmbH

## OUR TEAM



CarbonConnect is led by a small, dedicated team combining climate science, technology, and hands-on field experience. Founded by **Nando Knodel** and **Tim Künzel**, our team includes experts in carbon removal, compliance, farmer operations, digital monitoring, and communications.

We work directly on the ground with farming communities while building digital systems that guarantee high-integrity, transparent, methane-free carbon removal. Together, we're committed to creating real climate impact and fair economic opportunities.

**Check out Team here:** <https://www.carbonconnect.earth/about>

## SEARCHING FOR...



We are currently bringing in a few final investors to **complete our first investment round (convertible loan), with a lead investor already committed** and a clear runway toward our Seed Round planned for next year. We also welcome **buyers** seeking high-integrity, methane-free biochar carbon removal with full traceability and existing offtake agreements in place. In addition, we are looking for **new project partners** - NGOs, cooperatives, farmer networks, and local organizations eager to scale fair, community-driven carbon removal projects across emerging markets.

Together, we can expand our impact, grow our global project footprint, and unlock the next wave of durable, socially rooted carbon removal.

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



CarbonConnect is one of the few CDR companies already **operating at scale in the Global South**, with active projects in **four countries**, verified carbon sinks, signed **offtake agreements**, and real credits already sold. Our methane-free biochar technology, full digital traceability, and farmer-powered model create **high-integrity, permanent carbon removal** that buyers trust and communities benefit from.

We are currently **closing our first investment round** with a lead investor already committed via a **convertible loan**, and we are looking for a few additional tickets to accelerate growth and prepare a **Seed round for late next year**. Investors choose us because we deliver **real operations, real impact, and real revenue** in a market where supply is scarce and demand is exploding.

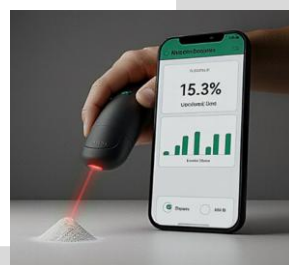
startup cooperation

pre-launch

material & digital

## ABOUT

Serino is a deep-tech startup developing printed quantum-dot infrared detectors and AI analytics that bring real-time chemical/material sensing out of the lab and into real operations. Our first product, **Q-Scan**, combines our QD sensor with a scanning microspectrometer (SMMS) to deliver an affordable, lightweight handheld material scanner for agriculture and food quality use cases (e.g., moisture and ripeness), enabling faster decisions, reduced waste, and higher quality.



Looking  
for 

pilot projects

investors

OEMs

## OPPORTUNITY



Agriculture and food supply chains still lack affordable, real-time insight into material quality (e.g., moisture, ripeness, authenticity) because analysis is lab-bound, slow, or depends on state-of-the-art SWIR solutions using InGaAs sensors that are too expensive and hard to scale for high-volume deployment. This cost and scalability barrier limits adoption in low-cost, large-volume markets like farming, food processing, and distributed quality control.

## SOLUTION



Serino's printed quantum-dot infrared sensors, combined with a Fraunhofer IMPS scanning microspectrometer, enable a pocket-sized material analyzer. Paired with AI analytics, it provides a scalable, low-cost alternative that brings chemical intelligence into handheld (and later embedded) devices for everyday decisions and inline quality control.

## WHY US



Serino combines printed quantum-dot infrared sensors with a Fraunhofer IMPS scanning micro-spectrometer and AI analytics to deliver affordable, real-time material insight in a compact, low-cost form factor. Designed for high-volume manufacturing, we start with agriculture and food, backed by validated performance and early pilot partners, and scale from Q-Scan handheld devices to OEM modules as a defensible sensing platform.

## CONTACT

### Contact person

holfeuer@serino-tech.com

### Located in

Munich

### Institute

Fraunhofer IPMS & LMU University

## OUR TEAM



### Dr. Amir Y. Amin – CEO

- Inventor of Serino's quantum IR technology (PhD, LMU Munich)
- Leads product development, partnerships & commercialization



### Dipl.-Ing. Rico Holfeuer – CTO

- Quantum chemist with industrial production experience (+5 yrs)
- Drives hardware execution & scale-up



## SEARCHING FOR...



### Investors (Pre-Seed/Seed VCs & Angels) who want to:

- Back European deep-tech hardware + AI (sensing/photonics, Agri/FoodTech).
- Fund product engineering to make Q-Scan a pilot-ready handheld scanner.

### To finalize during AHEAD we need support for:

- Redesign Q-Scan from absorption → reflection mode (field/at-line use).
- Partner with drone and machine-vision robotics companies to expand field automation use-cases.

### Ideal outcome from AHEAD Connect:

- 2–3 strong investor follow-ups + path to a lead/anchor for the next build phase.

## WHY SHOULD AN EXTERNAL CHOOSE US AND OUR TEAM?



Improve your quality control and decision-making in agriculture & food using Q-Scan together with us:

- **Expert Team:** Deep expertise in printed quantum-dot IR detectors, optics, and AI analytics.
- **Proven Device:** Q-Scan delivers fast, on-site moisture & quality measurements.
- **Real-World Ready:** Designed for field and production environments: compact, low-power, easy to operate.
- **Actionable Insights:** Moisture analytics available today via our ML pipeline, with expansion to further quality metrics underway.
- **Easy Integration:** Simple workflows, API/SDK options, and smooth rollout into existing QC processes.