

**October 2018****Specialised in Growth****Dear Reader,**

photo: schreier.co

After the summer break, we are back with another newsletter. Once again in this issue, we have compiled a lot of exciting news from our company and our portfolio companies for you. In July we announced the sale of the SHS III investment AMW, a Wangau-based specialist for drug delivery systems, to an international strategic investor. Just a few days ago, we were proud to inform you that we had sold our stake in Emerging Implant Technologies GmbH (EIT) to Johnson & Johnson Medical GmbH. A lot is also happening in the companies in our current portfolio including c-LEcta, Novo and CoreMedic.

In the meantime, we have completed the first closing for our fifth fund generation. Having already received capital commitments of 90 million euros, we have now reached almost two-thirds of the target. Investors can still invest in SHS V up to final closing.

We have added Sascha Alilovic to our management team. With him as our new partner, we now have a proven expert for corporate transactions in the life science and healthcare sectors on board.

I would also especially like to point out a story from within our own company. We interviewed our colleagues Cornelius Maas and Manfred Ulmer-Weber. The special thing about these two is that they both started as interns and now work for us as senior investment managers. How did that happen? Find out for yourself!

I hope you enjoy reading!

Hubertus Leonhardt

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**PORTFOLIO COMPANIES NEWS**

**SHS sells shares in 3D printing specialist EIT**



EIT PLIF Adjustable Implant

Emerging Implant Technologies GmbH (EIT) has changed ownership: Johnson & Johnson Medical acquired SHS' shares in the Tuttlingen-based medical technology company. SHS invested in the company in 2016 and supported it on its successful growth course. EIT was able to expand its product portfolio and tap into new markets.

Dr. Bernhard Schirmers, founder and Managing Partner of SHS, comments: "We would like to thank the management and employees of EIT for the successful partnership. We are delighted that the marketing of EIT's unique products can now benefit from the new owner's global network." Guntmar Eisen, founder and CEO of EIT, said: "We are proud of what we have achieved with our Cellular Titanium

implants. We are therefore excited about developing this innovative technology together with our new owner and making it available to customers around the world."

**KEY FACTS**

**Year established:** 2014

**Business purpose:** Development and marketing of 3D-printed fusion implants and instruments for spinal surgery applications. External implant production based on selective laser melting (SLM 3D printing) and regional distribution cooperations.

**Products:** Cervical cage, lumbar cages as well as an innovation portfolio comprising minimal-invasive access, customizability and other spine innovation projects

**Location:** Wurmlingen (2016, D), established in Tuttlingen

**c-LEcta on growth course: interview with Dr. Marc Struhalla and Thomas Pfaadt**

c-LEcta has announced a breakthrough in the market with mass production of a plant-based sweetener. SHS talked with c-LEcta board members Dr. Marc Struhalla and Thomas Pfaadt.

**SHS: Dr. Struhalla, what exactly does c-LEcta do?**

**Struhalla:** c-LEcta is a global leader in industrial biotechnology. We develop and commercialize innovative products and processes for the food and pharmaceutical industries. Our technological core competence consists of engineering enzymes and microorganisms. Our patent-protected technology platform allows these tools to be adapted quickly and purposefully to the complex conditions of industrial production processes. We also have the expertise necessary to produce new biotechnological products on a large scale under quality control and to ensure the regulatory prerequisites for market launch. c-LEcta makes high-quality biotechnological products of its own development or in close cooperation with manufacturers and supplies cost-efficient and sustainable production processes that open up new markets and enable better penetration of existing markets.



Uwe Steinbacher (Managing Director of SHS, center) talks with Thomas Pfaadt (CEO c-LEcta, l.) and Dr. Marc Struhalla (Founder and Managing Director c-LEcta, r.)

**SHS: Where is your technology used?**

**Struhalla:** We have already successfully launched several products on the market. Just a few weeks ago, we were the first company to announce a major breakthrough with a leading industrial partner in a process for the mass production of a plant-based sweetener with a sugar-like taste. It is particularly suitable for large-scale consumption in low-calorie and calorie-free beverages and foods such as soft drinks or diet products. In addition to two other products at an advanced stage of development with great market potential in this industry, the project pipeline includes several promising solutions for the food and pharmaceutical industries.

**SHS: How big is the market potential in these industries?**

**Struhalla:** When it comes to food ingredients, we are talking about a multi-billion-euro market. The marketing of the sweetener alone has the potential to raise c-LEcta's sales to a whole new level and enable our industrial partner to significantly change the world market for natural sweeteners.

**SHS: Mr. Pfaadt, you joined c-LEcta as CFO to support targeted growth. What do you see as being the great opportunities and drivers for the company?**

**Pfaadt:** Global megatrends and challenges in human nutrition require enzyme technologies that the chemical industry cannot offer. c-LEcta has established a remarkable track record with regard to both technology and product development, and has confirmed this with a growing customer base of leading pharmaceutical, chemical and food ingredient companies. The company already has more than ten successfully marketed, high-quality, industrial biotech products. It has now reached an attractive turning point, in which the current product pipeline is providing the foundation for accelerated growth.

**SHS: Your first official act consisted of completing the financing round. Do you see this as an initial success?**

**Pfaadt:** Yes, definitely! Closing this financing round with two new investors will not only inject growth capital, but also valuable access to an international network. With SHS in the lead, existing investors also invested in the capital increase.

**SHS: What strategic measures will you be financing in the future using the new funds?**

**Pfaadt:** With the new capital, we will be focusing on financing the approval, market launch and scaling of products from the project pipeline to commercial scale, as well as the further development of the pipeline and the expansion of international sales. Market trends demand our technologies and our highly qualified team is very motivated to launch the next level of growth. c-LEcta is well positioned for its transition to becoming a large biotechnology company.

Access to the public capital market is also on our agenda. With the products that already make a significant contribution to sales today and our product pipeline, we believe we are well positioned for this.

**KEY FACTS**

**Year established:** 2004

**Business purpose:** Development, optimization and implementation of high-quality enzymes and microbial strains for industrial biotechnology applications in food, feed, pharma and chemistry

**Products:** Industrial Enzymes: Food and animal feed, for the optimized production of pharmaceuticals; Bio-Chemicals: Food & Feed supplements, APIs, monomers

**Location:** Leipzig (D)

## Change of ownership at SHS portfolio company AMW



The leuporelin implant is administered via syringe.

The Wargau-based specialty pharmaceutical company AMW, which was developed with the participation of the SHS III fund, is changing ownership. The buyer is a consortium led by Hybio Pharmaceutical, a leading biopharmaceutical company, and YF Capital. In the course of the takeover, the new owners aim to expand the product portfolio as well as R&D, thereby driving forward the company's international expansion strategy. Dr. Bernhard Schirmers, founder and managing partner of SHS: "Together with our co-investors, we have accompanied AMW for many years and we are very proud of the company's impressive development. The takeover by a strategic investor shows how excellently positioned AMW is. With the new owner, AMW can enter a new growth phase."

### KEY FACTS

**Year established:** 2008

**Business purpose:** Development, production and marketing / out-licensing of speciality pharmaceuticals

**Products:** Transdermal systems (drug patches) and active implants for medical applications in oncology, neurology, psychiatry and endocrinology

**Location:** Wargau (D)

## CoreMedic reaches important milestone with the successful clinical deployment of ChordArt™

With ChordArt™, the Swiss start-up CoreMedic has developed minimally invasive repair systems for the treatment of heart valve diseases. Heart valve diseases such as mitral valve insufficiency or mitral insufficiency are one of the most common causes of heart defects. Open-heart surgery is currently the most common treatment method. The new method developed by CoreMedic is easier to perform and causes less stress for the patient.



ChordArt™ has now been used for the first time in a human operation. The procedure was without complications, the invasiveness of the surgical procedure was reduced, and the heart valve was repaired quickly, precisely and safely. ChordArt™ proved to be safe and well tolerated at all levels.

### KEY FACTS

**Year established:** 2012

**Business purpose:** Development of devices and therapies to address the treatment of heart valve diseases: repair system that replaces ruptured or elongated chordae tendineae by applying a minimally invasive approach

**Products:** ChordArt™ System

**Locations:** Bern, Biel, Tuebingen

## Novo acquires supplier of ventilation products Innocath



Novo Klinik-Service has expanded its product portfolio in the field of respiratory management with its acquisition of Innocath. The Duisburg-based company specializes in the care of ventilated patients. Core products include tubing systems, tubes, laryngeal masks and other accessories for tracheostomy patients. Innocath supplies customers throughout Germany and has recorded strong growth in recent years.

Udo Lutz, Managing Director of Novo Klinik-Service GmbH: "Innocath stands for high-quality products and excellent customer service. We will build on these strengths and, above all, jointly expand our sales activities. With the takeover of Innocath, we are now also strengthening our sales team with experienced and motivated employees. This enables us to meet the market requirements."

### KEY FACTS

**Year established:** 1987

**Business purpose:** Development, production and sales of medical technical products

**Products:** app. 100 products: fixations and pads for the intensive care, anesthetic and nursing sectors

**Location:** Kerpen (D)

## INSIDE SHS

### SHS collects over 90 million for its fifth fund



For the fifth fund, SHS has received capital commitments of more than 90 million euros at first closing. Almost two thirds of the target of 150 million euros was reached faster than expected. The fifth generation of SHS funds is also focused on the life sciences and medical technology sector, and thus on the growing global healthcare market with innovative and strong companies, especially in Germany and Switzerland. The fund can provide up to €30 million per transaction for expansion and innovation financing as well as succession situations. Both majority and minority shareholdings are possible. 12-15 engagements are planned.

Investors can still invest in SHS V up to final closing.

### Sascha Alilovic named new partner at SHS

Sascha Alilovic is strengthening the management team of SHS as a partner starting in October. The team was extended as part of launching SHS V. Alilovic has more than 20 years of experience in corporate transactions, M&A, corporate finance and IPOs. Most recently, he spent more than twelve years with MorphoSys AG, Germany's leading biotech company. He was responsible for the Corporate Finance & Corporate Development of the MorphoSys Group, was managing director of several subsidiaries and accompanied numerous corporate transactions. He previously held similar positions at Siemens and corporate finance boutiques.



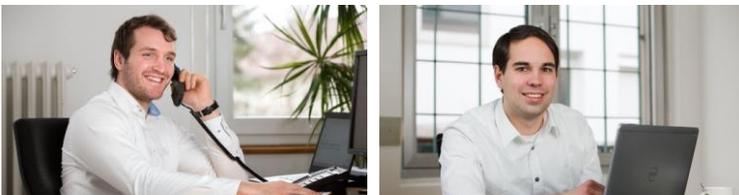
SHS Partner Sascha Alilovic

Hubertus Leonhardt, Managing Partner of SHS: "We are very pleased to have gained an experienced manager with proven expertise in corporate transactions in the life science and healthcare sectors. Sascha Alilovic has led transactions with a total volume of more than €10 billion and, with his network and experience, he will be a significant asset to SHS in the future, both in the acquisition, management and exit of portfolio companies."

Sascha Alilovic, Partner at SHS: "In the future I will actively support SHS in my new role as partner. The successful first closing of SHS V in July and the two successful exits of AMW and EIT in June and September underline SHS' position as a leading investor in innovative medical technology companies in the German-speaking world. I would like to take an active part in continuing this tradition of more than 25 years."

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## From interns to senior investment managers at SHS: a conversation with Cornelius Maas and Manfred Ulmer-Weber



SHS Senior Investment Managers Cornelius Maas and Manfred Ulmer-Weber

Sustainability and long-term goals are paramount for SHS Gesellschaft für Beteiligungsmanagement when developing its portfolio companies, but also as an employer. Cornelius Maas (26) and Manfred Ulmer-Weber (32) are perfect examples of how the company supports young potentials. Both of them started as interns with the company, became junior investment managers after graduation, and were then promoted to

senior investment managers within a short time.

***Mr. Maas, Mr. Ulmer-Weber, you have both been with SHS for quite some time now. Can you still remember your first day with the company and your initial impressions?***

**Cornelius Maas:** I remember my first task well. I had to assess whether a potential investment might be worthwhile. At that time, I had no idea how to go about it. Looking back now, I can say that I really had to jump in at the deep end, but I quickly learned how to swim. This reflects how we all work at SHS. We quickly assume responsibility and work at eye-level with company management.

**Manfred Ulmer-Weber:** At SHS nothing was as anonymous as in the large companies I had worked in before. I immediately became an integral part of the team and was included in everything. Team spirit is highly valued at SHS. We all work together.

***Why did you decide to pursue a career at SHS after your internship?***

**Ulmer-Weber:** After studying economics in Tübingen and Strasbourg, it was a logical step for me. The atmosphere, the team mentality and the approach I witnessed during my internship were impressive. The development possibilities and opportunities for advancement were very promising.

**Maas:** I was not always certain that I wanted to pursue a career in this area. Despite studying business, I initially played handball professionally for several years. Later on, I became interested in opportunities beyond sports and opted for an internship in the field of investment. I found SHS to be a flexible employer that allowed me to pursue both sports and business, and is now supporting me in obtaining my next degree alongside work.

***How did you experience your professional development?***

**Ulmer-Weber:** The path to becoming a senior investment manager was all learning by doing. It takes a lot of personal commitment to learn to swim and overcome initial gaps, but I believe this is the way to learn the most both personally and in terms of content.

**Maas:** I agree. I also had to familiarize myself with the relevant contracts and company agreements. I had to gain routine when it came to structuring an investment contract and evaluating business models. My SHS colleagues were always available to help me out when needed.

***What does your daily work as an investment manager include? What do you like most? Are there any particular hurdles?***

**Maas:** The daily work is varied and challenging. Assessing, consulting and supporting portfolio companies are all part of our day-to-day business. We spend a good bit of time on the road and talking to innovative companies in the healthcare sector. There are routine tasks, but no routine days. Each day we are confronted with something new. And, I would say, we always give it our best.

**Ulmer-Weber:** SHS has many companies in its portfolio that are still growing, so of course there are some difficult phases to go through. But this is also part of the business. The industry we are in is an especially exciting part of our work. The market for medical technology is innovative and developing dynamically. We work with technologies, products, and companies that help people alleviate their illnesses and simplify doctors' daily work. It is incredible what can now be achieved using technology.

Cornelius Maas and Manfred Ulmer-Weber are also looking forward to an eventful year in 2018 with SHS. The major milestone this year will be the opening of the fifth fund. Raising capital and talking with investors are therefore the primary focus. Building a new portfolio is yet another new challenge that the two senior investment managers will be working on.

## CAREER

### Jobs at SHS portfolio companies

#### License Manager Pharmaceuticals (m/f)

AMW GmbH is an innovative and fast-growing specialty pharmaceuticals company headquartered near Munich. To successfully market its products pending approval to an international audience, AMW is currently looking for a qualified License Manager. You can look forward to taking on a variety of challenging tasks with a high level of personal responsibility as well as attractive compensation and profit-sharing. [Find out more >>](#)

#### Director QM/RA (m/f) (QMB) / Head of QM/RA (m/f)

Spiegelberg GmbH & Co. KG was established in Hamburg in 1986. Today the company manufactures and markets innovative neurosurgical products for customers in over 40 countries. Our slogan "Technology for brains" stands for truly pioneering work. If you share our passion and enthusiasm for medical technology, we would be pleased to welcome you as part of our team. [Find out more >>](#)

#### Software Developer (m/f)

GNA Biosolutions in Martinsried develops instruments and tests for the ultrafast detection of real "bugs" such as multi-resistant hospital germs, tuberculosis and viruses. Using their Pulse Controlled Amplification technology, pathogens can be detected within just 15 minutes. GNA is looking for you as a software developer for its instruments! [Find out more >>](#)

#### Senior Supply Chain Manager (m/f)

The innovative Swiss manufacturer of pulmonary diagnostics technologies is seeking to strengthen its supply chain team in Zurich with a motivated and independent personality to fill the position of Senior Supply Chain Manager. [Find out more >>](#)

## **CFO (m/f) member of the management board**

Your area of responsibility will include monitoring of growth, internal and external accounting, controlling, taxes and legal issues. You will co-ordinate contact with investors, banks and auditors. You will also support the company in negotiating strategic business agreements. [Find out more >>](#)

## **Jobs at SHS**

### **Managing Director / MBI candidate (m/f) for medical technology, succession solution**

We are regularly seeking executives who would like to become entrepreneurs with us and drive the performance of companies. Together we develop a corporate vision and strategy, which you then put into action with our support. [Find out more >>](#)

### **Internships for students**

Are you studying business, economics or engineering? We offer you the opportunity to apply your previously acquired knowledge as part of an experienced team of SHS professionals. You will benefit from a project-oriented, flexible working atmosphere, a flat hierarchy and diverse employment opportunities offered by SHS throughout the entire investment activity cycle. [Find out more >>](#)

## **PRESS REVIEW**

### **Selected press starting May 2018**

A selection of relevant articles about us and our portfolio companies:

#### **Frankfurter Allgemeine Zeitung, 20 July 2018, page 29: "Mehr Geld für Medizintechnik – SHS Beteiligungsgesellschaft sammelt 90 Millionen Euro" (more money for medical technology – SHS Beteiligungsgesellschaft collects 90 million euros)**

FAZ reported exclusively on the successful first closing of SHS Gesellschaft für Beteiligungsmanagement's fifth fund. For this new fund, SHS has received commitments from investors for more than 90 million euros faster than expected. The company plans to use the fund to finance 12 to 15 companies from the medical technology and life science sectors. [Read more >>](#)

#### **Börsen-Zeitung, 7 July 2018: "Jack Ma investiert im Warngau" (Jack Ma invests in Warngau)**

Change of ownership at AMW: a consortium of buyers led by YF Capital and drug developer Hybio Pharmaceutical invests in the Bavarian specialty pharmaceutical company. The previous shareholders are the founders as well as the Tübingen healthcare investor SHS Gesellschaft für Beteiligungsmanagement, Bayern Kapital, KfW, IBG Risikokapitalfonds, BayBG and UVC Partners.

#### **Further reporting on the change of ownership at AMW:**

#### **China Money Network, 5 July 2018: "Yunfeng Capital and Hybio Acquire German Pharmaceutical Firm"**

<https://www.chinamoneynetwork.com/2018/07/05/yunfeng-capital-and-hybio-acquire-german-pharmaceutical-firm>

#### **VC-Magazin, 4 July 2018: "Spezialpharma-Unternehmen geht an Investorenkonsortium aus China" (specialty pharmaceutical company sold to Chinese investor consortium)**

<https://www.vc-magazin.de/deals/spezialpharma-unternehmen-geht-an-investorenkonsortium-aus-china/>

**medtech two, 12 June 2018: "Novo Klinik-Service übernimmt Innocath" (Novo Klinik-Service acquires Innocath)**

In mid-June, the SHS portfolio company Novo announced its acquisition of Innocath. The Duisburg-based company specializes in the care of ventilated patients. Novo Klinik-Service, based in Bergheim, North Rhine-Westphalia, distributes medical aids and medical technology solutions for intensive care medicine, anesthesia and nursing. [Read more >>](#)

**MassDevice, 1. May 2018: "CoreMedic launches first-in-human study of ChordArt mitral repair Device"**

The start-up company CoreMedic has used its minimally invasive repair systems for the treatment of hernial valve diseases for the first time in a human operation. The procedure was successful. In 2017 SHS acquired a stake in the company with the aim of advancing the further development of the product. [Read more >>](#)

**Westdeutsche Allgemeine Zeitung, 5 May 2018: "Millionen für eine „spektakuläre Idee“ einer Bochumer Firma" (millions for a "spectacular idea" by a Bochum-based company)**

The medical technology manufacturer phenox GmbH and its partners Ruhr-Uni and Knappschafts Krankenhaus Bochum receive 2.1 million euros from the Federal Ministry of Education and Research (BMBF) for their "Anti-Thromb" project. The money comes from the "Vorfahrt für den Mittelstand" (make way for SMEs) program, which aims to strengthen small and medium-sized enterprises in regional networks. phenox develops coatings for implants imitating the natural vascular wall for the treatment of brain aneurysms. [Read more >>](#)

**Investment focus**

<b>Sector:</b>	life sciences (medical technology, diagnostics, applied technologies, industrial biotechnology/pharmaceutical industry; no drug development)
<b>Geographical Focus:</b>	Germany, Austria, Switzerland, Scandinavia, Benelux countries
<b>Reasons for investment:</b>	growth capital, strengthening equity, MBO/MBI, change of shareholders/succession, M&A financing, spin-off
<b>Company situation:</b>	growth/expansion, succession/company sale, internationalization; operating profit may be negative for growth, or for technology-related reasons
<b>Transaction value and Investment size:</b>	transaction value: up to € 100 mn; investment amount SHS IV: € 2-30 mn, with a co-investor from the SHS-network up to € 60 mn
<b>Investment types:</b>	majorities or minorities, equity & financial instruments similar to equity