

Venture Capital GmbH

In the first half of 2019, we have seen exciting developments at BASF Venture Capital. We have invested in two new portfolio companies and two new funds.

Below please find some of the highlights in our portfolio - we look forward to discuss any type of co-operation with you!

Kind regards,

Markus

Markus Solibieda, Managing Director BASF Venture Capital GmbH



ANS

Unique chemical process technologies for converting renewable feedstocks into high-value, specialty chemicals and renewable intermediates. In July 2019 – Sunnen Products Company (USA) and Sweden's <u>Applied Nano Surfaces (ANS)</u> have entered into a joint market development agreement to advance technology and applications based on the unique Triboconditioning® process recently patented by ANS. The process reduces friction and wear on various steel and cast iron surfaces while improving surface finish, preventing seizures, and enhancing product life.

Earlier in the year Germany based VC firm Abacus alpha has led a new financing round alongside existing investors including BVC. The funding will enable ANS to proceed with existing development programs as well as to explore new application opportunities



ESS

All iron redox flow battery for grid scale long duration storage **ESS** has successfully shipped its first-generation batteries to its customers.

ESS is presently optimizing the scale up of its secondgeneration battery system and receiving positive response from the market for long duration (4 to 6 hours) energy storage operators. ESS has orders from grid integration customer for its second-generation battery system.

ESS successfully closed its Series C financing in August 2019 at a considerably higher valuation.



Prismlab

Prismlab is revolutionizing traditional manufacturing through industrializing photo polymeric 3D printing solutions. **Prismlab** is a leading Chinese 3D printer manufacturer with proprietary 3D printing technologies, which is based on photocuring of polymer formulations with Subpixel Micro Scan (SMS) technology that combines high exposure area with speed and accuracy.

Its core business continues to grow at high rates, with their second generation of machines launching in Q4 of 2019. In addition, their Nano printing technology is entering the prototyping phase, as well as ceramic printing.



Lactips

Bio-based thermoplastic materials for sustainable packaging

Lactips develops and manufactures water-soluble bio-based thermoplastic materials. The films processed with Lactips' material are fully biodegradable and offer outstanding dissolution properties, making them highly suitable as packaging material in, for example, the detergents and cleaners market segments. Lactips recently launched two important initiatives to boost sales. In May, Lactips and BASF signed an exclusive contract to market Lactips' material in the home care, and industrial and institutional markets. The agreement will help Lactips to enter this market by leveraging BASF's expertise in network and supply chain. The first sales took place in August. In July, Lactips announced a distribution partnership with the specialty distributor IMCD group in the Nordics and France to market its product in technical and food applications.



Longwater Advanced Materials Fund

Longwater is a China-based growth Capital fund focused on advanced materials and chemistry related technologies.



Omnivore

India's leading agritech venture fund, which invests in Indian startups developing breakthrough technologies for food, agriculture, and the rural economy **Longwater Capital** is a growth capital fund focused on advanced materials and chemistry-related technologies in China.

It successfully closed their flagship fund of 500 million RMB in 2018 with BASF and other institutional LP such as Xiamen C&D, CICC Genesis and Tsinghua Redbud.

It is now actively looking for attractive investments to deploy the capital. Currently the fund has closed over 5 investments so far in 2019.

In April this year, BASF Venture Capital invested in <u>Omnivore</u> Partners' second venture fund.

Originally launched in 2011 by Mark Kahn and Jinesh Shah, Omnivore is an impact venture fund that invests in Indian startups developing breakthrough technologies for food, agriculture and the rural economy. After a first fund raised in 2012-13 of USD 40 million, Omnivore has raised USD 97 million for its second fund. BASF Venture Capital participated to the extent of ~ USD 3.6 million.

As at June 2019, Omnivore has deployed close to 10% of its second fund in 5 startups leveraging IT and technology in food grading, farm mechanization, hyper-local delivery of fresh milk and produce, and end-to-end distribution of inputs & produce.





Industrial Additive Manufactoring at Scale

Essentium is executing on its strategy to transform the future of industrial-scale manufacturing. Operations have been moved to a larger facility in Austin, Texas, to support growth plans. After completing its beta-program successfully, Essentium now starts shipping its High-Speed Extrusion (HSE[™]) additive manufacturing platform for use cases incl. medical prosthetics, foot apparel, contract manufacturing, and aerospace. HSE[™] stands out from competition as it combines significantly higher print speeds with high accuracy and reproducibility enabling additive manufacturing at scale. Essentium's open materials strategy allows customers to choose Essentium's or BASF's advanced filaments as well as third party materials. Hence the breadth of applications using standard, engineering, and high performance polymers is almost unprecedented. To fuel its expansion the company is planning to raise a series B round mid-2020.



LanzaTech

Revolutionizing the way the world thinks about waste carbon by treating it as an opportunity instead of a liability. LanzaTech, a pioneer in the production of next generation fuels and chemicals through the recycling of carbon pollution, and Danish Novo Holdings A/S (Novo Holdings) announced that they have formed a partnership to grow LanzaTech's revolutionary sustainable fuels and chemicals platform. Novo Holdings is making a USD 72 million investment in the company in a Series E financing, and Senior Director Anders Bendsen Spohr will join LanzaTech's Board of Directors.

LanzaTech's platform takes pollution and recycles it, eliminating single-use carbon. Examples of the uses of the technology include taking steel mill emissions in China and unsorted, unrecyclable household waste in Japan and converting these wastes to ethanol, sustainable aviation fuel or polyethylene for consumer goods.



Zapata

Quantum Computing

In April 2019, BASF Venture Capital joined a group of prominent investors in the Series A investment round of <u>Zapata Computing</u>. Led by Comcast Ventures and Prelude Ventures, the round also includes participation from new and existing investors Pitango Ventures, Robert Bosch Venture Capital, Pillar VC, and The Engine.

Since spinning out of Harvard University in 2017, Zapata has rapidly become an established player in quantum computing with an exceptional team of scientists. Zapata has emerged as a leading enterprise technology company focused on developing a powerful software platform and quantum algorithms to enable the next generation of discoveries — for a wide range of industries including chemistry, pharmaceuticals, logistics, finance and materials — on quantum computers.