

Individual polymers for semiconductor fabrication

The Project

Photoresists are used by chip manufacturers to create a structure in semiconductors, which determines the performance of the final integrated circuit (IC, chip). An essential ingredient of a photoresist is a polymer, which is responsible for the resolution of the structure and therefore for the efficiency of the chip. Today, photoresist producers are forced to rely on standardized polymers available on the market but could profit from tailor-made products for specific issues. Fraunhofer LBF has developed a polymerization technique that allows the manufacturing of a broad variety of polymers fulfilling the specific requirements of the semiconductor industry. Based on LBF's IP, Supurior is going to offer a technology platform that allows the production of individual polymers, which will lower the cost and increase the performance of ICs.

The Team

Location: Fraunhofer LBF, Darmstadt

Members: Heiner Schulte (founder), Roland Klein (LBF), Kabelan Thavayogarajah

(LBF)

AHEAD Infos Batch: 1/2022 Track: Spinn-off Phase: 2



The Business Model

Unique Selling Proposition:

Providing individual polymers fulfilling customer requirements Support during the entire process chain from R&D to production

Unfair Advantage: Proprietary polymerization process for tailor-made products

with a broad variety of compositions

Revenue Model: Development and production by contract manufacturer

Venture Readiness Level

VRL Ideation Incubation **Traction** Growth

Technology Readiness Level

TRL 5 6

The Side Facts

Customer Focus: B2B

Searching For: Customers, Investors, CFO

Industry Tags: Chemicals, semiconductors & semiconductor equipment,

Technology Tags: Customization, nano engineering, new materials