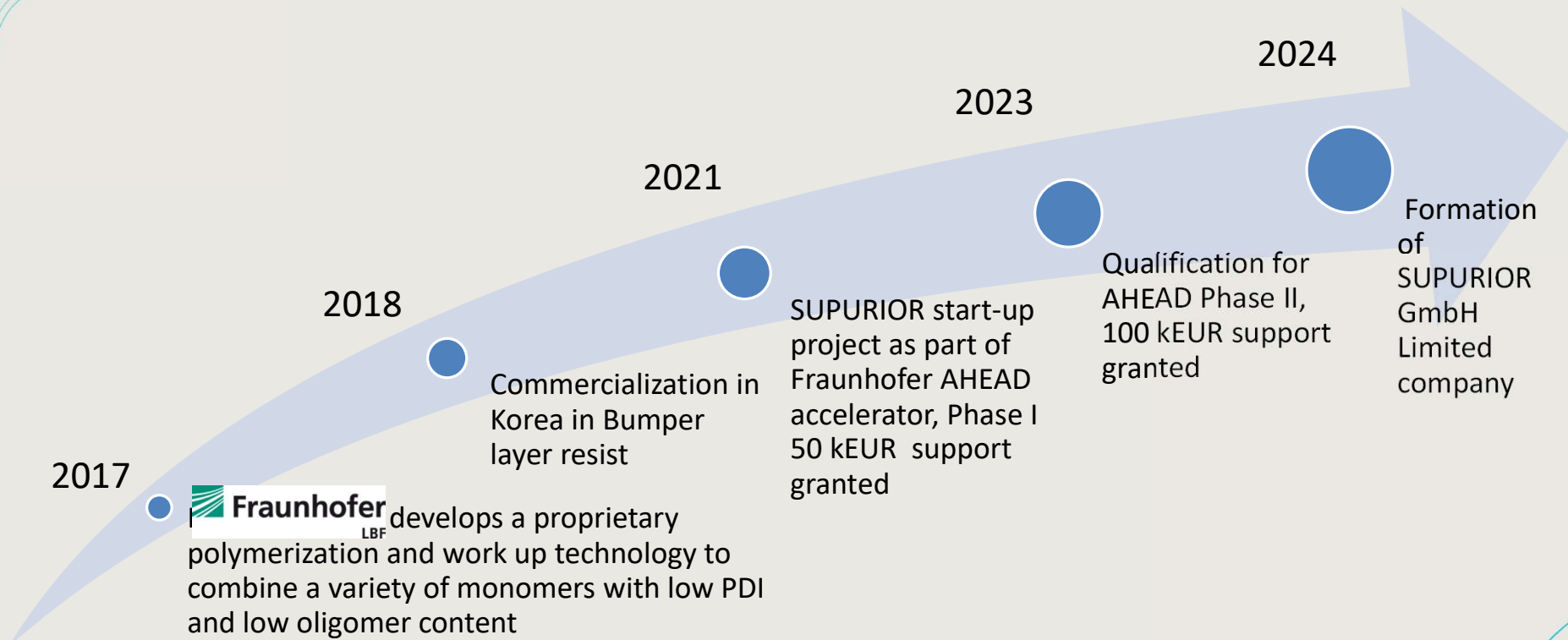


# **TAILORMADE POLYMERS FOR SEMICONDUCTOR INDUSTRY**

# OUR JOURNEY



# PURPOSE STATEMENT



SUPURIOR  
DEVELOPS, PRODUCES AND SELLS  
TAILORMADE POLYMERS  
WITH A FOCUS ON  
SEMICONDUCTOR INDUSTRY  
BY UTILIZING  
PROPRIETARY POLYMERIZATION TECHNOLOGY

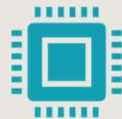
# MARKET SITUATION

Innovation/Design/  
Market



Expectation

IC producer



Expectation

Photoresist  
Manufacturer



- New products and new designs (e.g. faster, smaller devices, foldable cell phones, AI ...)
- Advanced production technologies (e.g. EUV, E-beam, 3D Packaging)
- new communication technology, higher switch rate, frequencies

→ **Continuous adaption of photoresist**

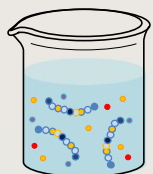
- Only off-the-shelf polymers available
- Variance in quality
- Unfavorable polymer properties
  - Phase separation during formulation
  - Incompatibility causes resist separation, short shelf life
  - Processability/viscosity issues of the resist
- No adaptability to customer needs

**Market expectations** can not be fully met  
**fast and individual solutions are missing**

# SUPURIOR'S OFFER



**Your company**



**Fast and individual,  
tailor-made  
cost-effective solutions  
for emerging technologies**

Sample development



Commercial supply



Own lab in Germany  
Process development,  
upscaling



Raw material qualification,  
manufacturing and supply  
logistic



Contract manufacturers  
in Germany, East Asia



# TECHNOLOGY

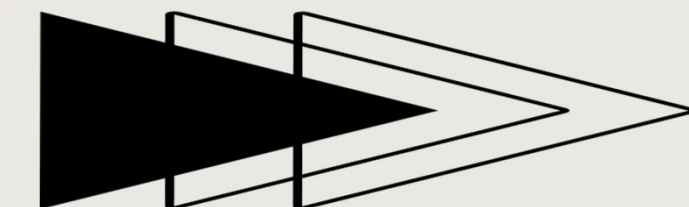
Combining properties.....

Monomer A Polarity, solubility

Monomer B Reactivity

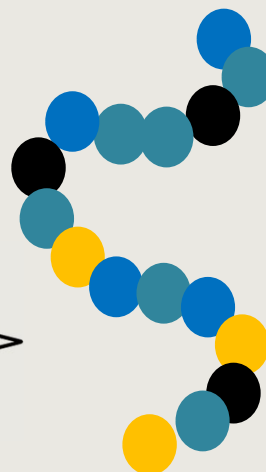
Monomer C Adhesion

Monomer C Chemical resistance

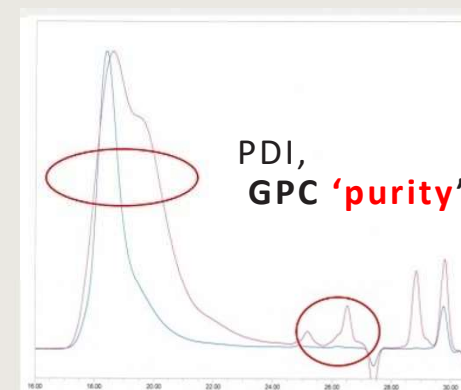


Polymerization Work-up

Patented Technology by German Fraunhofer Institute LBF, Darmstadt



in a **unique** resin:



**Metal-ion** purity  
Usually <100 ppb  
ICP-OES

**Particle** purity  
tbd. by customer

**Cost-effective**  
process

# CHALLENGE US !



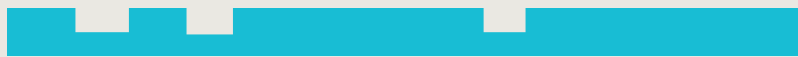
## Potential fields of applications



### Cleanser polymer

PHS based copolymer

new



### IC structuring, FOEL resists

KrF resist

existing

EUV resist

new

e-Beam

new



### IC Packaging

RDL

new



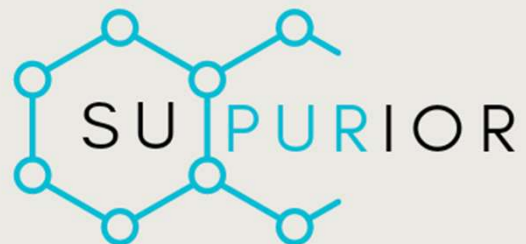
Bumper layer

existing (Korean producer)



5G CCL, RCC

new



# **TAILORMADE POLYMERS FOR SEMICONDUCTOR INDUSTRY**

[info@supurior.com](mailto:info@supurior.com)

[www.supurior.com](http://www.supurior.com)