



## Company Profile

**Founded:** 2019

**Location:** Charlotte, NC

**Employees:** 5

**Industry:** Consumer Electronics

**Technology:** OLED materials

**Status:** Pre-revenue

## Team

**Margaret Kocherga, PhD.**

CEO & Founder

**Rusty Stapp, MBA**

Business Development.

**Kevin Boyle**, Staff Scientist

**Hyocheol Jung**, OLED PostDoc

## Advisors

**Ameen Saafir** – Consumer Electronics

**Hosik Kim** – OLED

**Accelerators:** AdMaCom Berlin, Chain Reaction Innovations, Innovate Charlotte, NewChip, and Bethesda Green

## Partners

UNC Charlotte; Argonne National Lab

## Financial Information

**Non-Dilutive:** \$1.1M

**Investments:** \$20,000

**Monthly Burn:** \$14,000

**Cash Balance:** \$90,000

**Seeking:** \$800,000

## Financial Support

National Science Foundation  
Department of Energy  
NCIDEA

## Additional Information

**Lawyers:** Karen Schuller  
Boardman

**Accountants:** PVG CPA

**Bank:** Truist

## Contact

Margaret Kocherga, CEO

[info@margik.tech](mailto:info@margik.tech)

## Margik

Materials Suppliers for a New Generation of Organic Consumer Electronics

**Problem.** Consumer electronics display technology is shifting toward organic light emitting diodes (OLEDs). But today's OLEDs are made with 20+ layers of outdated materials that limit design options for new devices and are expensive to produce.

**Solution.** Margik's patented materials provide a solution that seamlessly integrates with current manufacturing processes, uses no scarce resources or toxic elements, and reduces power consumption of devices by 23%. Wide adoption of the Margik technology will reduce greenhouse gas emissions based on device use by 8,000 MtCO<sub>2</sub>e/year, or the equivalent of driving a passenger vehicle 20 million miles.

**Market.** The OLED materials market will reach \$100B by 2030 at CAGR of 20%. Our target market is \$1B/year. Margik targets manufacturers of eye-safe and environmentally friendly displays and lighting and will sell materials directly to OLED manufacturers. Our ultimate target market includes manufacturers that produce OLED displays, lighting, organic solar cells, and smart windows.

**Competitors.** LG Chem, Merck, Mitsubishi chemical are key competitors. The following failure modes identified by customers for our competitors include: 1) mismatch of materials metrics when moving to solution processability; and 2) material instability with respect to moisture, air, and heat. Margik has been able to successfully address these concerns to accommodate the necessary performance.

**Business Model.** Margik will sell bundles of materials to OLED manufacturers and expand to the solar cell and smart windows market. Our customer pool consists of only a few giant players, and we will begin by introducing one product at a time and before developing multiple product lines with the same customer.

**Customer Traction.** Margik has received validation from OLEDWorks, a leader in OLED lighting, who manufactured a blue OLED device with the use of Margik's product. This resulted in a 6% brightness increase and 11% efficiency increase. Margik has completed four customer R&D pilots and has received five LOIs.

## Financial Forecasts:

- 2023: \$600,000 at 50% profit
- 2025: \$50M/year at 60% profit
- 2028: \$600M/year at 60% profit
- 2030: \$1B/year at 80% profit

**Funding.** We are seeking \$800,000 to launch our production-scale pilot. Use of funds include: 1) \$210,000 - production of MVP; 2) \$460,000 - space and staff expansion; 3) \$44,000 marketing and promo demo; 5) \$86,000 - operations and administrative management, and patent filing.

	2020	2021	2022	2023
<b>Technology</b>	1 <sup>st</sup> generation prototype material.	Customer testing of 1 <sup>st</sup> generation. 4 testings.	2 <sup>nd</sup> generation material, Demo device production with our product.	Production scale pilot execution of MVP
<b>Funding</b>	Admitted into Chain reaction innovations. Applied for NSF STTR Phase I.	Applied for DOE STTR Phase I; received NSF STTR Phase I.	Applied for NSF STTR Phase I; Apply for NSF STTR Phase II. Close pre-seed round.	Apply for DOE STTR Phase I; Apply for NSF STTR Phase II; Prepare for seed round.
<b>Team</b>	2	5	7	10
<b>Business</b>	No users	4 users	4 users; 1 pilot	5 users; 1 customer