

## The Ultrasonic Transducer is a precision ber deposition technology. Our approach centers around the development of a groundbreaking method for the tailored manipulation and controlled deposition of electrospun nanobers. This groundbreaking advancement is poised to revolutionize various industries, ranging from sensors and 3D printing to the creation of stronger and more versatile materials.

Currently, electrospun bers cannot be created using conductive materials. This limitation hampers the development of bers and systems that utilize conductive wires on the nanoscale. Additionally, the process of producing nano bers is slow. However, production times can be signi cantly reduced by employing ultrasonic arrays to control ber deposition.

Our target customers include manufacturers producing high surface area materials, biotechnology companies developing biosensors, and applications where high strength and low weight are required.

The market opportunity presented by our technology will pave the way for advancements across multiple industries. This includes faster production of nano bers, enhanced sensor development, and the creation of novel materials.

- Electrospinning conductive nano bers
- Antennas
- Lightning Protection
- EM Shielding
- Rigid bers for fuel tanks to improve mechanical, thermal, and permeability properties while reducing micro-cracking
- Selective deposition of materials using high frequency transducers
- Cabling of multiple nano bers
- · Reduction in production time