

## Job Description

### Process Development Engineer

**Location:** Tempe, AZ

At Crystal Sonic, we are developing a new semiconductor materials processing technology that saves material, saves cost and will accelerate the adoption of next-generation substrate materials and devices, including power electronics, RF, solar, 3D sensing, photonics and beyond. Existing legacy manufacturing methods are costly, wasteful and time consuming, and have limited the adoption of high performance, high efficiency devices based on new materials. We believe there is a better way.

By harnessing the power of sound, our core technology, Sonic Lift-off, cuts semiconductor substrates with no material loss, enabling the re-use of substrates. Spun out of Arizona State University laboratories in 2018, we are small and passionate team of scientists, engineers, and entrepreneurs eager to reshape the future of semiconductor manufacturing. Let's get cracking!

#### Primary responsibilities of the position include:

- Drive the execution of the R&D plan for process development for Sonic Lift-off.
- Conduct hands-on experiments to determine cause-effect relationships in our novel acoustic wafer splitting technology to optimize operational parameters.
- Establish and document processes of record for including statistical analysis, experimental design, and best practices.
- Conduct metrology and surface characterization of processed wafers
- Support the entire Crystal Sonic team with technical analyses, reports and graphical representations of data collected to facilitate decision making within the team.

#### Qualifications and Skills:

- Bachelor's or Master's in Physical Sciences or Engineering with a drive for hands-on laboratory experiments.
- Ability to thrive and adapt within a dynamic start-up environment and able to handle uncertainty.
- Skilled in hands-on laboratory processes (wafer handling, coatings, metrology, etc.)
- Experience in semiconductor process development or wafer processing a plus.
- Experience with surface metrology methods (optical, electron, X-ray, etc.)
- Proficiency in computing involving data collection, aggregation, analysis and visualization.
- Experience with statistical process control (SPC) and design of experiments (DOE) principles.
- Hands-on, self-starter with a team mentality.
- Knack for problem-solving and troubleshooting.
- Excellent verbal and written communication skills.
- Curiosity and willingness to learn new skills.

#### Benefits

- Competitive start-up compensation package.
- Opportunity to have a large direct impact on an emerging technology and shape the future.