

Dewatering PCB by using

focused ultrasonic

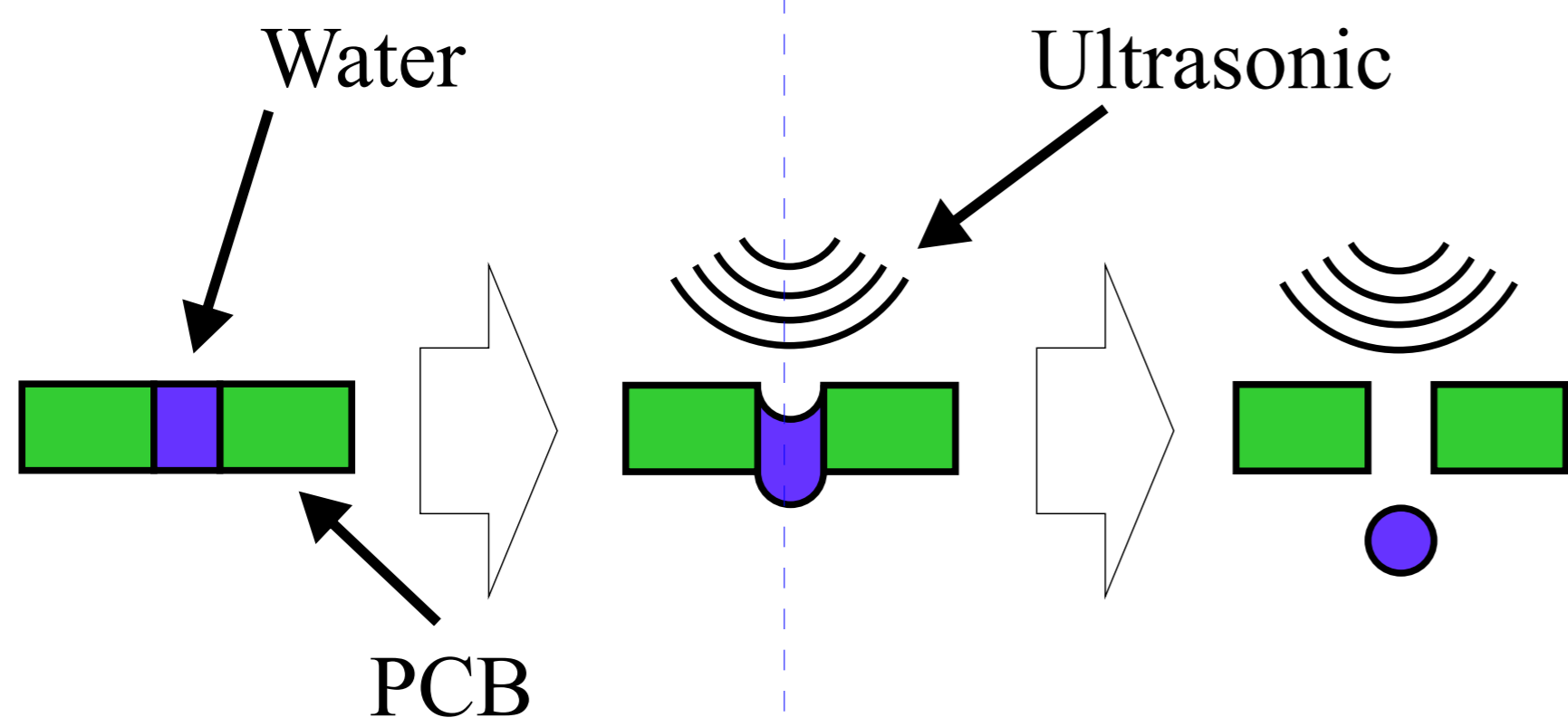
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Introduction

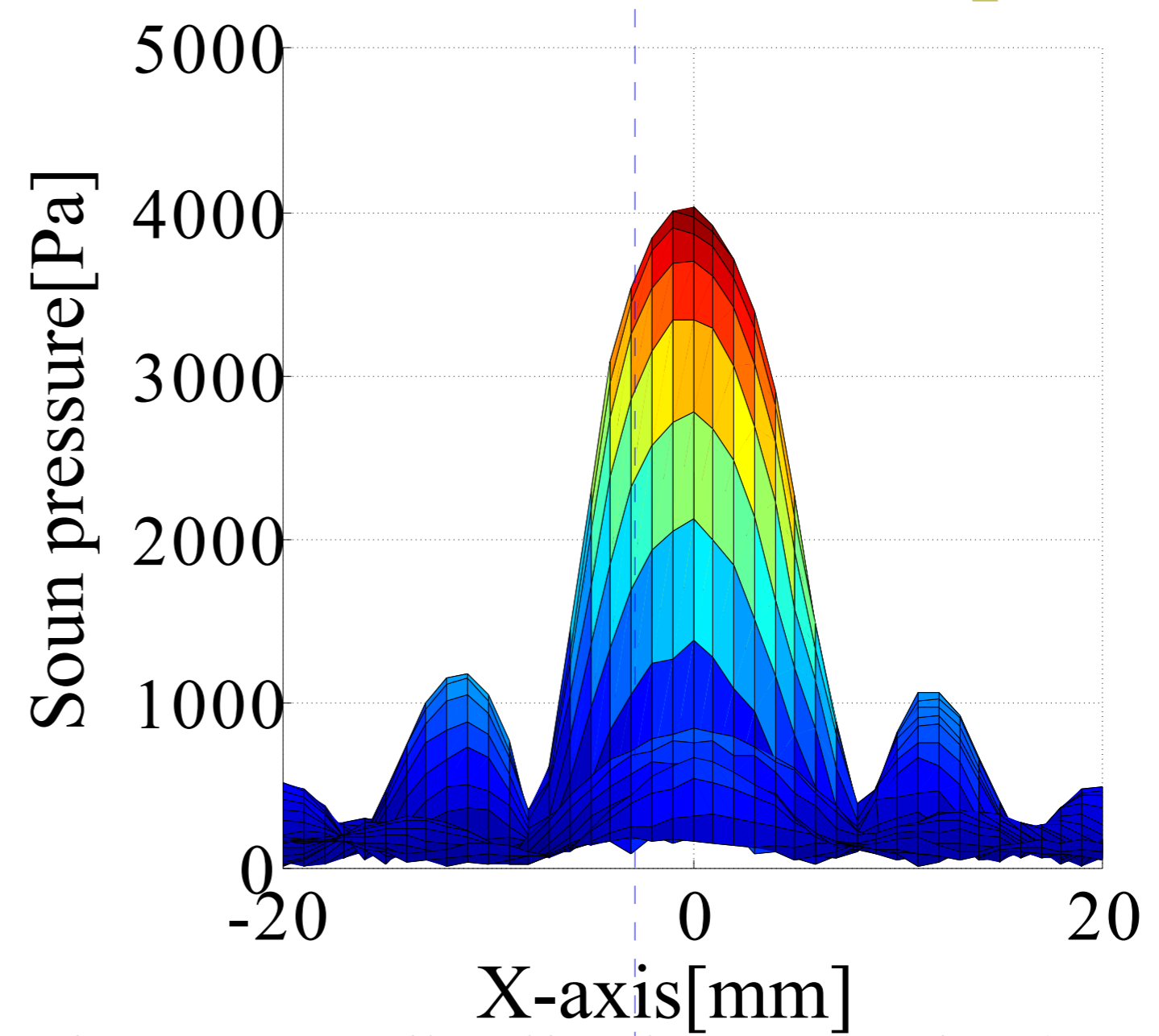
Processed PCB needs washing for removing impurities. After washing, it's vias contain water. We can push out water by ultrasonic irradiation. In this research, we change via's diameter and thickness of bakelite board and compare dewatering success rate.

Principle of dewatering



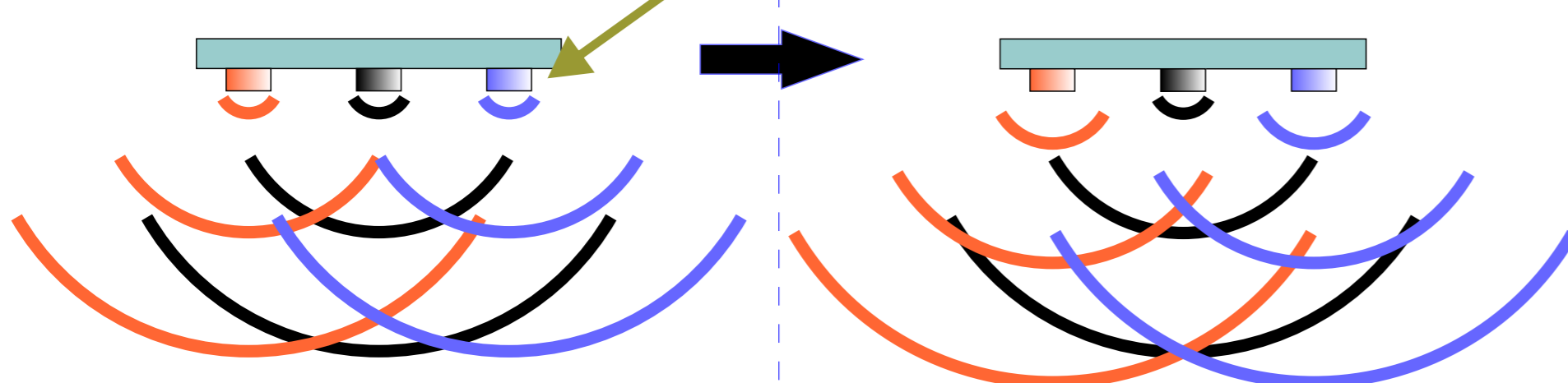
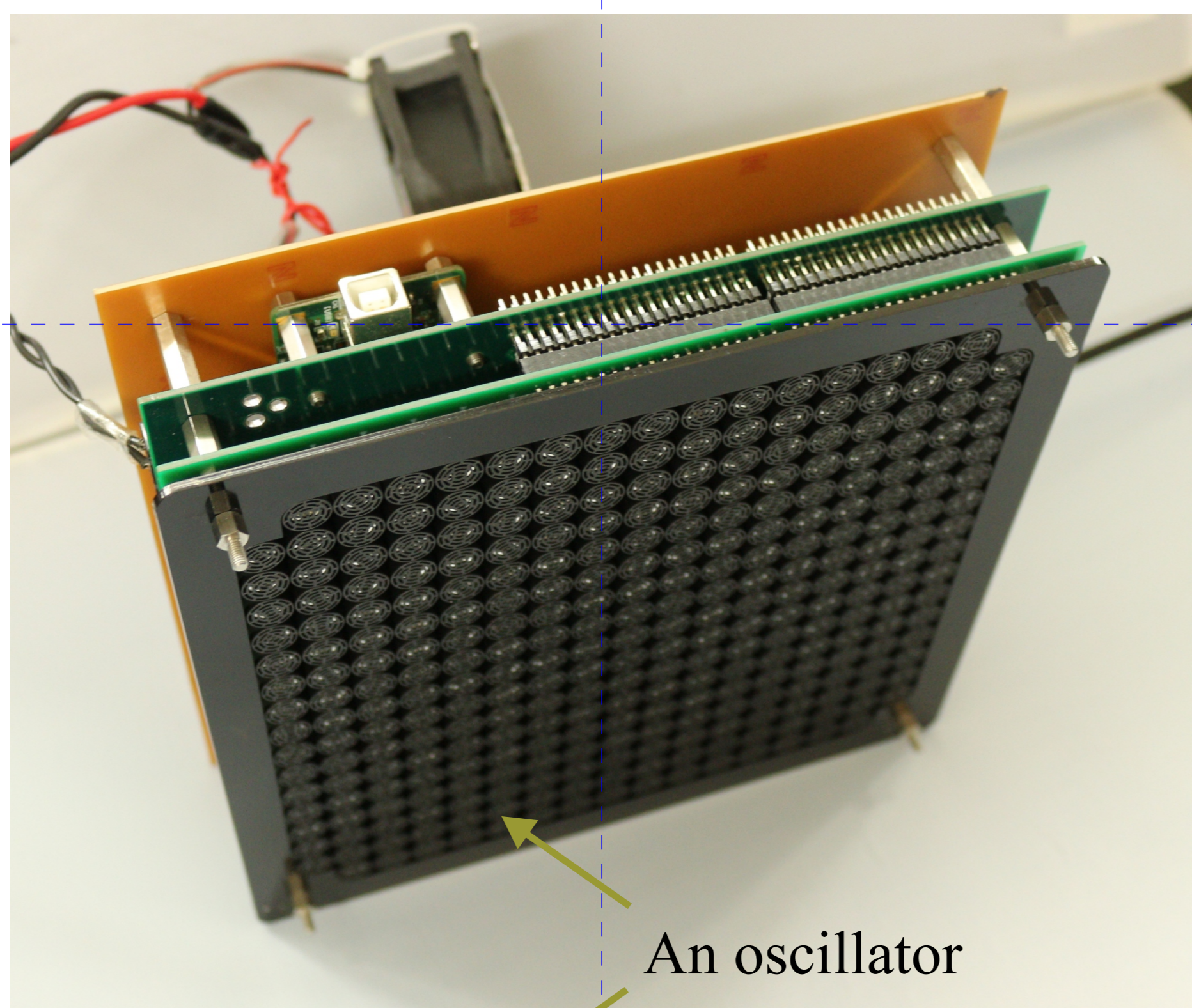
Acoustic radiation pressure push out water

Measurement of sound pressure



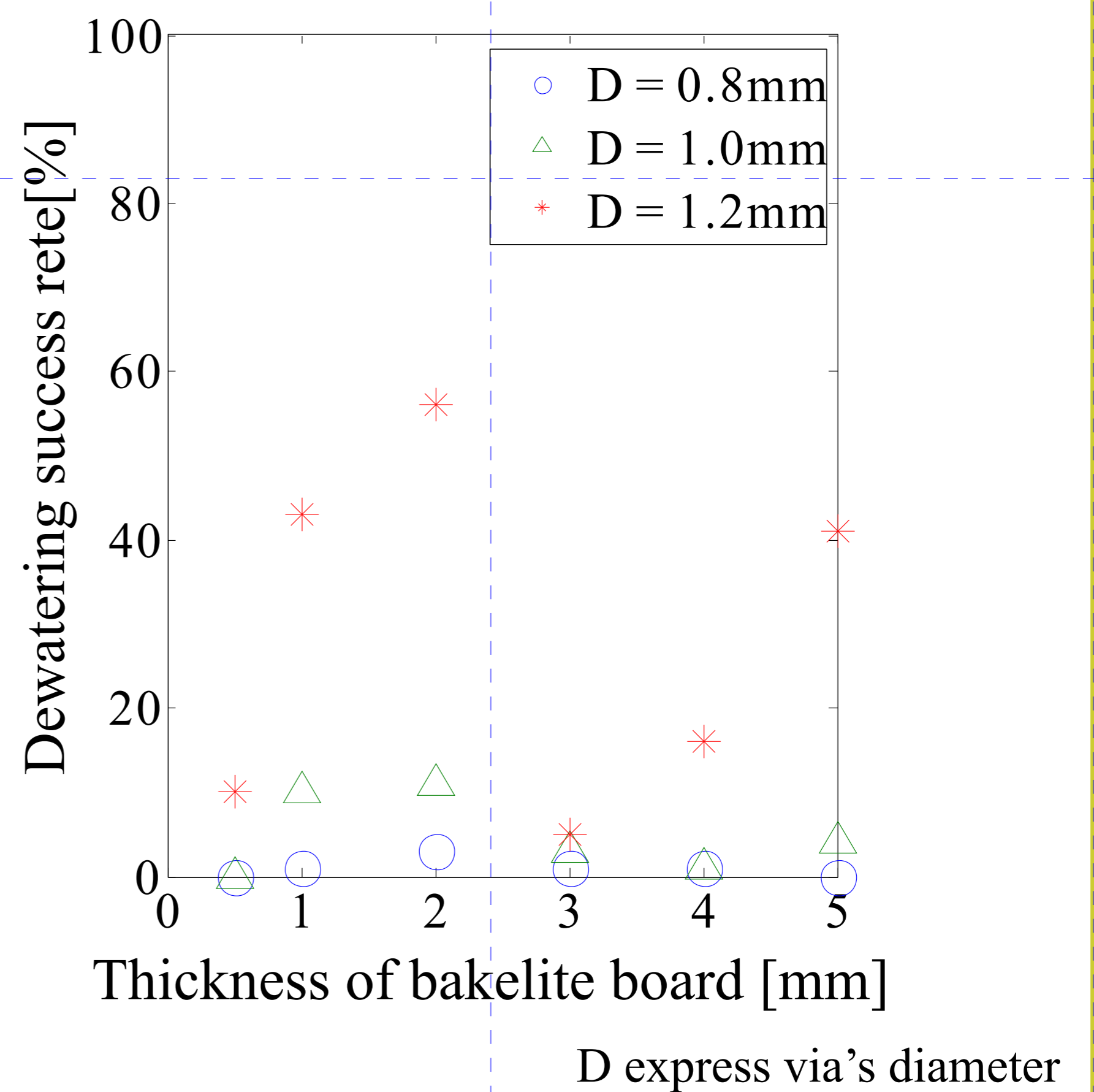
Sound pressure distribution near the focus point

Ultrasonic focusing device



Focusing by controlling phase of sound wave

Experimental result



Future plan

Comparing dewatering success rate by changing other parameters