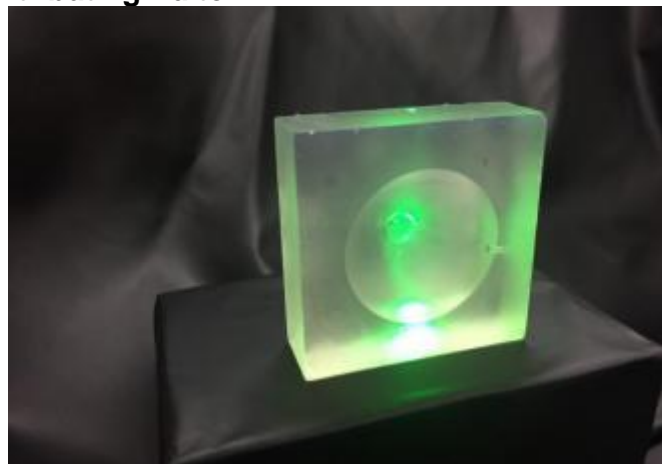


3D Printed Lens Increases Ultrasound Clarity

New 3D printed resin ultrasound device is cheaper and more accurate than current glass options.

By Tim Hayes, Contributing Editor



A December 6th [article](#) from *The Engineer* discussed a new advancement in ultrasound diagnostic technology. Researchers at Nanyang Technological University in Singapore have developed a 3D printed lens that generates enhanced ultrasound or photoacoustic waves compared to current machines. The lens is made from resin, which allows the waves to focus sharper than current glass options and leads to better and more precise images.

(Related: [Desktop 3D Printers Poised For Significant Growth](#))

Ultrasound beams are created when high-frequency sound waves are fired at a lens. While standard ultrasounds are cylindrical or spherical, 3D printed resin lenses can be created in much more complex shapes allowing for the ultrasound to be focused onto multiple sites or shaped to direct energy a certain way. The lenses can also increase the therapeutic use of ultrasounds such as breaking up blood clots, destroying tumor cells, or controlling the release of drugs from an implant.