Royal College of Art student make a 3D printer that focuses the light of the sun

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(PhysOrg.com) -- 3D printing has been around for a few years. If you hooked it up to a solar panel you could make it work with the sun, but still would not be as cool as doing it the way that Markus Kayser, a MA student at the Royal College of Art, has gone about it. He has create a 3D printing machine that is able to focus the rays of the sun through a glass ball with enough intensity that it can create a beam that is able to

heat silica sand to its melting point. Silica sand is often used in manufacturing process of heat resistant products for its high melting point.

The device, named the Solar Sinter, is based on a previous design known as the Sun-Cutter, which was able to cut two-dimensional shapes into thin sheets of plywood. Because of the imprecision of the tool it was only able to make relatively rough cuts, and there was a great deal of variation in functionality based on changes in the cloud cover.

This new 3D model gets is based on current designs of 3D printing technology with only two substitutions. The traditionally used resin or plastic powder has been replaced by the sand and the laser has been

replaced by focused solar rays. The system, which is fully automated, then automatically creates a glass object out of the 3D designs, which represents a significant upgrade to the technology.

People who are interested in seeing the design first hand are able to see it while it is on show at the Royal College of Art graduate exhibition.

More information: www.markuskayser.com/

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