3D PRINTED ANTENNA DESIGNS FOR FOURIER TRANSFORM MICROWAVE SPECTROSCOPY

JOHN K KOPP, Chemical Engineering, Kettering University, Flint, Michigan, United States; NICK KNOWLES, Chemistry, Kettering University, Flint, MI, USA; CHRIS DEWBERRY, Department of Chemistry & Biochemistry, Kettering University, Flint, MI, USA.

Traditionally antennas for Fourier transform microwave spectrometers have been the classic "L" shaped antennas. Here we will discuss how 3D printing can be used to quickly prototype various designs and sizes for antennas and antenna arrays to give insight on optimal antenna for FTMW. This work largely focuses on the receiving antenna and fractal designs.