

### **Energy Transfer with Silver**

My research uses a femtosecond laser, a microscope, a camera and a computer to gain information about energy transfer within a silver sample. The sample has very small dimensions, on the order of a millionth of an inch, and the individual silver particles are connected to each other in a framework that allows the energy from the laser to travel around within the sample. We need the microscope so that when we watch this energy transfer with the camera, which looks through the microscope, we are able to see the sample, since the framework is so small. Since this method of energy transfer is faster and more efficient, and the pieces smaller than in current electronics, such as computers, this technology may, in the future, be a better option for communication between electronic devices.

-Mindi Ewald