

Physics Department
College of Science, Engineering & Technology

August 20, 2019

George Fomitchev
CEO and Founder
Endurance Laser

Dear Mr. Fomitchev,

Saginaw Valley State University (SVSU) was founded in 1963. It is located about nine miles north of Saginaw, Michigan. Currently SVSU has around 10,000 students in over 100 academic programs. We plan to use your laser in our physics labs.

The Department of Physics offers four programs in physics leading to the B.S. degree. Areas of study include physical optics, Fourier optics, Laser physics and optoelectronics.

Talking with Dr. Marian Shih, who teaches our physics 332-Optics and Holography class, she was excited about using another wavelength to capture holograms. We have a very nice optics lab, and this would supplement our red HeNe lasers.

Dr. Chris Nakamura quickly thought of some projects that our physics majors could pursue for their required research projects. The first would use the laser to cut various materials and have the students inspect these materials with optical and electron microscopes. This would be done working with the biology department, who own the electron microscope. Another project for our students would be in spectroscopy. Dr. Nakamura feels that 445 nm would be a potentially useful wavelength for optically pumping laser dyes and/or laser crystals. We would likely use the laser for experiments in our Physics 442 lasers course. Similarly, we will investigate potential nonlinear optics applications which would fit well into that course.

Since one of these possible projects uses the laser to cut material, I am looking forward to adapting the laser for use on the physics' department PRUSA MK3s 3D printer.

Thank you again for your generosity,



John Potts
Physics Department Technician