Published on *DSU* (http://desu.edu)

DSU Wins First Place at Research Conference

Posted: August 28, 2009

July 23, 2009

Two DSU physics students recently won first-place in a poster competition at the 2nd North American Symposium on Laser Induced Breakdown Spectroscopy Conference held this July in New Orleans, LA.

The winning poster entitled, ?An Examination of Matrix Effect of Carbon and Iron Mixtures in Laser Induced Breakdown Spectroscopy Spectra, An Initial Analysis? was the result of the work performed by graduate student Steven Rock and undergraduate student Brian Greenly, both from the DSU Department of Physics under the direction of Dr. Noureddine Melikechi, acting dean.

The work shows that important and unexplained changes take place in the atomic and ionic emissions immediately following plasma formation. These changes are indicative of the fact that both photochemical and highly nonlinear effects take place. The research not only addresses fundamental issues but has the potential for applications in the development of novel rapid and inexpensive trace detection techniques.

?I am pleased with the work that our students have done and I am particularly encouraged as this is the third year in a row that our optics program at DSU is recognized by our peers,? Dr. Melikechi said. ?The students have done a phenomenal work. Much more needs to be done to better understand the physics behind the observations reported in New Orleans and we intend to do it.?

Mr. Rock is a Dover resident and native of Wheeler Wisconsin; he is also a U.S. Air Force veteran. Mr. Greenly is a third-year undergraduate student from Milford Del. and is currently working on a NASA project in Texas.

Source URL: http://desu.edu/news/dsu-wins-first-place-research-conference