EXPLOSIVE METALLURGY — New Mexico Institute of Mining and Technology Associate Metallurgy Professor Marc Meyers shows his daughter Maria Cristina Alexandra Meyers an exhibit of his research at the W. Martin Speare Library.

Metallurgy Display at Tech Library

Photographs and text explaining explosive metallurgy research at the New Mexico Institute of Mining and Technology are on display at the W. Martin Speare Library.

The exhibit is free and open to the public during regular library hours. It was originally created by New Mexico Tech Associate Metallurgy Professor Marc Meyers, metallurgy graduate student Bhushan Gupta, and the Tech Terminal Effects Research and Analysis Group for the Showcase for Technology in Albuquerque last month.

The display includes scanning electron microscope enlargements of metal particles before and after they are welded together using explosive metallurgy techniques. The process involves the controlled use of the energy produced by an explosion to combine metal powders into new and stronger materials. New Mexico Tech researchers are particularly involved in studying the micro-structure of the new alloys.

Meyers says the new metals’ strength and high temperature endurance make them especially applicable to aerospace uses. Other possible applications include cutting tools, forging dies, gun barrels, punches, and other items requiring high strength and integrity. (NMIMT News Release)