

Cornerstone Ceremony





The cornerstone-laying ceremony for the new LLE building took place on 2 April 1976. Guests included representatives of the university, government, and industry. The building was based on architectural design work by United Engineers and engineering design efforts of Eastman Kodak Co. It had 100,000 square feet of laboratory and office space.

Laboratory for Laser Energetics

a unique national resource

First Use of Nd:Phosphate Glass in a Large Nd:Glass Laser



Steve Jacobs with Dave Segawa and Tsetsuro Izumitani of HOYA Optics

LLE's Materials Group led the development of a high-gain phosphate laser glass with a low nonlinear index of refraction for high-power glass laser systems.

Laser-Compression Studies with Neon-Filled Glass Microballoons



Comparison of part of the x-ray spectrum

The paper "Laser Compression Studies with Neon-Filled Glass Microballoons" by B. Yaakobi and L. M. Goldman was published in *Physical Review Letters*. It presented measurements of x-ray emission of compressed neon gas fill in glass microballoons, irradiated by DELTA—an early LLE four-beam laser system.

Several physics packages were added to the one-dimensional hydrodynamic code SUPER: radiation transport, transport of suprathermal electron from resonant absorption, and a realistic equation-of-state table. These improvements made possible realistic simulations of implosions carried out on the DELTA Laser System.

B. Yaakobi and L. M. Goldman "Laser Compression Studies with Neon-Filled Glass Microballoons," Phys. Rev. Lett. 37, 899–902 (1976).



