## National Laser Users Facility News

On November 29 and 30, a workshop was held at LLE to consider possible laser experiments in areas outside laser fusion. Over fifty scientists attended, chosen for their expertise in disciplines unconnected with laser fusion, but which nevertheless could benefit from experiments using high power lasers. It was the consensus of those attending the workshop that the major impact in biology and chemistry will be through EXAFS (Extended X-ray Absorption Fine Structure) studies or x-ray diffraction techniques. Development of the latter is underway at LLE and steps are being taken to improve the resolution to the level necessary. Equation of state studies can be extended to new regions through the extremely high velocity shock waves that can be driven by high power lasers. Damage effects created by lasers in a variety of materials are of interest to workers in material properties. The high neutron flux generated during implosion experiments could be of interest due to the effect produced in materials, but this subject needs further investigation. There are a variety of applications in general physics, including the study of highly ionized atoms, cross-section measurements at relatively low energies using laser – produced ions and multiphoton ionization processes.

A report on the workshop is being prepared and will be available shortly.