

## Section 3

# NATIONAL LASER USERS FACILITY NEWS

National Laser Users Facility (NLUF) activity during the second quarter of FY88 centered on four activities: the first was the review of proposals received for FY90 research; the second was a series of shots for **U. Feldman** (Naval Research Laboratory); the third was a visit by **C. Hooper** (University of Florida) to discuss analysis of data taken during December 1987; and the fourth was data taken for **C. Collins** (University of Texas).

A total of 13 proposals were received for evaluation by the NLUF Steering Committee. The committee met on 26 February 1988 at LLE. **Dr. B. Arden**, from the University of Rochester, chaired the meeting. Voting members on the 1988 committee are

<b>Dwight Duston</b>	Office of Scientific Development/ Strategic Defense Initiative Office
<b>Damon Giovanielli</b>	Los Alamos National Laboratory
<b>William Kruer</b>	Lawrence Livermore National Laboratory
<b>David Nagel</b>	Naval Research Laboratory
<b>Keith Matzen</b>	Sandia National Laboratory
<b>Eberhard Spiller</b>	IBM Thomas Watson Research Center

The minutes of this meeting have been typed and are being distributed to the committee for approval. Principal investigators will be informed of the results of the evaluation by the middle of April 1988.

**J. Seely** from the Naval Research Laboratory took XUV spectroscopy data during March 1988. Targets of Ge, Pr, W, and Re were irradiated with the OMEGA laser to record XUV spectra. These targets were irradiated with and without the DPP's for intensities of  $6 \times 10^{14}$  and  $5 \times 10^{15}$  W/cm<sup>2</sup>. The Na-like isoelectronic sequence is being studied with these targets.

**C. Hooper**, from the University of Florida, visited on 31 March 1988. He and **M. C. Richardson** of LLE are collaborating on a series on compression experiments using targets of plastic shells filled with Ar, Kr, and Ar/Kr mixtures. Most of the analysis has been centered on an Ar-filled target, where the data indicate a high-density compression. The primary diagnostic for this shot is SPEAXS, a time-dependent crystal spectrograph tuned to the H- and He-like 2p-1s transitions. The data from these shots are being analyzed at both LLE and the University of Florida.

Three shots were taken for **C. Collins** of the University of Texas. He is collaborating with **B. Yaakobi** of LLE on an experiment to use x rays from a laser-generated plasma to excite nuclei. Targets of CaF<sub>2</sub> and CaF<sub>2</sub> overcoated with KCl were used for x-ray spectroscopic measurements.

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