

# GUEST EDITOR'S COMMENTS

LARRY R. FOREMAN

*Los Alamos National Laboratory*

In 1981, Charles Hendricks, then head of the inertial confinement fusion (ICF) fabrication activities at Lawrence Livermore National Laboratory (LLNL), recognized the need to initiate collaboration on the processes and materials issues related to fabricating targets for laser and light ion ICF. Hendricks organized the First Target Fabrication Specialists' Meeting (TFSM), which was held in Denver, Colorado, in the summer of that year.

This initial meeting was successful; the participants agreed that it was an excellent, relatively informal forum for exchanging essential information on target fabrication. The series has continued on an ~18-month schedule to the present time, hosted alternately by LLNL and Los Alamos National Laboratory (LANL). Because much of the work on ICF was classified during this time period, the meetings have always had a large classified component.

The Tenth TFSM was held in Taos, New Mexico, and was hosted by LANL. Like its predecessors, this meeting was quite successful, continuing the tradition of providing an excellent forum for information on target fabrication. Unlike its predecessors, this meeting was completely unclassified, thanks to new classification guidance on ICF from the U.S. Department of Energy (DOE). For the first time, the meeting could open its doors to target fabricators from France, Japan, and Russia. Because of the open discussions and the decidedly international flavor, the Tenth TFSM was particularly exciting. Representatives attended from the

United States, the United Kingdom, Japan, France, Russia, and Canada.

The Tenth TFSM also reflected the spirit of optimism in the international ICF community—the feeling that a number of the programs are nearing ignition. Indeed, the National Ignition Facility in the United States, the Laser MegaJoule in France, and the KONGOH laser facility in Japan are all facilities designed to achieve ignition in the laboratory. All are in serious planning for operations in the first decade of the millennium. Furthermore, two new facilities in the United States were close to operation (both began operations in the months following the meeting): Omega, a 60-beam glass laser for direct drive research at the University of Rochester, and NIKE, a KrF laser, also for direct drive research at the Naval Research Laboratory.

In celebration of the Tenth TFSM, the spirit of international cooperation in inertial fusion that was felt at the meeting, and the sense that future TFSMs will continue to reflect this spirit, we have prepared this special issue of *Fusion Technology* containing selected papers from that meeting. We believe that these papers will provide a glimpse into the exciting science, technology, and art associated with fabricating targets for ICF and will be of interest to the wider fusion community.

I would like to acknowledge Ken Schultz, General Atomics, and Tom Bernat and Bob Cook, LLNL, for their help in putting this issue together.