

Findings and Recommendations of Student/Postdoctoral Panel

[This panel was comprised of Ryan Rygg (chair), Dan Casey, Carolyn Kuranz, Hiroshi Sawada, and Louise Willingale.]

A variety of topics were raised during the student/postdoc/new-user panel session at the OMEGA Laser Users Group meeting. Although the chance to perform experiments on OMEGA is a wonderful opportunity for students and postdocs, there are a number of issues that are of particular concern for new users, especially those who are not members of groups with strong ties to LLE. In an effort to increase the effectiveness of experiments performed by students, postdocs, and other new users, the major areas of discussion are summarized below

1. Information for new users

Copious information about many aspects of the Omega Laser Facility is available on the LLE website. However, navigating the website to find relevant documents for external users can be overwhelming, partly because the information for external OMEGA users is intermingled with the much greater volume of information provided specifically for Omega Facility staff.

New users would benefit from a concise and easy to find overview of the location and purpose of relevant documents and resources. For example, the NLUF Users' Guide is a particularly useful resource, yet it is not well known by all external users and, in particular, would be hard to identify as a useful document for those new users not funded by NLUF.

Many also expressed a desire for readily accessible descriptions of available diagnostics. The current "Help" links from the SRF diagnostic pages are too cryptic to be very useful for inexperienced users, and the NLUF Users' Guide diagnostics section is sometimes too far removed from the terse SRF labels to easily help evaluate which diagnostics are appropriate for a given experiment. It was proposed that a Diagnostic Summary page be provided (perhaps in parallel or perhaps merged with the Diagnostic Status page) that includes the diagnostic acronym, a two- to three-sentence description of its use and limitations, operational procedures, a link to relevant RSI papers, and examples of calibration or experimental data, if available. Links to this Diagnostic Description Summary page directly from the SRF form or SRF diagnostic Help page would also be useful.

Beside a resource summary and diagnostic summary, other information suggested as valuable on a new users' summary page includes concise (as compared to the 227-page NLUF users guide) descriptions of the laser system capabilities; tools to aid in experimental planning, such as delays incurred by laser or diagnostic configuration changes; and a list of who to contact with questions about various topics.

2. Engineering liaison for external users

One recommendation that was echoed in later sessions was to create an engineering liaison for external users. OMEGA users are widely spread both nationally and internationally, and it is impractical for each group to have a representative at LLE for the weeks and months prior to a shot day to prepare and interface the experiment with

the OMEGA facility. However, these external users could share a designated representative who is familiar with the facility, knows who to ask which question, can perform some of the legwork in the weeks prior to shot day, and is up to date on the latest news/issues that may affect the experiment. The suggested archetype for this liaison is the role that Chuck Sorce currently performs for the national labs. Students and postdocs, in particular, would benefit from a contact that is less senior than John Soures; someone they would be less intimidated by to ask numerous simple questions that would benefit their education.

3. Availability of smaller facilities

Finally, many expressed concerns regarding the continued availability of smaller-scale experimental facilities. Smaller-scale facilities provide a practical means of testing new diagnostics and experimental ideas prior to their implementation on OMEGA. In addition, they offer an opportunity for hands-on experience to students and postdocs in a relatively low-stakes environment, where the cost of mistakes, an essential element of experience gain, is lessened.

Given OMEGA's limited experimental time, and to help ascertain whether OMEGA is the proper facility, a list could be supplied of alternative smaller-scale experimental facilities for potential use for diagnostic and experimental development. In addition to the name, location, and description, suggestions were also made to include the proposal process and deadlines, if any, for each facility.