



Pre-Solicitation Notice

System for Award Management (SAM) Posting

Notification of Intent to Publish a Full and Open Competitive Solicitation for AMPLIFIED TI-SAPPHIRE LASER

INTRODUCTION

The National Renewable Energy Laboratory (NREL) is one of the U.S. Department of Energy's (DOE) national laboratories for renewable energy and energy efficiency research and development. NREL develops renewable energy and energy efficiency technologies and practices, advances related science and engineering, and transfers knowledge and innovations to address the nation's energy and environmental goals.

BACKGROUND

The Alliance for Sustainable Energy, on behalf of NREL, located in Golden, Colorado intends to release a Request for Quote (RFQ) for a Amplified Ti-Sapphire Laser to be procured, installed and operated at NREL's South Table Mountain campus in Golden, CO.

This Pre-Solicitation notice is released to the public with the intent to share NREL's capability requirements and technical specifications expected to become part of the RFQ planned to be released in January 2023. NREL is releasing this information to allow interested parties the ability to begin any preparations that may be necessary to plan strong quotes in response to NREL's expected RFQ for the Amplified Ti-Sapphire Laser procurement. This Pre-Solicitation is planned to be publicly posted for approximately 15 days.

DESCRIPTION:

NREL intends to publicly publish for a period of 15 calendar days a competitive solicitation for the following:

Requirements:

Amplified ti-sapphire laser system

Pulse energy: between 3-5 mJ

Wavelength: 790-810 nm

Pulsethickness: 70-120 fs

Repetition rate: 1 kHz

Power requirements: 120V (lab is not set up for 240V)

Footprint: no dimension larger than 50"

Proven compatibility with Ultrafast Systems Helios and EOS spectrometers

Delivery in no more than 20 weeks ARO

'One box' system must include oscillator

Pulse-to-pulse stability: $< 0.5\%$ RMS
Spatial Mode: TEM₀₀, $M2 < 1.25$
Beam pointing < 10 microrad

Please note that this solicitation is not ready to be issued as of this date. NREL will publish the solicitation on SAM.gov and NREL.gov when it is available.

NREL expects the resultant purchase order to be a firm fixed price type agreement.

All responsible sources may submit a proposal to the solicitation once posted. Electronic submissions to the public solicitation will be accepted prior to the response date and time, which will be publicized with the solicitation.

NREL will evaluate offers in accordance with the Buy American Act policies and procedures of FAR Part 25.

Proposals, questions, and submissions in response to this pre-solicitation notice will not be collected.