The National Institute of Standards and Technology (NIST), intends to negotiate, a firm fixed price purchase order, on a sole source basis, with 4Wave Incorporated, Sterling, VA. For the purchase of stainless steel stages and installation. This will be other than full and open competition, under authority of FAR 13.106-1(b) (1). Only one responsible source and no other supplies or services will satisfy agency requirements:

A sole source determination is based on the following: The stainless steel stages use proprietary hardware and software. The new stages must be absolutely identical to the existing ones. Only 4Wave, Incorporated can meet NIST technical requirements.

Specifically, no other vendor can meet the NIST requirements for: stainless steel stages. This tool is unique in that it is a deposition system that can deposit very dense, pinhole free, and very smooth films at room temperature. No other type of tool has this capability.

The 4Wave ion beam/bias target deposition systems uses temperature controlled wafer stages to ensure process repeatability. The stages have an intricate cooling system and temperature monitoring system built in. Small changes in temperature uniformity or drift in overall temperature of the stages can cause large shift in key film parameters such as pinhole density, smoothness, and density. This technology is proprietary and is only available from 4Wave. 4Wave does not have any authorized distributors/resellers.

The North American Industry Classification System (NAICS) code for this acquisition is 333242, and the size standard is 1,500.

No solicitation package will be issued. This notice of intent is not a request for competitive quotations; however, interested persons may identify their interest and capability to respond to this requirement. The Government will consider responses received by 1:00 p.m. (EST) June 30, 2017. Inquiries will only be accepted via email to <u>Barbara.suhrie@nist.gov</u>. No telephone requests will be honored.