

CLASSIFICATION CODE: 66 – Laboratory Equipment and Supplies

SUBJECT: NOTICE OF INTENT TO SOLE SOURCE: WAVELENGTH SHIFTING FIBERS

SOLICITATION NUMBER: NB610030-16-05516

RESPONSE DATE: August 22, 2016

CONTACT POINTS: Cory Worley, Contract Specialist, 301-975-3635
Patrick Staines, Contracting Officer, 301-975-6335

DESCRIPTION:

The Department of Commerce, National Institute of Standards and Technology (NIST), intends to negotiate a firm fixed price purchase order, on a sole source basis, with Kuraray America Inc. of Houston, TX for the purchase of under other than full and open competition by the authority of FAR subpart 13.106(1)(b).

The NIST Center for Neutron Research (NCNR) is engaged in a project to build a polychromatic incident beam reflectometer for measurement of many types of layered microstructures. The detector for this instrument will use an array of highly oriented pyrolytic graphite crystals to diffract neutrons scattered from the specimen into an array of neutron sensors. These sensors, under development at NIST, use neutron-sensitive scintillators to produce light which is then collected by wavelength shifting fiber optics and conducted to a photodiode.

NIST requires approximately 6 km of wavelength shifting fiber to produce the 1640 neutron sensors for the CANDOR instrument. This fiber will shift blue light produced by the scintillators to a green light for transport to a photosensor. NIST has determined that the K27 dye formulation in 650 ppm concentration provides NIST with the correct properties for light capture.

This fiber is to be round with a diameter of 0.5mm, S-type, multi-clad, and provided in canes of lengths evenly divisible by 60 cm.

All of the development work performed at NIST and by collaborators at other sister facilities have used Kuraray Y-11 wavelength shifting fiber as the K27 dye is the most effective blue-green wavelength shifter. Kuraray is the only known manufacturer who produces the wavelength shifting fiber with the dye concentration NIST requires, in diameters NIST requires, and in a form (cane) that is required.

Therefore, Kuraray America Inc. is uniquely qualified to provide the required wavelength shifting fibers.

Delivery shall be FOB Destination, Gaithersburg, MD, and be completed in accordance with the Contractor's commercial schedule.

The North American Industry Classification System (NAICS) code for this acquisition is 325211, and the size standard is 1,250 employees.

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 3:00 p.m. (EST) on August 22, 2016. Inquiries will only be accepted via email to cory.worley@nist.gov. No telephone requests will be honored.

A determination by the Government not to compete the proposed acquisition based upon responses to this notice is solely within the discretion of the Government. Information received will normally be considered solely for the purpose of determining whether to conduct a competitive procurement in the future.