

SOLE SOURCE JUSTIFICATION
PR 480484414
Purchase of PANalytical X-Ray Powder Diffractometer

NASA, Kennedy Space Center, will negotiate with PANalytical for the purchase of x-ray powder diffractometer. The total estimated cost of this effort is \$ 295,000.

Pursuant to FAR 13.106-1(b), the acquisition of referenced PANalytical hardware is determined to be available from only one source. Competition is impractical for the following reasons:

Based upon market research the PANalytical x-ray powder diffractometer encompasses several salient characteristics that would substantially benefit the intended NASA mission for the instrument to include the following:

- The data files are in a secure XML file format, which is compatible with current historical data collected over the last 15 years and would allow us to continue to evaluate historical data as well corroborate with other NASA Centers with the same equipment.
- The optical accessories are precision machined to allow rapid experiment design without the need for alignment which would be a substantial benefit in a multi-user laboratory working with a wide variety of different configurations.
- The use of a point source design, for performing micro beam diffraction, would give maximum x-ray flux over source designs that aperture line source.
- NASA KSC would have access to a local- Orlando, FL based service technician for rapid emergency service calls. Our experience with PANalytical service over the last 30 years has been excellent.
- Use of 10 software licenses for off line data analysis for multi-users environment.

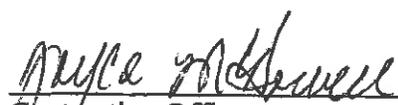
Based upon the above, I hereby determine that the circumstances of the contract action deem only one source reasonably available for this acquisition. I hereby certify that this statement is accurate and complete to the best of my knowledge and belief.



Philip M. Howard
NASA/KSC Chemistry Laboratory
NE-L6

Date 23 Aug 2013

I hereby certify that this justification is accurate and complete to the best of my knowledge and belief.



Contracting Officer

8/26/2013
Date