



66 -- X-Ray Photoelectron Spectroscopy for Chemical Imaging

- [Combine Synopsis/Solicitation](#) - Posted on Apr 04, 2007

General Information

Document Type: Amendment to Combined Synopsis/Solicitation
Solicitation Number: N00173-07-R-JS05
Posted Date: Apr 23, 2007
Original Response Date: May 03, 2007
Current Response Date: May 03, 2007
Original Archive Date: Apr 22, 2008
Current Archive Date: Apr 22, 2008
Classification Code: 66 -- Instruments & laboratory equipment
Naics Code: 334516 -- Analytical Laboratory Instrument Manufacturing

Contracting Office Address

Department of the Navy, Office of Naval Research, Naval Research Laboratory, 4555 Overlook Ave. S.W., Washington, DC, 20375, UNITED STATES

Description

The purpose of this amendment is to provide answers to questions received from potential offerors and to provide additional information to be used as a guide with the specifications:

1. Q: Regarding point 2.3.5.2 for the integration of your electron source LEG 200 we would need some more information on the scan unit. Do you know if it has an analog external input? It would be very helpful if you could provide us with a copy of the manual.

A: The scan unit does not have an analog external input that I can tell. Although, the little bit of documentation that I have indicates that it could be computer controlled. The scan unit has 4 cables that come out (x1, x2, y1, y2) to the LEG 200 gun which controls the raster and has 2 cables that come in from the secondary electron detector (a BNC video in and a strange 9 pin connector that is also labeled video input). The x and y output voltages start at 100 VDC and decrease to nearly 0 as the magnification is increased. I did not put the outputs to an oscilloscope to determine what frequency is being used to sweep the beam. The rate at which the x (1 & 2) and y (1&2) voltages are switched. This causes a rastering of the electron beam in order to obtain a TV image. Have you ever looked at the SETTINGS of your computer monitor? The frequency can be 50 Hz, 68 Hz, 72 Hz, or nearly any value. For the scan unit to form a secondary electron detection (the TV image), the electron beam must be rastered by switching voltages at a frequency. I do not know the frequency the scan unit is using.

2. Q: Point 2.6.2 I understand that we should also offer an additional In-situ ultra-high vacuum transfer system consisting of a track and trolley system and wobblestick. We thought that you would want to use your existing transfer system. Please clarify if we should offer this.

A: We do not need a trolley system. We already have a cart and trolley system, which must be used. Any new chamber must have a port and proper dimensions to allow the trolley system to bring samples into the XPS system from the connecting Preparation Chamber. The port should be an 8" (inches) CF flange, as that is what is currently used. It is conceivable that a 6" CF flange may work as the cart is only 3.5" wide and 3" tall. We do not need a wobble stick either, as we have one which can be used. The purpose of section 2.6.2 was to provide information on how samples are to be brought into the XPS system by us.

3. Q: Do you accept payment terms that are:
65% prepay (on order)
30% on delivery
5% on final acceptance

A: Payment arrangements can be in accordance with FAR Part 12.

4. Q: Is there a given budget on the bid?

A: No.

5. Q: Would it be possible for the end user to supply details about the existing chamber pumping and any pumping associated with individual instruments?

A: The chamber is pumped through a 10 inch CF flange attached to a "cross". Off of the cross are a CryoTorr 8 cryopump, a large ion pump (> 200 l/s), and a titanium sublimation pump. There is a small ion pump (< 60 l/s) that is used to differentially pump the old monochromatic x-ray source and diffraction crystal. There is a small diffusion pump which is turned on to differentially pump the ion gun and helium UV source, and it connects to the system through a ~1.5 inch pipe. There are two mechanical pumps which are used for backing the diffusion pump and the helium UV source.

6. Q: Is it possible for the end user to supply additional details about the existing systems wafer manipulator and transfer devices? Specifically, what is the Z (up/down) travel of the manipulator and how many ancillary devices are needed to move the wafer samples on to the manipulator from the transfer chamber?

A: Yes. The Z up/down travel of the 3" wafer manipulator is ~4 inches, with it going ~0.5 inches above the chamber center line and ~3.5 inches below the chamber center line. Only one wobble stick is required to lift the wafer sample off of the cart and place it onto the 3" wafer manipulator. The wafer sample holder has a hole in its' ring that a pin on the wobble stick goes through, and thus allowing the wafer sample holder to be picked up.

7. The following DFARS clause is incorporated: DFARS 252-227-7015, Technical Data, Commercial Items (NOV 1995).

8. The government will incorporate the following provision into any ensuing contract:

This document contains proprietary commercial technical data of * for company * delivered under contract number *. Use, copying or disclosure by the U.S. Government of the Technical Data contained herein is Governed by the terms of DFARS 252.227-7015, Technical Data, Commercial Items (NOV 1995).

* To be completed at time of award

9. Pictures to be used as a reference tool, ESCALab MK II, can be found at <http://heron.nrl.navy.mil/contracts/RFP/07js05.htm>.

Point of Contact

Jamie Brown, Contract Specialist, Phone 202-767-4597, Fax 202-767-0430, Email jamie.brown@nrl.navy.mil - F. Janilea Bays, Contracting Officer, Phone 202-767-2974, Fax 202-767-0430, Email jan.bays@nrl.navy.mil

Place of Performance

Address: Naval Research Laboratory 4555 Overlook Avenue, S.W. Washington, D.C.

Postal Code: 20375

Country: UNITED STATES

[Register to Receive Notification](#)

[Government-wide Numbered Notes](#)

You may return to Business Opportunities at:

- DON ONR listed by [\[Posted Date\]](#)
- DON Agencywide listed by [\[Posted Date\]](#)

[\[Home\]](#) [\[SEARCH synopses\]](#) [\[Procurement Reference Library\]](#)