

NASA Ames Research Center  
RFQ # NNA09308294Q-B-AWQ

Question and Answer Set 1

1. Specifications Item 7: The system shall be able to accurately resolve Molybdenum Mz line from C K $\alpha$  line and be able to show clear separation of the Silicon L1 line from the noise peak.

Question: Please clarify how you define "accurately resolve".

Response: The system properly identifies the peaks qualitatively and uses the correct peak information quantitatively.

2. Specifications Item 8. The system shall automatically identify elements with better than 99% accuracy for entire detection range.

Question: Please define the sample(s) to be used and how the test will be performed.

Response: NASA expects the vendor to substantiate the accuracy of their system in their quotation.

3. Specifications Item 10. The system shall be able to map and show clear separation of Boron and Carbon precipitates as small as 1000nm contained within a matrix with an acquisition time better than 5 minutes.

Question: What is the sample matrix? What is the criterion for "clear separation"? This seems to be a test of the SEM as much or more than a test of the EDS system.

Response: The matrix can be iron, nickel, aluminum, copper, etc. The two different precipitates should have their own well defined boundaries. The Leica S360 SEM with LaB6 filament has resolution below 1nm.