

## **NMHU PURCHASING DEPARTMENT SOLE SOURCE JUSTIFICATION FORM**

A sole source procurement is one for which only one vendor is capable of or allowed to perform a particular service and/or construction or for a tangible item that can be offered by only one vendor. A sole source procurement must comply with §13-1-126 and §13-1-128 N.M.S.A. 1978 and all other state statutes and federals pertaining to sole source procurements.

Submittal of this form is one of the steps required prior to approval of the procurement (approved via issuance of a purchase order). If this procurement is approved by the NMHU Purchasing Department it will then be posted onto the University's website and the State of New Mexico's Sunshine Portal. The posting will be for no less than thirty (30) calendar days. If a potential vendor submits a protest against a sole source procurement within that timeframe, the sole source will not be awarded until, and if the protest is resolved.

This form must be completed in its entirety. If it is not completed in its entirety it will not be accepted and will be returned to the requestor.

### **Describe the tangible item(s), construction and/or service(s) you would like to procure.**

An automated thermoluminescence/optically stimulated luminescence (TL/OSL) reader which performs single grains measurements using "Electron Multiplying Charge Coupled Device" (EMCCD) detector, as well as bulk sample measurements via a PMT. Control of detection systems, filters, and excitation sources is determined and controlled by an automated computer controlled system (automatic detector changer). The system must also allow for future upgrades of stimulation sources and detection systems. A ring shaped beta-irradiation unit which provides a homogeneous dose rate over the irradiation area:

≤ (± 2,5 %) @ 8 mm diameter

≤ (± 3,5 %) @ 10 mm diameter

### **Can this procurement be made by the regular bidding process? If not, explain why.**

Only one company in the world builds a TL/OSL reader which performs single grains measurements using EMCCD detector, as well as bulk sample measurements via a PMT. And that control of the detection systems, filters, and excitation sources is determined and controlled by and automated computer controlled system. This system also allows for future upgrades of stimulation sources and detection systems. The beta-irradiation unit is a ring shape which provides the desired homogeneous dose rate over the irradiation area.

### **What other tangible items, services or construction methods did you consider? Specify the specifications, sources, technical data and any other non-tangible factors that you considered.**

I spoke with representatives of the only two companies that manufacture TL/OSL readers.

**Did you rely on information from other individuals to make your determination, if so by who and what information did they provide?**

I have spoken with over half-a-dozen researchers in the field of TL/OSL research. These researchers have worked the TL/OSL readers manufactured either one or both companies. They shared the limitations and advantages of both readers. The consensus was that an EMCCD detector and control of detection systems, filters, and excitation sources by a computer controlled system was important for research applications. Also, it is crucial that the beta-irradiation unit provide a homogeneous dose rate over the irradiation area for reliable OSL measurements.

**Attach to this department quotes, technical specifications or other data that describes the tangible item(s), service(s) and/or construction. It must also include, at a minimum, the vendor's name, address and telephone number and the amount of the procurement.**

*Freiberg Instruments, Delfter Straße 6, 09599 Freiberg - Germany  
Amount of 190,700 Euros = 258,307 US Dollars*  
**Provide any additional information that may be useful in making a determination.**

*I certify that all the information provided in this document and all attachments (if applicable) are to the best of my knowledge and I understand that there are penalties for willful violations of the State of New Mexico Procurement Code.*

_____	_____	_____
<b>Requestor Name and Title</b>	<b>Signature</b>	<b>Date</b>

**APPROVALS:**

_____	_____	_____
<b>Department Head or Dean (if different from above) Name and Title</b>	<b>Signature</b>	<b>Date</b>

_____	_____	_____
<b>Purchasing Department Name and Title</b>	<b>Signature</b>	<b>Date</b>

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