

**COMPETITIVE SOLICITATION TABULATION**

Budget Number			
Solicitation Number			
Solicitation Title	Ai4r Alpha Autoradiography system		
Opening Date		Time	
Posting Time/Date			
FROM:	7/11/2022 /		4:00 PM
UNTIL:	7/14/2022 /		5:00 PM
PAGE	1	OF	1

**FAILURE TO FILE A PROTEST WITH THE TIME PRESCRIBED IN ACCORDANCE WITH FLORIDA BOARD OF GOVERNORS REGULATION 18.002 AND FSU REGULATION FSU-2.015, OR FAILURE TO POST THE BOND OR OTHER SECURITY AS REQUIRED IN FLORIDA BOARD OF GOVERNORS REGULATION 18.003, SHALL CONSTITUTE A WAIVER OF RIGHT TO PROTEST**


RESPONDERS					Research Exemption							
Ai4r Alpha Autoradiography system		\$141,300.00										

Tabulated By: Rosey Murton/ CPO      Awarded By: National High Magnetic Field Laboratory (NHMFL)      Verified By: Mark Riley/Interim Vice President of Research  
REMARKS: CIRCLED PRICE INDICATES INTENT TO AWARD, NOT AS SPECIFIED CODE(S)



## RESEARCH EXEMPTION CERTIFICATION

TO: President Richard McCullough  
Florida State University

FROM: Mark Riley <sup>DS</sup>  
Interim Vice President for Research

RE: Exemption Request for Sole Sourcing an Ai4r Alpha Autoradiography system  
Agency Number: National High Magnetic Field Laboratory (NHMFL)  
Project Title/Period: Gypstacks/Rare Earth Initiative

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In accordance with the provisions of s. 1004.22(7), Florida Statutes and University procedures, a research exemption is approved as follows:

- ✓ ☒ A. Competitive Procurement: *Ai4r Alpha Autoradiography System*
- ☐ (1) The vendor is specified in the prime contract or award.
- ☐ (2) The vendor has been approved in writing in accordance with the provisions of the prime contract or grant.
- ✓ ☒ (3) Purchase of goods or services from this vendor is more efficient or expeditious.
- ✓ ☒ (4) Purchase of specific goods or services from this vendor can be demonstrated to be necessary to meet the time requirements of the prime contract or grant award.
- ✓ ☒ (5) Purchase from this vendor is mandated by scientific or technical requirements.
- ☐ (6) Purchase from this vendor can be demonstrated to be at a cost below industry norms
- ☐ (7) Other (specify; attach additional sheets if necessary):

Research Exemption Request

Agency Number: National High Magnetic Field Laboratory (NHMFL)

Project Title/Period: Gypstacks/Rare Earth Initiative

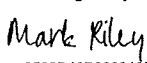
July 7, 2022

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- ☐ B. Confidentiality: The prime contract, grant award or subcontract contains a confidentiality clause requiring the research materials to be exempt from public scrutiny, or it has been determined that, pursuant to s. 240.241(2) Florida Statutes, the research activity necessitates an exemption from public scrutiny.

- ☐ Methods of manufacture or production
- ☐ Business Transactions
- ☐ Potential trade secrets
- ☐ Proprietary Information
- ☐ Potentially patentable material
- ☐ Actual trade secrets
- ☐ Other (specify)

Certification: The undersigned certifies that this research exemption is necessary for the efficient or expeditious prosecution of the research project as described herein.

DocuSigned by:  
  
3539D46B380040D...

7/8/2022 | 12:33 PM EDT

Mark Riley  
Vice President of Research  
Florida State University

cc: Project File/Procurement



**Florida State University**  
1800 East Paul Dirac Drive  
Tallahassee, Florida 32310  
nationalmaglab.org

July 5, 2022

Re: SRAD Exemption Request for Sole Sourcing an Ai4r Alpha Autoradiography system.

Dear Mark,

I'm writing to request a Sponsored Research Exemption to acquire an Ai4r BeaQuant-s for digital autoradiography on SRAD funds for the State-funded gypstacks/Rare Earth Initiative. The reason SRAD funds were used for the purchase is that we placed the order prior to the state funds becoming available.

The purpose of this urgent purchase is that the accumulation of radium is the key challenge to exploring for rare earth elements in the phosphogypsum industrial wastes from the phosphate mining operations in Central Florida. It is essential to the success of this project that we quickly establish whether the radium is homogeneously distributed in the gypsum crystals (bad news!) or is localized in specific radium carrier phases (good news!). In the latter case, determination of the properties of the radium host phase would enable physical or chemical separation strategies to be developed. The equipment needed to locate the radium, present in picogram per gram quantities within the gypsum, is digital alpha-particle autoradiography.

Our exploration of the instrument market showed only one commercially available system that performs this task: the French company Ai4r's BeaQuant-s. There are non-digital phosphor-based alpha autoradiography systems, and there are numerous beta-emission-based digital autoradiography systems targeting the biomedical community, neither of which serve our purposes. Phosphor-based autoradiography is extremely tedious if one does not quantitatively know the radioactivity in advance to determine the appropriate exposure time, because both over-exposure and under-exposure compromise the usefulness of the result. Even a digital system like the BeaQuant-s that provides real-time measurements may require several days to count a single sample at picoCurie levels of radioactivity.

Accordingly, we request an exemption to purchase the BeaQuant-s (\$141K) without going through a competitive bidding process. We greatly appreciate your consideration of this request. Please feel free to contact me if you need further information.

**Munir Humayun , Professor**

**850-644-1908 | [humayun@magnet.fsu.edu](mailto:humayun@magnet.fsu.edu)**

and Los Alamos National Laboratory  
Supported by the U.S. National Science Foundation and the State of Florida

Operated by Florida State University, University of Florida,



Sincerely,

A handwritten signature in black ink that reads "Munir Humayun". The signature is written in a cursive style.

Munir Humayun.