

**INSTRUCTION FOR COMPLETING
COMPETITIVE SOLICITATION ACKNOWLEDGEMENT FORMS**

The Competitive Solicitation Acknowledgement Form must be completely filled in. This may be done on line then printed or you may print then fill in with pen or typewriter.

PLEASE NOTE: IF THIS IS NOT COMPLETED IT MAY BE GROUNDS FOR REJECTING YOUR SOLICITATION.

NOTICE TO RESPONDERS:

Responders must E-Mail or Fax Verification of Receipt of Competitive Solicitation. E-Mail Mary Ward at fsusolicitation@admin.fsu.edu or Fax Attention: Mary Ward, (850) 644-8921.

SOLICITATION NUMBER		UNIVERSITY DATE OF ISSUE		FLORIDA STATE UNIVERSITY COMPETITIVE SOLICITATION ACKNOWLEDGEMENT FORM			
SOLICITATION TITLE							
RESPONSES WILL BE OPENED AT				SUBMIT RESPONSES TO FLORIDA STATE UNIVERSITY PURCHASING DEPARTMENT A1400 UNIVERSITY CENTER TALLAHASSEE, FLORIDA 32306-2370 (850) 644-6850			
and may not be withdrawn within 45 days after such date and time.							
CORPORATE CHARTER NO.		F.E.I.D./S.S.NO.		Responses not received at the exact above location, by the appointed hour and date, will not be considered			
PLEASE FILL IN COMPLETE VENDOR NAME AND ADDRESS				REASON FOR NO RESPONSE			
				DELIVERY WILL BE		CASH DISCOUNT TERMS	
				AREA CODE		TELEPHONE NO.	
						FAX NO.	
				Email Address:			
				Web Address:			
I certify that this response is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a response for the same materials, supplies or equipment, and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this response and certify that I am authorized to sign this response for the responder and that the responder is in compliance with all requirements of the Competitive Solicitation, including but not limited to certification requirements. In submitting a response to the Florida State University, the responder offers and agrees that if the response is accepted, the responder will convey, sell, assign or transfer to the Florida State University all rights, title and interest in and to all causes of action it may now or hereafter acquire under the Anti-trust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the Florida State University. At the University's discretion, such assignment shall be made and become effective at the time the University tenders final payment to the responder.				AUTHORIZED SIGNATURE (MANUAL)			
				AUTHORIZED SIGNATURE (TYPED) TITLE			

GENERAL CONDITIONS

SOLICITATION RESPONSE SUBMISSION: All responses must contain this Acknowledgement Form with a manual signature (or a facsimile) in the appropriate space above. Responses must be typed except for those areas where the solicitation specifically allows hand written entries. If submitted by mail, do not include more than one response in an envelope. The face of the envelope shall contain the above address, the date and time of the response opening and the solicitation number. Responses not submitted on any attached response form or in another specified media may be rejected. Any manual changes made to a solicitation price must be initialed. All responses are subject to the conditions specified herein. Any response that does not comply with these conditions will be rejected.

- SOLICITATION RESPONSE DELIVERY:** Responses must be delivered and available to be publicly displayed at the address, date and time specified above unless the solicitation specifically states otherwise. The clock in the lobby of the Purchasing Department shall be the official timepiece for determining if a response has been received in a timely manner. Responses, which for any reason are not available at this location at the prescribed time and date, will not be considered. It is the responder's responsibility to assure that his response is delivered on the correct date and time and at the specified location. If the solicitation specifications specifically allow submission by fax, the date and time indicated on the University Right Fax Server as the time received will be the official date and time of the response's receipt. Delivery of a response to the University Post Office or any other place on the University campus is not acceptable. Timely delivery of the response itself to the specified location is required. Offers by telephone are not acceptable under any circumstances.
- NO RESPONSE SUBMITTED:** If not submitting a response to this solicitation, respond by returning only this acknowledgement form with the statement "NO RESPONSE" written on it and a brief explanation in the space provided above. Failure to respond to a Solicitation by not returning a response or this acknowledgement form shall result in removal of your firm from the University's Competitive Solicitation file. To qualify as a respondent, vendor must submit a "NO RESPONSE" and it must be received no later than the stated display date and time.
- TABULATION:** Response tabulations will be furnished upon written request with an enclosed, self-addressed, stamped envelope. In accordance with s.119.07(3)(m), Florida Statutes, public review of responses to a competitive solicitation may be denied until the notice of a decision is posted or until 10 days after the competitive solicitation display, whichever occurs first.
- PRICES, TERMS and PAYMENT:** Prices offered shall be firm and include all packing, handling, shipping charges and delivery to the destination shown herein
 - TAXES:** Florida State University does not pay Federal Excise or Florida Sales Tax on direct purchases of tangible personal property. The appropriate exemption number will be printed on the face of the purchase order. This exemption does not apply to purchases of tangible personal property made by contractors who use the tangible personal property or service in the performance of contracts for the improvement of University-owned real property as defined in Chapter 192, F.S.
 - DISCOUNTS:** A cash discount for prompt payment may be offered. However, such discounts shall not be considered in determining the lowest net cost for response evaluation purposes. Discounts will be computed from the date of satisfactory delivery at place of acceptance or from receipt of a correct invoice at the office specified, whichever is later. Responders are encouraged to reflect cash discounts in the unit prices proposed.
 - MISTAKES:** Responders are expected to examine the specifications, delivery schedule and all instructions pertaining to supplies and services. Failure to do so will be at Responder's risk. In case of a mistake in extension, the unit price will govern.

- CONDITION AND PACKAGING:** It is understood and agreed that any item offered or shipped as a result of this competitive solicitation shall be a new, current standard production model available at the time of this response. All containers shall be suitable for storage or shipment, and all prices shall include standard commercial packaging.
- SAFETY STANDARDS:** Unless otherwise stipulated in the Competitive Solicitation, all manufactured items and fabricated assemblies shall comply with applicable requirements of Occupational Safety and Health Act and any standards thereunder.
- UNDERWRITERS' LABORATORIES:** Unless otherwise stipulated in the competitive solicitation, all manufactured items and fabricated assemblies shall carry U.L. approval and reexamination listing where such has been established.
- INVOICING AND PAYMENT:** The contractor shall be paid after delivery and acceptance of the goods, less deduction if any, and submission to the University of a properly certified invoice at the prices stipulated on the purchase order. Invoices shall contain the purchase order number. An original and three (3) copies of the invoice shall be submitted. Failure to follow these instructions may result in delay in processing invoices for payment. **INTEREST PENALTIES:** Payment shall be made in accordance with Section 215.422, F.S., which provides that agencies have 5 working days to inspect and approve goods and services, unless the Competitive Solicitation specifications or the purchase order specify otherwise. If payment is not made within 40 days, measured from the latter of the date the correct invoice is received or the goods or services are received, inspected and approved, a separate interest penalty set by the Comptroller pursuant to Section 55.03, F.S., will be due and payable in addition to the invoice amount. To obtain the applicable interest rate contact the Payable & Disbursement Services at (850) 644-5021. Payments to health care providers shall be made not more than 35 days from the date the eligibility for payment is determined, and the interest rate is 1% per month. Invoices returned to vendor due to errors will result in payment delay. Interest penalties of less than \$1.00 will not be paid unless the vendor requests payment. Invoice payment requirements do not start until a properly completed invoice is provided the University. A Vendor ombudsman, whose duties include acting as an advocate for vendors who may be experiencing problems in obtaining timely payment(s) from the University, may be contacted at (850) 410-9724, or by calling the State Comptroller's Hotline, 1-800-848-3792.
- DELIVERY:** Unless actual date of delivery is specified (or if specified delivery cannot be met), show number of days required to make delivery after receipt of purchase order in space provided. Delivery time may become a basis for making an award (see Special Conditions). Delivery shall be within the normal working hours of the university, Monday through Friday, unless otherwise specified.
- MANUFACTURER'S NAMES AND APPROVED EQUIVALENTS:** Any manufacturers' names, trade names, brand names, or catalog numbers used in the specifications are there for the purpose of establishing and describing general performance and quality levels. Such references are not intended to be restrictive, and responses are invited on comparable brands or products of any manufacturer. The responder may offer any equivalent brand or product that meets or exceeds the specifications for an item(s). However, a Responder shall not be allowed to offer more than one brand or equivalent product on any one item. It is the Responder's responsibility to select the single equivalent brand or product that his firm sells which meets all specifications and is the lowest in cost. If a responder offers more than one equivalent brand or product on an item, only the equivalent brand or product offering the lowest response shall be considered. If an offer is based on an equivalent brand or product, the manufacturer's name and number must be indicated on the response form. Responder shall submit with his response cuts, sketches, and descriptive literature, and/or complete specifications. Reference to literature submitted with a previous response will not satisfy this provision. The Responder shall also explain in detail the reason(s) why the proposed equivalent will meet the specifications

and not be considered an exception thereto. Florida State University reserves the right to determine acceptance of item(s) as an approved equivalent. Responses which do not comply with these requirements are subject to rejection. Responses lacking any written indication of intent to offer an alternate brand will be received and considered in complete compliance with the specifications as listed on the solicitation form. The Director of Purchasing is to be notified of any proposed changes in (a) materials used, (b) manufacturing process, or (c) construction. However, changes shall not be binding upon the University unless evidenced by an addendum issued by the Purchasing Department.

7. **CONFLICT OF INTEREST:** The award hereunder is subject to the provisions of Chapter 112, F.S. All offerors must disclose with their response the name of any officer, or agent who is also an employee of the State of Florida, or any of its agencies. Further, all offerors must disclose the name of any State employee who owns, directly or indirectly, an interest of five (5) percent or more in the offeror's firm or any of its branches.
8. **AWARDS:** The University reserves the right to make award(s) by individual item, group of items, all or none, or a combination thereof; to reject any and all responses or waive any minor irregularity or technicality in responses received. When it is determined there is competition to the lowest responsive responder, evaluation of the other responses is not required. Responders are cautioned to make no assumption unless their response has been evaluated as being responsive.
9. **ADDITIONAL QUANTITIES:** For a period not exceeding ninety (90) days from the date of acceptance of this offer by the university, the right is reserved to acquire additional quantities up to the amount shown on the solicitation, but not to exceed \$25,000, at the prices listed on the response to this competitive solicitation. If additional quantities are not acceptable, the response sheets must be noted "RESPONSE IS FOR SPECIFIED QUANTITY ONLY."
10. **SERVICE AND WARRANTY:** Unless otherwise specified, the responder shall define any warranty service and replacements that will be provided during and subsequent to this contract. Responders must explain on an attached sheet to what extent warranty and service facilities are provided.
11. **SAMPLES:** Samples of items, when called for, must be furnished free of expense, on or before solicitation opening time and date, and if not destroyed may, upon request, be returned at the responder's expense. Each individual sample must be labeled with responder's name, manufacturer's brand name and number, solicitation number and item reference. A request for return of samples shall be accompanied by instructions which include shipping authorization and name of carrier and must be received with your response. If instructions are not received within this time, the commodities shall be disposed of by Florida State University.
12. **NONCONFORMANCE TO CONTRACT CONDITIONS:** Items may be tested and/or inspected for compliance with specifications by any appropriate testing facilities. Should the items fail testing, the University may require the offerors to reimburse the University for all costs incurred by the University in connection with the examination. The data derived from any test for compliance with specifications are public records and open to examination thereto in accordance with Chapter 119, F.S. Items delivered not conforming to specifications may be rejected and returned at vendor's expense. Items delivered which do not comply with the competitive solicitation specification and items not delivered as per delivery date in solicitation and/or purchase order may result in responder being found in default. In which event, any and all procurement costs may be charged against the defaulting vendor. Any violation of these stipulations may also result in:
 - (a) Supplier's name being removed from the Purchasing Department's vendor mailing list.
 - (b) All State departments being advised not to do business with the supplier without written approval from the Division of Purchasing until such time as the supplier reimburses the University for all procurement and cover costs and advises the Division of corrective action taken to preclude recurrence of such failure to perform.
13. **INSPECTION, ACCEPTANCE AND TITLE:** Inspection and acceptance will be at the destination location unless otherwise provided. Title and risk of loss or damage to all items shall be the responsibility of the vendor named on the purchase order until accepted by the University, unless loss or damage results from negligence by the University. The vendor named on the purchase order shall be responsible for filing, processing and collecting all damages claims. However, to assist him in the expeditious handling of damage claims, the University will:
 - (a) Report any evidence of visible damage on all copies of the delivering carrier's Bill of Lading.
 - (b) Report damage (visible and concealed) to the carrier and contract supplier, confirming such reports in writing, within 15 days of delivery, requesting that the carrier inspect the damage merchandise.
14. **INTERPRETATIONS/DISPUTES:** Any questions concerning solicitation conditions and specifications shall be directed in writing to the Purchasing Office for receipt no later than two (2) days prior to the solicitation opening. Inquiries must reference the date of solicitation opening and solicitation number. No interpretation shall be considered binding unless provided in writing by the University in response to a request in full compliance with this provision.
15. **NOTICE OF SOLICITATION BONDING REQUIREMENT:** Any person who files an action protesting a decision or intended decision by the University pursuant to Section 120.57(3)(b), F.S., Rule 6C-18.055(3) and Rule 6C2-2.015(13) of the Florida Administration Code (FAC) shall post with the University at the time of filing the formal, written "Notice of Protest", a bond payable to the University in an amount equal to 10 percent of the total dollar amount of responder's response or \$10,000, whichever is less. The bond shall be conditioned upon the payment of all costs which may be adjudged against the protestor in the administrative hearing in which the action is brought and in any subsequent appellate court proceeding. In lieu of a bond, the University may accept a cashier's check or money order in the amount of the bond. **FAILURE TO FILE THE PROPER BOND AT THE TIME OF FILING THE FORMAL PROTEST, WILL RESULT IN A DENIAL OF THE PROTEST.**
16. **GOVERNMENTAL RESTRICTIONS:** In the event any governmental restrictions may be imposed which would necessitate alteration of the material, quality, workmanship or performance of the items offered on this response prior to their delivery, it shall be the responsibility of the successful responder to notify the university at once, indicating the specific regulation which required an alteration. The University reserves the right to accept any such alteration, including any price adjustments occasioned thereby, or to cancel the contract at no expense at the University
17. **LEGAL REQUIREMENTS:** Applicable provisions of all Federal, State, county and local laws, and of all ordinances, rules and regulations shall govern development, submittal and evaluation of all responses received in

response hereto and shall govern any response by the Florida State University by and through its officers, employees, and authorized representatives, or any other person, natural or otherwise. Lack of knowledge by any responder shall not constitute a cognizable defense against the legal effect thereof.

18. **PATENTS AND ROYALTIES:** The responder, without exception, shall indemnify and save harmless Florida State University and its employees from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of any purchase order resulting from this solicitation, including its use by Florida State University. If the responder uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the response price shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.
19. **ADVERTISING:** In submitting a response, responder agrees not to use the results therefrom as a part of commercial advertisement.
20. **ASSIGNMENT:** Any Purchase Order issued pursuant to this solicitation and the monies which may become due hereunder are not assignable except with the prior written approval of the University.
21. **LIABILITY:** The responder shall hold and save Florida State University, its officers, agents, and employees harmless against claims by third parties resulting from the responder's breach of negligence in connection with any purchase order resulting from this solicitation.
22. **FACILITIES:** The University reserves the right to inspect the responder's facilities during normal business hours with prior notice.
23. **DISQUALIFICATION OF RESPONDER:** Only one response from an individual, firm, partnership, corporation or association under the same or different names will be considered. Reasonable grounds for believing that a responder is involved in more than one response for the same item will be cause for rejection of the highest response in which such responders are believed to be involved. Any or all responses will be rejected if there is reason to believe that collusion exists between responders. Responses in which the prices obviously are unbalanced will be subject to rejection.
24. **FLORIDA RESPONDER:** Florida State University shall give preference to responders located within the State when awarding contracts whenever the commodity can be provided at no greater expense than, and at a level of quality comparable to that obtainable from a responder located outside the State.
25. **POSTING OF SOLICITATION RESPONSE TABULATIONS AND NOTICE OF PROTEST:** A Response Tabulation with recommended award(s) will be posted at the Purchasing Department for review by interested parties shortly after the scheduled opening date of this Competitive Solicitation, and will remain posted for a period of 72 hours, not including Saturdays, Sundays and Holidays. Any person who is affected adversely by the University's decision or intended decision in connection with this solicitation shall file a written "Notice of Protest" with the Director of Purchasing within 72 hours after the hour and date listed on the "Solicitation Response Tabulation" as the "Posting Time Date." A "Notice of Protest" is considered filed when it is received at the address listed on the front of the Acknowledgment Form. Failure to file a "Formal Protest" and the required bond under Rule 6C-18.055(3) FAC, and 6C2-2.015(13), within 10 days after filing the "Notice of Protest" shall constitute a waiver of proceedings under Section 120.57(3)(b), Florida Statutes.
26. **PRIDE:** It is expressly understood and agreed that articles available from the corporation identified under Chapter 946 F.S., which are the subject of, or required to carry out any purchase order resulting from this solicitation, shall be purchased from said corporation in the same manner and under the same procedures set forth in section 946.515(2), and (4), F.S.; and for purposes of this purchase order the person, firm, or other business entity carrying out the provisions of this purchase order shall be deemed to be substituted for the University insofar as dealings with such corporation are concerned.
27. **EQUAL OPPORTUNITY EMPLOYER:** The nondiscrimination clause contained in Section 202, Executive Order 11246 as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor are incorporated herein.
28. **PUBLIC RECORDS:** Any material submitted in response to this Competitive Solicitation will become a public document pursuant to Section 119.07, F.S. This includes material which the responder might consider to be confidential or a trade secret. Any claim of confidentiality is waived upon submission, effective after opening pursuant to Section 119.07, F.S.
29. **ADDITIONAL TERMS AND CONDITIONS:** No additional terms and conditions included with the solicitation response shall be evaluated or considered and any and all such additional terms and conditions shall have no force and effect and are inapplicable to this solicitation. If submitted either purposely through intent or design or inadvertently appearing separately in transmittal letters, specifications, literature, price lists or warranties, it is understood and agreed the general and special conditions in this competitive solicitation are the only conditions applicable to this solicitation and the responder's authorized signature affixed to the responder acknowledgment form attests to this.
30. **PUBLIC ENTITY CRIME:** A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity, may not submit a response on a competitive solicitation with a public entity for the construction or repair of a public building or public work, may not submit responses on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity for a period of 36 months from the date of being placed on the convicted vendor list.
31. **UNAUTHORIZED ALIENS:** The employment of unauthorized aliens by any Contractor is considered a violation of Section 274A(e) of the Immigration and Nationality Act. If the contractor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of any purchase order resulting from this Competitive Solicitation.
32. **JURISDICTION:** Any purchase order or contract resulting from this Competitive Solicitation will be governed by and under the Jurisdiction of the Law and Rules of Florida and any provisions in conflict there with shall be void and of no effect.

NOTE: NOTE: ANY AND ALL SPECIAL CONDITIONS AND SPECIFICATIONS ATTACHED HERETO WHICH VARY FROM THESE GENERAL CONDITIONS SHALL HAVE PRECEDENCE. WHEN EXECUTED THIS SHEET AND THE ACCOMPANYING COMPETITIVE SOLICITATION CONSTITUTE AN OFFER FROM THE RESPONDER.



**FLORIDA STATE UNIVERSITY
INVITATION TO BID
CRYOGENIC HELIUM GAS CIRCULATION SYSTEM**

ITB-5358-3

I. GENERAL

The Florida State University is inviting bids from qualified firms for a cryogenic helium gas circulation system to provide cryogenic environment to a 30 m superconducting DC cable and other advanced power system components to study the interrelationship of their electrical and thermal behaviours.

II. DEFINITIONS

Purchaser: The Florida State University, hereinafter referred to as the University.

Vendor: The proposer who submits the successful bid and receives a purchase order from the University based on and incorporating the terms, conditions and prices listed in this competitive solicitation.

ITB: Invitation to Bid.

III BIDDER NOTES

Bidders shall submit all costs and services proposed in the format specified.

Each bid shall be prepared simply and economically, providing a straight forward, concise delineation of the Bidder's capabilities to satisfy the requirements of the bid. Fancy binding, colored display and promotional material are not desired. However, technical literature, drawings, and pictures of proposed equipment should be included in the bid. Emphasis in each bid must be on completeness and clarity of contents. In order to expedite the evaluation of bids, it is essential that bidder's follow the format and instructions contained herein.

In the event of extension error(s) the unit price will prevail and the bidder's total offer will be corrected accordingly. In the event of addition errors, the extended totals will prevail and the bidder's total offer will be corrected accordingly. Bidder's must check their bid for any such errors and state the discount(s) where applicable.

BIDDING:

For the purposes of this Invitation for Bid, all bidders must provide the cost per item number in reference to section VI of this ITB. All bids shall include shipping cost and be shipped FOB Destination Center for Advanced Power Systems 2000 Levy Ave. Tallahassee, FL 32310.

Bids must be submitted for the entire work described therein. Deviation from plans and specifications will not be considered and will be cause for rejection of bids. It is the bidder's responsibility to examine all the provisions of the Contract Specifications carefully prior to submitting a bid.

AWARD:

Contract shall be awarded to the lowest responsive, responsible bidder whose bid meets the required specifications, based on the lowest total bid amount and in the best interest of the University. Contract may be awarded to one vendor or multiple vendors, whichever is in the best interests of the University.

If the successful bidder fails to properly execute the agreement, the University reserves the right to award the contract to the next lowest responsive, responsible bidder. Florida State University reserves the right to reject any or all bids and to waive any irregularities or informalities. The decision of the University is final.

ALTERATIONS:

DO NOT ALTER THIS BID IN ANY WAY. The only acceptable changes or alterations to this Invitation to bid will be made in the form of addenda and issued only by the FSU Purchasing Department.

IV. GENERAL REQUIREMENTS

A. Introduction

Florida State University Center for Advanced Power Systems (FSU-CAPS) requires a cryogenic helium gas circulation system to provide cryogenic environment to a 30 m superconducting DC cable and other advanced power system components to study the interrelationship of their electrical and thermal behaviours. The cryogenic system is being designed for nominal capacities of 1 kW and 0.5 kW at 77 K and 40 K, respectively. The cooling power will be provided by four Cryomech AL 330 cryocoolers assembled in a cryostat. To provide cryogenic environment to the DC cable and other power system components, FSU-CAPS needs a helium circulation system that is capable of circulating helium gas at a mass flow rate of up to 20g/s and at pressures up to 250 psi.

To accomplish the challenging cryogenic helium flow conditions, FSU-CAPS is looking to purchase a bank of four helium pumps connected in parallel that together produce 20g/s flow rate. The system should be modular to enable future modifications and operational flexibility.

Vendor must provide installation at FSU-CAPS. Equipment must be delivered and installed within five months from time of contract, date of purchase order.

B. Specifications in this request

The specifications given throughout this request are required specifications. The vendor must guarantee these values over the entire warranty period unless otherwise noted. If the vendor provides typical (or nominal) values, he must indicate so by suffixing 'typ.' to the values. The specifications for any optional item are also required specifications.

C. Equipment.

All equipment provided by the vendor shall be new and shall be free of defects.

D. Documentation.

The vendor shall deliver with the equipment a copy of complete technical and dimensional drawings. In addition electronic copies in standard format shall also be provided.

E. Warranty.

Vendor shall warrant the equipment to perform in accordance with the specifications, to be free of defects in material and workmanship for one year.

V. TECHNICAL REQUIREMENTS

The total system shall consist of a cryostat and a top flange into which all elements are mounted.

Cooling power will be provided by 4x AL330 Cryomech cryocoolers that FSU-CAPS have been procured separately:

Cryostat to integrate all system elements.

This cryostat has the following specifications.

- The cryostat consists of an upper and a lower half connected by a bolted O-ring flange. All elements are connected to the upper half so this can be taken out to work on the internals.
- 4x AL330 cryocoolers will be integrated to provide one stream of helium gas
- Each of the four cryocoolers has to be equipped with heat-exchangers to transfer the cold from the cylindrical cold head into the pressurized helium gas.
- Integration should allow the flexibility of activating 1 to 4 cryocoolers at anytime. Cryogenic valves should be available on the top flange.
- 2 x 1.5 m flexible cryogenic vacuum jacketed lines should come out horizontally as inlet and outlet for the He gas flow. The end of these flexible lines should have a 1" bayonet couplings.
- Feed-throughs are needed for electrical control wiring to the inside of the cryostat via 5 CF-35 flanges.
- Up to 3 of the CF-35 flanges may be used for the valves described above.
- To allow for future modifications of the system, all main elements (cryogenic fans, heat exchangers and valves) should not be welded directly onto the cryostat dome. For each valve and fan there will be a CF-100 flange. The actual elements should be welded through a CF-100 blind flange. For future expansion, 2 additional CF-100 flanges with blind flange should be incorporated.
- The AL330's will be mounted on a special flange per AL330 design, so that the cryocoolers can be taken out and replaced.
- All elements and connecting lines should be build in a cryogenically correct way and be properly insulated with MLI.
- To make dismantling and exchange of these main elements (cryogenic fans, heat exchangers and valves) possible, they should be equipped with 1/2" VCR couplings on their inlet and outlets. All segments between these elements need to be welded.
- All the components and the whole system should operate at a maximum system pressure of 20 barg. Therefore the system shall be equipped with the required

safety features suitable for the specified pressure.

- To allow for gas filling, depletion and buffering to compensate for density variation, required number of valves and connections should be provided. FSU-CAPS will design and fabricate the buffer volume.

Electric Connections Junction

A UL electric box shall be provided in which the different electric and electronic functions as described or necessary shall be build into.

The box shall be mounted to a detachable fixture to the side of the cryostat.

Set of 4x CryoFans type Noordenwind with HX's for AL330

Each of the four AL330 cryocooler should form a unit together with 1 cryogenic fan and 1 heat exchanger. This unit will provide a helium gas stream to the application as well as the heat transfer from the returning gas into the cold head.

The combination of 4 of these units should provide a total mass flow of 20 g/s. Under the conditions of 17 barg and 40 K, this will result in a dT over the inlet and outlet of the helium gas of 5 K.

17 barg is chosen to have 3 barg variation from the maximum allowable pressure of the application of 20 bar.

Supplier should provide a test data in the form of a graph of the cryogenic fan curve and HX resistance curve.

Temperature control of AL330

Supplier should include a temperature control system for each AL330. These will normally run down to equilibrium temperature depending actual load. To keep the outlet gas temperature at a set level, the HX's shall be equipped with heaters of total 90 W power and a PT100 sensor. By measuring the outlet temperature (see list of measuring devices below), a PID shall control the heaters to keep this at the set minimum temperature. Electronics shall be supplied to use the temperature input values to control a power supply feeding the heaters.

On the control box there is a screen on which the operator should be able to choose the set-temperature required.

Cryogenic valves to vary the number of units of AL330 in operation

Since the entire 4 x AL330 are in parallel tubing, this would mean all of them have to run always. To enable the choice of number of units of AL330 in operation at any given time, 2 manual valves are to be integrated in the following scheme:

- No. 1 AL330 will be just open and always be running.
- No. 2 will have its own valve so it can be shut off independently from the others.
- No. 3 and 4 will be connected after the second valve.

In this way one can choose any number of AL330 to be on-line by choosing the right valve scheme.

Set of measuring devices

For analysis of the behavior of the system the following measuring devices shall be included:

1x gas flow meter for the total flow

1x dP measurement meter between inlet and outlet

1x Pressure measurement meter

2x Temperature measurement meters at inlet and outlet

3x Temperature sensors per HX: at inlet at outlet and one as base temperature of the HX.

VI. VENDORS' REPLY

The vendor shall briefly address all specifications and requirements with specific values and descriptions.

Vendor shall list price for bid here \$_____

SEALED BID – TERMS AND CONDITIONS

All Respondents and other participants of this BID agree that they have read and fully understand these terms and agree to be bound thereby.

Acceptance of Terms and Conditions. By submitting a response the respondent agrees that they have read, fully understand and accept these Terms and Conditions.

1.0 TERMS AND CONDITIONS

1.1 Submission of Mandatory Forms

Bidders are required to return the Competitive Solicitation (CS) Acknowledgment Form with their BID. A representative who is authorized to contractually bind the Bidder shall sign the Acknowledgment Form.

1.2 Delivery Location

Sealed BID's will be accepted until the date and hour listed in this BID, at the Florida State University Purchasing Department, at which time a public opening will take place. This is an absolute deadline. BID's received after that date and time will be rejected. Delivery to any other point on or off campus is not acceptable and shall be grounds for rejection of the BID.

1.3 Delivery Address

BID's sealed in a clearly identified envelope will be accepted at the following address:

Purchasing Department
Florida State University
A1400 University Center
Tallahassee, Florida 32306-2370

Note: Delivery to any other point on, or off, campus is NOT acceptable and shall be grounds for rejection of the BID.

1.4 Delivery Deadline

The absolute deadline for receipt of sealed BID's is listed in this BID. The clock in the lobby of the Purchasing Department shall be the official timepiece for determining if a BID has been received at the correct time. The Florida State University is not responsible for lost, misdirected or misdelivered, or late bid packages for vendor(s) using delivery services/carriers, i.e. (USPS, FedEx, DHL, UPS, etc.). It is the responsibility of the vendor(s) to submit a complete bid response package to the FSU Purchasing Department by the designated, date and time. BID's received after the time and date listed in the bid will not be accepted and shall be returned to the sender unopened.

1.5 University Point of Contact

The Bidders SOLE point of contact for all matters relating to this BID is:

Nicholas Lybbert
Florida State University Purchasing Department
A1400 University Center
Tallahassee, Florida 32306-2370
Phone (850) 645-2789
Fax: (850) 644-8921
E-mail: nlybbert@admin.fsu.edu

Written questions on this BID must be submitted to Mr. Nicholas Lybbert prior to the bid due date.

1.6 Vendor Point of Contact

Each Bidder shall identify in its submittal the single point of contact for all matters in relation to the response. The Invitation to Bid will be signed by a person or persons legally authorized to bind the prospective vendor to this Invitation to Bid.

1.7 Public Inspection

In accordance with Florida Statutes, the BID's shall not be made available for public inspection until the University provides notice of a decision or intended decision pursuant to s.120.53 (5)(a), Florida Statutes, or within 10 days after the opening date, whichever is earlier.

1.8 Written Communications Required

Only those communications that are in writing from the **University Purchasing Department** shall be considered as a duly authorized expression on behalf of the University. Also, the University will recognize only communications from Bidders that are signed and in writing as duly authorized expression on behalf of the Bidder.

QUESTIONS DIRECTED TO, OR ANY RESPONSES RECEIVED FROM ANY OTHER DEPARTMENT, PERSON, AGENT, OR REPRESENTATIVE OF THE UNIVERSITY WILL NOT BE CONSIDERED VALID OR BINDING.

1.9 Formal Offer

A Bidder's written submission in response to the BID shall be considered as the Bidder's formal offer. The content of the BID, the Bidder's submission in response to the BID, and resulting contract/purchase order(s) shall be considered the entire agreement between the successful Vendor and the University. It is understood and agreed that nothing herein is intended, or should be construed, as constituting the Vendor as the agent or representative of the University for any purpose or in any manner whatsoever. The Vendor is, and shall remain, an independent contractor operating in accordance with the terms and conditions of the license granted as a result of this Request for BID.

1.10 Interpretations

The following paragraph supersedes paragraph (14), Interpretations of the General Conditions, on the Request for BID Competitive Solicitation Acknowledgment form: "Bidders shall examine the BID to determine if the University's requirements are clearly stated. If there are any requirements that are too vague or restrict competition, the Bidder may request, in writing, that the Specifications be changed. A Bidder who requests changes in the Specifications must identify and describe the Bidders difficulty in meeting the University's specifications; must provide detailed justification for the change, and must provide a recommended change to the Specification. Requests for changes must be received in the Purchasing Department by the close of the business day, not later than the entry noted in the "Calendar of Events" area of this BID as the last day to receive written inquiries regarding the BID. A Bidder's failure to request changes by the permissible date shall be considered acceptance of the University's Specifications and a waiver of the Bidders right to protest the BID on the basis of Specifications. The University reserves the right to determine which changes to the BID shall be acceptable to the University. If required, the University shall issue an addendum reflecting the changes to the BID. This addendum shall be sent to all Bidders so that each is given the opportunity of submitting a BID to the same Specification. Said Specifications shall be considered the University's minimum mandate requirements."

1.11 Verbal Communications

Bidders may not consider any verbal instructions as an official expression on the University's behalf. Only written communications, signed by a duly authorized representative of the Purchasing Office shall be considered valid.

1.12 BID Tabulation

A BID Tabulation that serves as the "Notice of Award" will be posted for review by interested parties on the University Purchasing Departments website and will remain posted for a period of seventy-two (72) hours. Any person who is adversely effected by the University decisions or intended decisions as detailed above in connection with this BID, shall file a written "Notice of Protest" with the Director of Purchasing. Failure to file a "Notice of Protest" within the 72 hours after the University intended decisions is posted shall constitute a waiver of proceedings under s.120 Florida Statutes. A "Notice of Protest" is considered filed when it is delivered to the Purchasing Department, A1400 University Center, during the normal hours of operation of the Purchasing department, 8:00 a.m. through 5:00 p.m., Monday through Friday. Failure to file a "Formal Written Protest" and the bond required under s 287.042(2), Florida Statutes within ten (10) days after filing the "Notice of Protest" in accordance with Rule 6C2-2.015(23) shall constitute a waiver of the Bidder's right to protest under s. 120.53(5)(b), Florida Statutes.

1.13 Mandatory Requirements

Any BID that fails to meet mandatory Specifications stated in the BID may be rejected. Any BID that does not comply with the functional, cost or contractual requirements in the BID may be rejected. The University shall not be liable to pay for information obtained from or through any Bidder prior to issuing the purchase order to the successful Bidder.

1.14 Minor Irregularities

The University reserves the right to waive minor irregularities in BID's, providing such action is in the best interest of the University. Minor irregularities are defined as those that have no adverse affect on the University's interest, will not affect the amount of the BID and will not give a Bidder an advantage or benefit not enjoyed by another Bidder.

1.15 BID Materials

The materials submitted in response to this BID become the property of the University upon delivery to the Purchasing Department. All of the materials will be considered as

part of this BID and will be subject to review as public records 10 days after the BID is opened or an award is made, whichever occurs first.

1.16 BID Rejection

The University shall have the right to reject any or all BID's, and in particular reject a BID not accompanied by data required by the BID, or a BID in any way incomplete or irregular, including omissions of pricing. Conditional BID's will not be accepted.

1.17 Conflict Between Documents

If any terms and conditions contained within the documents related to this BID are in conflict with any other terms and conditions contained therein, then the various documents comprising this BID, as applicable, shall govern in the following order of precedence: Amendment/Change Order, Policy, Purchase Order, Addenda, BID Terms and Conditions, BID Specifications, General Conditions of the BID, Bid.

1.18 Additions, Deletions, Substitutions

Should the University find it necessary to supplement, modify, correct, or interpret any portion of the BID during the BID period, such action shall be taken by issuance of a written Addendum to the documents distributed to all known prospective Bidders.

1.19 Interpretation

Neither interpretation of the meaning of the BID documents, nor any correction of ambiguity, inconsistency or error will be made to any Bidder orally. All such communications will be in the form of written addenda as issued by the Contract Administrator. Only written addenda issued by the University Contract Administrator shall be binding. Bidders are advised that no other source is authorized to accept or give information concerning, explain, or interpret the BID.

1.20 Requests for Clarification

All requests for such interpretation or correction shall be made in writing directly to the Purchasing Department. Only those written requests properly submitted no later than specified can be considered. Oral or late requests will not be valid.

1.21 Acknowledgment

Any addenda issued by the University to participating Bidders shall include an "Addenda Acknowledgment Form." This form shall be signed by a company representative, dated and returned to the University by the date specified in the "Calendar of Events" for BID's to be opened.

Failure to return an "Addenda Acknowledgment Form" issued for this solicitation may be grounds for rejection.

1.22 Pride

It is expressly understood that any articles which are the subject of, or required to carry out the purchase order/contract/agreement resulting from this BID, which have been certified by the corporation identified under Chapter 946, F.S., shall be purchased from said corporation in the same manner and under the procedures set forth in Section 946.15(2), (4), F.S. For purposes of the contract/agreement resulting from this BID, the person, firm or other business entity carrying out the provisions of this agreement shall be deemed to be substituted for this agency insofar as dealings with such corporation.

1.23 Public Record

The successful Bidder shall allow public access to all documents, papers, letters or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by him/her in conjunction with the contract resulting from this BID. Refusal by the

successful Bidder to allow such public access shall be grounds for cancellation of the contract by the University.

In accordance with s.119.07 (3) (m), Florida Statutes, public review of responses to a competitive solicitation may be denied until the notice of a decision is posted or until the notice of a decision is posted or until 10 days after the competitive solicitation display, whichever occurs first.

1.24 Amendments

Any amendments, alterations or modifications to the contract resulting from this BID must be in the form of a change order to the original contract and have the written approval of the Purchasing Department and must be signed or initialed and approved by the same signatories noted on the BID.

1.25 Validity

The laws of the State of Florida shall govern the validity, construction, and effect of any purchase order/contract or change order.

1.26 Availability of Funds

The obligations of the University under any resulting award shall be subject to the availability of funds lawfully appropriated annually for its purposes by the Legislature of Florida.

1.27 Taxes

The University, as an agency of the State of Florida, is entitled to the benefits of sovereign immunity including immunities from the payment of federal excise and state sales taxes on direct purchases of tangible personal property or services by the Vendor in the performance of the contacts with the University.

1.28 Assignment

Under no circumstances shall the successful Bidder assign to a third party any right or obligation of successful Bidder pursuant to this BID without prior written consent of the University. If the successful Bidder is, or during the term of the contract resulting from this BID, becomes an individual on the payroll of the State of Florida, successful Bidder represents that he or she has complied with all applicable provisions in the Florida Statutes and Florida Administrative Code regarding outside or dual employment and compensation.

1.29 Use by Others

With the consent and agreement of the successful vendor, purchases may be made under this BID by other universities, government agencies or political subdivisions within the State of Florida. Such purchases shall be governed by the same pricing, terms, and conditions stated herein with no deviations allowed. This agreement in no way restricts or interferes with the right of any public agency or political subdivision to BID any or all of the items or services independently.

1.30 Jurisdictional Applicability

Applicable provisions of all federal, State of Florida, county and municipal statutes, laws, ordinances, rules and regulations shall govern any BID submitted hereto and any resulting contract. Lack of knowledge by any Bidder shall not constitute a cognizable defense against the legal effect thereof. Disputes arising from, or in connection with, the contract shall be determined before a Florida court of competent jurisdiction or through an applicable administrative proceeding whichever is appropriate to the circumstances under Florida law. In the event that either party is required to obtain any permit, license or authorization as a prerequisite to performing its obligation under the contract, the cost shall be borne by the party required to obtain the permit, license or authorization.

1.31 Public Entity Crime

A person or affiliate who has been placed on the convicted vendor list following a conviction for a Public Entity Crime may not submit a contract to provide any goods or services to a public entity, may not submit a BID on a contract with a public entity for the construction or repair of a public building or public work, may not submit BID's on leases of real property to a public entity, may not be award or perform work as a contractor, supplier, subcontractor, or consultant under a contract with a public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, F.S., for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

1.32 Governmental Restrictions

In the event any governmental restrictions may be imposed which would necessitate alteration of the terms of the contract resulting from this BID, it shall be the responsibility of the successful Bidder to immediately notify the University in writing, indicating the specific regulation which requires the alteration. The University reserves the right to accept any such alteration, including any fee adjustments occasioned thereby, or to cancel the contract at no expense to the University.

1.33 Cancellation Without Cause

For the protection of both parties, any contract entered into as a result of this BID may be canceled without cause or without penalty, in whole or in part by either party by giving a thirty (30) day prior notice in writing to the other party.

1.34 Equal Opportunity

The Vendor must at all times during the term of the contract be in compliance with all federal, state and local laws, rules and regulations relating to the nondiscrimination clause contained in Section 202, Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex or national origin and the implementing rules and regulations proscribed by the Secretary of Labor are incorporated herein. The applicable sections, rules and regulations referenced above are hereby incorporated into the terms and conditions of this BID.

1.35 Governmental Action

It is mutually agreed that if at any time during the term of the contractual agreement the Vendor is required to make extensive program changes, as a direct result of any determination, or action by any applicable Federal, State, or Local Government authority, the University will be willing to negotiate any unit cost increase necessitated by such changes, subject to availability of funds. Any negotiated price increase may not be implemented until a contract amendment signed by both parties is processed through the Florida State University Purchasing Department.

1.36 Parking

If the contractor provides onsite services, the contractor shall observe campus parking rules and regulations at all times. No properly issued citation will be waived. Parking for contractor personnel and vehicles shall be in those areas so designed by Parking Services.

If the Contractor's agent uses any University controlled parking facility, it will be necessary to purchase a parking permit from the Parking Services Office. It will be the responsibility of the Contractor or its agent to pay any fees required.

1.37 Insurance

This section (#14) pertains only to those proposing to do work on the premises of

Florida State University.

The successful Responder shall not commence any work until he has obtained all the following types of insurance and the University has approved such insurance, nor shall the successful Responder allow any subcontractors to commence work on his subcontract until all similar insurance required for the subcontractor has been so obtained and approved. All insurance policies shall be with insurers qualified and doing business in the State of Florida, and with an A.M. Best rating of no less than A.X. The University shall be furnished proof of coverage of insurance by certificates of insurance accompanying the agreement and shall name the Florida State University and their Board of Trustees as an additional name insured. The insurer shall provide 30 days written notice to the certificate holder if a policy is to be cancelled before the expiration date thereof.

The successful Responder shall be required to furnish a public liability policy of insurance protecting the public against bodily injury and property damage, worker's compensation coverage (if applicable) in accordance with the following schedule and conditions:

Coverage	Minimum Limits of Liability
1. Bodily Injury Liability	\$500,000 each accident
2. Property Damage Liability (other than automobile)	\$100,000 aggregate operations \$100,000 aggregate protective \$100,000 aggregate contractual
3. Worker's Compensation	Limit of liability as provided by Worker's Compensation Law, State of Florida. If not applicable, provide a copy of your exemption certificate.

The contractor shall secure and maintain during the life of this agreement, Worker's Compensation Insurance for all his employees connected with the work of this project and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all the latter's employees unless such insurance shall comply fully with the Florida Worker's Compensation Law. In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under Worker's Compensation statute, the Contractor shall provide, and cause each subcontractor to provide, adequate insurance satisfactory to the purchaser, for protection of his employees not otherwise protected. If there is an instance where the Contractor is subcontracting the required services with a vendor who is not required by Florida Statute to cover their employees by Worker's Compensation, the Contractor must obtain prior approval of the subcontractor by the Florida State University.

The University shall be exempt from, and in no way liable for, any sums of money that may represent a deductible in any insurance policy. The payment of such deductible shall be the sole responsibility of the responder and/or subcontractor providing such insurance.

The public liability policy shall be properly endorsed with the "Hold Harmless Agreement" to save Florida State University and their Board of Trustees, State officials and employees harmless and to indemnify Florida State University and their Board of Trustees for any claim or liability to benefits under the Worker's Compensation Law of Florida (Chapter 440, Florida Statutes) occasioned by an accidental injury to temporary help by Florida State University.

Such policy or policies of insurance shall contain an endorsement giving the Florida State University Purchasing Department thirty (30) days written notice in advance of any material alteration or cancellation of the policy. Such policy or policies should contain a 3rd party rider showing the Florida State University and their Board of Trustees as additional named insured. Such policy is to be submitted to the Florida State University, Purchasing Department for approval no less than ten (10) days prior to the commencement of the term of the agreement.

1.38 Liability

The following Special Condition supersedes General Condition Number 21, titled "Liability":

Vendor's entire liability and the University's exclusive remedy shall be as follows:

In all situations involving performance or non-performance of machines or programming furnished under this agreement, the University's (the Buyer) remedy is:

- (a) the adjustment or repair of the machine or replacement of its parts by Vendor, or, at Vendor's option, replacement of the machine or correction of programming errors, or
- (b) if, after repeated efforts, Vendor is unable to install the machine or a replacement machine, model upgrade or feature in good working order, or to restore it to good working order, or to make programming operate, all as warranted, the University shall be entitled to recover actual damages to the limits set forth in this provision. For any other claim concerning performance or non-performance by Seller pursuant to, or in any other way related to the subject matter of, this Agreement or any order under this Agreement, the University shall be entitled to recover actual damages to the limits set forth in this provision.

Vendor's liability for damages to the University for any cause whatsoever, and regardless of the form of action, whether in contract or in tort including negligence, shall be limited to the greater of \$100,000 or the purchase price stated herein for the specific machines that caused the damages or that the subject matter of, or are directly related to the cause of action, the foregoing limitation of liability will not apply to:

- (a) the payment of cost and damage awards pertaining to patent and copyright indemnity, or to
- (b) claims for procurement costs or the cost of cover pursuant to Rule 6C2-2.015(23) of the Florida Administrative Code
- (c) claims for personal injury or damage to real or personal property caused by Seller's tortious conduct.

Vendor shall hold and save the University harmless for any and all suits and judgements against the State for personal injury or damage to real or personal property caused by Vendor's tortious conduct in the performance of this Agreement provided that:

- (a) the University promptly notifies the Vendor in writing of any claim, and
- (b) Vendor shall be given the opportunity, at its option, to participate and associate with the University in the control, defense and trial of any claim and any related settlement negotiations and, provided further, that with respect to any claim, or portion thereof, for which Vendor agrees at the initiation of such claim that

vendor shall save and hold the University harmless, Vendor shall have the sole control of the defense, trial and any related settlement negotiations, and

- (c) the university fully cooperated with vendor in the defense of any claim.

In no event, however, will Vendor be liable for:

- (a) any damages caused by the University's failure to perform the University's responsibilities, or for
- (b) any lost profits or other consequential damages, even if Seller has been advised of the possibility of such damages, or for
- (c) any claim against the University by any other party, except as provided in the hold harmless provision of the preceding paragraph of this provision and except as provided in the entitled or non-performance or machines or programming located outside the United States or Puerto Rico.

1.39 Articles

It is expressly understood and agreed that any articles which are the subject of, or required to carry out the purchase order resulting from this solicitation, which have been certified by the corporation identified under Chapter 946, F.S., shall be purchased from said corporation in the same manner and under the procedures set forth in Section 946.515(2), (4), F.S.; and for purposes of the purchase order resulting from this Bid, the person, firm or other business entity carrying out the provisions of this agreement shall be deemed to be substituted for this agency insofar as dealings with such corporation.