



## RETURN BIDS TO:

## RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government  
Services Canada/Réception des  
soumissions/Travaux publics et Services  
gouvernementaux Canada

See herein for bid submission  
instructions/

Voir la présente pour les  
instructions sur la présentation  
d'une soumission

NA

Alberta

## REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

**Proposal To: Public Works and Government  
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right  
of Canada, in accordance with the terms and conditions  
set out herein, referred to herein or attached hereto, the  
goods, services, and construction listed herein and on any  
attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services  
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la  
Reine du chef du Canada, aux conditions énoncées ou  
incluses par référence dans la présente et aux annexes  
ci-jointes, les biens, services et construction énumérés  
ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

**Vendor/Firm Name and Address**

**Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**

Public Works and Government Services / Travaux publics et  
services gouvernementaux  
Canada Place/Place du Canada  
Suite 1000  
10th Floor/10e étage  
9700 Jasper Ave/9700 ave Jasper  
Edmonton  
Alberta  
T5J 4C3

<b>Title - Sujet</b> Surface Area and Pore Size Analyzer	
<b>Solicitation No. - N° de l'invitation</b> 31970-218095/A	<b>Date</b> 2020-10-06
<b>Client Reference No. - N° de référence du client</b> 31970-218095	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$EDM-034-11914	
<b>File No. - N° de dossier</b> EDM-0-43079 (034)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2020-10-22</b>	<b>Time Zone Fuseau horaire</b> Mountain Daylight Saving Time MDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Nigam, Nidhi	<b>Buyer Id - Id de l'acheteur</b> edm034
<b>Telephone No. - N° de téléphone</b> (587) 532-8142 ( )	<b>FAX No. - N° de FAX</b> (780) 497-3510
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> NATIONAL RESEARCH COUNCIL CANADA 11421 SASKATCHEWAN DRIVE EDMONTON Alberta T6G2M9 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b> See Herein	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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## PART 1 - GENERAL INFORMATION

### 1.1 Statement of Requirement

The National Research Council of Canada has a requirement for one new analyzer which is capable of surface area and pore size analysis. The equipment has to be delivered to Edmonton, Alberta, Canada. On-site installation and training is also required. This analyzer will be used for supporting internal research projects and servicing external clients

### 1.2 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### 1.3 epost Connect service

This bid solicitation allows bidders to use the epost Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

## PART 2 - BIDDER INSTRUCTIONS

### 2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### 2.2 Submission of Bids

Bids must be submitted only to the Public Works and Government Services Canada (PWGSC) Bid Receiving Unit specified below by the date and time indicated on page 1 of the bid solicitation:  
**PWGSC Western Region Bid Receiving Unit.**

Only bids submitted using epost Connect service will be accepted. The Bidder must send an email requesting to open an epost Connect conversation to the following address:  
[roreceptionSoumissions.wrbidreceiving@tpsgc-pwgsc.gc.ca](mailto:roreceptionSoumissions.wrbidreceiving@tpsgc-pwgsc.gc.ca)

**Note:** Bids will not be accepted if emailed directly to this email address. This email address is to be used to open an epost Connect conversation, as detailed in Standard Instructions [2003](#), or to send bids through an epost Connect message if the bidder is using its own licensing agreement for epost Connect.

It is the Bidder's responsibility to ensure the request for opening an epost Connect conversation is sent to the email address above at least six days before the solicitation closing date.  
Bids transmitted by facsimile or hardcopy to PWGSC will not be accepted.

### 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

## 2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in AB.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

## 2.5 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
- Office of the Procurement Ombudsman (OPO)
  - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

The Bidder must submit its bid electronically in accordance with section 08 of the 2003 standard instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid  
Section II: Financial Bid  
Section III: Certifications

Bids transmitted by facsimile or hardcopy will not be accepted.

### Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

## **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Basis of Payment.

### **3.1.1 Electronic Payment of Invoices – Bid**

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “C” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “C” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

### **3.1.2 Exchange Rate Fluctuation**

[C3011T](#) (2013-11-06), Exchange Rate Fluctuation

### **3.1.3 SACC Manual Clauses**

## **Section III: Certifications**

Bidders must submit the certifications and additional information required under Part 5.

## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **4.1 Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### **4.1.1 Technical Evaluation**

##### **4.1.1.1 Mandatory Technical Criteria**

Failure to meet any of the following mandatory criteria at solicitation closing will render your submission non-compliant and given no further consideration.

- (a) Ability to provide the items in accordance with Annex “A”, requirement.
- (b) Compliance with the terms and conditions contained in this document.

#### **4.1.2 Financial Evaluation**

The total assessed bid price will be determined in the following method:

Quantity (A) will be multiplied by the firm lot price (B) to reach the total extended price.

Total extended price for all items will be aggregated to calculate the Total assessed bid price.

SACC Manual Clause [A0222T](#) (2014-06-26), Evaluation of Price-Canadian/Foreign Bidders (*if applicable*)

### **4.2 Basis of Selection**

- 4.2.1** SACC Manual Clause [A0031T](#) (2010-08-16), (Basis of Selection - Mandatory Technical Criteria)

## **PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

### **5.1 Certifications Required with the Bid**

Bidders must submit the following duly completed certifications as part of their bid.

#### **5.1.1 Integrity Provisions - Declaration of Convicted Offences**

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

### **5.2 Certifications Precedent to Contract Award and Additional Information**

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

#### **5.2.1 Integrity Provisions – Required Documentation**

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

#### **5.2.2 Federal Contractors Program for Employment Equity - Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

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## PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### 6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

### 6.2 Statement of Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex "A".

### 6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### 6.3.1 General Conditions

[2010A](#) (2020-05-28), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

### 6.4 Term of Contract

#### 6.4.1 Delivery Date

All the deliverables must be received on or before **2021-03-31**.

#### 6.4.2 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified at Annex "A" of the Contract.

### 6.5 Authorities

#### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Nidhi Nigam  
Title: Procurement Officer

Directorate: Public Works and Government Services Canada Acquisitions Branch  
Western Region  
Address: Canada Place  
10th Floor 9700 Jasper Ave  
Edmonton, Alberta, T5J 4C3

Telephone: 587-532-8142  
Facsimile: 780-497-3510  
E-mail address: [nidhi.nigam@pwgsc-tpsgc.gc.ca](mailto:nidhi.nigam@pwgsc-tpsgc.gc.ca)

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

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### 6.5.2 Project Authority [inserted at contract award]

The Project Authority for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

### 6.5.3 Contractor's Representative [to be completed by the bidder]

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
E-mail address: \_\_\_\_\_

## 6.6 Payment

### 6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price(s) as specified in Annex "B". Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

### 6.6.2 Limitation of Price

SACC Manual clause C6000C (2017-08-17) Limitation of Price

### 6.6.3 Single Payment

SACC Manual clause H1000C (2008-05-12) Single Payment.

### 6.6.4 SACC Manual Clauses

SACC Manual clause C2000C (2007-11-30) Taxes - Foreign-based Contractor (if applicable).

### 6.6.5 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;



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- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

## 6.7 Invoicing Instructions

The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

Invoices must be distributed as follows:

- a) The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
- b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

## 6.8 Certifications and Additional Information

### 6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

## 6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in \_\_\_\_\_ (*insert the name of the province or territory as specified by the Bidder in its bid, if applicable*).

## 6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions 2010A (2020-05-28), General Conditions - Goods (Medium Complexity);
- (c) Annex A, Statement of Requirement;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated \_\_\_\_\_

## 6.11 SACC Manual Clauses

A9068C (2010-01-11), Government Site Regulations  
B1501C (2018-06-21), Electrical Equipment  
B7500C (2006-06-16), Excess Goods  
G1005C (2008-05-12), Insurance

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## **6.12 Dispute Resolution**

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "Dispute Resolution".

## ANNEX "A"

### STATEMENT OF REQUIREMENT

#### Objective

The National Research Council of Canada has a requirement for one new analyzer which is capable of surface area and pore size analysis. The equipment has to be delivered to Edmonton, Alberta, Canada. On-site installation and training is also required. This analyzer will be used for supporting internal research projects and servicing external clients

Refer to the Compliance Matrix for the complete performance specifications and instructions that must be satisfied in order for a bid to be deemed responsive.

#### INSTALLATION AND TRAINING

The supplier must install and configure the surface area and pore size analyzer in its entirety on site at the delivery address listed below at the complete expense of the supplier (including but not limited to travel expenses). The supplier must verify upon installation that the surface area and pore size analyzer is operating in accordance with minimum performance specifications in the compliance matrix below. Installation must be coordinated with NRC Project Authority. Installation must be completed on or before **March 31, 2021**.

Training for the surface area and pore size analyzer, its accessories and the software system must be provided by the supplier at the complete expense of the supplier (including but not limited to travel expenses). The supplier must train up to three persons at the delivery address listed below. Training must be coordinated with NRC Project Authority. Training must be completed by **March 31, 2021**.

#### DELIVERY

All deliverables must be received on or before **March 31, 2021** at:

National Research Council Canada (NRC)  
NRC Nano Research Center  
11421 Saskatchewan Drive  
Edmonton, Alberta, T6G 2M9, Canada

### COMPLIANCE MATRIX – MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS

A complete list of the minimum mandatory performance specifications are detailed below in the "Compliance Matrix". Bidders are to clearly demonstrate compliance with each mandatory specification.

1. Bidders **must** show compliance by addressing each performance specification in the Compliance Matrix, whether the product offered "meets" or "doesn't meet".
2. Bidders are requested to indicate how they meet each performance specification by recording this information under the Performance Specification Offered column in the Compliance Matrix.
3. It is requested that supporting technical documentation, including but not limited to, specification sheets, technical brochures, photographs or illustrations be provided with the bid at solicitation close and be cross-referenced on the Compliance Matrix for each performance specification to outline where in the supporting technical documentation it demonstrates compliance. It is the

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Bidders responsibility to ensure that the submitted supporting technical documentation provides detail to prove that the proposed product(s) meet the requirements of the Performance Specification. If published supporting technical document is not available, the Bidder should prepare a written narrative complete with a detailed explanation of how its bid demonstrates technical compliance.

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4. If the supporting documentation referenced above has not been provided at bid closing, the Contracting Authority will notify the Bidder that they must provide supporting documentation within two (2) business days following notification. Failure to comply with the request of the Contracting Authority within that time period, will deem the bid non-responsive and the bid will be given no further consideration.
5. Bidders must address any concerns with the performance specifications in written detail to the Contracting Authority before bid closing as outlined in the Request for Proposal (RFP) document.
6. Failure to meet each mandatory performance specification will result in the bid being deemed non-responsive, and be given no further consideration.

COMPLIANCE MATRIX – MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS

Requirement	Manufacturer Offered:	Model number Offered#

Item #	Performance Specification	Status (M) Mandatory (D) Desirable*	Performance Specification Met? Indicate either Yes/No	Performance Offered: Bidder should how they meet the performance specification by recording this information in this column	Cross Reference: In this column, Bidders should cross-reference where this performance specification is
1	<b>Surface Area and Pore Size Analyzer</b>				
1.1	The unit must be able to carry out physisorption of nitrogen, carbon dioxide and Krypton and must have features to measure the adsorption / desorption isotherms, surface area (both single and multi-point BET or Langmuir), pore size, pore volume, micropore distribution. It must have at least two sample analysis stations and two sample preparation stations (degassing stations).	M			

1.2	The minimum surface area must be equal to or less than 0.01 m <sup>2</sup> /g with nitrogen, and 0.001 m <sup>2</sup> /g with krypton	M			
1.3	Pore size measurement of pore diameter in the range of 0.35-500 nm.	M			
1.4	Each analysis station must be equipped with three transducers of 1 torr (or 0.1 torr), 10 torr and 1000 torr, and the accuracy of pressure should be within 0.2%.	M			
1.5	The analysis station must be supplied with a 90+ hour dewar without refill.	M			

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1.6	The system must have automatic coolant control with level controller to minimize the cold free space (within 4-5 cm of base of lowest portion of sample cell for enhanced sensitivity).	M			
1.7	The system reference pressure $P_0$ must be served by its own dedicated 1000 mmHg transducer without interrupting pressure readings at the sample station.	M			
1.8	Absorbates - The system can use gases such as Argon, nitrogen, carbon dioxide or krypton. The system must have at least Five gas inlet ports.	M			



1.9	Degassing stations - at least two stations, each consisting of sample heating mantle with over- temperature protection, computer or control panel with programmable ramp / hold / test protocols. and cold trap. Temperature range ambient to 350 °C or higher.	M			
1.10	Sample cells must be available in different sizes for powders, pellets, and granules. - Stem intern diameters must be in the ranges of 4 mm to 12 mm.	M			
1.11	Reference materials must be provided for testing and certifying the instrument for surface area and pore size measurements.	M			

2	Software					
2.1	The software package must run under Windows 10, able to control the analysis and degassing stations, enter parameters and acquire experiment data	M				
2.2	Create and modify methods for measuring adsorption/desorption isotherms. The software must be able to define report generation, export data/figures to spreadsheets, offline data processing.	M				

2.3	Must be able to calculate surface area with BET, Langmuir or DFT models. Must be able to produce micropores pore size distribution with BJH, NLDFT, QSDF, Monte-Carlo models. Must be able to produce mesopores pore size distribution with NLDFT, BJH, DH models. Must be able to produce total pore volume and average pore size.	M		
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<b>3</b>	<b>Computer System</b>				
3.1	A desk top computer with windows 10 operating system with at least six (6) usb ports, Ethernet port for internet connection.	M			
3.2	Minimum 20 inch monitor. Must be LCD	M			
3.3	Minimum clock speed must be 3.0 Ghz for the processor.	M			
3.4	At least 8 GB RAM	M			
3.5	1Terabyte (TB) Hard drive or more	M			

## ANNEX "B"

### BASIS OF PAYMENT

- Bidders must complete the below table and submit it with their proposal.
- Firm lot Prices are FOB destination and include all delivery charges, customs, and duties.
- Firm lot Price do not include Applicable taxes. Applicable taxes will be added as a separate line item to any invoice issued as a result of a Contract.
- The Firm Lot Price for the Installation and Training include all costs for labour, materials, equipment, tools, travel/meals/lodging, and supervision necessary to provide the work.
- All line items must be filled out in order for the bid to be deemed responsive, if any line item is left blank it will be considered zero for evaluation purposes.

### Delivery location:

#### **FOB Destination, including all delivery charges, customs and duties to:**

National Research Council Canada (NRC)  
Nanotechnology Research Centre  
11421 Saskatchewan Drive NW  
Edmonton, AB, T6G 2M9

Item	Description	Quantity (A)	Firm Lot Price (B)	Extended Price (AxB)
1.1	Supply and delivery of the Analyzer in compliance with the Minimum Mandatory Specifications and the requirements outlined in Annex A;	1 Lot	\$_____/lot	\$____
1.2	Following the complete on-site installation and training of the equipment as outlined in Annex ``A``;	1 Lot	\$_____/lot	\$_____
<b>Total assessed bid price</b>				\$_____

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## **ANNEX “C” to PART 3 OF THE BID SOLICITATION**

### **ELECTRONIC PAYMENT INSTRUMENTS**

The Bidder accepts any of the following Electronic Payment Instrument(s):

- ☐ ( ) VISA Acquisition Card;
- ☐ ( ) MasterCard Acquisition Card;
- ☐ ( ) Direct Deposit (Domestic and International);
- ☐ ( ) Electronic Data Interchange (EDI);
- ☐ ( ) Wire Transfer (International Only);
- ☐ ( ) Large Value Transfer System (LVTS) (Over \$25M)