



**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Public Works and Government Services Canada  
Telus Plaza North/Plaza Telus Nord  
10025 Jasper Ave./10025 ave. Jasper  
5th floor/5e étage  
Edmonton  
Alberta  
T5J 1S6  
Bid Fax: (780) 497-3510

## INVITATION TO TENDER APPEL D'OFFRES

**Tender 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.

### Soumission 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 et 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 Canada  
Telus Plaza North/Plaza Telus Nord  
10025 Jasper Ave./10025 ave Jasper  
5th floor/5e étage  
Edmonton  
Alberta  
T5J 1S6

<b>Title - Sujet</b> Spectrophotometers	
<b>Solicitation No. - N° de l'invitation</b> 31970-125448/A	<b>Date</b> 2013-01-08
<b>Client Reference No. - N° de référence du client</b> NRC	<b>GETS Ref. No. - N° de réf. de SEAG</b> PW-\$EDM-183-9670
<b>File No. - N° de dossier</b> EDM-2-35357 (183)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2013-02-19</b>	
<b>Time Zone</b> <b>Fuseau horaire</b> Mountain Standard Time MST	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Tikhonovitch, Alex	<b>Buyer Id - Id de l'acheteur</b> edm183
<b>Telephone No. - N° de téléphone</b> (780) 497-3541 ( )	<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 T6G 2M9 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</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

## **TABLE OF CONTENTS**

### **PART 1 - GENERAL INFORMATION**

1. Security Requirement
2. Requirement
3. Debriefings

### **PART 2 - BIDDER INSTRUCTIONS**

1. Standard Instructions, Clauses and Conditions
2. Submission of Bids
3. Enquiries - Bid Solicitation
4. Applicable Laws

### **PART 3 - BID PREPARATION INSTRUCTIONS**

1. Bid Preparation Instructions

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

1. Evaluation Procedures
2. Basis of Selection

### **PART 5 - CERTIFICATIONS**

1. Mandatory Certifications Required Precedent to Contract Award
2. Additional Certifications Precedent to Contract Award

### **PART 6 - RESULTING CONTRACT CLAUSES**

1. Security Requirement
2. Requirement
3. Standard Clauses and Conditions
4. Term of Contract
5. Authorities
6. Payment
7. Invoicing Instructions
8. Certifications
9. Applicable Laws
10. Priority of Documents
11. SACC Manual Clauses

#### **List of Annexes:**

- |         |                  |
|---------|------------------|
| Annex A | Requirement      |
| Annex B | Basis of Payment |

**PART 1 - GENERAL INFORMATION****1. Security Requirement**

There is no security requirement associated with the requirement.

**2. Requirement**

National Research Council Canada (NRC), Edmonton, Alberta has a requirement for the supply, delivery and offloading of one (1) UV-Vis-NIR Spectrophotometer and one (1) Fluorescence Spectrophotometer as per Annex A and the terms and conditions herein.

The instruments must be delivered, fully assembled, installed and tested by the Contractor(s) to ensure proper operation.

**3. Debriefings**

After contract award, 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 of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

## **PART 2 - BIDDER INSTRUCTIONS**

### **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>) 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 (2012-11-19) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### **2. Submission of Bids**

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

### **3. Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) 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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

### **4. Applicable Laws**

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

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.

## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **1. Bid Preparation Instructions**

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (1 hard copy);

Section II: Financial Bid (1 hard copy);

Section III: Certifications (1 hard copy).

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement

(<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

#### **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. The total amount of Goods and Services Tax (GST) or Harmonized Sales Tax (HST) must be shown separately, if applicable.

#### **1.1 SACC Manual Clauses**

C3011T (2010-01-11), Exchange Rate Fluctuation

#### **Section III: Certifications**

Bidders must submit the certifications required under Part 5.

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

### **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.

#### **1.1 Technical Evaluation**

##### **1.1.1 Mandatory Technical Criteria**

Compliant with Annex A, Requirement.

#### **1.2 Financial Evaluation**

SACC Manual Clause A0220T (2007-05-25), Evaluation of Price

### **2. Basis of Selection**

A bid must comply with all requirements of the bid solicitation to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

## PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and related documentation to be awarded a contract. Canada will declare a bid non-responsive if the required certifications and related documentation are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications, to provide the related documentation or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

### 1. Mandatory Certifications Required Precedent to Contract Award

#### 1.1 Code of Conduct and Certifications - Related documentation

- 1.1.1 By submitting a bid, the Bidder certifies, for himself and his affiliates, to be in compliance with the Code of Conduct and Certifications clause of the Standard instructions. The related documentation hereinafter mentioned will help Canada in confirming that the certifications are true. By submitting a bid, the Bidder certifies that it is aware, and that its affiliates are aware, that Canada may request additional information, certifications, consent forms and other evidentiary elements proving identity or eligibility. Canada may also verify the information provided by the Bidder, including the information relating to the acts or convictions specified herein, through independent research, use of any government resources or by contacting third parties. Canada will declare non-responsive any bid in respect of which the information requested is missing or inaccurate, or in respect of which the information contained in the certifications is found to be untrue, in any respect, by Canada. The Bidder and any of the Bidder's affiliates, will also be required to remain free and clear of any acts or convictions specified herein during the period of any contract arising from this bid solicitation.

Bidders who are incorporated, including those bidding as a joint venture, must provide with their bid or promptly thereafter a complete list of names of all individuals who are currently directors of the Bidder. Bidders bidding as sole proprietorship, including those bidding as a joint venture, must provide the name of the owner with their bid or promptly thereafter. Bidders bidding as societies, firms, partnerships or associations of persons do not need to provide lists of names. If the required names have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

Canada may, at any time, request that a Bidder provide properly completed and Signed Consent Forms (Consent to a Criminal Record Verification form- PWGSC-TPSGC 229)

(<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>) for any or all individuals aforementioned within the time specified. Failure to provide such Consent Forms within the time period provided will result in the bid being declared non-responsive.

### 2. Additional Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

## 2.1 Federal Contractors Program - Certification

### Federal Contractors Program - \$200,000 or more

1. The Federal Contractors Program (FCP) requires that some suppliers, including a supplier who is a member of a joint venture, bidding for federal government contracts, valued at \$200,000 or more (including all applicable taxes), make a formal commitment to implement employment equity. This is a condition precedent to contract award. If the Bidder, or, if the Bidder is a joint venture and if any member of the joint venture, is subject to the FCP, evidence of its commitment must be provided before the award of the Contract.

Suppliers who have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

2. If the Bidder does not fall within the exceptions enumerated in 3.(a) or (b) below, or does not have a valid certificate number confirming its adherence to the FCP, the Bidder must fax (819-953-8768) a copy of the signed form LAB 1168, Certificate of Commitment to Implement Employment Equity, to the Labour Branch of HRSDC.
3. The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

- a. ( ) is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- b. ( ) is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- c. ( ) is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC (having not bid on requirements of \$200,000 or more), in which case a duly signed certificate of commitment is attached;
- d. ( ) is subject to the FCP, and has a valid certificate number as follows: \_\_\_\_\_ (e.g. has not been declared an ineligible contractor by HRSDC).

Further information on the FCP is available on the HRSDC Web site.



## **PART 6 - RESULTING CONTRACT CLAUSES**

### **1. Security Requirement**

There is no security requirement associated with the requirement.

### **2. Requirement**

The Contractor must provide items in accordance with the Requirement at Annex A.

### **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>) issued by Public Works and Government Services Canada.

#### **3.1 General Conditions**

2010A (2012-11-19), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

### **4. Term of Contract**

#### **4.1 Delivery Date**

All the deliverables must be received and the installation/training completed on or before March 29, 2013.

### **5. Authorities**

#### **5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Alex Tikhonovitch  
Public Works and Government Services Canada  
Acquisitions Branch  
Western Region  
5th Floor Telus Plaza North  
10025 Jasper Avenue  
Edmonton, Alberta T5J 1S6

Telephone: (780) 497-3541  
Facsimile: (780) 497-3510  
E-mail address: alex.tikhonovitch@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

#### **5.2 Project Authority**

The Project Authority for the Contract is: **To be determined**

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.

### 5.3 Contractor's Representative

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Facsimile: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

E-mail address: \_\_\_\_\_

## 6. Payment

### 6.1 Basis of Payment - Firm Lot Price

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm lot price, as specified in Annex B - Basis of Payment for a cost of \$\_\_\_\_\_. Customs duties are included, and Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

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.

### 6.2 Limitation of Price

SACC Manual clause C6000C (2011-05-16) Limitation of Price

### 6.3 Terms of Payment

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

### 6.4 SACC Manual Clauses

C2000C (2007-11-30), Taxes - Foreign-based Contractor

## **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.

## **8. Certifications**

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

## **9. Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in the province of Alberta.

## **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) 2010A (2012-11-19), General Conditions - Goods (Medium Complexity);
- (c) Annex A, Requirement;
- (d) Annex B, Basis of Payment;
- (e) the Contractor's bid dated \_\_\_\_\_

## **11. SACC Manual Clauses**

B7500C (2006-06-16), Excess Goods

G1005C (2008-05-12), Insurance

**ANNEX "A"****REQUIREMENT**

National Research Council Canada (NRC), Edmonton, Alberta has a requirement for the supply, delivery and offloading of one (1) UV-Vis-NIR Spectrophotometer and one (1) Fluorescence Spectrophotometer as per Annex A and the terms and conditions herein.

The instruments must be delivered, fully assembled, installed and tested by the Contractor(s) to ensure proper operation.

The Contractor(s) must provide on-site training on instruments operation and routine maintenance for a maximum of six persons for each instrument. Training to be conducted at the Customer Site, Edmonton, AB.

Spectrophotometers must come with a minimum one year warranty covering all parts, labor and software updates/upgrades.

Delivery, installation and training are mandatory to be completed no later than March 29, 2013.

Please indicate below:

**Meet Delivery/Installation Requirement \_\_\_\_\_**

or

**Unable to Meet Delivery/Installation Requirement \_\_\_\_\_**

A maximum of two contracts may be awarded for this requirement. Bidders are invited to submit a bid on one or both Instruments. Each Instrument will be evaluated separately.

### **Minimum Performance Specifications:**

To be considered responsive a bid must clearly indicate compliance or noncompliance with each article below by inserting "Yes" or "No" under the "Comply" Column.

To demonstrate compliance, Bidders must also include and appropriately cross reference published technical information that confirms compliance with each mandatory criterion specified herein (unless stipulated as "not applicable for this item").

If published technical documentation does not exist for a specific requirement, then a written narrative explaining how the product offered meets the specification must be included with the bid. Failure to comply with any of the mandatory technical requirements will disqualify the bid from further consideration.

To ensure compliance is clear, the bidder must utilize a numbering system that corresponds to the numbering system below. An example of an acceptable system would be to indicate the specification reference number on a Tab stuck to the appropriate page of the technical documentation. The appropriate article of the technical documentation that demonstrates compliance should then be highlighted or underlined.

### **Minimum Performance Specifications for Fluorescence Spectrophotometer (Instrument #1):**

<b>Reference Section</b>	<b>Technical Requirement</b>	<b>Comply (Bidder shall indicate Yes or No)</b>	<b>Supporting Information (Bidder shall indicate cross-reference)</b>	<b>Comments (For use by Evaluation Team Only)</b>
1	Wavelength: 200 - 800 nm or larger coverage for both excitation and emission light;			
2	Sensitivity: 6000 : 1 or better RMS (Raman to water band), 350 nm excitation, 10 nm emission and excitation slits and 1s integration time;			
3	Slit: 0.5 to 20 nm for both emission and excitation, changeable from the computer software;			
4	Sample volume: 50 µL to 3 mL;			
5	cell holder with stirrer and temperature controlled;			
6	Light Source: Xenon lamp (air or water cooled);			
7	Temperature controller unit: be able to provide temperature in the range of -10°C to 100°C or larger range and programmable through software;			

Reference Section	Technical Requirement	Comply (Bidder shall indicate Yes or No)	Supporting Information (Bidder shall indicate cross-reference)	Comments (For use by Evaluation Team Only)
8	Grating: both excitation and emission shall have 1200 lines/mm at specified blaze wavelengths;			
9	Wavelength accuracy: $\pm 0.5$ nm or better;			
10	Wavelength reproducibility: $\pm 0.5$ nm or better;			
11	Polarizers for both emission and excitation;			
12	Power supply: AC 90-240 V, 50/60Hz;			
13	The operation software compatible with a supplied window operating system;			
14	The software must be capable of performing the following operations:  collect data, analyze data and report results, export results in text files;			
15	Computer system:  1) Windows based system (software support windows XP or windows 7 or windows 8);  2) Minimum 21" monitor. Must be LCD;  3) Minimum clock speed 3.0 Ghz for the processor;  4) At least 8 GB RAM;  5) 1T Hard drive or more;  6) 16xDVD burner or better, six or more USB ports with at least two having USB 3.0;			

Reference Section	Technical Requirement	Comply (Bidder shall indicate Yes or No)	Supporting Information (Bidder shall indicate cross-reference)	Comments (For use by Evaluation Team Only)
	7) Network card ;  8) Video card must have at least 512 MB onboard memory.			

**Minimum Performance Specifications for UV-Vis-Spectrophotometer (Instrument #2):**

Reference Section	Technical Requirement	Comply (Bidder shall indicate Yes or No)	Supporting Information (Bidder shall indicate cross-reference )	Comments (For use by Evaluation Team Only)
1				
2	Resolution: 0.10 nm or better for UV-Vis range, 0.50 nm or better for NIR range;			
3	Photometric range: up to 6 absorbance units for the entire wavelength range (175-3300nm);			
4	Band Pass: 0.10 to 5 nm in UV/Vis range, 0.50 nm to 20 nm in NIR range with 0.10 nm increments and be controlled from the computer software;			
5	Sample volume: 50 µL to 3 mL;			
6	Cell holder: cell holder with stirrer and temperature controlled;			
7	Light Source: Deuterium and Tungsten-halogen;			
8	Detectors: triple detectors, PMT for UV-Vis range, Peltier-cooled InGaAs and PbS detectors for NIR wavelength range;			

Reference Section	Technical Requirement	Comply (Bidder shall indicate Yes or No)	Supporting Information (Bidder shall indicate cross-reference )	Comments (For use by Evaluation Team Only)
9	Temperature controller unit: be able to provide temperature in the range of -5°C to 100°C or larger range and programmable through software;			
10	Grating: 1200 lines/mm or better for UV/Vis blazed and 320 line/mm or better for NIR blazed;			
11	Wavelength accuracy: $\pm 0.10$ nm for UV-Vis, and $\pm 0.50$ nm for NIR range;			
12	Wavelength reproducibility: $\pm 0.10$ nm or better for the entire wavelength (175-3300nm);			
13	Time course measurement: be able to set time interval from seconds to hours, able to collect up to 1000 spectra or more;			
14	Integrating sphere: a 150 mm diameter sphere and other necessary parts, able to measure diffuse reflectance and specular reflectance in the wavelength range 200-2500 nm;			
15	Power supply: AC 90-240 V, 50/60Hz;			
16	The operation software compatible with a supplied window operating system;			
17	The software must be capable of performing the following operations:  collect data, analyze data and report results, export results in text files;			
18	Computer system:  1) Windows based system (software support windows XP or windows 7 or windows 8);  2) Minimum 21" monitor. Must be LCD;			



Reference Section	Technical Requirement	Comply (Bidder shall indicate Yes or No)	Supporting Information (Bidder shall indicate cross-reference )	Comments (For use by Evaluation Team Only)
	3) Minimum clock speed 3.0 Ghz for the processor;  4) At least 8 GB RAM;  5) 1T Hard drive or more;  6) 16xDVD burner or better, six or more USB ports with at least two having USB 3.0;  7) Network card ;  Video card must have at least 512 MB onboard memory.			

**Make and Model of product being offered:** \_\_\_\_\_

Bids which do not meet all of the Minimum Specifications listed above will be deemed non-compliant and given no further consideration.

If, upon delivery and acceptance, the product is found to not meet the Minimum Specifications, the product will be returned at the supplier's expense and the Contract will be terminated for default.

**Annex B****Basis of Payment**

- The Firm Unit Prices must be FOB Destination and include all delivery and off-loading charges to:  
National Research Council Canada  
11421 Saskatchewan Drive  
Edmonton, Alberta T6G 2M9
- Firm Unit Prices do not include GST, however GST will be added as a separate line item to any invoice issued as a result of a Contract.
- The Firm Lot Prices for the Installation, Testing and Training must include all costs for labour, materials, equipment, tools, travel/meals/lodging, and supervision necessary to provide the work.
- All prices must be in Canadian dollars.

**Fluorescence Spectrophotometer:**

Item	Description	Qty.	Firm Unit Price	Extended Price
1	Supply, delivery and offloading of the Fluorescence Spectrophotometer in compliance with the Minimum Performance Specifications outlined in Annex A	1 ea.	\$_____/ea	\$_____
2	Following the complete On Site installation of the equipment and training as outlined in Annex A	1 lot	\$_____/ea	\$_____
<b>Total Bid Price:</b>				\$_____

**UV-Vis-Spectrophotometer:**

Item	Description	Qty.	Firm Unit Price	Extended Price
1	Supply, delivery and offloading of the ) UV-Vis-Spectrophotometer in compliance with the Minimum Performance Specifications outlined in Annex A	1 ea.	\$_____/ea	\$_____
2	Following the complete On Site installation of the equipment and training as outlined in Annex A	1 lot	\$_____/ea	\$_____
<b>Total Bid Price:</b>				\$_____