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Bid Receiving Public Works and Government
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d'une soumission

NA
Alberta

**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise
indicated, all other terms and conditions of the Solicitation
remain the same.

Ce document est par la présente révisé; sauf indication contraire,
les modalités de l'invitation demeurent les mêmes.

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/Travaux
publics et Services gouvernementaux Canada
Harry Hays Building (HHB)
Room 759, 220-4th Avenue SE
Calgary
Alberta
T2G 4X3

Title - Sujet Synthesis of Molecules	
Solicitation No. - N° de l'invitation W7702-226287/B	Amendment No. - N° modif. 002
Client Reference No. - N° de référence du client W7702-226287	Date 2022-01-18
GETS Reference No. - N° de référence de SEAG PW-\$CAL-137-7243	
File No. - N° de dossier EDM-1-44018 (607)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Mountain Standard Time MST on - le 2022-01-27 Heure Normale des Rocheuses HNR	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Jenkinson, Lorraine	Buyer Id - Id de l'acheteur edm607
Telephone No. - N° de téléphone (587) 337-2458 ()	FAX No. - N° de FAX (418) 566-6167
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

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

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TITLE: SYNTHESIS OF MOLECULES

This solicitation amendment is to provide clarifications to the Solicitation.

Q1. As per the solicitation requirement,

A2 – Chemist (P-22)

Minimum Qualifications

- a. The resource must have a Bachelor of chemistry
- b. The resource must have at least 1 year experience in the last 3 years working in a synthetic chemistry laboratory.

However, we have a Chemist with **Master's degree** and having **6 months experience** in synthetic chemistry laboratory. Therefore, can you please refer this matter to concerned authority and let us know if we can submit our Bid with **A2 Chemist** having **Master's degree and 6 months experience in synthetic chemistry laboratory**.

Would you consider revising the minimum qualifications?

A1. No, Canada will not revise the minimum qualifications.

Q2. What was the reason behind this solicitation being cancelled and resolicited? Were there significant changes to the solicitation?

A2. There were no compliant bids received. There is a minor change made to the experience requirements of the A2. Chemist. The "experience" has been changed to "full-time experience".

If your bid has already been submitted, you may wish to revise it. Revisions to your bid can be submitted by facsimile or by ePost, in which the content is clearly identified. Please clearly indicate the content on the envelope, on the cover page or in the subject line, according to your method of presenting your amended proposal.

Any revisions to your bid must be received by the Bid Receiving Unit on or before the time and date stated on page 1 of this document. Any revisions to your bid received after the closing date and time will be considered late and will be returned unopened.

ANNEX "A" - STATEMENT OF WORK
(Revised 2022-01-17)

1. TITLE

SYNTHESIS OF MOLECULES OF INTEREST

2. BACKGROUND

Defence Research and Development Canada (DRDC) – Suffield Research Centre (SRC) requires the synthesis of molecules for a variety of applications. The synthetic specialties required include but are not limited to organic, organophosphorus/pesticides, and pharmaceutical based molecules.

The period of the contract is from Date of Award to March 31, 2024 with 2 optional 1-year periods.

3. ACRONYMS

DRDC	Defence Research and Development Canada
SOW	Statement of Work
SRC	Suffield Research Centre
TA	Technical Authority

4. APPLICABLE DOCUMENTS & REFERENCES

None

5. TASKS TO BE PERFORMED

5.1 Synthesis of small molecules

The Contractor must synthesize molecule(s) as indicated in the individual task authorizations. Minimum quantities and purity of the synthesized molecule(s) will also be designated in the task authorization. The molecular weight of synthesized molecules will not exceed 1200g/mol. The Contractor may be required to develop a new synthetic pathway to complete the synthesis.

5.2 Characterization and identification of molecules

The Contractor must prove the identity and purity of either the molecules synthesized in task 5.1 or a molecule provided by the Technical Authority (TA) to the Contractor. In consultation with the TA, the Contractor will use analytical techniques as appropriate to physically characterize and prove the molecule identity and purity.

These analytical techniques will include a minimum of two of the following:

- Nuclear Magnetic Resonance Spectroscopy on ^1H , ^{13}C or ^{31}P nuclei, elemental analysis, melting point or boiling point determination
- mass spectroscopy techniques such as:
 - o Liquid chromatography mass spectrometry
 - o Liquid chromatography tandem mass spectrometry,
 - o Gas chromatography mass spectrometry,
 - o Gas chromatography tandem mass spectrometry
 - o Matrix-assisted laser desorption/ionization-mass spectrometry,
- optical polarimetry
- High performance liquid chromatography ultraviolet spectrometry.

5.3 Report of the synthesis of small molecules

In consultation with the TA, the Contractor must provide a report describing how the requested molecules were synthesized.

For each reaction used to complete the synthesis the report will include:

- 1) Identification of the glassware used, the quantities, and purification of starting materials and solvents.
- 2) The reaction conditions (the temperature, heating and cooling methods, and any other reaction conditions that were required to successfully complete the reaction).
- 3) The work-up and purification methods and materials used.
- 4) The results of the spectral analysis used to prove the successful synthesis of the reaction product.

The report will also include a description of reaction pathways that were attempted but did not successfully yield product.

6. DELIVERABLES

6.1 Deliverables for task 5.1

The Contractor will deliver the molecule requested in Task 5.1 in the purity and quantity requested to SRC.

6.2 Deliverables for task 5.2

The Contractor will provide soft copies of the spectra and results from the analytical techniques used to prove the identity of the specified molecule to the TA.

6.3 Deliverables for task 5.3

The Contractor will provide soft copies of the report to the TA.

7. DATE OF DELIVERY

Deliverables 6.1 & 6.2: Within four months after the task authorization is issued unless otherwise stipulated in the task authorization.

Deliverable 6.3: Within 2 months after submission of the receipt of deliverable 6.1.

8. LANGUAGE OF WORK

English

9. LOCATION OF WORK

The work must be performed on Contractor site.

10. TRAVEL

The Contractor is not required to travel.

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11. MEETINGS

Consultation with the TA by phone to discuss synthetic routes and identify analytical methods used to confirm the purity and identity of synthesized molecules. Timing for each meeting will be determined as availability of the Contractor and TA.

12. GOVERNMENT SUPPLIED MATERIAL (GSM)

Molecules if requested by the TA for task 5.2.
Molecules previously synthesized at SRC for characterization in Task 5.2.

13. GOVERNMENT FURNISHED EQUIPMENT (GFE)

None

14. SPECIAL CONSIDERATIONS

DRDC will cover the cost of shipping the molecules from SRC to the Contractor. The Contractor will be responsible to organize the return shipping of requested molecules from the contractor site to SRC.

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RESOURCE CATEGORIES LIST

No.	Resource Category	Minimum Resources Required		Estimated Annual Usage	Associated Tasks
		Junior/Intermediate	Senior		
A1	Lead Synthetic Chemist		1	100 hours/year	All
A2	Chemist	1		480 hours/year	All

RESOURCE QUALIFICATIONS

A1 – Lead Synthetic Chemist

Minimum Qualifications:

- The resource must have a PhD or at least 7 years synthetic chemistry experience.
- The resource must have developed at least one other multistep synthetic pathway in the last 2 years.
- The resource must have at least 3 peer reviewed publications outlining synthetic chemistry pathways.

A2 – Chemist

Minimum Qualifications

- The resource must have a Bachelor of chemistry
- The resource must have *at least 1 year of full-time experience in the last 3 years* working in a synthetic chemistry laboratory.