

ADVANCE CONTRACT AWARD NOTICE (ACAN)

1. Advance Contract Award Notice (ACAN)

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

2. Definition of the requirement

The Department of Natural Resources Canada (NRCan) has a requirement to synthesize catalysts via flame spray pyrolysis. Flame spray pyrolysis (FSP) is a scalable, continuous and well-established method for the production of nanoparticles in large quantities, especially materials such as TiO₂ and SiO₂. More recently, this technology has sparked interest from researchers for a wider application for catalyst production. Various parameters, such as particle size and structure, can be controlled by changing the operation conditions, including dispersion gas and precursor flow rates. The overall goal of this work is to synthesize new catalysts by the FSP method that will be tested and used in the catalytic systems at CE-O.

The objective of the work is to become familiar with the FSP technology and equipment operation for synthesizing new catalysts for carbon capture and conversion (CCU) processes.

The Contractor will perform the following tasks:

Task 1: Train CE-O engineers and scientists on flame spray pyrolysis setup for nanoparticle catalyst synthesis and synthesize the Fischer-Tropsch catalysts.

Task 2: Synthesize supported metal catalysts for the purpose of testing in CE-O's bench and pilot scale rigs.

Task 3: Characterize the synthesized catalysts to determine that the desired product has been achieved.

3. Criteria for assessment of the Statement of Capabilities (Minimum Essential Requirements)

Any interested supplier must demonstrate by way of a statement of capabilities that it meets the following requirements:

- **Have** a Flame Spray Pyrolysis (FSP) system scalable AND capable of synthesizing catalysts for precise control over particle size, composition, and morphology.
- **Have** resource (s) with the expertise to operate and adjust appropriate parameters of the FSP system from a received formulation for particle size, composition, and morphology.

4. Applicability of the trade agreement(s) to the procurement

This procurement is subject to the following trade agreement(s):

- Canadian Free Trade Agreement (CFTA)

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5. Set-aside under the Procurement Strategy for Aboriginal Business
Not applicable

6. Comprehensive Land Claims Agreement(s)
Not applicable

7. Justification for the Pre-Identified Supplier

The supplier mentioned in section 13 below is the only known supplier that meets the mandatory criteria set out in section 3 above.

Should Canada receive a statement of capabilities from a supplier that contains sufficient information to indicate that it meets the requirements set forth in this ACAN, a competitive process will be triggered with a technical and financial evaluation methodology of the bids proposed by the potential bidders

8. Government Contracts Regulations Exception(s)

The following exception(s) to the *Government Contracts Regulations* is (are) invoked for this procurement under subsection 6(d) - only one person is capable of performing the work. The identified supplier, the Department of Mechanical and Aerospace Engineering at Carleton University, is the only one able to meet all of the criteria identified in paragraph 3 above

9. Exclusions and/or Limited Tendering Reasons

The following exclusion(s) and/or limited tendering reasons are invoked under the:

- Canadian Free Trade Agreement (CFTA) – Article: 513.1(b) (iii);

10. Ownership of Intellectual Property

- Ownership of any Foreground Intellectual Property arising out of the proposed contract will vest in the Contractor.

11. Period of the proposed contract or delivery date

- The proposed contract is from contract award to January 31, 2024.

12. Cost estimate of the proposed contract

The estimated value of the contract, including option(s), is \$66,240.00 (GST/HST extra).

13. Name and address of the pre-identified supplier

Department of Mechanical and Aerospace Engineering
Carleton University
1125 Colonel By Dr,

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Ottawa, ON
K1S 5B6

14. Suppliers' right to submit a statement of capabilities

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

15. Closing date for a submission of a statement of capabilities

The closing date and time for accepting statements of capabilities is May 12, 2023 at 14h00 EST.

16. Inquiries and submission of statements of capabilities

Inquiries and statements of capabilities are to be directed to:

Name: Mathieu Cousineau
Title: Procurement Officer
Organization: Natural Resources Canada
Address: 580 Booth Street, 5th Floor, Ottawa, Ontario, K1A 0E4
Telephone: 343-541-6107
E-mail address: Mathieu.Cousineau@nrcan-rncan.gc.ca