



वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्
Council of Scientific & Industrial Research
राष्ट्रीय वांतरिक्ष प्रयोगशालाएं
National Aerospace Laboratories

INVITATION FOR TENDERS

No. NAL/PUR/CCFP/047/24

Dated: 10-Jul-2024

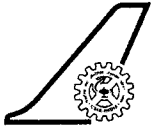
CSIR – National Aerospace Laboratories (NAL), Bengaluru, Karnataka, Republic of India, is one of the premier research laboratories under aegis of Council of Scientific and Industrial Research (CSIR), an autonomous body under the Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites online quotation(s) for the procurement of the following item(s) for day to day research work.

Sl. No	Description of Item(s)	Unit	Quantity
1	Supply of UD carbon fiber epoxy prepreg Type - 1	Sq.Mtrs	50
2	Supply of UD carbon fiber epoxy prepreg Type - 2	Sq.Mtrs	50
Note: Please refer annexure for the detailed specification and scope of work.			

Single /Double Bid	Two bid	Tender Type	OPEN Tender
Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with the quotation	Bid submission end date	05-08-2024 10.00 Hrs
Performance Security	Nil	Bid opening date	06-08-2024 11.00 Hrs

1. Tender document(s) may be downloaded from the Central Public Procurement Portal i.e., <https://www.etenders.gov.in>. Aspiring Bidders' who have not registered in the portal can do the same at free of cost before participating in our tendering process. Bidders are advised to go through instructions provided at 'Instructions for Online Bid Submission', in the portal.
2. Tenderer's can access tender document(s) on the website (for searching in the NIC site <https://www.etenders.gov.in>, kindly go to "Tender Search", option, select tender type and select 'Council of Scientific and Industrial Research', in organization tab and select NAL-Bengaluru-CSIR in department type. Thereafter, click on "Search", button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online in the website as per the schedule given in the next page.

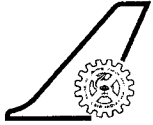


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3. a. Global Tender Enquiry: Either the Indian Agent on behalf of the Foreign Principal or the Foreign Principal can bid directly in a tender but *not* both. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. To maintain sanctity of tendering system, one Indian Agent *cannot* represent *two* different Foreign Principals in *one* tender.
- b. Open Tender Enquiry: Only Local Suppliers with prescribed local content as detailed in Department for Promotion of Industry and Internal Trade (DPIIT) Order No. P-45021/2/2017-PP (BE-II), dated 16th Sep, 2020, and subsequent orders issued by the Ministry of Finance, Government of India from time to time, are eligible for bidding. Bidders' must enclose the certificate declaring their local content of supplies as per our standard form.

Note: Kindly, refer to the first page of Notice Inviting Tender for tender type i.e. Open Tender Enquiry / Global Tender Enquiry and submit your bid accordingly.

4. Unsolicited / Conditional / Unsigned Quotations/Quotations received after the due date and time shall be summarily rejected. The Bidder should comply with the terms and conditions of the tender, failing which, their offer will be liable for rejection.
5. The bids' failing to comply with the following clauses will be summarily rejected.
 - The Bidders' proposing to supply finished products directly/indirectly from vendors' of countries sharing the land border with India should submit a copy of registration done with DPIIT
 - If the products supplied are not from vendors of countries sharing land border with India, the Bidders' have to enclose a declaration to that effect.
6. As per Government of India procurement policies:
 - The purchaser intends to give purchase preference to local supplies (preference to Make in India) in case the cost of procurement is up to Rs.50 (fifty) lakhs.
 - The procuring entity intends to give purchase preference to products/goods manufactured by Micro, Small and Medium Enterprises.
7. Bidders' are requested to refer to the instructions regarding Procurement Policies for "Make in India", issued by Ministry of Commerce and Industry, Department of Industrial Policy and promotion dated. 28-May-2018, and 4-Jun-2020 and guidelines as and when issued.



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8. Kindly, note CSIR-NAL **GST No.29AAATC2716R1ZB**. And, the bidders' are requested to furnish their GST No. in their invoice failing which we will **not** be able to make timely payment.
9. Printed conditions, if any, submitted along with your quotation will not be binding on us.
10. The prospective bidders' are requested to refer to the Standard Terms and Conditions available on NAL website (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids'.
11. The Director, CSIR – National Aerospace Laboratories, Bengaluru, reserves the right to accept any or all the tenders either in part or in full or to split the order without assigning any reason(s) thereof.

Thanking You,

Yours faithfully

Stores & Purchase Officer
For and on behalf of CSIR-NAL

Scope of NAL: NAL shall supply the resin to make prepreg to the qualified vendor/supplier.

Scope of Vendor/supplier:

1. Vendor/supplier shall make prepreg using NAL supplied resin with T 700S 50C grade carbon fiber.
2. Carbon fiber and other required raw materials for prepreg production are at the scope of the Vendor

Detailed specification of the stores(item)

Supply of UD carbon fiber epoxy prepreg (as per the specification)

Prepreg	Carbon fiber	Prepreg width	Prepreg Quantity
Type-1	T 700S 50C	300 mm	50 Sq.M
Type-2	T 700S 50C	300 mm	50 Sq.M

Qualification criteria and required technical specification

UD carbon fiber epoxy Prepreg (Type-1)

S.No	Reinforcement (UD Carbon Fiber)	
1	Nominal Area Weight	160 g/m ²
2	Fiber type	T700 / 12 K (1.0 % epoxy sized)
3	Fabric	UD
4	Nominal Fiber density	1.79 g/cm ³
Required Prepreg Data		
5	Nominal Prepreg Area weight	242 ± 5 g/m ²
6	Resin content	34 Wt %
7	Expected cure ply thickness	0.155 mm
8	width	300mm



UD carbon fiber epoxy Prepreg (Type-2)

S.No	Reinforcement (UD Carbon Fiber)	
1	Nominal Area Weight	134 g/m ²
2	Fiber type	T700 / 12 K (1.0 % epoxy sized)
3	Fabric	UD
4	Nominal Fiber density	1.79 g/cm ³
Required Prepreg Data		
5	Nominal Prepreg Area weight	200 ± 5 g/m ²
6	Resin content	34.5 Wt %
7	Expected cure ply thickness	0.131 mm
8	width	300mm

Deviation: ± 5% in the given specification value is acceptable

Resin data sheet

S. No	Resin matrix Properties	
1	Resin Matrix Type	Multifunctional epoxies
2	Viscosity (@ 80°C)	800 to 900 Poise
3	Resin Filming temperature	70 to 80°C
4	Prepregging temperature	80 to 90°C
5	Gel time @ 100°C	> 2 hours
6	Storage	-10 to -20°C

Bidder/vendor/supplier Qualification criteria

Criteria 1 - Experience and Past Performance:

- a) The bidder/vendor should have hot melt coating with unidirectional carbon fiber prepreg fabrication facility.
- b) The bidder/vendor should have at least 1 years of experience in manufacturing carbon fiber prepreg with the same or higher specifications.



Criteria 2 - Capability- Equipment & manufacturing Facilities:

- c) The bidder/vendor should have hot melt coating and prepreg machine with capability to make 300 mm width of carbon fiber prepreg.

Terms and conditions

1. The selected bidder should sign the Non-disclosure agreement with NAL ^{after} ~~before~~ accepting the purchase order.
2. The vendor/supplier shall make prepreg using the NAL resin with standard modulus T 700S 50C / equivalent grade carbon fiber by hot melt coating.
3. CSIR-NAL shall supply the required formulated resin (as per the resin data sheet) to the prepreg manufacturer/supplier.
4. Carbon fiber and other required raw materials for prepreg production are within the scope of the manufacturer/supplier.
5. Prepreg shall be made and supplied by the manufacturer/supplier within 6 months from the date of purchase order.
6. Prior intimation in making the prepreg by the supplier to the indenter after the acceptance of PO and the indenter visit the supplier prepreg manufacturing facilities during the prepreg fabrication.
7. The fabricated prepreg shall meet the given technical specification as qualifying criteria.
8. Supply of fabricated prepreg to CSIR-NAL, Kodihalli stores, Bengaluru-560017.

