

## भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(शिक्षा मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

## INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of Education, Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

No. ME-INS-137-23-24 Date:20 October 2023

#### **Request for Quotation**

To, M/s

#### Subject: AMC Renewal for 5 Years of FRANC3D Crack Growth Analysis Software.

#### Sir

Indian Institute of technology (Indian School of Mines), Dhanbad is interested for the purchase of the materials/ equipment listed below:

Sl. No.	Detailed Specifications	Quantity
1	AMC Renewal for 5 Years of FRANC3D Crack Growth Analysis Software	02 Users
	(Specification in Annexure –II)	

#### **INSTRUCTIONS:**

- 1) Please attach relevant technical literature of the item.
- 2) Please fill the attached form 01 regarding class of supplier.
- 3) Please mention warranty/ guarantee period in your offer. Equipment/ material supplied must have minimum warranty/ guarantee of **12 months**.
- 4) Please attached authorization certificate from OEM.
- 5) Please mention after sales service information in your offer.
- 6) Please attach a certificate that the quoted price is not more than that of any other Govt. organization/institution in India. This has to be mentioned in the offer letter clearly.
- 7) The rates should be quoted for each item separately as per price schedule attached as annexure I
- 8) The items/ materials shall be required to be delivered at Mech Engg Department of IIT (ISM) Dhanbad at the risk and cost of the tenderer
- 9) Your tender must be **valid for minimum 120 days** from the date of opening of tender.
- 10) The stores are required to be delivered within 30 days, late delivery may not be accepted.
- 11) Full details of stores offered should be given in the tender along with supporting & relevant literatures/ Technical Literature.
- 12) The items offered should be of good quality confirming to BIS standards, wherever applicable.
- 13) *Advance payment is not admissible.* Payment shall normally be made within 3-4 weeks subject to receipt and acceptance & installation (as per Purchase Order Terms) of the ordered materials/items.
- In the event of the supplier failed to supply the materials or install the same as contractual condition, IIT (ISM) Dhanbad shall have the right to deploy suitable agency/ third party to get the job completed at the risk and cost of the supplier.
- 15) Tender may please be submitted in sealed cover only super scribed with Enquiry No. ME-INS-137-23-24 latest by 09.11.2023.
  - 16) The offer must be submitted in the office of Deputy Registrar (Purchase & Stores), IIT (ISM), Dhanbad—826004 (Jharkhand, India) only. Please send your offer by Regd. Post/ Speed Post/ Courier along with Courier receipt. Tender/ quotation will be received during IIT (ISM) Dhanbad working hours only (i.e. Monday to Friday). At any circumstances by hand delivery is not acceptable. Late or delayed tenders shall be summarily rejected. Bids sent through Email/Fax or submitted in unsealed cover(s) will not be accepted and such bids will be treated as non-responsive bids.
- 17) **Performance Bank Guarantee:** A bank guarantee issued by a Nationalized Bank in India towards PBG for an amount equal to 10% of total value of purchase order and valid till the period beyond two months of completion of warranty period should be submitted in favor of **Registrar**, **IIT** (**ISM**) **Dhanbad**.
- 18) Any other information that you may like to obtain, you are free to contact IIT (ISM) Dhanbad before submission of tender.
- 19) IIT (ISM) Dhanbad reserves the right to accept and/or to reject any/all tenders without assigning any reason.



### भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(शिक्षा मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

# INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of Education, Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@iitism.ac.in || Website : www.iitism.ac.in

No. ME-INS-137-23-24 Date:20 October 2023

- 20) **Payment**: will be made within 30-45 days after satisfactory supply, inspection, installation/commissioning/satisfactory services & acceptance and on submission of pre-receipted tax invoice, delivery challan, warranty certificate and installation report in triplicate
- Please attach purchase order copies of the same equipment which you have supplied to any other Govt., public sector and autonomous institutions.
- a) In a tender, either the Indian agent on behalf of the principle/OEM and the Principle/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - b) If an agent submit bid on behalf of the principle/ OEM, the same agent shall not submit a bid on behalf of another principle/ OEM in the same tender for the same item/product.

ASST. REGISTRAR P&S SECTION



### भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्डं, भारत, पिन-826004

(शिक्षा मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

# INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of Education, Govt. of India)

 $\textbf{STORES \& PURCHASE SECTION} \quad Phone: (0326) \ 2235678 \quad || \ Email: purchase@iitism.ac.in \quad || \ \ Website: www.iitism.ac.in$ 

No. ME-INS-137-23-24 Date:20 October 2023

<u>Annexure –I</u>

#### PRICE SCHEDULE FOR GOODS BEING OFFERED WITHIN INDIA

Name of the	he Bidder			
NIT Refer	ence No			
File Refer	ence No			
				1
Sl. No.	Full Description of items with (HSN	Quantity	Unit Price (in	Total Amount (in
	Code/SAC Code)		INR)	INR)
1.				
2.				
3.				
Ex-Work	ss Price-			
Packing	& Forwarding			
Transpor	tation			
GST/IGS	ST (as applicable%)			
Insurance	e up to Destination/handover (in case of fabric	cation)		
Installati	on & Commissioning charge			
Training				
FOR (II7				
Addition	nal Warranty Charges, if any			
Annual	Maintenance Charge, if any			
*(C	On the basis of the technical specifications sub	mitted)		•
Total Bid	Price		in words	
Note:				
(a) The Pr	ice schedule of optional items shall be indicat	ed in a separate she	et in the same Performa	a.
(b) Cost sp	pare parts may be indicated separately			
Signature Name	of Bidder			
Business				
Address				



## भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(शिक्षा मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

# INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of Education, Govt. of India)

 $\textbf{STORES \& PURCHASE SECTION} \quad Phone: (0326) \ 2235678 \ \parallel \text{Email : purchase@iitism.ac.in} \ \parallel \text{Website : www.iitism.ac.in} \\$ 

No. ME-INS-137-23-24 Date:20 October 2023

### Form-1

Declaration by bidder

(Please specify Class of Supplier and Local Content percentage)
In accordance and manner as specified in Order No. P45021/2/2017-PP (BE-II) dated: 04<sup>th</sup> June 2020 and 2th March 2021 issued by DIPP, Ministry of Commerce and Industries, GoI.

10,
The Director,
Indian Institute of Technology (Indian School of Mines)
Dhanbad -826004
Respected Sir,
$In \ accordance \ with \ the \ order \ No. \ P-45021/2/2017-PP \ (BE-II) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (E-50310) \ dated \ 04^{th} \ June, \ 2020 \ and \ P-45021/2/2017-BE-II-Part \ (1) \ (2) \ dated \ (2) \ $
dated 4th March 2021 I hereby declare that
I am aware about all provision mentioned in Tender No. ME-INS-137-23-24 as well as order No. P-45021/2/2017-PP (BE-II) dated
04th June, 2020 and P-45021/2/2017-BE-II-Part (1) (E-50310) dated 4th March 2021 and abides by the same.
I declare that for this tender, I am a <u>Class-I local supplier / Class-II local supplier / Non-local supplier</u> (Strike out whichever is not
applicable) and classification is based on local content of goods/services/work offered by bidder in this tender.
Local content (in percentage) in offered good/services/work is:%
Whereas 'Local Content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal
Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content
in the item (including all customs duties) as a proportion of the total value, in percent.
The services such as transportation, insurance, installation, commissioning, training and after sales service support like ACM/CMC
etc. are not included as Local content in case of imported products.
The local content for all inputs which constitute the said goods/services/works has been verified and bidder is responsible for the
correctness of the claims made therein.
Date:
Signature:
Name of Authorized Signatory:
Name of Bidder:
Seal of Bidder:



### भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(शिक्षा मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्त्व का एक संस्थान)

## INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of Education, Govt. of India)

 $\textbf{STORES \& PURCHASE SECTION} \quad Phone: (0326) \ 2235678 \ \ || \ Email : purchase@iitism.ac.in \ \ || \ \ Website : www.iitism.ac.in$ 

No. ME-INS-137-23-24 Date:20 October 2023

Annexure -II

### **Technical Specification**

- 1. Accurate SIF Computation FRANC3D uses M-Integral or Interaction Integral method to compute the Stress Intensity Factor. Which gives Strain Energy Release Rate G1, G2, G3 associated with K1, K2, and K3 for three modes of failure; which makes SIF more accurate against all other methods. Which guides on most accurate prediction of Crack Direction, Stability and Rate.
- 2. Anisotropic, Orthotropic Material FRANC3D is capable of computing crack propagation in all kindof materials like isotropic, anisotropic, orthotropic material without making any assumptions on material type
- 3. FRANC3D can simulate Bimaterial fracture, which is along the interface and across the interface; this is an key unique capabilities for composites, coating and other bi-material interface, at the moment crack crossing the interface simulation is only possible in FRANC3D
- 4. FRANC3D is capable of simulating Partial Crack Growth, Multiple Cracks and also Elasto Plastic J Integral based EPFM
- 5. FRANC3D can compute time, cycle, temperature or combination of loading for crack growth
- 6. FRANC3D is the only tool can handle Fretting crack nucleation and propagation: Computes Crack nucleation due to fretting right at the edge of the contact region and grows along the edge of contact.
- 7. FRANC3D implemented crack growth simulation in components subjected to HCF/LCF loading in FRANC3D- combined static and modal analysis in particular, simulating crack growth as a resonant frequency is crossed during a throttle excursion
- 8. FRANC3D is easily customisable with Python Scripts.
- 9. FRANC3D can handle all kind of loading conditions and schedules accounting the time & temperature dependency as well. (Simple Cyclic, Non-Proportional, Spectrum, Transient, Hold Events under Fatigue Loading and also Quasi-Static Crack Growth.