



NOTICE INVITING QUOTATION (LIMITED TENDER)
for SUPPLY OF INSTRUMENTS/EQUIPMENTS/MODULE/SYSTEMS
for Research Project at NIT Manipur - Sedimentation Study of Thoubal River
NHP Project under National Hydrology Project (NHP) – WRD, Govt of Manipur

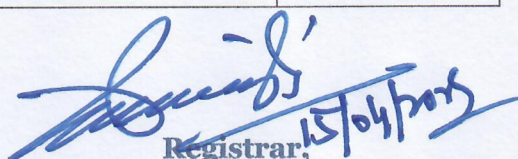
No. NITM.1/(24-PROJ)/ROMEJI/WRD-NHP/2023(Pt-1)/R-1006

Dated: 15/04/2025

Sealed Quotations in prescribed format are invited from Authorized & Registered Indian Manufacturers/Dealers/Firms/Agencies, etc, for the supply of the following listed Instruments/Equipments/Modules/System, required for the following NHP Research project at the Department of Civil Engineering, NIT Manipur.

“SEDIMENTATION BUDGETING AND MODELLING FOR RIVERS (THOUBAL RIVER) IN MANIPUR”

Sl. No	Items (Equipments/Systems) with Make/Model	Qty.	Purpose/Usage (in brief)	Technical Specifications (attached as)
1.	DHI MIKE HD & 21C / MIKE+ Module Make: Danish Hydraulics Institute (DHI), India Version: DHI 2023/2024, etc	1 user	A prime tool/module for in-depth river modelling with sediment/silt transport in 2D to analyse river bed aggradation/degradation, river flood modelling, etc	Proprietary item – DHI India (direct procurement)
2.	BEDLOAD - SEDIMENT SAMPLER Model: US BLH-84 Make: USDH, etc	1 no	For in-situ sampling of sediment flow and concentration in alluvial rivers	Annexure – 1
3.	PORTABLE SOIL TENSION METER Model: TEN-60 Make: Top, China	1 no	For in-situ measurement of river soil and sand tension/ friction in river bank, etc	Annexure – 2
4.	FIELD SPECTROSCOPY Model: FieldSpec4 Make: ASD, etc	1 no	To measure spectral signatures at ground to correspond with satellite imagery analysis of river morphology	Annexure – 3
5.	AQUAMETER CRM-500/AUTO-C, Model: CRM-500/Auto-C Make: Anvic Systems, India, etc	1 no	For extracting subsurface strata and groundwater availability information	Annexure – 4
6.	PORTABLE ULTRASONIC WATER DEPTH Sensor/Gauge Model: Portable Ultrasonic Water Depth Sensor/Gauge Make: Sino-Inst, etc	1 no	For measuring water depth in rivers/channels at the deep sites	Annexure – 5
7.	LapTop WORKSTATION (Portable) Make: HP/DeLL/Lenovo Model: Workbook/Z Book (intel core i9/i7/Xeon processor; minimum 16GB DDR RAM, screen > 16", etc)	1 no	Dedicated PC/system for hydraulic river modeling to run DHI MIKE 21C/MIKE+; In-situ analysis with field instruments for sediment size analysis, etc	Annexure – 6

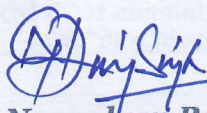

 Registrar, 15/04/2025

National Institute of Technology Manipur

TERMS AND CONDITIONS:

1. The Notice Invitation Quotation (NIQ) is open from the date of uploading of the same in the official website of NIT Manipur at www.nitmanipur.ac.in.
2. The last date of receipt of quotations/bids (by post/hand) will be **30th April 2025** (1630 hrs IST) i.e. 15 days from the date of opening i.e. uploading in the institute website (15/04/2025). NIT Manipur will not hold any responsibility for postal delays. However soft copies of **only the Technical Bids** may be emailed to the Project Focal/PI @ romeji@nitmanipur.ac.in in advance as to affirm the status of pre-bid submissions. However Financial Bid should reach by the last date prescribed in sealed envelopes.
3. Only prescribed format, to be downloaded from NIT Manipur website www.nitmanipur.ac.in shall be considered.
4. An amount of Rs. 1000/- (non-refundable) as the cost of downloaded quotation form in favour of "Director, NIT Manipur, Project Account" A/C No: **60330100000092** by Demand Draft only (Cheques not accepted) payable at Bank of Baroda, NIT Manipur branch (IFSC: BARB0NITMAN), should also be sent along with the bid/quotation. Bids/Quotations submitted without tender fees will not be considered, except those registered with MSME.
5. The sealed quotations will be tentatively opened on: **02/05/2025** (1230 hrs IST) by the constituted purchase committee of the institute.
6. All bidding documents must be sent/submitted to the institute in a sealed format by registered/speed post/hand to the **Dr. Ngangbam Romeji (Project P.I), Assoc. Professor, Department of Civil Engineering, NIT Manipur, Langol, Lamphelpat Imphal (W) – 795004, Manipur** on or before the last date prescribed. Delays on account of postal handling, etc will not be entertained/considered.
7. The envelope should be super scribed as "**Supply of<item name>.....** **for Sedimentation Study of Thoubal River NHP Project**" (relevant item) at Department of Civil Engineering, NIT Manipur, for the Project entitled "**Sedimentation Budgeting and Modelling for Rivers (Thoubal River) in Manipur**".
8. The Institute reserves the right to accept or reject quotation in whole or in part in the manner decided by the Purchase Committee/P.I., whose decision shall be final and binding. Mere submission of bidding documents does not entitle to qualify for the tender and supply process.
9. All quotes must be inclusive of eligible taxes as GST, and duties and for destination at the Department of Civil Engineering, NIT Manipur, Langol, Lamphelpat, Imphal (W)–795004. No separate freight charges shall be imposed under any circumstances.
10. Rate(s) quoted will be valid for **at least 3 (three) months** from the date of submission.
11. The payment for items will be processed after receiving the items in good intact condition(s).
12. Purchase Order (P.O) will be issued to the Qualified Firms based on the outcome of the recommendations of the Purchase Committee. However, Firms who do not respond upon receipt/providing P.O. within 7 days will automatically stand cancelled/rejected. The next 2nd Applicable Firm will be provided with the P.O. or/as based on the recommendations of the Purchase Committee.

Note: All Quotations/Bid should be submitted in the official letter head of the firm/agency.
Last Date (Time) of receipt of bids: 30/04/2025 (1630 hrs IST)


Dr. Ngangbam Romeji
(Project Focal/PI)
Associate Professor
Department of Civil Engineering
National Institute of Technology Manipur



Technical Specifications

FOR SUPPLY OF INSTRUMENTS/EQUIPMENTS/SYSTEMS FOR NATIONAL HYDROLOGY PROJECT (NHP) under Ministry of Jal Shakti govt. of India (vis. WRD Manipur) SPONSORED RESEARCH PROJECT AT NIT MANIPUR

PROJECT DETAILS: Supply of Instruments/Equipments/Systems at Department of Civil Engineering for the NHP under Ministry of Jal Shakti govt. of India (vis. WRD Manipur) sponsored research project entitled:

“SEDIMENTATION BUDGETING AND MODELLING FOR RIVERS (THOUBAL RIVER) IN MANIPUR”

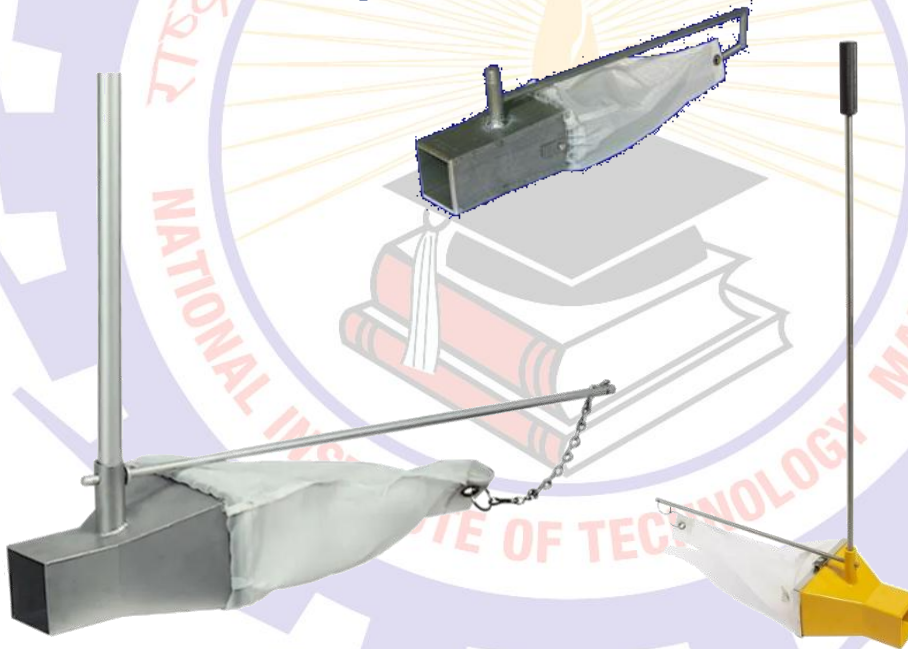
Item (1) BEDLOAD SUSPENDED- SEDIMENT SAMPLER

Model: US BLH-84

Make: USDH

Purpose:

The US BLH-84 is a wading-type hand-held bedload sampler. The sampler is used for in-situ measurement of sediment flow and concentration in alluvial rivers. The sampler consists of an expanding nozzle, a sample bag, a wading rod assembly. The sampler design enables collection of particle size nozzle and an area expansion ratio (ratio of nozzle exit area to entrance area) of 1.4.



Technical Specifications & Features:

- Handheld, wading type bed load sampler
- Body: Aluminium
- Weight: 10 lbs
- Dimension: 5.5” W x 28” L

Item (2) PORTABLE SOIL TENSION METER

Model: TEN-60

Make: Top , Zhejiang, China

Purpose and Product description:

For in-situ measurement of river soil and sand tension in river, banks etc. Soil tensiometer is made up of a pressure gauge, acrylic tube, and ceramic probe , after the acrylic tube is filled with water, ceramic probe gets wet and it can prevent outside air into the ceramic probe. When there is the pressure difference between measured soil water potential and tensiometer, the water in the tensiometer will infiltrate into the measured soil until the balance is reached. So at that moment, the value shown on the pressure gauge is the measured soil water potential.



Technical Specifications & Features:

Specifications:

- Length: 60 cm (TEN-60)
- Testing range: 0-1 Bar

Item (3) FIELD SPECTROSCOPY**Model: FieldSpec 4****Make: ASD****Purpose:**

To measure spectral signatures at ground to correspond with satellite imagery analysis of river morphology. The ASD FieldSpec 4 line of full-range spectroradiometers delivers the fastest and most accurate spectral field measurements available from any commercial field-portable spectroradiometer. Continued enhancements to core instrument spectrometers and other critical components have dramatically improved overall performance, signal, and integration speeds compared to earlier models.

Technical Specifications & Features:

- Ground Truthing
- Remote Sensing
- Near-infrared Spectroscopy (NIR)
- Spectral resolution : 3 nm @700 nm, 10 nm @ 1400/2100 nm
- Wavelength : 350 nm – 2500 nm

Item (4) AQUAMETER CRM-500 / AUTO-C

Model: CRM-500/ Auto-C

Make: ANVIC SYSTEMS, INDIA



Purpose:

Resistivity (geo-electrical) surveying is one of the most versatile and successful geophysical prospecting methods for ground water prospecting mineral prospecting, ground resistance measurements, geological and geo-technical mapping, bedrock studies, certain civil engineering applications. The Aquameter's intelligent microprocessor technology employs ingenious methods for extracting subsurface information. It is a popular instrument, because of its single button operation, deep penetration, accurate and reliable results, even in adverse field conditions. The instrument has a facility to measure self potential (SP) which is useful in mineral prospecting and environmental studies.

Technical Specifications & Features:

- Depth of Investigation: 600 meters
- Current Range: 1 mA to 500 mA (Auto-C), manual (CRM-500)
- Power Source: 12V 12Ah rechargeable battery
- Weight: 12.5 kg
- Dimensions: L 400mm x W 225mm x H 330mm

Item (5) PORTABLE ULTRASONIC WATER DEPTH SENSOR/ GAUGE

Model: Portable Ultrasonic Water Depth Sensor/Gauge

Make: Sino-Inst



Purpose:

Portable Ultrasonic Water Depth Sensor is a water depth measurement instrument specially used in reservoirs, lakes, rivers, shallow seas, etc. When measuring depth, place the ultrasonic transducer on the water surface or a certain position in the water, and use the propagation principle of ultrasonic waves in the water to automatically calculate the current water depth.

Technical Specifications & Features:

- Widely used in water depth measurement in hydrographic surveys, hydropower plants, reservoir areas, shallow seas, lakes, river surveys, and environmental water monitoring;
- The instrument is equipped with a rechargeable battery, making it portable for handheld measurement, easy to use and simple to operate;
- Support data storage and download;
- Support range customization, 50m, 100m, 200m, 300m;
- Output signal 4~20mA, or RS485, or customized;
- This machine integrates ultrasonic transceiver sensor, service circuit, temperature compensation sensor and compensation circuit unit, display, control signal output and serial data or analog output unit (optional)
- Detection Accuracy: $\pm 0.5\%$

Item (6) LAPTOP WORKSTATION/WORKBOOK (core i9/xeon processor)**Make:** HP/DeLL/Lenovo (preferred: HP)**Model:** Workbook/Z Book (intel core i9 processor)**Purpose:**

Dedicated PC/system for hydraulic river modelling to run DHI MIKE 21C/MIKE+; In-situ analysis with field instruments for sediment size analysis, etc model runs which requires high computational resources, reduction in computational time for trial model runs and meet project timelines.

Technical Specifications & Features:

- 13th Generation Intel ® Core™ i9 processor
- Windows 11 Home/Professional
- 16 to 17 inch diagonal QHD display (opted: 240 Hz refresh rate, 5-7 ms response time display)
- NVIDIA® GeForce RTX™
- 32 GB RAM DDR5 (expandable)
- 1 TB SSD Hard drive (expandable)
- Backlit RGB 4-zone Keyboard/

(or as applicable)

NB: The Technical Specifications provided in all the above 6 (six) items, must be compliant with established standards (ISI, ISO, etc) and in case compatibility issues arises, the same will be taken into consideration for the revised/modified product configuration/model.

Dr. Ngangbam Romeji

(Project PI/Lead Expert)

Associate Professor

Department of Civil Engineering

National Institute of Technology Manipur

ANNEXURE-I

FIRM/COMPANY/AGENCY PROFILE & BID FEE DETAILS

Ref.
No.:

Dated: -

NOTICE INVITING QUOTATION (LIMITED TENDER) –

Supply and Installation of
Equipments/Systems for NATIONAL HYDROLOGY PROJECT (NHP)
under Ministry of Jal Shakti govt. of India (vis. WRD Manipur)
SPONSORED RESEARCH PROJECT at Department of Civil
Engineering, NIT Manipur titled

“SEDIMENTATION BUDGETING AND MODELLING FOR RIVERS
(THOUBAL RIVER) IN MANIPUR”

NIQ/Bid Reference no.:

Dated:

FOLLOWING DETAILS ARE TO BE FURNISHED BY THE BIDDING FIRMS:

1. Name of the Firm:
2. Address of the Firm:
3. Contact no:
4. Email address:
5. Registration details:
6. Permanent Account Number:
7. Service Tax registration, GST registration details:
8. Bank Account details including Account Number, Bank name, Branch name & IFSC code:
9. Application fee details – Name of Bank.....
DD no..... Date:
10. EMD fee details (if any):

Name of the bank.....
Date
Amount

Important Note: Copies of the relevant documents are to be enclosed along with this Annexure including copy of latest filed Income Tax Returns (ITR) for FY 2024–2025 and GST Certification.

For exemption in Application/Tender Fees, valid MSME Certificate has to be provided.



(in FIRM/COMPANY/AGENCY/DEALER's Letterhead)

DECLARATION:

I/We hereby declare that I/We have read & understood all the terms & conditions mentioned in the Notice Inviting the sealed quotations and I/We undertake myself/ourselves to abide by them.

I/We further, declare that all the information given above are true.

Name:

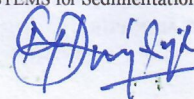
[Official Seal]

Designation:

Signature:

Place:

Date:





ANNEXURE-II

TECHNICAL AND FINANCIAL BID NOTICE INVITING QUOTATION (LIMITED TENDER) –

**Supply and Installation of
Equipments/Systems for NATIONAL HYDROLOGY PROJECT (NHP) under Ministry of Jal Shakti
of India (vis. WRD Manipur) SPONSORED RESEARCH PROJECT at Department of Civil Engineering,
NIT Manipur titled**

“SEDIMENTATION BUDGETING AND MODELLING FOR RIVERS (THOUBAL RIVER))IN MANIPUR”

NIQ/Bid Ref. No.:

Dated:

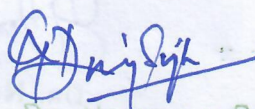
TABLE 1 and TABLE 2 are to be furnished by the BIDDING FIRMS for items as applicable:

TECHNICAL BID

(in FIRM/COMPANY/AGENCY/DEALER's Letterhead)

Table 1: PRODUCT MAKE AND MODEL

Sl. No	Equipment / Instrument/System	Qty.	Desired / Preferred Product	Quoted Product, Make & Model
1.	DHI MIKE HD & 21C / MIKE+ Module Make: Danish Hydraulics Institute (DHI), India Version: DHI 2023/2024, etc	1 no	DHI India	
2.	BEDLOAD - SEDIMENT SAMPLER Model: US BLH-84 Make: USDH, etc	1 no	US BLH-84	
3.	PORTABLE SOIL TENSION METER Model: TEN-60 Make: Top , China	1 no	TEN-60	
4.	FIELD SPECTROSCOPY Model: FieldSpec4 Make: ASD, etc	1 no	FieldSpec4 ASD	
5.	AQUAMETER CRM-500/ AUTO-C, Model: CRM-500/Auto-C Make: Anvic Systems, India, etc	1 no	CRM-500/Auto-C Anvic Systems, India	
6.	PORTABLE ULTRASONIC WATER DEPTH Sensor/Gauge Model: Portable Ultrasonic Water Depth Sensor/Gauge Make: Sino-Inst, etc	1 no	Sino-Inst	
7.	LapTop WORKSTATION (Portable) Make: HP/DeLL/Lenovo Model: Workbook/Z Book (intel core i9/i7/Xeon processor; minimum 16GB DDR RAM, screen > 16", etc)	1 no	HP Workstation Z Book 16", Xeon/Intel Core i9 processor Min. 32 GB DDR RAM, 17 inch VGA, NVIDIA	



DR. NGANCHAM ROMEJI
Project P.I. / Lead Expert

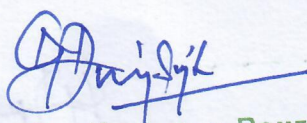


THOUBAL RIVER SEDIMENTATION MODELLING NHP
Associate Professor, CED, NIT Manipur

(in FIRM/COMPANY/AGENCY/DEALER's Letterhead)

Table 2: ELIGIBILITY CRITERIA FULFILMENT
(as applicable to the BIDDING FIRM for items quoted)

Sl. No	Equipment / Instrument/System	Qty.	Product Eligibility Criteria/Standards (as stated or options can be also specified)	Please state in (Yes/No) Whether the quoted product fulfils the product eligibility criteria
1.	DHI MIKE HD & 21C / MIKE+ Module	1 no	DHI India Proprietary item	
2.	BEDLOAD SUSPENDED-SEDIMENT SAMPLER Model: US BLH-84 Make: USDH	1 no		
3.	PORTABLE SOIL TENSION METER Model: TEN-60 Make: Top , China	1 no		
4.	Field Spectroscopy Model: FieldSpec4 Make: ASD	1 no		
5.	AQUAMETER CRM-500/AUTO-C, Model: CRM-500/Auto-C Make: Anvic Systems, INDIA	1 no		
6.	Portable Ultrasonic Water Depth Sensor/Gauge Model: Portable Ultrasonic Water Depth Sensor/Gauge Make: Sino-Inst	1 no		
7.	LapTop Workstation Make: HP/DeLL/Lenovo Model: Workbook/Z Book (intel core i9/i7/Xeon processor)	1 no		



DR. NGANGBAM ROMEJI
Project P.I. / Lead Expert
THOUBAL RIVER SEDIMENT MODELLING NHP
Associate Professor, CED, NIT Manipur

(in FIRM/COMPANY/AGENCY/DEALER's Letterhead)

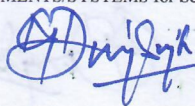
**DETAILS to be furnished by the BIDDING FIRMS for
FINANCIAL BID**

(to be enclosed in separate sealed envelope inside main envelope containing Technical Bid and other documents)

TABLE 3: FINANCIAL BID FORMAT

Sl. No	Equipment / Instrument/ System	Qty.	Rate/ Amount (in INR Rs)	Applicable GST Amt. (Rs)	Any Other Taxes/ Duties (Rs)	Total Amount (without taxes) (Rs)	Total Amount (with taxes) (Rs)	Discounts, if applicable/any (for academic institutions) (% / Rs)
1.	DHI MIKE HD & 21C / MIKE+ Module	1 no						
2.	BEDLOAD - SEDIMENT SAMPLER Model: US BLH-84 Make: USDH	1 no						
3.	PORTABLE SOIL TENSION METER Model: TEN-60 Make: Top , China	1 no						
4.	Field Spectroscopy Model: FieldSpec4 Make: ASD	1 no						
5.	AQUAMETER CRM-500/AUTO-C, Model: CRM-500/Auto-C Make: Anvic Systems, INDIA	1 no						
6.	Portable Ultrasonic Water Depth Sensor/Gauge Model: Portable Ultrasonic Water Depth Sensor/Gauge Make: Sino-Inst	1 no						
7.	LapTop Workstation Make: HP/DeLL/Lenovo Model: Workbook/Z Book (intel core i9/i7 processor)	1 no						
	TOTAL (as per items quoted)							

NOTICE INVITING QUOTATION (LIMITED TENDER) for SUPPLY of EQUIPMENTS/SYSTEMS for Sedimentation Budgeting and Modelling for Rivers (Thoubal River) in Manipur NHP Project, NIT MANIPUR



7/8
DR. NGANGBAM ROMEJI
Project P.I. / Lead Expert
THOUBAL RIVER SEDIMENT MODELLING NHP
Associate Professor, CED, NIT Manipur



(in FIRM/COMPANY/AGENCY/DEALER's Letterhead)

DECLARATION:

I/We hereby declare that I/We have read & understood all the terms & conditions mentioned in the Notice Inviting the sealed quotations and I/We undertake myself/ourselves to abide by them. I/We further, declare that all the information given above are true and the quoted products are in compliance to the item specifications listed above in Annexure II (Technical and Financial Bid)

Name:

Designation:

Signature:

[Official Seal]

Place:

Date:

