DOCUMENT

Open Competitive Bid (OCB)

For

Supply and Installation of
Transportation Engineering Lab equipments of
Civil Engineering Dept.
at the three campuses of
Rajiv Gandhi University of Knowledge
Technologies

Proprietary & Confidential



RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES

> Ground Floor, Vindhya C4 Building, IIIT-H Campus, Gachibowli HYDERABAD- 500 032

> > Phone: 040-23001830

Proprietary & Confidential

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News paper advertisement

Short Tender Notice

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES



Ground Floor, Vindhya C4 Building, IIIT-H campus, Gachibowli, HYDERABAD- 500 032 Phone: 040-23001830

Separate Sealed Tenders are hereby invited from reputed Manufacturers or Authorised dealers for supply and installation of equipments for the following labs of Civil Engineering Departments 1) Transportation Engineering Lab, 2) Soil Mechanics Lab at the three campuses of RGUKT located at Basar (Adilabad District), Nuzvid(Krishna District) and RK Vally (YSR Kadapa District) of Andhra Pradesh:

Last date of submission of tender along with EMD as specified in the bid document is on 01.08.2012 before 04 .00 pm.

Interested parties can collect the Tender document for each laboratory from 20.07.2012 to 31.07.2012 against payment of Rs. 5,000/- towards the cost of Tender document fee (non-refundable) through D.D. from any Nationalized Bank payable to REGISTRAR, RGUKT at Hyderabad from the office of the RGUKT. For further details visit our website www.rgukt.in

Date: 20.07.2012 Sd/ Registrar

Time schedule of various Short tender related events

Bid calling date	20 .07.2012
Last date for sale of	31.07.2012 at 05:00 P.M
document	
Pre bid meeting	26.07.2012 at 03.30PM
Bid closing date/time	01.08.2012 at 04:00 P.M.
Technical Bid Opening	01.08.2012 at 05:00 P.M.
date/time	
Price Bid opening	02.08.2012 at 04:30 P.M.
date/time	
Bid Document fee	Rs.5,000/-
Contact person	Registrar, RGUKT
Reference No	RGUKT/Proc/Civil/TEL/T 18/2012

Registrar, RGUKT

TENDER FORM

Not transferable

Reference. No. RGUKT/Proc/Civil Engg./TEL/T 18/2012 Dated 20.07.2012

Subject: Invitation of Tenders for Supply, installation and commissioning of Transportation Engineering Lab Equipments to the Civil Engineering Departments at three campuses of RGUKT located at Basara (Adilabad Dist), Nuzvid (Krishna Dist) and RK Valley (YSR Kadapa Dist) of Andhra Pradesh.

Last date and time for submission of the TENDER AT RGUKT, Vindhya-C4, IIIT Campus, Gachibowli, HYDERABAD is 01.08.2012 up to 4:00PM

Dear Sir/Madam,

- A. RGUKT invites sealed tenders comprising technical bid and price bid separately from reputed manufacturers (or) authorized dealers for three RGUKT IIITs located at Basara (Adilabad Dist), Nuzvid (Krishna Dist) and R K Valley (Kadapa Dist) of Andhra Pradesh.
- B. The Tender form consists of 37 pages of which pages from 6 to 17 are instructions and page No.26&27 contains the format for financial bid. The duly completed Technical Bid together with a copy of the bid document (this tender) signed on all pages by the Bidders authorized signatory and the Price Bid should be kept in separate sealed covers. These sealed covers must be submitted in a sealed master envelope superscribed "Tender for Supply, Installation & Commissioning of Transportation Engineering Lab Equipments to the Civil Engineering Departments at the three campuses of RGUKT. The last date for submission of bid is 01.08.2012 and closing time is 04:00 PM.
- C. The Sealed Tenders should be deposited in the Tender box kept in the office of Registrar, RGUKT, Hyderabad up to 04:00 P.M. on 01.08.2012.

For any clarification and further details on the above tender please contact by Telephone No: 040-23001830 or Contact in Person during office hours.

Thanking you

Yours faithfully,

Registrar, RGUKT.

STATEMENT OF IMPORTANT LIMITS/VALUES RELATED TO BID

Item	Description
EMD	Rs.1,00,000/- by way of Demand Draft from any Nationalised Bank or by way of irrevocable bank guarantee from any Nationalised Bank only. DD/BG from other than Nationalised Banks will not be accepted.
Bid Validity Period	365 days from the date of opening of Financial bid
EMD Validity Period	90 days from the date of opening of Financial bid
Warranty Period	3 years
Variation in quantities/number of residents	<u>+</u> 40 %
Period for furnishing performance Security Deposit	Within 10 days from date of receipt of award
Delivery Schedule	Bidder shall deliver the goods in one single lot within 30days from the date of award of the contract.
Performance security value	5% of contract value by way of irrevocable Bank Guarantee from any Nationalised Bank
Performance security validity period	38 months from award of contract (including 30 days of installation period)
Period for signing the order Acceptance	Within 7 days from date of receipt of notification of award

Payment terms	
On delivery at user site	 Payment for goods and services shall be made in Indian rupees as follows. 80% of payment will be paid after installation, commissioning Balance 20% will be paid after 3 months after obtaining the satisfactory certificate from the Director, RGUKT IIITs.
Maximum Liquidated Damages for late deliveries	For delays:- If the supplier fails to deliver any (or) all of the goods or perform the services within the time period specified in the contract the purchaser shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damages a sum equivalent to 0.25% of the contract value per day until actual delivery or performance up to a maximum deduction of 10% of the delayed goods or services contract price. Once the maximum deduction is reached, the purchaser may consider the termination of the contract duly forfeiting the performance security etc.,

ELIGIBILITY CRITERIA

- 1. This bid is open to all firms within India who are eligible to do business under relevant Indian laws as in force at the time of bidding, subject to meeting the pre-qualification criterion. They should provide list of customers of previous supply of similar/ same items to IITs, NIT's or Central Universities or any Academic Institute of National repute with contact details. Copies of orders received from the reputed firms on bidding firm need to be submitted.
 - 2. The bidder should have servicing facility or work shop with in India so the provision of service is possible at a short notice and without incurrence of delay.

3.	The Bidding firm	should have	e minimum	turnover as follows:

Bid Value offered against	Last financial year's business
the tender call	turnover
25 lakhs	50 lakhs
50 lakhs	1 crore
50-100 lakhs	2 corers
Greater than 100 lakhs	3 Crores

The bidder should have adequate experience in supply of such materials as required in the tender. Bidder should furnish proof of having supplied such materials as required in the tender in the previous financial year ending 31st March 2012 as mentioned above. A certificate indicating the Turn Over value details (in Rupees) of subject material, during the financial year 2011-12 (for the year ending 31.03.2012) from a Firm of Chartered Accountants must be enclosed (in original) as a proof for Turnover. The Turn Over of the subject Material must be separately indicated in the certificate.

- 4. The bidder should furnish satisfactory performance certificate from the parties concerned to whom bulk supplies were effected, in case such supplies were made. RGUKT may contact any such parties to elicit details.
- 5. Bidder should be registered under VAT Act/CST Act with the relevant State Sales Tax Authorities. He should furnish along with the bid document, the relevant VAT/CST Registration Document and PAN / TAN Card copies.
- 6. All bidders shall also include the following information and documents with their tenders (in the Technical bid cover)

- 7. Copies of original documents defining the constitution or legal status, place of registration, and principal place of business of the bidding firm/entity; written power of attorney of the signatory of the Bid to commit the Bidder.
- 8. Machinery/equipment owned by the bidder and number of employees.
- 9. Latest Income Tax returns and VAT/CST Returns filed.
- 10. List of Present Clientele with contact addresses & telephone numbers.
- 11. All the certificates furnished along with technical bids should be attested by a Gazetted Officer, counter signed by bidder along with their seal.
- 12. The bidders must submit all relevant documentary evidence to support their claim for eligibility in placing bid. The tenders received without the above documents will be rejected.

Requirement of Transportation Engineering Lab Equipments

S No	Equipment	Qty for 3 centers
1	Los Angeles Abrasion Testing machine for the estimation of abrasion value of coarse aggregate with the following:	03
2	Aggregate Impact Tester	03
3	Aggregate Crushing value apparatus	03
4	Thickness Gauge for the determination of flakiness of aggregates	18
5	Density Basket	06
6	Cylindrical required for determining the bulk density or unit weight of aggregates.	06
7	IS Sieve (coarse) -45 cm diameter	09 set
8	IS Sieve (Fine)	09 set
9	Sieve shaker Having an inclined sieve table capable of accommodating sieves of 150 or 200 mm diameter with timer	03
10	Mechanical balances of different capacity	06 each
11	Electronic balances of different capacity	06 each
12	Water Bath	06 Nos
13	Hot air oven:	06 Nos
14	Jaw screw crusher for crushing of road aggregates	03 No
b)E	quipment for Bitumen Testing	
15	Universal Penetrometer for testing the consistency of bitumen as per IS 1203	06
16	Ductility machine for bitumen as per IS: 1208	03
17	Ring and Ball Apparatus Softening Point of Bitumenas per IS: 1205/D 36-95 Apparatus shall consist of	06
18	Marshal Stability with electronic Conversion kit for testing bituminous mix.	03
19	Viscometer for bitumen	03

20	California Bearing Ratio (CBR) Test apparatus Laboratory Type-motorized	03
	With all accessories as per IS:2720-Part 17 For testing cohesive soils with	
	standard accessories including the swell test.	
	The apparatus shall include	
21	California Bearing Ratio (CBR) moulds- (150 mm ID x 175)-Brass make	15
22	MERLIN for measuring road roughness	03
d) N	liscellaneous Items	
23	Refrigerator-200 liters capacity – for bitumen sample preparation	03
	&storage	
24	Digital stop watches 0-60 minutes	15
25	Digital Multi-meter	06
26	Adjustable wrench 6 Inches long, 0-20mm opening	06
27	GI Trays of different sizes for aggregate sample preparation	15
	[size , in ft 2X1, 2X2 ,3X2]	
28	Aggregate storage bins [2.5 ftdia and 4ft ht]	30 Nos
29	Radar Gun	03No

Technical Specifications of Transportation Engineering Lab Equipments

S No	Equipment	Each Campus	Total
1	 Los Angeles Abrasion Testing machine for the estimation of abrasion value ofcoarse aggregate with the following: For testing procedure and machine conforming to IS:2386 Part IVand IS: 10070-1982 A hollow steel cylinder mounted on a sturdy frame on ball bearings capable of rotating about its axis in a horizontal position. A detachable shelf fitted inside the cylinder at a distance of 1250 mm from the opening measured along the circumstance in the direction of rotation. A motor with reduction gear which runs the drum at 30-33 rpm. A tray and a preset electronic revolution counter. Abrasive charge consisting of 12 steel ball approximately 48 mmdia and each weighing between 390 and 445 g. Suitable for operation on 440 v, 50 Hz, 3 phase supply. 	01	03
2	 Aggregate Impact Tester Testing machine and test procedure as per IS:2386 Part IV-1963 A Heavy circular base with two vertical guides fitted with a cross bar at the top. Hammer falling form 380+/-mm fitted with automatic blow counter The unit shall comprise of Impact testing machine conforming to IS: 2386 (Part IV)- 1963,IS Sieves of sizes - 12.5mm, 10mm and 2.36mm, A cylindrical metal measure of 75mm dia. And 50mm depth, A tamping rod of 10mm circular cross section and 230mm length, rounded at one end and Oven. 	01	03
3	 Aggregate Crushing value apparatus to determine the aggregate crushing value of coarse aggregates as per IS: 2386 (Part IV) – 1963. The apparatus consists of Steel cylinder with open ends, and internal diameter 25.2 cm, square base plate plunger having a piston of diameter 15cm with a hole provided across the stem of the plunger so that a rod could be inserted for lifting or placing the plunger in the cylinder. (ii) Cylindrical measure having internal diameter of 11.5 cm 	02	06

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	and height 18 cm. (iii) Steel tamping rod with one rounded end, having a diameter of 1.6 cm and length 45 to 60 cm (iv) Balance of capacity 3 kg with accuracy upto 1 g. (v) Compressions testing machine capable of applying load of 40 tons, at a uniform rate of loading of 4 tons per minute.		
4	Thickness Gauge for the determination of flakiness of	06 each	18
	 Consisting of a panel having accurately cut slots of different standard lengths and widths Fully meeting the requirements of IS:2386 (part-1)-1963 		
	Length Gauge for determining the elongation index of		
	coarse aggregate.		
	 Consisting of a metal plate on which 8 steel pins are vertically mounted with specified distances in between. This assembly shall be mounted on a hardwood base. Fully meeting the requirements of IS:2386 (part-1)-1963 		
5	Density Basket	02	06
	 Made of galvanized wire mesh with dimensions 20.3 cm dia and 20.3 cm height) 		
	● Conforming to IS: 2386 (Part III) – 1963		
6	Cylindrical required for determining the bulk density or unit	02	06
	 weight of aggregates. Three calibrated cylindrical measures one each of 3 liter, 15 liter and 30 liter capacity made out of steel sheet with handles, complete with one tamping rod 16 mm dia x 60 cm long rounded at one end 		
	 Meeting the requirements of IS: 2386 (Part – III) -1963, IS: 10079-1982 		
7	IS Sieve (coarse) -45 cm diameter	03 set	09
	• GI sheet frame with steel sheet with square holes.		
	• Aperture sizes (in mm) 125, 108, 100, 90, 75, 63, 53, 50, 45, 40, 37.5, 31.5, 26.5, 25, 22.4, 20, 16, 13.2, 12.5, 11.2, 10.8, 6.7, 6.3, 5.6 and 4.75 complete with pan and cover		
8	IS Sieve (Fine)	03 set	09
	 Brass frame sieves per IS 469-1972 – Aperture sizes: 4.75, 2.36, 2.00, 1.70, 1.18 and 1.00 mm, and of following sizes in microns: 600, 425, 300, 150, 75 		
9	Sieve shaker Having an inclined sieve table capable of	01	03
	accommodating sieves of 150 or 200 mm diameter with timer		
	 Standard gyratory action should produce inclination from the vertical axis and the direction of inclination should change 		

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	It should have a mechanism to accurately control penetration		
	time to exact five seconds.		
	 Penetrometer Cone : made of Gunmetal/Aluminum and is 		
	fitted with a hardened and ground detachable steel tip and a		
	stem,		
	 Additional accessories required: Aluminum penetration 		
	cups,penetration needle		
16	Ductility machine for bitumen as per IS: 1208	01	03
	 Ductility testing machines should be conforming to IS 1208. 		
	 Suitable for determination of the ductility of asphalt, cut 		
	bitumen and blown type bitumen.		
	• The machine shall consist of a thermostatically controlled bath		
	with inlet and outlet taps and equipped with an electric pump		
	circulator and heater include carriage moving over a lead screw.		
	An electric motor driven reduction gear unit should assure		
	smooth constant speed and continuous operation.		
	• The rates of pull / travel shall be 50mm/min and 10 mm/min.		
17	Additional accessory required: Briquette mould Ping and Pall Apparatus Softening Point of Pitumonas per IS	02	06
1 /	Ring and Ball Apparatus Softening Point of Bitumenas per IS	02	06
	: 1205/D 36-95		
	Apparatus shall consist of		
	• Rings—Two square-shouldered brass rings.		
	 Pouring Plate—A flat, smooth, brass plate approximately 50 by 75 mm 		
	 Balls—Two steel balls, 9.5 mm (3/8 in.) in diameter, each 		
	having a mass of 3.50g		
	 Ball-Centering Guides for centeringthe steel balls 		
	 Bath—A glass vessel, capable of being heated, not lessthan 85 		
	mm in inside diameter and not less than 120 mm indepth from		
	the bottom of the flare.		
	 Ring Holder and Assembly—A brass holder designed tosupport 		
	the two rings in a horizontal position		
	• An Low Softening Point Thermometer, having arange from −2		
	to +80°C, and conforming to electrical heating + a heater and		
	energy regulator, Hear resistant glass with all accessories such		
	as tapered rings, ring holder, steel balls; 220 V, 50 Hz)		
4.0	Additional accessories: tapered rings, ring holder, steel balls		
18	Marshal Stability with electronic Conversion kit for testing	01	03
	bituminous mix.		
	 Marshall apparatus, all required accessories and with electronic 		
	conversion kit operated on 230 V, 50 Hz		
	Marshall apparatus shall consists of:		
	1) A loading unit motorized, capacity 5000kgf with two		
	telescopic pillars and an adjustable cross head. Limit switches		

	are fitted inside to control upward or downward movement of the pillars. On-off reversing switch and indicator lamps are on the front side while a hand wheel to manually move the pillars is on the right. The load frame has fixed speed of 5.08cm per minute. Operated on 230 Volts A.C. 2) 1 No. Compaction pedal with specimen mold holder. 3) 2 Nos. Compaction Rammers, 4.5kg weight and free fall 45.7cm. 4) 1 No. Breaking head assembly with provision to fix flowmeter. 5) 3 Nos. Specimen mould 10.16cm I.D. x 7.6cm high with base plate and extension collar. 6) 1 No. Kit for specimen extraction consists of one each load transfer bar, steel ball, specimen extracting plate. Accessories: (a) Integral type Proving Ring capacity 3000 kgs. (b) A dial gauge 0.01 x 25mm (c) Universal Water Bath S.S. with false bottom and pyramid shaped lid to accommodates 3 Nos. Marshall specimen (d) Thermometer 0 − 250°C x 1°C • Additional accessories required: Marshal mould (cylindrical-4 'dia)-10 Nos		
19	Viscometer for bitumen • Continuous display of: Viscosity (cP or mPa·s), Temperature	01	03
	(°C), Shear Rate, Shear Stress, % Torque, Spindle		
	 Torque measurement accuracy: 1% of full scale range Repeatability: 0.2% of full scale range 		
	• 54 selectable speeds provide superior range of viscosity/shear measurements for use in stand-alone operation		
	 Automate program control by PC running optional software; 		
	 speed control from 0.01 to 200 rpm Automatic data collection and comparison with database 		
	Built-in RTD temperature probe for sample monitoring		
	Auto-zero function to ensure precision torque measurementCustomizable options		
	 Parallel printer, serial RS-232 and analog voltage outputs 		
	NIST traceable viscosity standards available		
20	California Bearing Ratio (CBR) Test apparatus Laboratory Type-	01	03
	motorized With all accessories as per IS:2720-Part 17 For testing		
	cohesive soils with standard accessories including the swell test.		
	 Mould 150 mm ID x 175 mm high Gun Metal 		
	 Mould 150 mm ID x 175 mm high M. steel 		
	Metal Tripod for Dial Gauge		

Penetration Piston 50 mm face dia		
• Circular Metal Spacer Disc with detachable handle, 148 mm		
dia x 47.7 mm height		
• Perforated Plate 148 mm dia, with adjustable Stem and Lock		
Nut		
central hole		
California Bearing Ratio (CBR) moulds- (150 mm ID x 175)-	05	15
Brass make		
MERLIN for measuring road roughness	01	03
Miscellaneous Items		
Refrigerator-200 liters capacity – for bitumen sample	01	03
preparation &storage		
Digital stop watches 0-60 minutes	05	15
Digital Multi-meter	02	06
Adjustable wrench 6 Inches long, 0-20mm opening	02	06
GI Trays of different sizes for aggregate sample preparation	05 each	15
[size , in ft 2X1, 2X2 ,3X2]		
Aggregate storage bins [2.5 ftdia and 4ft ht]	10 Nos	30
	 Circular Metal Spacer Disc with detachable handle, 148 mm dia x 47.7 mm height Perforated Plate 148 mm dia, with adjustable Stem and Lock Nut Soaking Tank for six CBR moulds Extension Collar 150 mm ID x 50 mm high Annular Metal Weight 2.5 kg, 147 mm dia with 53 mm dia central hole Slotted Metal Weight, 2.5 kg, 147 mm dia, with 53 mm dia slot Swell Plate Cutting Collar California Bearing Ratio (CBR) moulds- (150 mm ID x 175)-Brass make MERLIN for measuring road roughness Miscellaneous Items Refrigerator-200 liters capacity – for bitumen sample preparation & storage Digital stop watches 0-60 minutes Digital Multi-meter Adjustable wrench 6 Inches long, 0-20mm opening GI Trays of different sizes for aggregate sample preparation [size, in ft 2X1, 2X2, 3X2] 	Circular Metal Spacer Disc with detachable handle, 148 mm dia x 47.7 mm height Perforated Plate 148 mm dia, with adjustable Stem and Lock Nut Soaking Tank for six CBR moulds Extension Collar 150 mm ID x 50 mm high Annular Metal Weight 2.5 kg, 147 mm dia with 53 mm dia central hole Slotted Metal Weight, 2.5 kg, 147 mm dia, with 53 mm dia slot Swell Plate Cutting Collar California Bearing Ratio (CBR) moulds- (150 mm ID x 175)- Brass make MERLIN for measuring road roughness Miscellaneous Items Refrigerator-200 liters capacity – for bitumen sample preparation & Storage Digital stop watches 0-60 minutes Digital Multi-meter Adjustable wrench 6 Inches long, 0-20mm opening O5 each [size , in ft 2X1, 2X2, 3X2]

1 No 03 29 Radar Gun: **Specifications** Active Speed Windows: 2 Units of Measurement: KM/H Range: 90 m Battery: (6) AA NiCad or AA NiMh Data Ports: Standard RS-232/RS-485, 1200 baud to 38.4 Kbaud Transit Modes: Pull-to-Transmit; Pull-On, Pull Off Recall: Up to 5 previous readings Features of Stalker Radar Sport 2 Radar-Gun: 300 foot range – The Stalker Sport 2 outperforms all others! Default settings are optimized for measuring pitch speeds Improved (higher) release speed measurement 2 Active Speed windows – both Peak Speed and Plate Speed 10-millisecond speed acquisition time Stopwatch function – Simultaneously measures pitches and times runners optional stopwatch cable required Recalls previous 5 readings Simultaneously displays release and plate speeds Displays speed in either units or tenths Reduced size and weight improves comfort Uses Standard Data Port. RS-232/RS-485, 1200 baud to 38.4 Kbaud communicates with any serial device Concurrent Radar and Stopwatch Operation Uses common AA NiMh rechargeable batteries Battery Handle Cap quickly Snaps ON/OFF

* General Requirements & Qualification Criteria

- Bidding Firm offering the product should have ISO 9001 Accreditation certification.
- Bidding Firm, offering the product, should have supplied similar type of test systems for a several years to government establishments, defense organizations
 & National higher learning institutions like IITs, IISC etc., in India
- Bidding Firm offering the product should submit list of supplies made by it, during last two years with complete contact details of the end users such as phone number, fax number, e-mail ID etc. It should submit copies of order placed by such organizations and user certificates for goods of same/similar nature.
- Bidding Firm offering the Product should have a Local Service Support Facility,
 preferably in Hyderabad, and should submit address and contact details
- Bidding Firm should give an Undertaking that, un interrupted service support will be given for a minimum period of 10 years with unbroken availability of spares supply.
- Bidding Firm should give an undertaking that, the Software upgrades if any, during the warranty period of three year, should be supplied free of charge
- Bidding Firm should offer pre-dispatch inspection free of charge at their factory premises for 2 users for 3 days and post installation training at our three laboratories in different campuses to 2 users for 5 days.

NOTE

A complete set of bidding documents may be purchased by interested bidders from the RGUKT contact person upon payment of the bid document price which is non-refundable. Payment of bid document price should be by demand draft / cashier's cheque or certified cheque drawn in favor of "Registrar, Rajiv Gandhi University of Knowledge Technologies" and payable at Hyderabad (India).