Dr.N.R.Patra,
No.: CE/GTE/NRP/2011
Professor-in-charge
Dated: 18 Nov, 2011

email: nrpatra@iitk.ac.in

Enquiry no. **CE/GTE/NRP/2011 dt 17.11.2011 Closing Date : 30 November 2011** 

Subject: Supply of equipments for Geotechnical Engg Lab.

Dear Sirs,

We intend purchasing under listed equipment for our laboratory.

- 1. 12 Channel strain indicator with data acquisition System
- 2. 12 Channel Pressure indicator with data acquisition System
- 3. 12 Channel Displacement indicator with data acquisition System
- 4. Automated Triaxial Set up for soil at low confining pressure

A fully Automated and Computer controlled Triaxial Shear Test Apparatus should be enable performing of Triaxial tests on unsaturated soil and saturated soil conforming to requirement of IS-2720 (Part-XII) and BS-1377 standards with all the modules namely Load Frame, Confining Pressure System and Back Pressure System (totally controlled by the dedicated computer). Also, parameters such as Load, Displacement, Confining Pressure, Back Pressure, Pore Pressure and Volume Change should be measured through the computer. Once the specimen is assembled in the Triaxial cell, required parameters like Strain Rate, Confining Pressure and Back Pressure should be programmed through the computer. Controlling and data acquisition is supported by user friendly window based software.

It should be suitable for testing of saturated / unsaturated with low confining pressure soils.

- i. Shear in UC, UU, CU, CUBar & CD Tests
- ii. Stress Path Triaxial Test
- iii. K<sub>0</sub> consolidation and swelling test

## 5. Automated Triaxial Set up for unsaturated soil

A fully Automated and Computer controlled Triaxial Shear Test Apparatus should be enable performing of Triaxial tests on unsaturated soil and saturated soil conforming to requirement of IS-2720 (Part-XII) and BS-1377 standards with all the modules namely Load Frame, Confining Pressure System and Back Pressure System (totally controlled by the dedicated computer). Also, parameters such as Load, Displacement, Confining Pressure, Back Pressure, Pore Pressure and Volume Change should be measured through the computer. Once the specimen is assembled in the Triaxial cell, required parameters like Strain Rate, Confining Pressure and Back Pressure should be programmed through the

computer. Controlling and data acquisition is supported by user friendly window based software.

It should be suitable to perform tests under the following conditions:

Suitable for testing of unsaturated soils.

- i. Shear in UC, UU, CU, CUBar & CD Tests
- ii. Stress Path Triaxial Test
- iii. K<sub>0</sub> consolidation and swelling test

Kindly arrange to send the quotation(s) with detailed specifications of the item in a sealed envelope to the following address so as to reach to the undersignd on or before the closing date of enquiry. The quotation should have a validity of minimum 60 days. Offer for the above instruments should include provision of AMC for atleast 5 years and cost of the same should be shown separately alongwith the price of the machine/equipment. The undersigned reserves the right to accept the offer in part or full or reject without assigning any reason.

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Thanking you,

Sincerely

[N.R.PATRA]