

Enquiry No: ChE/AS/Oct/03 Dated: October 24, 2011

Last date: October 29, 2011

Dear Sir/Madam:

Quotations are invited for purchase of Laboratory Hydrogen atmosphere Programmable high temperature Reactor System having following specifications:

**Specifications:**

Consisting of a completely leak proof one end closed Reactor made of Inconel alloy-600 material having ID 100mm, OD 114mm and length 600mm. Provided with required flange with perfect tightening arrangement and high temperature sealing gaskets and hydrogen gas inlet of Inconel Pipe upto the depth of reactor and exhaust system also to burn it at the exhaust of flange. An exhaust Nozzle with needle valve to be provided in the flange. An Inconel Pipe of one end closed for insertion of additional thermocouple of length 450mm should be provided. The reactor should be divided in two parts by Inconel Sheet partitions to have two platforms of 3"x 20" size. The front Flange should also provided with a Adjustable Door with rectangular Opening of size 3"x 3/4" for insertion of sample on Inconel tray. The Front side of Reactor should also be provided with cooling arrangement of air cooling and water cooling. Inner Chamber having constant temperature heating zone of 150mm from the back wall. A Suitable Rod with insulated handle should also be provided for keeping and taking out the samples . The Reactor should also be provided with a constant temperature heating zone of 6" to 8" from the bottom , by conjunction with a High temperature Programmable Furnace to have temperature range upto 1100°C . The furnace should be perfectly insulated and with required arrangement to hold the reactor and capable to have at least 16 steps to perform ramp and soak action. The System shall also be supplied with an Electric Chimney having base suction size of 24"x18" with 6 feet length exhaust pipe to connect the same to exhaust system of A.C. Room. The Chimney shall be provided with all required mounting attachments to mount on the furnace top,

**Terms & Conditions:**

1. Only those vendor need to apply who had supplied at least 2 furnaces at IIT Kanpur within last six months. Kindly attach name of concerned person, department and email address with PO number and date.
2. Prices should be FOR IIT Kanpur including installation and training.
3. Warranty should at least be for three years after installation.
4. Validity of quotation should be at least for 60 days

Kindly send your best offer (Technical & Commercial) so as to reach us on or before October 28, 2011 to the following address-

Prof. Ashutosh Sharma  
DST Unit on Nanosciences, Department of Chemical Engineering  
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India