



**JORHAT INSTITUTE OF SCIENCE AND TECHNOLOGY**  
DEPARTMENT OF MECHANICAL ENGINEERING  
P.O. CHENLIAN, SOTAL, JORHAT-785010 (ASSAM)

**REQUISITION FORM FOR TEQIP-III (COLLABORATIVE RESEARCH PROJECT) PURCHASE**

SL No: JIST/TEQIP-III/CR/2019/2578/MEC-402

Name: Mr. Nayanjoti Talukdar (Principal Investigator)

Title of the Project: "Non-Thermal Plasma Process Technology for Development of Si Photovoltaics"  
[Ref.: ASTU/TEQIP-III/Collaborative Research/2019/2578, Dated: 18.07.2019]

Sl. No	Description of Items	Quantity	Specification/Details (Separate Sheet may be attached if needed)	Justification/Purpose	Issue (to be filled by Store)
1	Argon Gas Cylinder	1 Nos	<b>Cylinder Specification:</b> Cylinder material: Good quality SS, Cylinder Height (W/O Valve): 1370 mm, Cylinder Outer Diameter: 232 mm approx., Wall Thickness: ~5.5 mm <b>Argon Gas quality:</b> Purity: 99.999%, Used for research work in laboratory	It is a gas cylinder consisting of Argon gas. Argon gas has numerous applications in diverse fields. To generate the Argon plasma for different industrial application, the high purity gas is required.	
2	Hydrogen Gas Cylinder	1 Nos	<b>Cylinder Specification:</b> Cylinder material: Good quality SS, Cylinder Height (W/O Valve): 1370 mm, Cylinder Outer Diameter: 232 mm approx., Wall Thickness: ~5.5 mm, <b>Hydrogen Gas quality:</b> Purity: 99.999%, Used for research work in laboratory	It is a gas cylinder consisting of Hydrogen gas. Hydrogen gas has numerous applications in diverse fields. To generate the Hydrogen plasma for different industrial application, the high purity gas is required.	
3	Double Stage Regulator for Argon Gas	1 Nos	<b>Features:</b> Body materials: Copper/Stainless steel Product Type: Double Stage Regulators Inlet Pressure: Max: 300 Bar Outlet Pressure: Max: 10 Bar Flow: Max: 1000 L/min	It is used to release the gas to the experimental chamber from the gas cylinder.	
4	Double Stage Regulator for Hydrogen Gas	1 Nos	<b>Body materials:</b> Copper/Stainless steel <b>Product Type:</b> Double Stage Regulators Maximum Flow 1000 l/min Maximum Delivery Pressure: 10 bar Maximum Inlet Pressure: 230 bar	It is used to release the gas to the experimental chamber from the gas cylinder.	

Indenter: *Nayanjoti Talukdar*  
Date: *10/08/2020*  
Assistant Professor

Verified by: *Prudh Seka*  
*10/08/2020*

Signature of Issuing Authority: *[Signature]*  
Date: *10/08/2020*  
Principal  
Jorhat Institute of Science & Technology  
Jorhat-10

**Annexure I**

**Technical Specification of Hydrogen and Argon Gas Cylinder**

Hydrogen Gas Cylinder	1 Nos	<b>Cylinder Specification:</b> Cylinder material: Good quality SS, Cylinder Height (W/O Valve): 1370 mm, Cylinder Outer Diameter: 232 mm approx., Wall Thickness: ~5.5 mm, Water Capacity of Cylinder: 46.7 Ltrs (Gas Capacity 7 CuM), Max. Working Pressure: 150 kgf/cm <sup>2</sup> , Weight of Cylinder: 54 kg (approx.), Cylinder Base: concave, Painting/Color Code: As per gas cylinder rule 2004. <b>Hydrogen Gas quality:</b> Purity: 99.999%, Used for research work in laboratory
Argon Gas Cylinder	1 Nos	<b>Cylinder Specification:</b> Cylinder material: Good quality SS, Cylinder Height (W/O Valve): 1370 mm, Cylinder Outer Diameter: 232 mm approx., Wall Thickness: ~5.5 mm, Water Capacity of Cylinder: 46.7 Ltrs (Gas Capacity 7 CuM), Max. Working Pressure: 150 kgf/cm <sup>2</sup> , Weight of Cylinder: 54 kg (approx.), Cylinder Base: concave, Painting/Color Code: As per gas cylinder rule 2004. <b>Argon Gas quality:</b> Purity: 99.999%, Used for research work in laboratory
Double Stage Regulator for Nitrogen Gas	1 Nos	<b>Features:</b> Stainless Steel Diaphragm in 1st stage - can withstand stock of full cylinder pressure Neoprene valve in 2nd stage- Gives flexibility and better pressure regulation Body materials: Copper/Stainless steel Product Type: Double Stage Regulators Inlet Pressure: Max: 300 Bar Outlet Pressure: Max: 10 Bar Flow: Max: 1000 L/min
Double Stage Regulator for Oxygen Gas	1 Nos	Stainless Steel Diaphragm in 1st stage - can withstand stock of full cylinder pressure Neoprene valve in 2nd stage- Gives flexibility and better pressure regulation Body materials: Copper/Stainless steel Product Type: Double Stage Regulators Maximum Flow 1000 l/min Maximum Delivery Pressure: 10 bar Maximum Inlet Pressure: 230 bar

*[Signature]*  
Principal  
Jorhat Institute of Science & Technology  
Jorhat-10

### **Terms and Conditions:**

The vendor is required to bid for Argon and Hydrogen Gas cylinder as prescribed in the requisition form. A duly signed sealed quotation super scribing with “**QUOTATION FOR SUPPLY OF Argon and Hydrogen Gas cylinder** against **SI NO. JIST/TEQIP-III/CR/2019/2578/MECH-402**” due on 25.08.2020, 4.30 PM.

1. should send in a single sealed envelope containing the both technical details and budget.
2. Delivery: 01-02 weeks after receiving purchase order.
3. Payment: 100% against delivery
4. Validity of the quotation: At least 55 days
5. Warranty: At least 12 months from the date of delivery
6. Address to send the quotation:

**To  
The Principal,  
Jorhat Institute Of Science And Technology,  
Sotai, Jorhat-10, Assam**

**Or**

**By Email : go4nayan@gmail.com**

7. Address to Deliver the material:

**To,  
The META Laboratory,  
Assam Science and Technology University,  
Tetelia Road, Near Assam Engineering College,  
Jalukbari, Guwahati, Assam 781013  
+919101676970 (M)**

8. Last date of submission: On or before 25/08/2020 at 4.30 PM
9. Date of tender opening: On 27/08/2020 at 3.00 PM