

MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

| | |
|------------------------------|--|
| Scouting Number | 2024-342 |
| Item to be Scouted | Metalorganic Chemical Vapor Deposition (MOCVD) System |
| Days to be scouted | 15 |
| Response Due By | 11/22/2024 |
| Description | <p>Metal Organic Chemical Vapor Deposition (MOCVD) system with multi-layer growth capability with 3-2-inch and 1-4 inch wafer. Deposition temperatures up to 1400C. Tri-flow system capability with three laminar layer gas nozzles to avoid adduct formation in AIN growth. AIN growth rate of more than 6 micrometers/hour at 1400C. Growth pressure from 10 kPa to 100 kPa. Insitu gas concentration monitor.</p> <p>The University of SC is in desperate need of this specific machine, but they are unable to purchase it until a domestic competitive search is completed.</p> |
| Notify Requester Immediately | Yes |
| State item to be used in | South Carolina |

Section 2: Technical Information

| | |
|---|--|
| Type of supplier being sought | Manufacturer |
| Reason | BABA |
| Describe the manufacturing processes (elaborate to provide as much detail as possible) | Electronic Assembly / Mechanical Assembly |
| Provide dimensions / size / tolerances / performance specifications for the item | <p>Metal Organic Chemical Vapor Deposition (MOCVD) system with multi-layer growth capability with 3-2-inch and 1-4 inch wafer. Deposition temperatures up to 1400C. Tri-flow system capability with three laminar layer gas nozzles to avoid adduct formation in AIN growth. AIN growth rate of more than 6 micrometers/hour at 1400C. Growth pressure from 10 kPa to 100 kPa. Insitu gas concentration monitor.</p> <p>The machine's footprint is roughly 32 ft long x 8 ft deep x 10 ft high.</p> <p>This is an electromechanical machine capable for producing chemical vapor deposition coatings at relatively high temperature. Performance and specifications must match MOCVD system produced by Kanematsu. Model number SR4339KS-HT.</p> |
| List required materials needed to make the product, including materials of product components | mechanical components, electrical components, electronic components, sensors, motors, computerized controller, heating elements. |
| Are there applicable certification requirements? | No |
| Are there applicable regulations? | No |
| Are there any other standards, requirements, etc.? | No |
| NAICS 1 | 334516 Analytical laboratory instrument manufacturing |
| NAICS 2 | 339999 All other miscellaneous manufacturing |
| Additional Technical Comments | Must match performance and specifications of Kanematsu MOCVD system. Model number SR4339KS-HT. |

Section 4: Business Information

| | |
|---|--|
| Estimated potential business volume | 1 unit, one-time purchase |
| Estimated target price / unit cost information (if unavailable explain) | \$1,988,800.00 |
| When is it needed by? | 12/1/24 |
| Describe packaging requirements | fixed inside wooden crate. Miscellaneous parts shipped in separate wooden crate. |
| Where will this item be shipped? | Columbia, SC University of South Carolina |

Additional Comments

| | |
|---|---|
| Is there other information you would like to include? | For all BABA related questions please contact: Rose Delaney Grants Management Specialist rose.delaney@nist.gov |
|---|---|