



**San José State**  
UNIVERSITY  
FOUNDATION

**Position: Chief Engineer/Research Vessel POINT SUR**

**DEPARTMENT:** Moss Landing Marine Labs/Marine Operations  
**IMMEDIATE SUPERVISOR:** Master Research Vessel POINT SUR  
**POSTING DATE:** June 27, 2008  
**CLOSING DATE:** Open Until Filled  
**SALARY:** commensurate with experience  
**EXEMPT STATUS:** Nonexempt

---

**GENERAL NATURE OF POSITION:**

Responsible for the operation and maintenance of the propulsion engines and auxiliary equipment of a vessel engaged in oceanographic research. The POINT SUR is a 296 GRT, 473 GT ITC, un-inspected Oceanographic Research Vessel.

---

**ESSENTIAL DUTIES & RESPONSIBILITIES:**

1. Operate, repair and maintain main engines and auxiliaries, water pumps, air compressors, electric motors and other electrical gear, refrigeration plants, other deck and engine room machinery including hydraulics, deck winches, capstans and water makers. Responsible for decisions relating to whether a piece of machinery can safely remain in service or must be removed from service for maintenance or repair. Utilize available resources to handle breakdown and repairs so the vessel can maintain its mission and schedule. Able to distinguish between safe, expeditious solutions and ideal solution and act appropriately. Stand watch as engineer on duty.
2. Supervise and train assistant and crew in operation, repair and maintenance of equipment.
3. Engineering duties are primary, however, applicant must be able to assist deck department in the use of deck cranes and frames.
4. Order parts, spares, fuels and oils, etc. within specified budget.
5. Responsible for keeping the Captain advised regarding the material status of the vessel and assigned equipment, and the daily status of fuel, lube oil and water.
6. Serves as damage control officer of the ship.
7. Other related duties as assigned such as working with the science party while on watch operating ship's cranes and frames, loading stores and assisting with various deck operations.

8. Maintain the ship in accordance with specifications set forth by the National Science Foundation (NSF) and the American Bureau of Shipping (ABS).
  9. Plan and execute all preventive maintenance, voyage and emergency repairs to the vessel.
  10. Provide the Marine Superintendent with annual and long-range budgetary estimates on keeping the ship's hull and machinery in first class condition and to meet all regulatory requirements. These budgets are for inclusion in the annual operating budget and reports required by the NSF Cooperative Agreement.
  11. Assist the Captain and Marine Superintendent with the preparation of shipyard job specifications.
  12. Maintain accurate maintenance records of ships machinery in digital format (computerized maintenance program) and follow necessary procedures to maintain or overhaul said machinery.
  13. Assist the Marine Superintendent with special projects as directed.
- 

#### **INTERPERSONAL CONTACTS:**

- Reports directly to the Master. Keeps the Master and Marine Superintendent informed regarding the materials status of the engineering plant.
  - Coordinates with shore support staff in order to obtain parts, services and equipment necessary for the execution of assigned duties.
  - Supervises the assistant engineer.
  - Interacts with the crew and scientific party, providing assistance and advice on the proper use and care of equipment on board the research vessel.
- 

#### **QUALIFICATIONS:**

##### **1) Education and Experience**

- Three years engineering experience on a sea-going vessel with diesel propulsion plant greater than 500 horsepower or equivalent. A United States Coast Guard issued engineering license is highly desirable.

##### **2) Knowledge, Skills and Abilities required**

- Knowledge of Diesel Engines and propulsions systems, specific knowledge of Caterpillar systems preferred. Knowledge of auxiliary systems such as electrical motors, electrical circuits and power distribution, hydraulic, water and sewage.
- Ability to interpret ship's plans and prints, draw engineering plans and prepare job orders. Demonstrated ability to use hand tools, small machine tools and electrical test equipment.
- Good communication skills.
- Ability to plan projects, assign priorities, resolve problems and to work with out supervision.
- Ability to supervise others.

##### **3) Environmental Conditions**

- At sea this job consists of usually standing a 12 hour watch, usually six hours on and six hours off around the clock. The crew is on call 24 hours a day for emergencies or other than normal operating conditions. Voyages can be up to 21 days at sea at a time and can be for longer periods away from homeport with logistic stops in other ports. Between 140 and 220 days a year can be at sea. Conditions at sea can include rough seas, violent motion of the vessel, excess heat or cold,

and exposure to all kinds of weather. Duties in the engine room are in an area of high noise, high heat and some crowded spaces. Many times work takes place in the vicinity of operating machinery. Must be able to lift moderate weights at sea and in port.

- In port the working hours are the normal 8 to 5, forty-hour week.
- Employee will be subject to the DOT/USCG drug and alcohol testing

**4) Machines and Equipments**

- Two Caterpillar D379 turbo charged diesel engines at 565 horsepower each, two Pay and Brink reduction gears and controllable pitch propeller systems, two Caterpillar D3406 Auxiliaries with 175 KW Kato generators, six hydraulic power packages to 150 HP, Several salt water and fresh water pumps, reverse osmosis water makers, refrigeration units, air compressors, fuel oil purifier, oil and diesel pumps, sewage system, arc welder, oxy/acetylene torch, hand and power tools.

For more information about Moss Landing Marine Laboratories and the R/V Point Sur please visit our website at; <http://marineops.mlml.calstate.edu/> or call the Marine Superintendent at (831) 771-4134. This position description intends to describe the general nature and level of work being performed by people assigned to this job. It is not intended to include all duties and responsibilities. The order in which duties and responsibilities are listed is not significant.

---

**APPLICATION PROCEDURES:**

To apply for this position, you may submit a letter of interest and a resume or an application. An application and other information may be obtained from the Foundation Human Resources Department, through the Foundation's web site at <http://www.sjsu.edu/depts/Foundation/homepage.html>, or in person by visiting the Foundation, located at 210 N. 4<sup>th</sup> St., (corner of St. James and 4<sup>th</sup> Streets). (An application will be required for those interviewed.)

**San Jose State University Research Foundation**  
210 N. Fourth St.  
San Jose, CA 95112  
E-mail: [jobs@foundation.sjsu.edu](mailto:jobs@foundation.sjsu.edu)

The San Jose State University Research Foundation is one of the oldest nonprofit Corporations in the California State University System. The general purpose of the Foundation is to advance the welfare of the University, assist it in fulfilling its objectives, supplement the programs and activities of the University in appropriate ways, promote and assist its educational services, and otherwise aid and assist the University in fulfilling its purposes and in serving the people of the State of California, especially those of the area in which the University is located. These purposes are compatible with the legal framework established within the California State University System.

**Foundation employment is separate and distinct from San Jose State University or State of California employment.**

---

**SAN JOSE STATE UNIVERSITY RESEARCH FOUNDATION**

**The San Jose State University Research Foundation is an Equal Opportunity Employer and does not discriminate on the basis of race, religion, color, sex, age, national origin or disability.**

**408-924-1460  
TDD/408-924-1424**