SSSG - Marine Technician
Research Scientist/Engineer 2

The University of Washington's School of Oceanography (SoO) operates two research vessels, the R/V *Thomas G. Thompson* and R/V *Rachel Carson*. The Shipboard Science Support Group (SSSG) provides logistical support within SoO's Marine Operations to enable industry and academic users of our research vessels and shore-based facilities to successfully and safely carry out their planned missions and objectives. Individuals in SSSG work cooperatively with ship operators, ship users, co-workers, and vendors to maintain a high level of services and specialized scientific and technical assistance to the oceanographic community both on shore and at sea.

The University of Washington is currently seeking a qualified motivated individual with technical and practical skills in ocean sciences to join our sea-going team of technicians in support of the SoO's scientific and educational cruises. The role includes frequent periods worked at sea, up to half the year between the two research vessels. Those hired will also work shoreside to provide logistical support for current and future cruises, work long periods in shipyard, as well as seek to develop personal knowledge with the goal of keeping SSSG current in technological advances and trends in oceanographic research.

All SSSG personnel must have the capacity for both working as part of a team in a high energy group environment, where communication and listening both are critical to success, and working alone for extended periods while retaining the ability to remain self directed. Personnel are expected to cultivate positive and welcoming shipboard culture and uphold the University of Washington's inclusivity work where diverse perspectives are recognized, respected, and seen as a source of strength.

Computer Network Management:
Members of SSSG are expected to have the knowledge and skills to understand and manage the shipboard computer networks on the R/V Thompson and R/V Carson including:

- Manage shipboard computer Linux-based data servers and individual networked acquisition computers running Linux, Windows 10, and Mac OS operating systems.
- Network administration expertise and strong working knowledge of VLANs are preferred.
- Ensure that this system is optimally configured and maintained for the science mission, including preserving the integrity of cruise data and shipboard communications systems.
- Develop procedures to provide redundancy of functions for system components, document the procedures, and provide training and direction within SSSG to elucidate network architecture, functionality, and procedures.

Basic Job Duties:

All personnel within the group are expected to perform the following tasks while at sea:
- Stand regular watches (typically 12 hours per day); perform duties of scientific data collection and archiving; and assist with deployment and recovery of scientific equipment as required to meet the objectives of each expedition
- Assist the Master of the vessel to maintain compliance with ship, deck, and lab safety procedures and with proper storage and use of scientific hazardous materials and radioisotope materials brought onboard by vessel users
- Operate, monitor, and maintain shipboard scientific instruments and associated software, shipboard navigation and communications systems, and GPS receivers
- Provide weekly and final cruise summary reports for each expedition, detailing successes and deficiencies in meeting objectives and the status of on board equipment and instruments
- Plan and implement upgrades, as well as document procedures and configurations.

All personnel within the group are expected to perform the following tasks while on shore:
- Provide logistical support within SSSG, including order and ship equipment or repair parts and supplies to ports of call
- Provide technical support to shipboard personnel via e-mail or phone consultations
- Inform SSSG Manager of equipment status and assist in ongoing efforts to schedule and document required repairs, upgrades, and associated tasks
- Work with manufacturers to ensure maintenance, repairs, and calibrations of instruments and equipment
- Contribute ideas to improve efficiency and function of SSSG.
- Interact with ship users and operators to determine best procedures to accomplish planned work safely.
- Participate in pre-cruise conferences to identify and schedule the acquisition of specialized equipment to support expedition objectives.
- Maintain pooled oceanographic instrumentation and equipment in safe working condition.
- Work collaboratively with other marine operations personnel to plan, schedule, and accomplish individual mobilization and demobilization tasks during vessel in port periods (both in Seattle and in other ports), and participate in the planning for shipboard scientific system maintenance, repairs and upgrades.
- Participate during drydock and shipyard work periods.
- Participate in vendor, UNOLS (University National Oceanographic Laboratory System) or NSF-sponsored training opportunities to achieve standards of performance expected fleet wide.
- As schedule permits, attend annual meetings of the UNOLS Research Vessel Technical Enhancement Committee (RVTEC) to exchange information with

personnel from other institutions to identify best practices and to resolve common problems.

Other Skills
In addition to the basic duties required of all personnel, members of SSSG are expected to develop individual expertise in emerging areas of oceanographic research in order to contribute ideas, develop procedures for carrying out shipboard research, interpret data quality, and collaborate on presenting research results. They are encouraged to identify and pursue necessary training opportunities to increase knowledge and skills in ways that benefit SSSG and Marine Operations activities and goals and that contribute to the academic and research missions of the School of Oceanography.

Data Acquisition Systems. Participate, in consultation with other members of SSSG team, vessel users, and vendors in operation/maintenance/upgrades of software and hardware that comprise the suite of mechanical, electronic, and computer-controlled instruments in shipboard data collection, routing, and archiving systems (e.g., Knudsen depth sounder and sub-bottom profiler, Seabird CTD, Kongsberg EM 302 swath bathymetry system, Applanix POS/MV, meteorological and navigational sensors, and vessel-mounted Teledyne/RDI Acoustic Doppler Current Profilers).

Sampling and Measurement Systems. Participate, in consultation with other members of SSSG team, vessel users, and vendors in the maintenance of mechanical and electronic components of sampling and measurement devices. Develop expertise in the use of acoustical systems and other scientific instrumentation for ship-based observations (e.g., Guildline AutoSal, Metrohm Dosimat titrators, chlorophyll fluorometers).

Data Archiving. Participate in UNOLS fleet wide R2R (rolling deck to repository) data archiving initiative and related efforts; implement best practices and standard procedures on our vessels; develop, maintain, and upgrade software to archive raw, derived, and meta data and to process, edit, and plot data for quality control and scientific inspection at sea.

Education. Interact with faculty, students, and research scientists to train and mentor them in standard and novel approaches to shipboard oceanographic instrumentation, data collection and interpretation; become a resource within the School of Oceanography who contribute to local NSF-required broader impacts efforts to explain the significance of the research conducted on our vessels.

Additional related duties are to be performed as required.

Education: Bachelor’s degree in a field related to oceanography or engineering or extensive practical experience; other degrees in other disciplines as well as prior experience in a seagoing technical position directly related to oceanographic field

studies will be considered, including operation and maintenance of standard shipboard scientific instruments; excellent written and verbal skills; ability to work under and meet short deadlines; and demonstrated ability to work safely and effectively at sea in adverse weather and conditions.

Experience: 2-5 years of experience preferred depending on the applicant's education and related work experience.

Conditions of Employment:
Must have the ability to obtain a valid passport and valid driver’s license.
Must provide references who are able to speak to relevant job qualifications and experience.
Employees will be required to participate in research cruises at sea for extended periods of time.