



Vacancy: OTN Technician

The Ocean Tracking Network (OTN) is a Canada Foundation for Innovation (CFI) - International Joint Ventures Fund global research and technology development project headquartered at Dalhousie University, Halifax, Nova Scotia. Starting in 2008, the OTN began deploying Canadian state-of-the-art acoustic receivers and oceanographic monitoring equipment in key ocean locations. These are being used to document the movements and survival of marine animals carrying acoustic tags (“pingers”), and to document how both are influenced by oceanographic conditions. In support of our collaborators research objectives, OTN deployments will occur in all of the world’s five oceans, and span seven continents. The species tracked include marine mammals, sea turtles, squid, and fishes including sharks, sturgeon, eels, tuna, salmon, and cod.

Working on the OTN Technical team, the OTN technician will be responsible for the preparation, deployment, maintenance and data retrieval of acoustic receivers and oceanographic monitoring equipment. The position requires extensive national and international travel, ranging from tropical to arctic conditions, and extended periods of time at sea in various conditions. The individual must be able to work independently, and also be a good team player. The OTN technician will work in physically challenging environments, think on the fly and adapt to changing conditions in the field. More specifically, the OTN technician will be responsible for:

- Leading field missions from start to finish on behalf of OTN, from reviewing applications, liaising with partners, securing equipment, shipping, scheduling of deployment through to incorporating data into the data warehouse. This will require:
 - Understanding all aspects of acoustic telemetry technologies, including how the different elements (receivers, releases and tags) integrate and communicate with one another.
 - Identifying equipment purchase needs, obtaining quotes from manufacturers, and assisting in preparing purchase requisitions for required equipment.
 - Preparing acoustic telemetry receivers, acoustic releases and oceanographic equipment for underwater deployments.
 - Designing mooring systems (based on regional conditions) to ensure safe and effective retrieval of acoustic receivers and oceanographic systems.
 - Recording information pertinent to deployments (e.g. station location) and providing input back to the OTN data management team.
 - Retrieving and refurbishing equipment (i.e. battery replacement, removal of bio-fouling).
 - Retrieving data from acoustic receivers and oceanographic monitoring equipment.
 - Preparation of travel and mission reports for deployments undertaken.

- Assisting the OTN Data management team and collaborators with management of the data collected in the field.
- Liaising with suppliers to help resolve issues, equipment malfunctions and coordinate delivery schedules.
- Provide logistical and field support to OTN partners, review proposed project plans and provide recommendations.
- Keeping abreast of new developments in acoustic telemetry and oceanographic technologies
- Investigating and recommending new methods/materials for improving deployment and/or the performance of deployed equipment
- In collaboration with partners, interpreting bathymetry and other data to select most appropriate underwater placement of OTN equipment (i.e. acoustic array design).
- Incorporate novel ideas, suggestions and methods from OTN partners into OTN procedures.
- In collaboration with industrial and scientific partners, conducting field tests of prototypes of new equipment and software.
- Answering queries from, and working with, collaborators to assist in the design and location of their acoustic arrays.
- Mentoring collaborators on mooring design, deployment, refurbishment and data retrieval.
- Packaging and preparing equipment for shipment to international locations.
- Assisting with the operation and maintenance of the project's Slocum electric glider and Liquid Robotics wave glider autonomous vehicles.
- Reporting status to OTN Technical Lead and OTN Senior Project Manager on a regular basis.
- Representing OTN during collaborations with OTN partners.
- Assisting with maintaining OTN Data Policy, Templates and Workflow documentation to ensure ongoing compliance with OTN data quality procedures and data policies
- Assisting with developing templates and procedures in collaboration with OTN database developers to facilitate data and metadata acquisition in accordance with OTN data policies and standards
- Assisting with quality control of data and metadata submitted by OTN funded collaborators in accordance with OTN data standards
- Maintains electronic and physical inventory of equipment and fungibles required to support OTN field operations
- Assisting with maintenance of OTN project equipment allocation records in support of OTN reporting purposes

The following skills would be considered an asset:

- Working knowledge of acoustic telemetry technologies;
- Working knowledge of CTDs, temperature and tilt loggers;
- Understanding of acoustic and satellite tagging technologies;
- Experience in handling small boats, including inflatables;
- Advanced SCUBA diver's certificate;

- Forklift operations;
- Marine First Aid and Marine Emergency Duties;
- Experience with hand tools;
- Boat trailer operations;
- Data management or processing experience
- Working knowledge of Microsoft Office suite of products.

Candidates must possess the following:

- Valid Driver's license;
- Experience and the ability to work at sea on small boats in rough conditions.

Please apply with a resume and cover letter to otn@dal.ca. This is a term position available immediately and continuing until March 31st, 2017.