

Research Scientist & Technical Support Specialist

Employed by:	SMRU Consulting (wholly owned subsidiary of University of St Andrews)
Location:	Scottish Oceans Institute, St Andrews
Contract:	Full-time, Permanent
Responsible to:	Head of SMRU Instrumentation

About SMRU and SMRU Instrumentation

The Sea Mammal Research Unit (SMRU), located within the School of Biology and the Scottish Oceans Institute at the University of St Andrews, is a world-leading research group specialising in the biology of marine mammals. SMRU delivers world-class research and provides independent scientific advice and expertise relating to marine mammals globally, through active membership of international organisations including IUCN, ICES, and IWC, and through membership of governmental expert review panels.

The SMRU Instrumentation Group (SMRU-IG) designs, builds, and sells data logging and telemetry equipment used to study the biology and ecology of marine animals. With over thirty years of experience working on collaborative ventures between marine scientists and systems engineers, SMRU-IG ensures that maximum scientific value is derived from each dataset collected.

SMRU-IG is at an exciting stage in its development, transitioning to a next generation of devices and expanding its collaborations across the global research community. The Research Scientist & Technical Support position is a new post created to strengthen the interface between SMRU-IG's engineering capability and its scientific user base.

Role Summary

The Research Scientist is a specialist post combining scientific expertise in marine animal telemetry with a central role in supporting SMRU-IG's customer base and ensuring the quality and value of data collected by deployed instruments. The postholder is the primary point of contact for tag users, managing customer relationships from initial order through to deployment support and publication. They monitor data quality across active deployments, develop analysis protocols and tools, contribute to research outputs, and represent SMRU-IG at conferences and within the wider telemetry and biologging community.

The postholder works closely with the Head of SMRU Instrumentation, who leads the strategic direction of SMRU-IG, acts as the interface between the engineering team and the research community on sensor and technology development, and drives the group's long-term research and commercial strategy. The Research Scientist complements this by providing the day-to-day scientific and customer support that ensures SMRU-IG's users receive excellent service and derive maximum value from their instruments.

Key Responsibilities

1. Data Quality Monitoring & Analysis Support

- Monitor data from active and recent tag deployments, identifying anomalies, quality issues, or unexpected patterns that may indicate instrument faults, deployment problems, or data processing errors, and escalating findings to the Head of SMRU Instrumentation and the Development Team as appropriate.
- Develop, document, and maintain data analysis protocols and workflows that enable end-users to process, interpret, and present data from SMRU-IG tags.
- Provide expert advice and guidance to end-users on data analysis, processing, and interpretation.
- Develop and maintain statistical routines, vignettes, and software tools to support data analysis and interpretation, and provide user support for SMRU-IG visualisation tools including MamVisAD.
- Track current and recent tag deployments, gathering structured feedback from end-users on instrument reliability, data quality, and functionality, and providing regular summaries to the Production and Development teams to inform continuous improvement.
- In collaboration with the Development Team, contribute to the investigation and analysis of data from faulty or underperforming instruments, helping to determine cause and identify solutions.

2. Customer Relationship Management & Order Administration

- Serve as the primary day-to-day point of contact for tag users, managing relationships from initial enquiry through deployment planning, in-field support, data assistance, and post-deployment follow-up.
- Work collaboratively with new and existing customers to understand their research objectives and ensure that SMRU-IG instrumentation is matched effectively to their scientific needs. Providing advice and input to support customers in future funding proposals.
- Coordinate the management of incoming orders, ensuring that customer requirements are accurately captured, communicated to the production team, and tracked through to delivery. This includes raising and managing sales invoices and maintaining accurate order records in line with the University's financial and administrative procedures.
- Maintain clear and accurate records of customer interactions, order status, deployment outcomes, and associated financial transactions, providing regular reporting to the Head of SMRU Instrumentation as required.
- Respond promptly and constructively to customer queries, data support requests, and post-deployment feedback, maintaining SMRU-IG's reputation for scientific excellence and customer service.

3. Research, Publication & Scholarly Activity

- Maintain an active research profile in the field of biotelemetry, contributing to the scientific reputation of SMRU-IG through publication, conference presentations, and engagement with the research community.
- Assist end-users with preparation of data for publication, including statistical analysis, visualisation, and presentation, and contribute as co-author to resulting publications where appropriate.
- Identify and develop opportunities for collaborative research involving SMRU-IG instrumentation and data, contributing to projects that raise the scientific profile of the group.
- Identify and pursue areas of personal research interest within biologging and biotelemetry where SMRU-IG instrumentation and data offer distinctive opportunities for scientific contribution.

- Undertake continuing professional development on a routine basis, keeping abreast of developments in marine science/oceanography, telemetry technology, data science, and relevant analytical methods.

4. Community Outreach & Representation

- Represent SMRU-IG at conferences, workshops, and events within the research and biologging community, promoting SMRU tags, presenting research findings, and building relationships with the user community.
- Lead and manage SMRU-IG's social media presence, developing content that communicates the group's work, data tools, and scientific impact to the research community and wider public audiences.
- Document, monitor, and report on the scientific, economic, and policy impact of SMRU-IG tags and the research they enable, contributing to the group's case for continued investment and development.
- Develop and maintain awareness of the wider telemetry and biologging field — including emerging research needs, analytical approaches, and funding landscapes — and feed relevant intelligence back to the Head of SMRU Instrumentation to inform development planning and business strategy.

Knowledge, Qualifications & Experience

Essential

- A PhD in a relevant field, such as marine biology, ecology, zoology, oceanography, or a closely related discipline, with a focus on or substantial involvement in animal telemetry or biologging.
- Demonstrated ability to analyse telemetry datasets and interpret results in the context of animal behaviour and the marine environment.
- Experience developing analysis protocols, statistical routines, or software tools to support data processing and visualisation in a research context.
- A current and broad knowledge of the marine telemetry and biologging research field, including awareness of key research groups, methodologies, and emerging developments.
- Excellent written and verbal communication skills, with the ability to engage effectively with researchers and non-specialist audiences, and to produce high-quality scientific publications and technical documentation.
- Experience building and maintaining collaborative relationships with researchers and other stakeholders across institutions and disciplines.
- Strong organisational skills, with the ability to manage multiple concurrent customer relationships, projects, and associated administrative responsibilities effectively, including order management and invoicing.

Desirable

- Technical or engineering experience relevant to electronic instrumentation, sensor systems, or data acquisition systems.
- Experience with data processing, statistical analysis, or software development in the context of animal-borne sensor data (e.g. R, Python, MATLAB or equivalent).
- Experience of science communication, outreach, or social media management in a research context.
- Experience contributing to funding proposals or grant applications.
- Familiarity with SMRU-IG instrumentation or other commercial telemetry tag systems.
- Experience of fieldwork involving animal capture, handling, or tag deployment.

Personal Skills & Attributes

- A genuine passion for marine research and a strong commitment to maximising the scientific value of telemetry data.
- Excellent interpersonal and communication skills, with the confidence and credibility to engage with researchers across a wide range of disciplines and institutions.
- Strong analytical and problem-solving capability, with a rigorous and attentive approach to data quality and scientific interpretation.
- Proactive and self-motivated, with the ability to identify issues, take initiative, and follow through on customer and research commitments reliably.
- Collaborative and collegial approach, able to work effectively as part of a multidisciplinary team and to support a culture of shared scientific endeavour.
- Highly organised, with the ability to manage competing demands across customer relationships, data support, and research activity without losing attention to detail.
- Receptive to new ideas, technologies, and approaches, and committed to continuous professional development.
- Willingness to travel internationally to conferences and events on a regular basis.

What We Offer

- An interesting and varied role at the intersection of marine science, data analysis, and engineering, working with research teams around the world.
- The opportunity to work with a globally respected research group and to build relationships with leading marine animal researchers.
- Scope to maintain and develop an active research profile and contribute to publications in the field of biologging and biotelemetry.
- Competitive salary commensurate with experience, with associated benefits and flexible working patterns.
- Personal development time, commitment to staff training, and excellent career development opportunities.
- A commitment to staff wellbeing and a supportive, collegiate working environment.
- Global opportunities for collaboration through the wider SMRU network.

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