

POSITION DESCRIPTION

Business Unit	Commercial
Group	Measurement Standards Laboratory (MSL)
Team	Temperature & Light
Reports to	Manager, Temperature & Light
Direct Reports	N/A
Date Prepared	29 June 2017

Role Purpose

As a Research Scientist, you will be involved in the development, maintenance and dissemination of scales relating to humidity relevant to NZ industry and the NZ public.

The Research Scientist's role is:

- to provide a calibration service and disseminate measurement expertise associated with quantities related to humidity throughout New Zealand,
- to support research, and development of measurement capability, in areas related to humidity generation, measurement and control, moisture measurement, and analysis of measurement uncertainty,
- to provide advice and consultancy to the New Zealand measurement infrastructure, to industry generally and to firms that depend on reliable measurement in particular.

About Callaghan Innovation

Callaghan Innovation's purpose is to accelerate the commercialisation of innovation by New Zealand businesses. Our focus is to encourage and support businesses to turn their ideas into new products, services and processes faster, and to connect them to the technical services, talent, markets and funding they need to grow. We work in partnership with New Zealand Trade and Enterprise (NZTE), economic development agencies, industry associations, business incubators, universities, polytechnics, CRIs and the venture capital community.



About Measurement Standards Laboratory of New Zealand (MSL)

The Measurement Standards Laboratory of New Zealand is New Zealand's National Metrology Institute operating within Callaghan Innovation under the Measurement Standards Act 1992. MSL is responsible for maintaining and disseminating the SI units of measurement to New Zealand users by realising and supporting units of measurement of importance to New Zealand and by making them available through calibration services. Technical guidance, consultancy and training are also provided by MSL as key parts of ensuring that measurement results are reliable. MSL's strong research capability allows it to develop novel solutions to measurement problems, particularly those encountered by industry, and it adds to the international credibility of New Zealand's measurement infrastructure.

Key Deliverables

Key Deliverables	Deliverables / Outcomes
Research Skills	<ul style="list-style-type: none"> Support research into new methods for realisation of humidity and into developing scales for moisture measurement and other new measurement capabilities as needs arise.
Technical Skills	<ul style="list-style-type: none"> Provide scientific support for humidity standards. This includes the realisation and development of New Zealand's standards of relative humidity and dew point. Assist in the maintenance of MSL's signatory status of the CIPM Mutual recognition Arrangement (MRA) between National Metrology Institutes: <ul style="list-style-type: none"> Oversee MSL participation in international comparisons of measurement scales. Ensure that MSL maintains IANZ accreditation for humidity calibration services by participating in ongoing review and maintenance of technical procedures and associated instruments. Contribute to the wide range of calibrations, training courses, measurement consultancy and technical guidance provided for industrial and other clients. Participate in technical meetings as required.
Recognition of Callaghan Innovations' "Home Safe Everyday" Policy: Understand that our key Health, Safety and Environment (HSE) goal is that we all go home safe every day, and that everyone shares responsibility for ensuring this happens	<ul style="list-style-type: none"> Be responsible for your own and others' health and safety, by taking appropriate action to deal with work place hazards, accidents and/or incidents in ways that comply with our H&S policies, procedures and systems. Promote healthy and safe behaviour at work.
Policies and procedures	<ul style="list-style-type: none"> Be familiar with, and comply with, all policies and procedures including HSE, records and document management, code of conduct for State Services (SSC), and standards and expectations.

Other duties as may be reasonably assigned to this position in consultation with your manager.

Competencies

Competencies for Everyone		
Action Orientation Taking on new opportunities and tough challenges with a sense of urgency, high energy & enthusiasm	Customer Focus Building strong customer relationships and delivering customer-centric solutions	Collaboration Building partnerships and working collaboratively with others to meet shared objectives

Role-specific Competencies	
Cultivates Innovation Creating new and better ways for Callaghan Innovation to be successful	Nimble Learning Actively learning through experimentation when tackling new problems, using both successes and failures as learning fodder

Role Specific Competencies	
Nimble Learning	<ul style="list-style-type: none"> Learns quickly when facing new situations. Experiments to find new solutions. Takes on the challenge of unfamiliar tasks. Extracts lessons learned from failures and mistakes.
Cultivates Innovation	<ul style="list-style-type: none"> Comes up with useful ideas that are new, better or unique. Introduces new ways of looking at problems. Can take a creative idea and put it into practice. Encourages diverse thinking to promote and nurture innovation.

Person Specification

Experience and Qualifications

- PhD/MSc or equivalent in physics and/or engineering, preferably with research experience.
- Knowledge and experience in experimental physics, including computer control of equipment and associated programming, statistics, mathematics, and modelling.
- Mechanical/optical design skills and experience would be an advantage

Skills and Knowledge

Technical Skills (job specific skills)	<ul style="list-style-type: none"> PhD/MSc or equivalent in physics and/or engineering, preferably with research experience. Knowledge and experience in experimental physics, including computer control of equipment and associated programming, statistics, mathematics, and modelling. Mechanical/optical design skills and experience would be an advantage
Soft Skills	<ul style="list-style-type: none"> Ability to self-manage and use initiative Demonstrated ability to develop effective relationships A demonstrated commitment to the provision of quality services Effective written and verbal communication skills. Thorough and methodical approach to work.
Office Skills	<ul style="list-style-type: none"> Competent in use of Microsoft Office Suite products, particularly Outlook, Word and Excel Knowledge of navigating Sharepoint an advantage



Relationships and Partnerships	<p>Ability to build strong professional relationships / partnerships with a diverse range of stakeholders to deliver outcomes aligned with the organisation vision and strategy.</p> <p>Internal</p> <ul style="list-style-type: none">• Other members of MSL, in particular members of the humidity team.• Manager, Temperature and Light. <p>External</p> <ul style="list-style-type: none">• Users and suppliers of humidity generation and measurement equipment.• Commercial clients.• IANZ accredited laboratories.• IANZ assessors of metrology and calibration laboratories.• The international metrology research community.
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