

**Research Technician, Length & Dimensional Measurement**

## POSITION DESCRIPTION

<b>Business Unit</b>	Commercial
<b>Group</b>	Measurement Standards Laboratory (MSL)
<b>Team</b>	Length and Mass Quantities
<b>Reports to</b>	Manager, Length & Mass Quantities
<b>Direct Reports</b>	N/A
<b>Date Prepared</b>	29 June 2017

### Role Purpose

As a Research Technician you will be involved and become an expert in the calibration, testing and development of length measuring systems and instruments for New Zealand. These include linescales, laser interferometers, electronic distance meters, gauge blocks and high accuracy coordinate measuring machines.

### 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.



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### Key Deliverables

Key Deliverables	Deliverables / Outcomes
<b>Research Skills</b>	<ul style="list-style-type: none"> <li>Support research into developing new methods and improving current approaches to length and dimensional measurement.</li> </ul>
<b>Technical Skills</b>	<ul style="list-style-type: none"> <li>Contribute to the wide range of calibrations, training courses, measurement consultancy and technical guidance provided for industrial and other clients.</li> <li>Assist in the ongoing review and maintenance of the Quality Management System, supporting technical procedures and associated instruments to ensure IANZ accreditation is maintained.</li> <li>Participate in technical meetings as required.</li> </ul>
<b>Recognition of Callaghan Innovations' "Home Safe Everyday" Policy:</b> 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"> <li>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&amp;S policies, procedures and systems. Promote healthy and safe behaviour at work.</li> </ul>
<b>Policies and procedures</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>

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

### Competencies

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

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

Role Specific Competencies	
<b>Nimble Learning</b>	<ul style="list-style-type: none"> <li>Learns quickly when facing new situations.</li> <li>Experiments to find new solutions.</li> <li>Takes on the challenge of unfamiliar tasks.</li> <li>Extracts lessons learned from failures and mistakes.</li> </ul>

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<b>Cultivates Innovation</b>	<ul style="list-style-type: none"> <li>• Comes up with useful ideas that are new, better or unique.</li> <li>• Introduces new ways of looking at problems.</li> <li>• Can take a creative idea and put it into practice.</li> <li>• Encourages diverse thinking to promote and nurture innovation.</li> </ul>
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## Person Specification

Experience and Qualifications	
	<ul style="list-style-type: none"> <li>• BSc or other technical qualification in physics and or engineering.</li> <li>• Experience in mechanical and optical design.</li> </ul>
Skills and Knowledge	
<b>Technical Skills (job specific skills)</b>	<ul style="list-style-type: none"> <li>• BSc or other technical qualification in physics and or engineering.</li> <li>• Experience in mechanical and optical design.</li> <li>• Knowledge on digital and analogue electronics along with some experience in instrument control (lasers, interferometer optics).</li> <li>• Good mechanical aptitude.</li> <li>• Skilled in 3-dimensional problem solving (e.g.: CMM, CNC, CAD)</li> </ul>
<b>Soft Skills</b>	<ul style="list-style-type: none"> <li>• Ability to self-manage and use initiative</li> <li>• Demonstrated ability to develop effective relationships</li> <li>• A demonstrated commitment to the provision of quality services</li> <li>• Effective written and verbal communication skills.</li> <li>• Thorough and methodical approach to work.</li> </ul>
<b>Office Skills</b>	<ul style="list-style-type: none"> <li>• Competent in use of Microsoft Office Suite products, particularly Outlook, Word and Excel</li> <li>• Good computer based data analysis and programming skills.</li> <li>• Knowledge of navigating SharePoint an advantage</li> </ul>
<b>Relationships and Partnerships</b>	<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><b>Internal</b></p> <ul style="list-style-type: none"> <li>• Other members of MSL</li> <li>• Manager, Length and Mass Quantities</li> </ul> <p><b>External</b></p> <ul style="list-style-type: none"> <li>• Users of measurements provided by a range of length measuring instruments such as coordinate measuring machines, gauge block testers, laser interferometers, linescales, electronic distance meters and roundness machines.</li> <li>• Commercial clients</li> <li>• IANZ accredited laboratories.</li> <li>• IANZ assessors of metrology and calibration laboratories.</li> </ul>