

## POSITION DESCRIPTION

<b>Position Title:</b>	Electromagnetic Sensing Team Leader
<b>Reporting To:</b>	Group Manager, Sensing and Biotechnologies
<b>Group:</b>	Sensing and Biotechnologies
<b>Location:</b>	Lincoln
<b>Status:</b>	Permanent Full-time
<b>Date:</b>	July 2021
<b>Purpose of Position:</b>	To lead the Electromagnetic Sensing team, conducting quality research and development of scientific technologies for Lincoln Agritech clients.

### Company Information

Lincoln Agritech Limited (LAL) is a leading edge research and development company with a track record for applying new and innovative engineering and science technologies to support agriculture, industry and the environment.

*Sensing and Biotechnologies.* Providing agricultural and industrial clients with: 1) smart sensing technologies that reduce costs, realise new revenue streams and improve decision-making - includes capability in machine vision and electromagnetics; and 2) microbial biotechnologies for biocontrol to manage disease and to enhance plant growth systems.

*Environmental Research.* Supplying tools that enable regional and central government, as well as water users, to manage groundwater quality and quantity, nitrogen impacts and water allocation to enable a sustainable future for New Zealand's water resource.

*Precision Agriculture.* Providing technologies and advice to enable efficient agricultural and horticultural production systems. Precision Ag is an agricultural management concept based on observing and responding to inter and intra-field variation. Applying inputs at the right time, in the right place in the right amounts.

*IRRICAD™ and Software.* Designed by Lincoln Agritech, IRRICAD™, is a world leading computer software for designing pressurised irrigation systems. It is available in eight languages and has been exported globally since 1988. Our software consulting team have expertise in processing complex data to create simple visualisation tools and interactive dashboards.

*New Materials.* Creating new revenue opportunities for New Zealand's primary sector and developing new functionalised high value materials for the coarse wool industry.

LAL is a 100% subsidiary of Lincoln University and are based on campus at Lincoln University, 20 km west of Christchurch, New Zealand. The North Island office is located on the Ruakura Research Campus in Hamilton, New Zealand.

## POSITION DESCRIPTION

### Key Responsibilities

#### *Team Leadership*

- Provide positive and supportive leadership to the electromagnetics team.
- Be a 'science thought leader' for the team.
- Initiate new ideas for research projects and actively seek funding to support them.
- Participate in and contribute to science and business plans, and annual budgeting processes.
- Ensure science and business plans are translated into operational performance objectives for the team.
- Generate a collegial, consultative, effective, and positive work environment.
- Coach and provide supportive assistance.
- Provide technical guidance and share knowledge.
- Assist staff in their duties where necessary.
- Conduct the performance review process with direct reports.

#### *Manage Stakeholder Relationships*

- Actively pursue and maintain informative and collaborative relationships with relevant research agencies and funders.
- Build relationships with public authorities and research organisations relevant for the projects to develop an understanding of their research needs.
- Assist with identifying and developing relationships with new stakeholders for opportunities to enhance the practical validation of the research work.
- Public presentations / speeches at conferences and seminars may be required from time to time.

#### *Maximise Research Outcomes*

- Provide the management and monitoring of the outcomes of research from the projects, evaluate outcomes against set objectives, set standards and establish timely control and reporting mechanisms for all research activities.
- Work closely with external stakeholders to maximise the uptake and use of the project outputs.
- Publish research findings in appropriate journals and industry publications as appropriate.

#### *Ensure Effective Research Implementation*

- Ensure milestones, tasks and subcontracts in the projects are appropriately planned, implemented, evaluated and published as appropriate.
- Track the work programme and subcontractors to ensure the expected tasks are completed on time and within budget.
- Ensure the projects comply with all legal and ethical requirements.
- Apply innovation in project management, team efforts and practical implementation of research results work within the project budgets.

#### *Reporting and Business Administration*

- Provide reports as requested on time.
- Support the completion of funding applications in the required timeframes by providing relevant information.

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- Maintain good records of project activities, correspondence and expenditure, and complete all company administrative requirements accurately and on time.
- Follow the administration practices and policies of the funding agency.

### *Health and Safety (H&S)*

- Comply with all Lincoln Agritech Limited and Lincoln University health and safety policies and procedures.
- Report any identified hazard, and all workplace injuries and incidents in a timely manner.
- All legislative requirements in respect of workplace health and safety are complied with.
- Protective clothing/apparatus are used where appropriate.

### *Treaty of Waitangi*

- Support Lincoln Agritech Limited to meet its obligations under the Treaty of Waitangi.
- Demonstrate, and encourages others to demonstrate, support for the company's commitment to the Treaty of Waitangi.

### *Other Duties as Required*

- Perform other reasonable duties as agreed and requested by the Group Management team or CEO.
- Active and visible contributor to the group and wider company.
- Provide services to an agreed standard.
- The company's common goals are achieved collaboratively.
- Comply with all LAL and Lincoln University policies and procedures.
- Work will be required in other locations within New Zealand and from time to time internationally to perform the duties of the role.

### **Authorities**

This position is responsible for the supervision of 5 staff. This position holds a delegated authority within the scope of the delegated authority policy.

### **Key Relationships**

The appointee is expected to establish effective working relationships with:

#### *Internal*

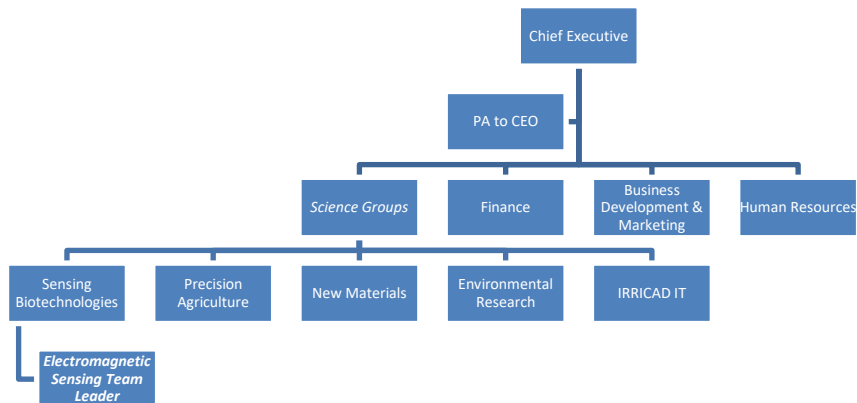
- Group Manager
- Other Sensing and Biotechnology Team Leaders
- Staff within the Electromagnetic Sensing team
- Staff within the Sensing and Biotechnologies Group
- The wider Lincoln Agritech team
- Staff at Lincoln University, as required

#### *External*

- Clients
- Contractors and sub-contractors
- Professional bodies
- Government Departments / Policy Advisors

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## Organisational Context



## Key Capabilities

### Qualification

- A PhD in Electronics, Engineering, Physics or a related field.
- Project management qualification, training or experience.
- The ability to legally work in New Zealand.
- Current drivers licence.

### Experience

- At least 10 years' proven and applicable scientific technologies experience.
- Experience leading a small internal team or project team.
- Experience reporting to and working with funders and clients; experience with NZ's funding system e.g. MBIE, MPI would be advantageous.
- Experience in experimental design and execution.
- Proven track record in the execution of research, collaboration, publications and other technology transfer.

### Technical Skills

- Skilled in electromagnetic wave propagation theory and practice, or a related field.
- Experience in computational modelling using Matlab and high level languages such as C++ and Python using a style that results in well-documented and structured code.
- Has a general and practical understanding of measurement techniques, underpinned by a solid understanding of associated mathematical and statistical methods for modelling, analysis and measurement errors.
- Applies the above attributes to own work and to coaching and leading others to achieve best practice R&D planning, execution and delivery.

### Personal Attributes

- Good levels of emotional intelligence.
- Sound attention to detail.
- Acts with integrity and honesty at all times.
- Personable, to interact with a range of sector stakeholders at medium to senior level.
- Commitment to work collaboratively in a multidisciplinary team.

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- As a science expert, develop the technical/ scientific capability of the Group.

### Key Competencies

#### *Collaboration*

- Assist the team in overcoming issues and barriers to successful teamwork.
- Manage and resolve issues of conflict and disagreement.
- Consult with colleagues at different levels to solicit ideas and opinions.
- Demonstrate open and honest communication within the team.
- Support the team to reach a consensus and alignment against agreed goals.
- Manage team and group meetings effectively, creating opportunity for contribution by all members.

#### *Drive for Results*

- Hold self and others accountable for delivering tasks and objectives to the agreed timescales and standards.
- Establish clear plans and actions for self and others.
- Demonstrate a sense of urgency and readiness to take action.
- Demonstrate persistence and perseverance to individual and team goals.
- Take responsibility for achieving team targets and objectives.

#### *Innovation and Change*

- Demonstrate a willingness to embrace new systems, processes, technology, and ideas.
- Improve efficiency and productivity in own team.
- Understand that ambiguity is a normal part of doing business, supporting the team through uncertainty and change.
- Adapt team goals and objectives in line with business needs.

#### *Scientific Process*

- Follow accepted scientific approach.
- Always provide honest and accurate data.
- Contribute to or write funding proposals.
- Monitor and manage team and project budgets and finances, identifying and communicating potential overspend.
- Use financial and project updates to ensure project performance is within agreed scope, budget and timeframe.

#### *Customer-Centric*

- Focus self and others on providing a prompt, professional and timely service to customers, stakeholders and colleagues.
- Use open questioning, listen and understand the customer, stakeholder and colleague's agenda.
- Balance customer and stakeholder needs with the needs of the business, giving clear explanations about why needs cannot be met.

#### *Communication*

- Produce written communications that are clear, concise and easily understood

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- Communicate ideas and concepts clearly, verbally and written, checking for understanding in others.
- Encourage two-way discussions and open dialogue, demonstrating active listening.

### *Decision Making*

- Assimilate information from different sources.
- Identify the root-cause of the problem through investigation and probing.
- Consider the wider impact of decisions and actions beyond the immediate problem or situation.
- Validate and challenge own thinking by obtaining additional information.
- Produce logical and well-reasoned solutions to problems encountered in work.

### *Managing People*

- Ensure individual and team objectives are clearly defined and measurable, through Key Performance Indicators (KPIs) and goal-setting.
- Use management information and performance data to improve individual and team performance.
- Effectively delegate work to others in the team by considering individual skills, abilities and interests.
- Provide praise and recognition of people's achievements and successes.
- Provide objective, corrective feedback where performance has not met expectations.
- Take ownership and accountability for supporting and developing the team.