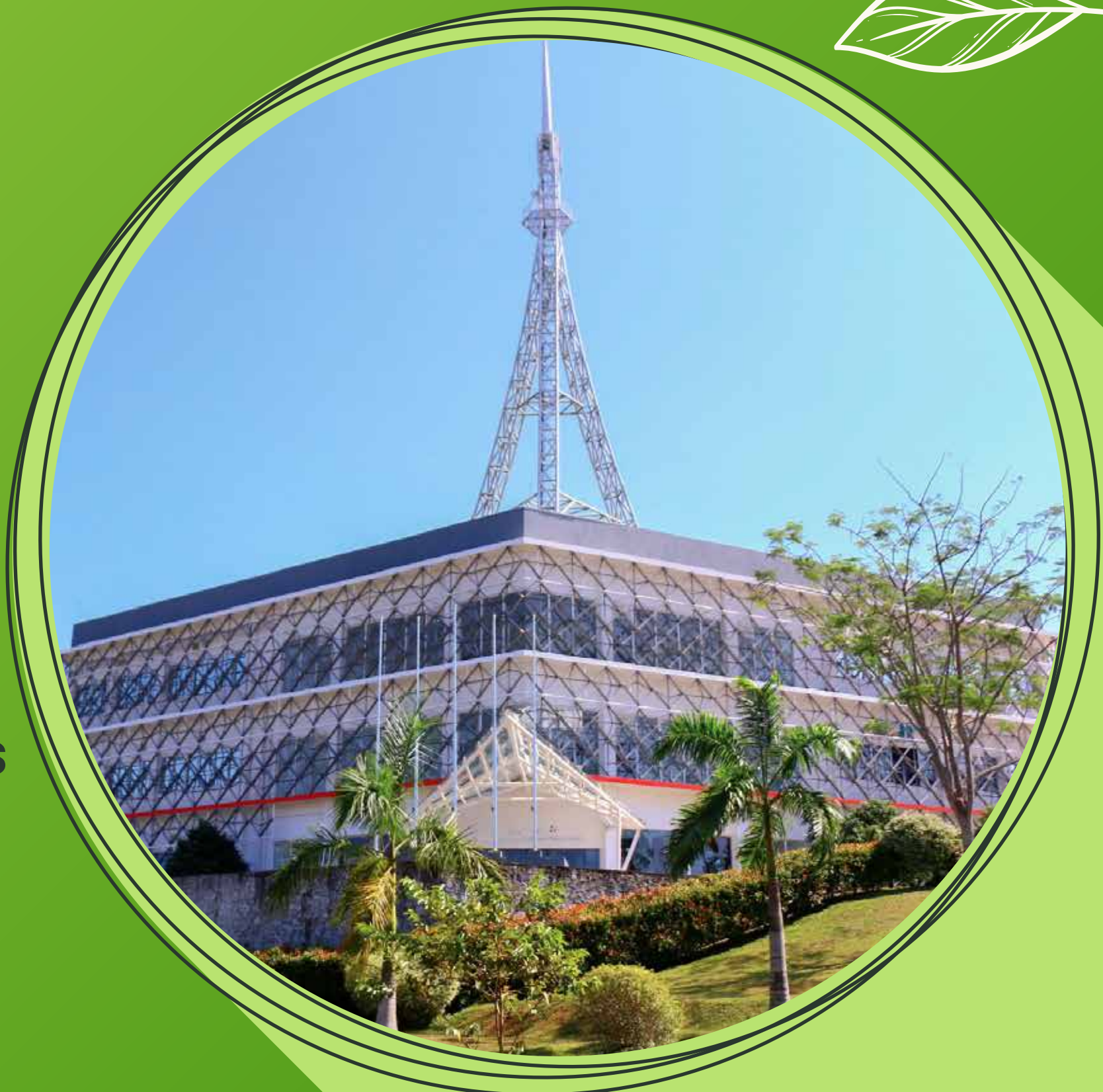


Nanotechnology in Agriculture

Sri Lanka Institute of Nanotechnology (SLINTEC)

A pioneer in nano and advanced technology research in Sri Lanka.

Our research is primarily focused on six areas :
Advanced Agriculture Technologies,
Natural Products and Nutraceuticals.
Sustainable and Functional Textiles,
Nano/Advanced Materials and Minerals,
Printable Electronic and Sensors, Energy Storage,



Benefits and Applications for Modern Agriculture

Nano-technology is an evolving technique that is expected to improve modern agriculture in sustainable ways, such as increasing crop productivity, precision farming, improving water use efficiency, protecting crops against pests and diseases.

Nano-technology could be used for the development of modern agriculture in many ways.



Nanotechnology in Advanced Agriculture



**Pesticide
improvement**



**Precision
farming**



**Soil
improvement**



**Reduce
post-harvest losses**



**Crop
improvement**



**Crop
protection**



SLINTEC's innovation in Advanced Agriculture Technologies

Ripening Delaying Technology



Nano-materials offer solutions to the problem of postharvest loss in agriculture. SLINTEC offers active packaging materials with embedded Nano-particles to reduce post-harvest losses in agriculture. SLINTEC Ethylene absorber sachets degrade ethylene and increase the shelf life of perishables.

Hybrid Fertilizer

A combination of both organic and synthetic fertilizers which provides a more sustainable approach to fertilization. SLINTEC's innovative hybrid fertilizers provide plants with a balanced supply of essential nutrients while promoting soil health and reducing environmental degradation.





Slow-release Fertilizers

Low nutrient use efficiency (NUE) and excessive fertilizer usage cause nitrate pollution. SLINTEC's innovation of Urea fertilizer with Nano-enabled slow release technology could prevent nitrate pollution by regulating nutrient release, improving NUE and plant cell viability.

Nano-pesticides

Nano-pesticides enhances the effectiveness of pesticides by enclosing them in a shell, making them water-soluble and reducing soil run-off. It can also reduce pheromone volatility, making them continuously release during pest capture.



Join Us For

- ▶ **Research Collaborations**
- ▶ **Contract Research**
- ▶ **Material Development**
- ▶ **Consultancy Services**

Contact Us

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