

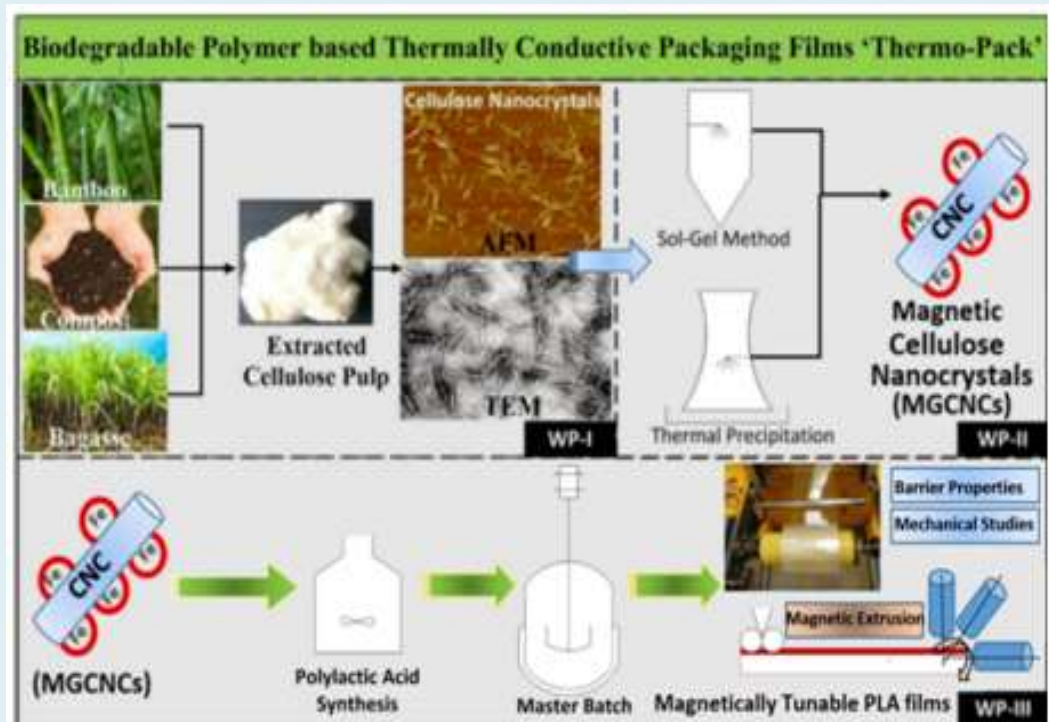
Degradable Polymer Based Food Packaging: Green Pack

Salient features

- Alternative of non-degradable PET films with PLA based degradable films for food packaging.
- Extraction from muga silkworm and chitosan synthesis by deacetylation
- The yield of chitosan production from extracted chitin: about 87% (d.b.).
- Successful grafting of PLA oligomer chains with chitosan in order to prepare masterbatch.
- Solution casting approach to prepare polymer composite films using PLA and chitosan masterbatch.
- Industrially viable Melt compounding-cum-film processing technique to process uniform PLA/chitosan films
- Bilayer lamination protocol to produce laminates with improved mechanical properties.

Advantages

- ✓ PLA/chitosan films can be an alternative to the PET films based packaged trays, bottles for food storage.
- ✓ High barrier biodegradable films for food packaging applications.
- ✓ High gas barrier film production through industrially viable approach



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| <i>More information</i> | Status of commercialization / Patent / Publication The Technology is ready for commercialization. |