

Development of spunlaced non-woven wound dressings using bamboo fibres

SITRA has undertaken a project for the development of wound dressings using Bamboo fibres for the chronic wounds in human body.

Bamboo fibres have inbuilt anti-bacterial property and hence, the extent of antibacterial agents to be used in dressings made out of Bamboo can be lower as compared to that to be used in dressings made out of conventional fibres like cotton and viscose. Since the microbial growth will be lesser in dressings made out of Bamboo, the replacement period of wound dressing can be extended. Along with the Bamboo fibres, activated charcoal can also be added in the manufacture of wound dressings to act as odour absorbent layer. Hence, SITRA has conducted a project with the following objectives:

- a) To develop a wound dressing consists of activated charcoal with anti-bacterial agent encapsulated between two layers of spunlaced Non-woven bamboo material.
- b) Optimization of quality attributes of the developed wound dressings in terms of
 - i) Anti-bacterial activity
 - ii) Odour absorption
 - iii) Skin friendliness
 - iv) Quicker healing etc



Wound dressings made out of spunlace nonwoven technology