



BIOTECH CONSORTIUM INDIA LIMITED

CYCLIC GLUCAN BASED POLYMERIC CARRIER FOR DRUG DELIVERY AND OTHER APPLICATIONS

TECHNOLOGY AVAILABLE FOR TRANSFER

BACKGROUND

The technology discloses a process for cyclic β -(1, 2)-glucan based polymeric carrier development for use in the delivery of drugs, food, flavouring agents, growth factors, natural products, phytochemicals and as a scaffold for growing cells.

The product is developed at the Department of Biotechnology, Indian Institute of Technology, Madras, India.

TECHNOLOGY

The cyclic β -(1, 2)-glucan is blended with synthetic or natural polymer, metal or ceramics to develop a drug delivery carrier (in the form of nanorods, patches, films) for controlled release of drugs. The polymer carrier system is capable of enhancing solubility of both polar as well as non-polar drugs and also has a greater drug loading capacity.

APPLICATIONS

Used as carrier for drugs, food, flavouring agents, growth factors, natural products, phytochemicals and as a scaffold for growing cells.

VALUE PROPOSITION

- The cyclic glucans have larger inner cavity diameter when compared to those found in cyclodextrins. This property is valuable in pharmaceutical and food industries.
- The high solubilisation properties would allow hydrophobic drugs to be complexed and can be used for delivery of poorly soluble drugs.

STATE OF DEVELOPMENT

The technology has been developed at lab scale.

PATENT STATUS

Patent pending

LICENSING OPPORTUNITY

The technology is available for license and BCIL is actively seeking partners for the licensing and commercial development of the technology.

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