




BCSIR Dhaka Laboratories, BCSIR

Process		A process for the production of chitin from shrimp industry waste
Use		Chitin is useful for several medicinal, industrial and biotechnological purposes
Area		Food & Pharmaceutical Industries
Salient features		Chitin was first isolated and characterized in 1811 by the chemist and botanist Henry Braconnot. Chitin is structurally 2-acetamido-2-deoxy-D-glucose (N-acetylglucosamine) residues linked by β -(1-4) bonds, is the second richest polysaccharide of animal origin found in nature after cellulose and it is characterized by its fibrous structure. Chitin is extracted from the shells of shrimp, lobster, and crabs. It is a fibrous substance that might block absorption of dietary fat and cholesterol.
		
Scale development	of	The process is standardized at bench scale.
Status development	of	This process is accepted by the BCSIR authority and it is ready for commercialization
Major Material	Raw	Shrimp processing waste (Head, body, Tail), Sodium hydroxide, Hydrochloric Acid
Major Equipment/Machinery	Plant	S.S. Still container, mechanical stirrer and hot plate
Commercialization status		This process is accepted by the BCSIR authority and it is ready for commercialization
Techno-Economics		This process is environment friendly and after commercialization this product able to fulfill our national demand
Cost		14000/Kg
Key words		Chitin, Shrimp shell, Hydrochloric acid
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