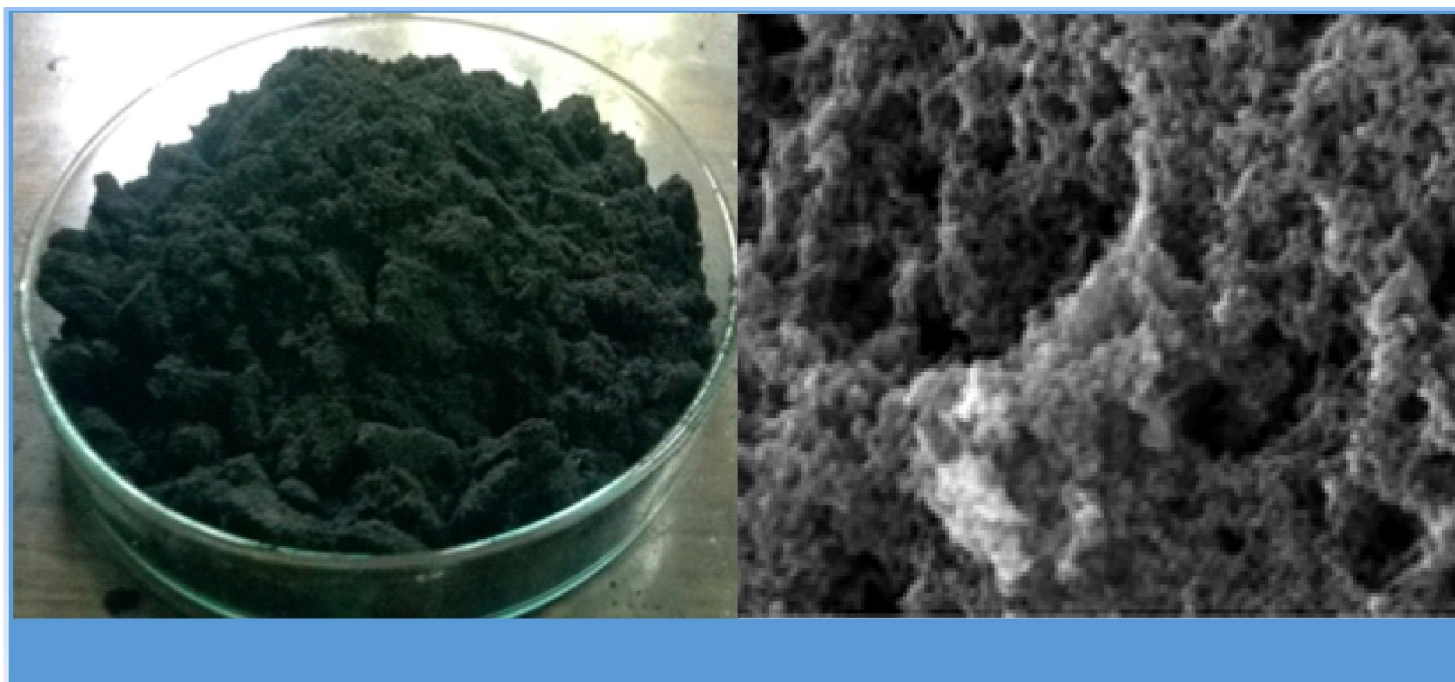




Name of the technology: Activated carbon from waste biomass jute sticks

Introduction: A Carbon materials with high porosity and high surface area are termed as activated carbon. Activated carbon is a non-graphitic form of carbon, which could be produced by activation of any carbonaceous material. Activated carbons are classified according to its particle sizes and shape, and each type has its specific application. However, some broad classification is made for general purpose based on their physical characteristics. The types of activated carbon are powder, granular and pellet. The NPL has developed the technology of activated carbon from waste biomass jute sticks of the following specifications of the product.



Specifications : (i) Density: 0.2g/cc; (ii) Pore size : micro and mesopores; (iii) BET Surface area: 1600-2000 m²/g; (iv) Ash content : <5%; (v) Moisture content: <5%



Application Area: Waste water purification, filtration, chemical production and purification, Air purification, Medical, Automobile sector, Food sector, etc

Choose the Readiness level of the Technology:

| Idea | Concept Definition | Proof of Concept | Prototype | Lab Validation | Technology Development | Technology Demonstration | Technology Integrated | Market Launch |
|------|--------------------|------------------|-----------|----------------|------------------------|--------------------------|-----------------------|---------------|
| | | | | | | | | |

Advantages: The raw material like jute stick is easily available in eastern parts of India. The technology addresses the issues related to waste biomass handling and the proposed process is very simple and economical for conversion of jute sticks into activated carbon.

Related Patents: Patent No: Nil; Country: NA; Publication Date: NA; Grant Date: NA;

Year of Introduction: 2017

Broad Area/Category: Carbon Products

User Industries: Water filtration industry, chemical industry, Air purification industry, Medical industry, Automobile industry, Food industry etc.

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