

IIT-Hyderabad faculty develops recycled thermocol to solve oil spill hassles

CS Sharma also decides to recycle thermocol commercially to make it into a fabric, which would absorb oil from water.



Prof. C S Sharma.

Sangareddy: Recycling plastic waste has become a global issue long ago. Many research studies have been carried out across the globe to find a solution to the disposal of plastic waste without causing any harm to the environment.

Identifying thermocol (polystyrene foam), which is also non bio-degradable plastic waste, is causing a major harm to the environment.

IIT-Hyderabad faculty member Chandra Shekar Sharma has designed a model to recycle thermocol without causing any damage to environment by using orange peel as a solvent. After tasting success at the lab level, the IIT faculty had applied for Indian, Chinese, American and PCT patent for his model.

Founding a startup (Restero Technologies) on the premises of IIT, he has also decided to recycle thermocol commercially soon to make it into a fabric, which would successfully absorb oil from water.

Multiple uses

The developed fabric will also help protect the environment since we can use the fabric to suck the oil spilled in oceans and clean the restaurant kitchens. Since there were no effective tools available to clean the oil spill, which affects the aquatic biodiversity of oceans, Sharma said that the fabric developed by recycling the thermocol will help us save the environment. He further said that “we can also prevent the waste oil from flowing into drains from kitchens and restaurants, which would further pollute the water bodies and groundwater table.

Dubious distinction

In an exclusive chat with Telangana Today, Sharma, a faculty at Department of Chemical Engineering, IIT-H, said that that only 3.1 per cent of thermocol waste, which is widely used as cushioning material for packaging goods and food, in the world is being recycled now. Sadly, India is the largest producer of thermocol waste, which occupies a large volume of space.

Since the existing recycling of thermocol models were not only feasible financially and also emanate toxic gases into the environment, the IIT faculty has said that not many have dared to take up the idea of recycling the thermocol. Mr Sharma and his team had got Rs 37 lakh funding under Waste Management Technology Development Project from Department of Technology of Indian government to work on the project. Stating that they had already completed the lab level trials of the project, Sharma said that the launch of commercial recycled thermocol was a matter of time. The IIT team had also won a gold medal for its project during Andhra Pradesh Science Congress held in Visakhapatnam last June.

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