

## PRESS NOTE

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### **SRM University-AP, Undergrad physics student files patent**

Ms Sreelekha Bhuvaneshwari, a BSc physics final year student in SRM University-AP, Andhra Pradesh, filed a patent for her work titled "A fibre material with moisture retention capacity with thermal tolerance and a method for manufacture" under the guidance of Dr Sabyasachi Mukhopadhyay, Assistant Professor, Department of Physics, SRM University-AP.

The project develops a methodology to design a fabric cloth that would replace the use of air conditioners. This cloth design is inspired by Saharan silver ants which regulate their body temperatures in the scorching desert heat and also from the cooling properties of clay. This research would significantly scale down the usage of AC and other cooling devices in warm places, thus reducing the use of electricity and emission of greenhouse gases to the environment. As this cloth would be environment friendly with long durability and cost-efficiency, Sreelekha hopes that this research would bridge the socioeconomic divide of haves and have-nots between communities.

"I am grateful to Dr Sabyasachi sir for his constant help and guidance along the way. There were several failed models, but he believed in the concept and that inspired me to go forward with the project," said Ms Bhuvaneshwari. "The facilities at the University made the process seamless; once the proposal was made, the procedure was automated. I thank the officials of SRM University-AP for believing in my proposal and helping me get through the procedures smoothly. If it were not for the facilities available at my university, I could not have finished the design," She added.