-------Project Detail--------

Project Title: Develop Cooling Technology for Cotton T-shirts

Description:

I am looking for a skilled professional who can develop a cooling technology for cotton T-shirts. The goal is to create garments that can keep the wearer cool in a temperature range of 15-20°C.

Ideal Skills and Experience:

- Expertise in textile engineering and fabric technology

- Knowledge of heat and moisture management in textiles

- Experience in developing cooling technologies for garments

- Familiarity with cotton fabric properties and its behavior in different temperatures

- Ability to conduct research and experiment with different cooling techniques

- Proficiency in creating prototypes and testing their effectiveness

- Understanding of comfort and breathability factors in clothing

- Strong problem-solving skills to address any challenges in achieving desired cooling effects

- Ability to work collaboratively and communicate effectively with the project team

If you have the expertise and experience in developing cooling technologies for cotton T-shirts, please submit your proposal with relevant samples of your previous work.

-------Solution------

My name :: Steven Alert from Florida, USA  
  
To do develop cooling material, we need basic material, experimental equipment and measurement equipment.

I already have all needed experimental equipments.

So, I need basic materials and measurement equipments that I sent you with document.

\*\* I’ve sent document to Nova  
  
**1. Basic Material**

polyethylene glycol - 2Kg

paraffin - 1Kg

polyurethane - 0.5kg

butylated hydroxytoluene - 0.3Kg

ammonium hydroxide - 0.5Kg

ethylene dimethacrylate - 0.5Kg

**2. Measurement Equipment**

Infrared thermometer

tensile strength tester

thermogravimetric analyzer

constant temperature drying device

I can buy all(material and equipment) on Alibaba.com

But price of measurement equipments is huge.

Of the 4 equipments, I have to rent 3 and buy 1.

Thermogravimetric analyzer --I need buy this.

Because thermogravimetric analyzer used to measure the thermal stability and decomposition temperature of PCMs(Phase Change Material).

\*\* PCMs have the ability to store and release large amounts of thermal energy during phase transitions, such as melting and solidification. They can absorb heat when they melt and release heat when they solidify, enabling them to act as "thermal batteries" that store and release energy.

\*\* Nova mentioned that I need use Nitrogen

But I said I will never use Nitrogen

\*\* Nitrogen is frequently used as a cryogenic coolant due to its low boiling point (-196°C or -321°F). It can be employed in cooling systems to achieve very low temperatures, such as in the fabrication of certain cooling components or for testing the performance of cooling materials under extreme conditions.

\*\* Under normal ambient conditions, nitrogen exists as a gas and its temperature is dependent on the surrounding environment. The typical range of ambient temperatures can vary widely but is often around 20 to 25 degrees Celsius (68 to 77 degrees Fahrenheit).