

Spacesuit Materials Add Comfort to Undergarments



Johnson Space Center

***Jockey International
Kenosha, WI***

NASA Technology

- ◆ Scientists developed a technology to help keep astronauts comfortable in their gloves, which have to accommodate temperatures from 250 °F to -250 °F.
- ◆ NASA scientists looked into phase change materials (PCMs), which either absorb or release heat to counteract their surroundings.



Technology Transfer

- ◆ Through Small Business Innovation Research (SBIR) funding, one company incorporated PCMs in spacesuit fabrics. Later, another firm received exclusive commercial rights to the innovation.
- ◆ Jockey then secured a license to print Thermocule technology into undergarment fabrics.

Benefits

- ◆ By March 2011 Jockey released its staycool undergarments for both men and women.
- ◆ The garments can regulate the temperature between a wearer's skin and clothing by as much as 3 degrees, helping to reduce overheating and prevent chills.
- ◆ Pro athletes and consumers alike wear staycool.