

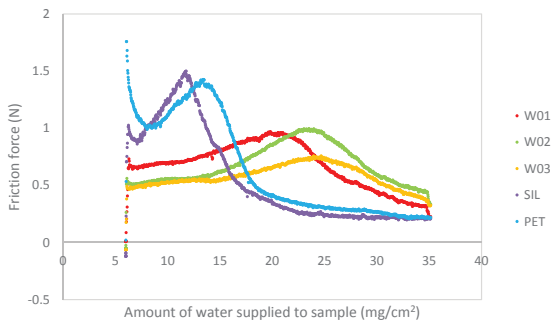
Friction Tester Characterizing the Stickiness Property of Textiles under Wet Skin Surface

Dr KAN Chi-wai, Associate Professor, The Institute of Textiles and Clothing

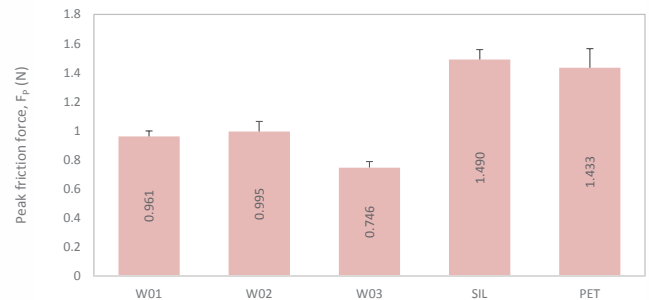
The presence of moisture within fabric-skin interface will cause sensorial discomfort and even lead to skin irritations, abrasions. This study describes the design and construction of TFT. First, predetermined amount of water was sprayed onto the simulated skin layer. Then, the sample was put on top of it and was dragged at a constant speed. A force gauge connecting to the sample was used to measure the force required to drag on a wet skin surface. The results revealed that TFT was highly sensitive and reproducible in differentiating these fabrics and it suggests that frictional properties of fabrics are skin wetness dependent.

Special Features

- A new Textile Friction Tester (TFT) was developed for characterizing the frictional property of textiles under wet skin surface
- This technology can be applied for sportswear, hygiene products or medical textiles application



The friction force curves for five different fabrics under different wetness level of skin surface. Friction force as a function of amount of water supplied to the sample per unit area.



TFT results. The error bars represent mean + S.D. of five samples in term of peak friction force.



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Food Safety Consortium

itdo@polyu.edu.hk



Innovation and Technology
Development Office
創新及科技發展處

Contact Us

Ir Steven LAM, Manager, Innovation and Technology Development Office

T (852) 3400 2864

E steven.tf.lam@polyu.edu.hk