Stain Resistant Fabric through Nanotechnology

Nano-Tex™ has developed a process that allows fabric to be stain resistant.

How do they do that???

– Cotton fibers have little hairs (called nano-whiskers -1nm) attached which make the fabric stain resistant.
– The fabric is dipped in a solution containing the nano-whiskers (made of fluorine molecules) which bond to the cotton fiber.
  • Think of self assembly.
  • The fluorine-cotton bond is stronger than the cotton-cotton bond making the nano-whiskers nearly permanent.
– Normal wear and tear and fabric softeners lessen the effect.
– The fabric is now negatively charged and repels water molecules that are dipolar.

Images from Nanotex.com
Current Uses of Nano-Fabrics

- Police Uniforms
- Baby Clothes
- Pants and military clothing
- Shirts