

# Clothes/Textile - Omni-phobic Coating

GEN TRIZ Case Study

## Clothes with Omni-phobic Coating

- Ultra-Ever Dry is a super-hydrophobic (water) and oleophobic (hydrocarbon) coating that will repel most water-based and some oil-based liquids. Ultra-Ever Dry uses proprietary omni-phobic technology to coat an object and create a surface chemistry and texture with patterns of geometric shapes that have "peaks" or "high points". These high points repel water, some oils, and other liquids unlike any other coating. Ultra-Ever Dry has vastly improved adhesion and abrasion resistance, compared to previous super-hydrophobic technologies, allowing it to be used in applications where greater durability is required.

<https://youtu.be/UHcSGSI4WXU>



## Clothes with Omni-phobic Coating: Addressing Secondary Problem

- **Secondary problem:**
  - How to kill bacteria and eliminate unpleasant smells from omni-phobic clothes without washing?
- **Solution:**
  - It is possible to use portable source of UV or/and cold plasma to kill bacteria and neutralize smells
- **Advantages:**
  - High convenience
  - Instant result
  - Low cost
  - Compact portable design
  - No water consumption
  - No detergent is necessary



[https://en.wikipedia.org/wiki/Nonthermal\\_plasma](https://en.wikipedia.org/wiki/Nonthermal_plasma)