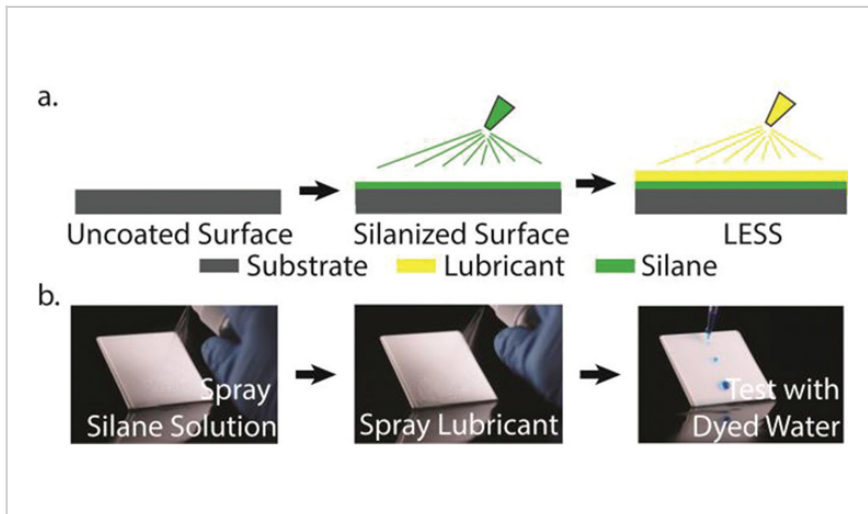


Anti-Fouling & Eco-Friendly Slippery Surface Coating for Cleaning and

ID# 2016-4510



PennState



Coating Process to form LESS

Technology Summary

We have developed a sprayable environmentally-friendly coating called the liquid-entrained smooth surface (LESS). It's demonstrated excellent anti-fouling properties function against urine, feces and bacterial biofilms, which leads to enhanced cleaning efficiency of surfaces. Through the support of the ENGINE grant, we aim to optimize the LESS formulation to achieve faster and simpler coating procedures, as well as to enhance coating durability and longevity in a typical environment.

Application & Market Utility

Advanced ecofriendly technologies that enhance cleaning efficiency are highly sought after for janitorial services for large institutions. Specifically, the ability to reduce fixture cleaning time (i.e., toilets and urinals), the associated labor costs, and chemicals usage will lead to significant cost savings for the more than 140,000 janitorial service providers in the U.S..

Next Steps

Seeking research collaboration and licensing opportunities.

TECHNOLOGY READINESS LEVEL

4-7

Seeking

Licensing | Research

Keywords

- Anti-Fouling
- Sanitation
- Cleaning
- Janitorial
- Smooth Surface

Researchers

Tak-Sing Wong

Assistant Professor and Wormley Family Early Career Professor in Engineering

Jing Wang

Technical Lead, Ph.D. Candidate

Originating College

College of Engineering

Office of Technology Management Contact

Smith, Matthew
mds126@psu.edu
814-863-1122



Invent Penn State is a Commonwealth-wide initiative to spur economic development, job creation, and student career success. Invent Penn State blends entrepreneurship-focused academic programs, business startup training and incubation, funding for commercialization, and university-community collaborations to facilitate the challenging process of turning research discoveries into valuable products and services that can benefit Pennsylvanians and humankind. Learn more at invent.psu.edu.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.