

Development of Coating-Free Super Water-Repellent Aluminium Micro-gradient Surfaces for Enhanced Water Management

Kirill Misiuk, Sam Lowrey, Richard Blaikie, Josselin Juras, Andrew Sommers

Problem

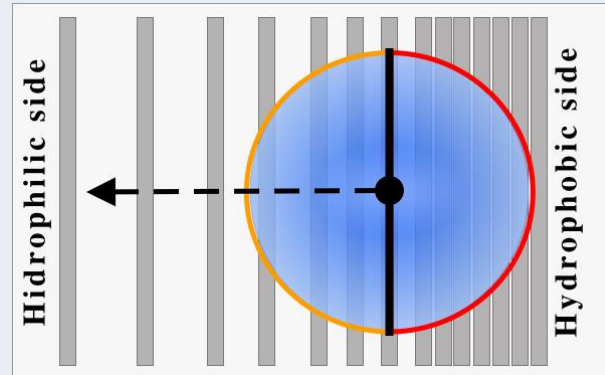
Ice formation
or
condensation

Low efficiency of
= energy conversion
or generation

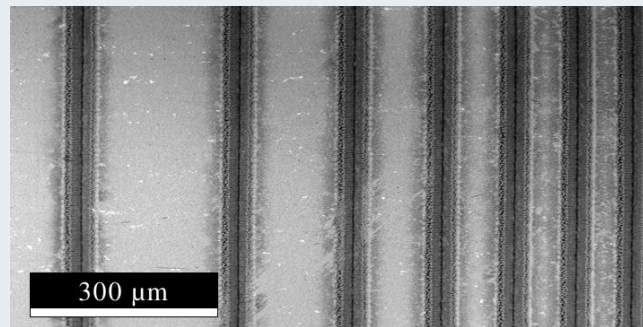


It's not a wing! A turbine blade!

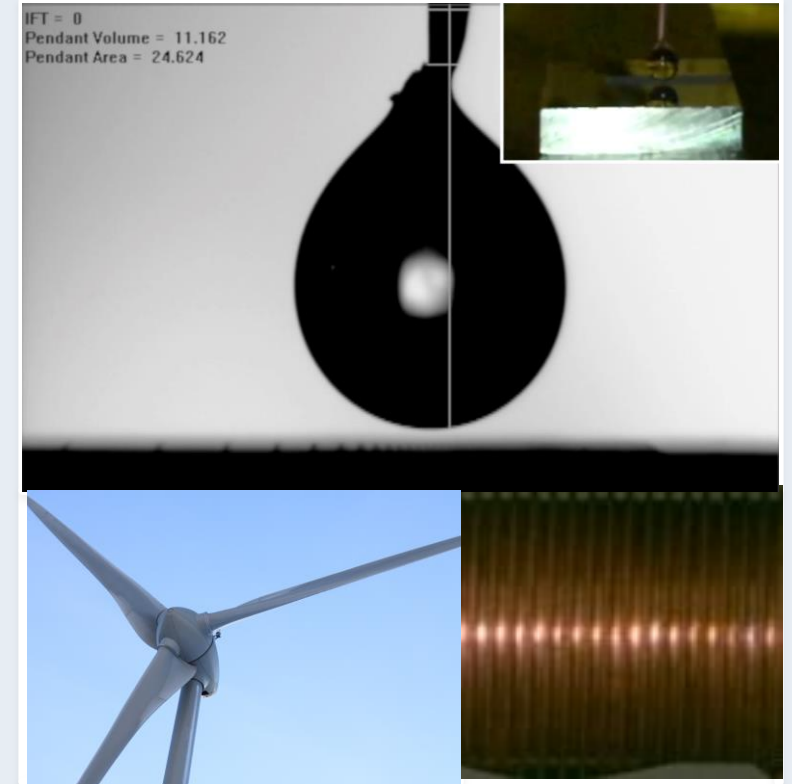
Proposal



A microstructured gradient can move a droplet before it freezes!



Outcome



**No coatings! Has direction!
Easy to put on!**