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### The quest for dew-repellent materials

**Abstract:** Dew forms when a cold material is placed in a humid atmosphere. We discuss how a few textured, hydrophobic materials can self-evacuate the dew forming at their surface. We focus in particular on the case of materials decorated with conical nanostructures, for which it is found that water droplets can remain quasi-spherical down to micrometric diameters – leading to remarkable anti-dew properties.

**Bio:** David Quéré is a Senior Researcher at CNRS and ESPCI-Paris and a Professor at École Polytechnique. He is engaged in experimental research in Soft Matter Physics and Fluid Mechanics, with a strong interest in interfacial hydrodynamics (drops, films, bubbles, coating, wicking) as well as in aerodynamics, morphogenesis and biomimetics. He is on the Editorial Board of *Physical Review Fluids*, *Soft Matter*, *Advances in Colloid & Interface Science* and *Droplet*. He received the 2014 Silver Medal of CNRS and the 2021 Fluid Dynamics Prize of APS, and he became a Distinguished Professor at ESPCI in 2016.