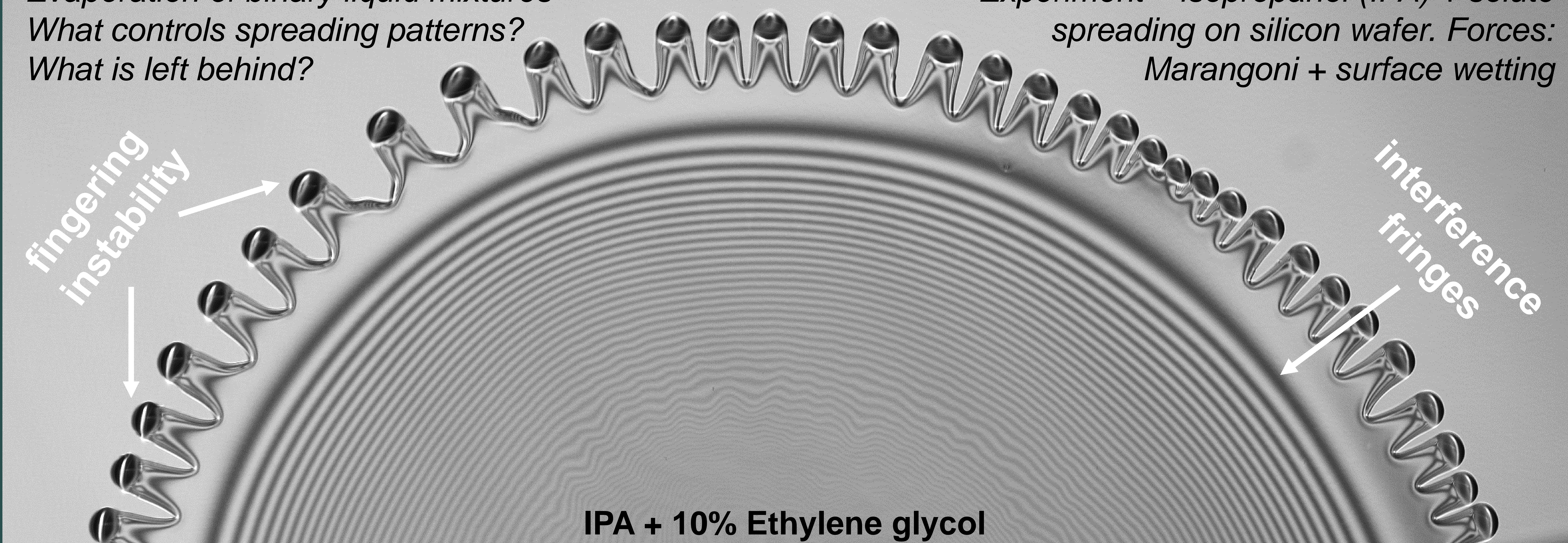


# Liquid deposition through evaporation

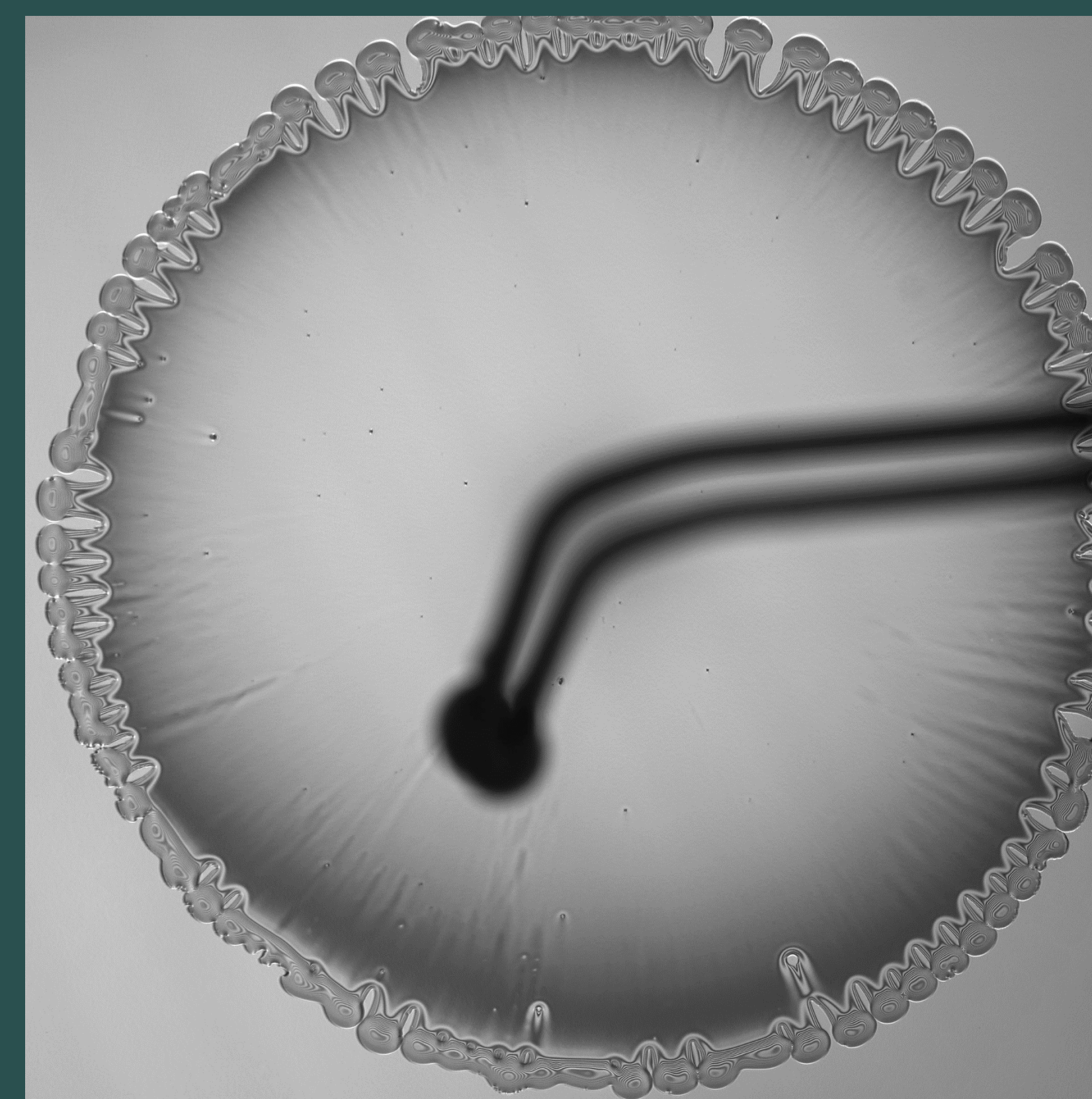
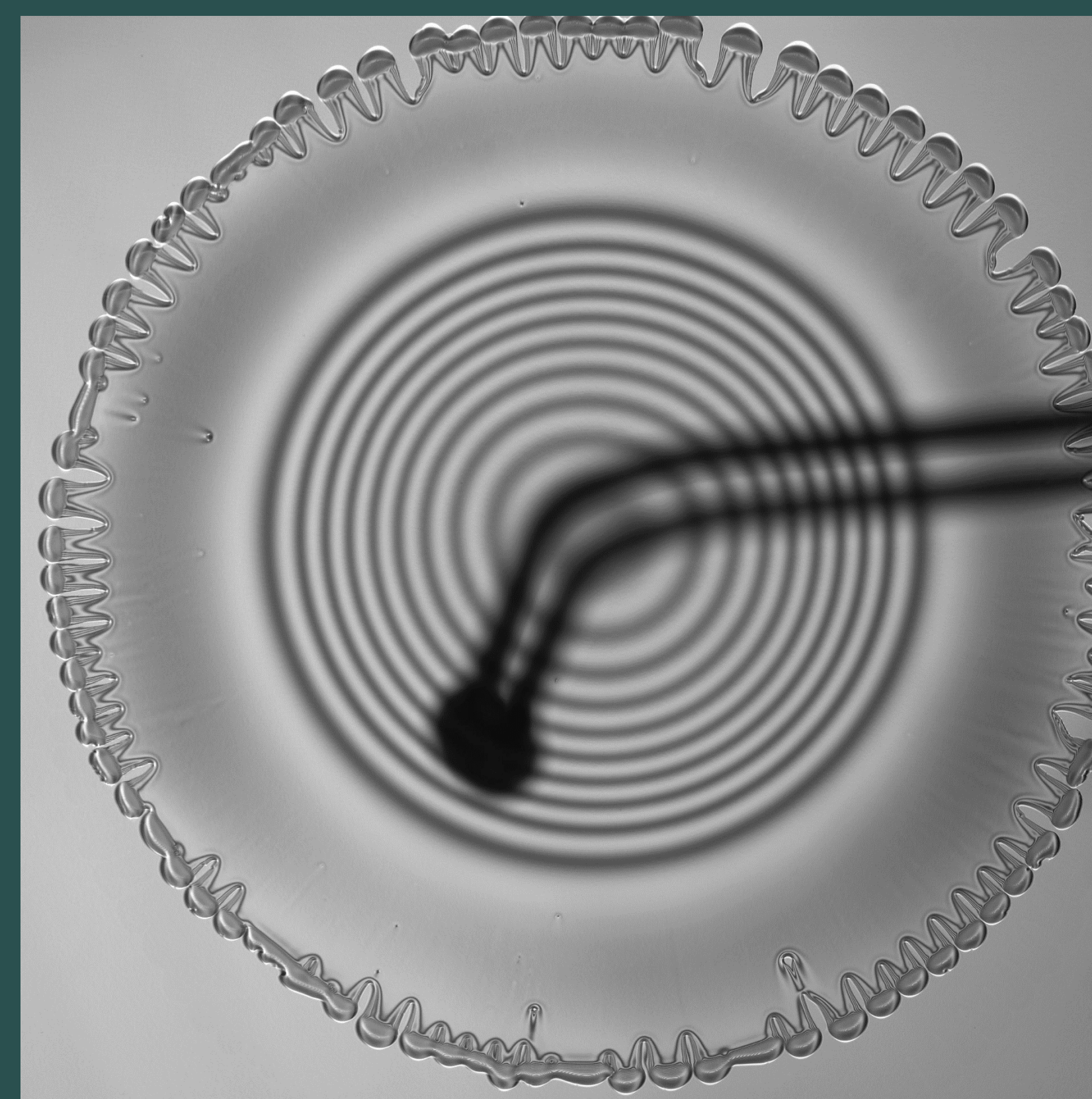
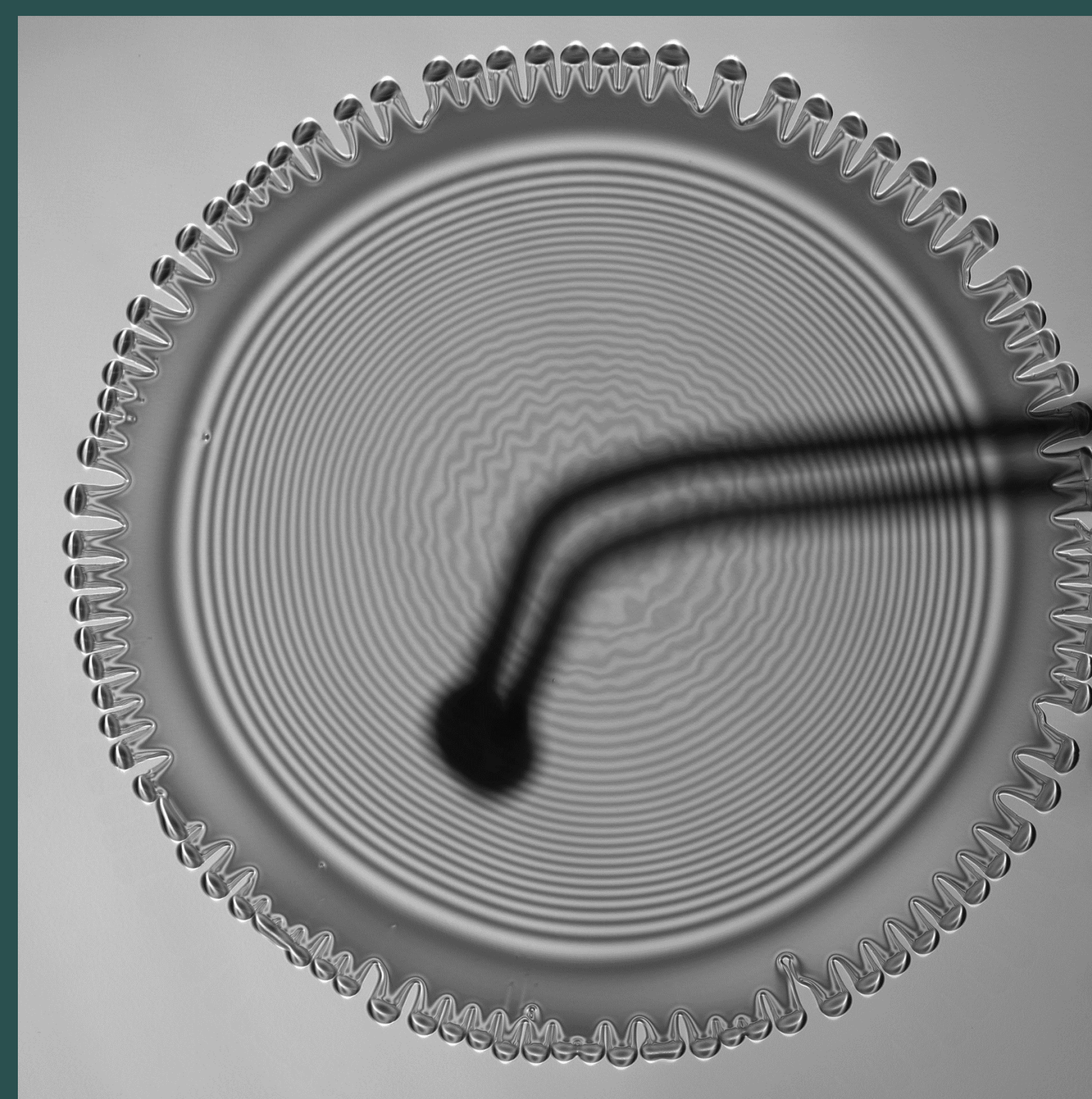
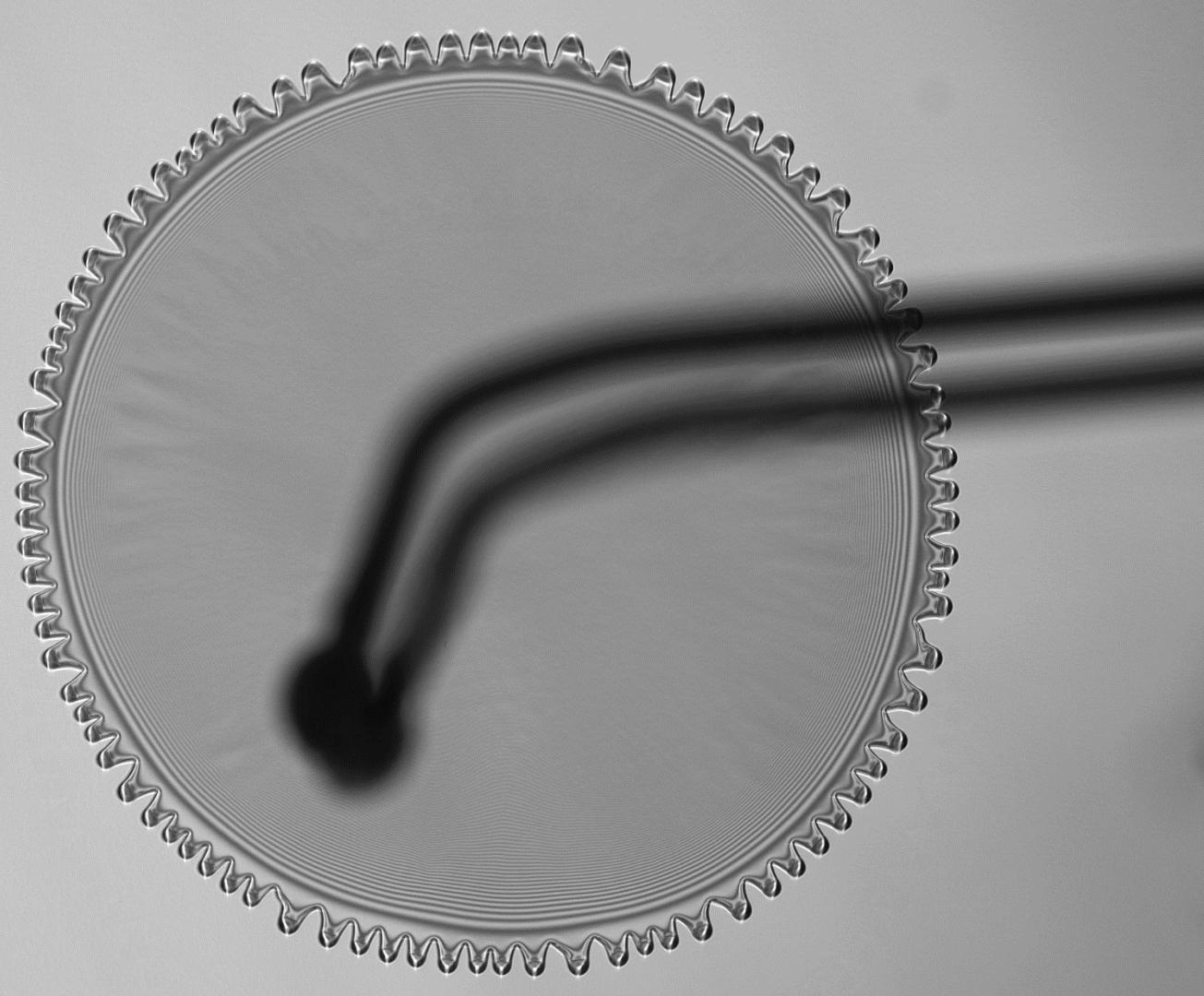
Asher Mouat, Clay E. Wood, Justin E. Pye, and Justin C. Burton - Department of Physics, Emory University

Evaporation of binary liquid mixtures –  
What controls spreading patterns?  
What is left behind?

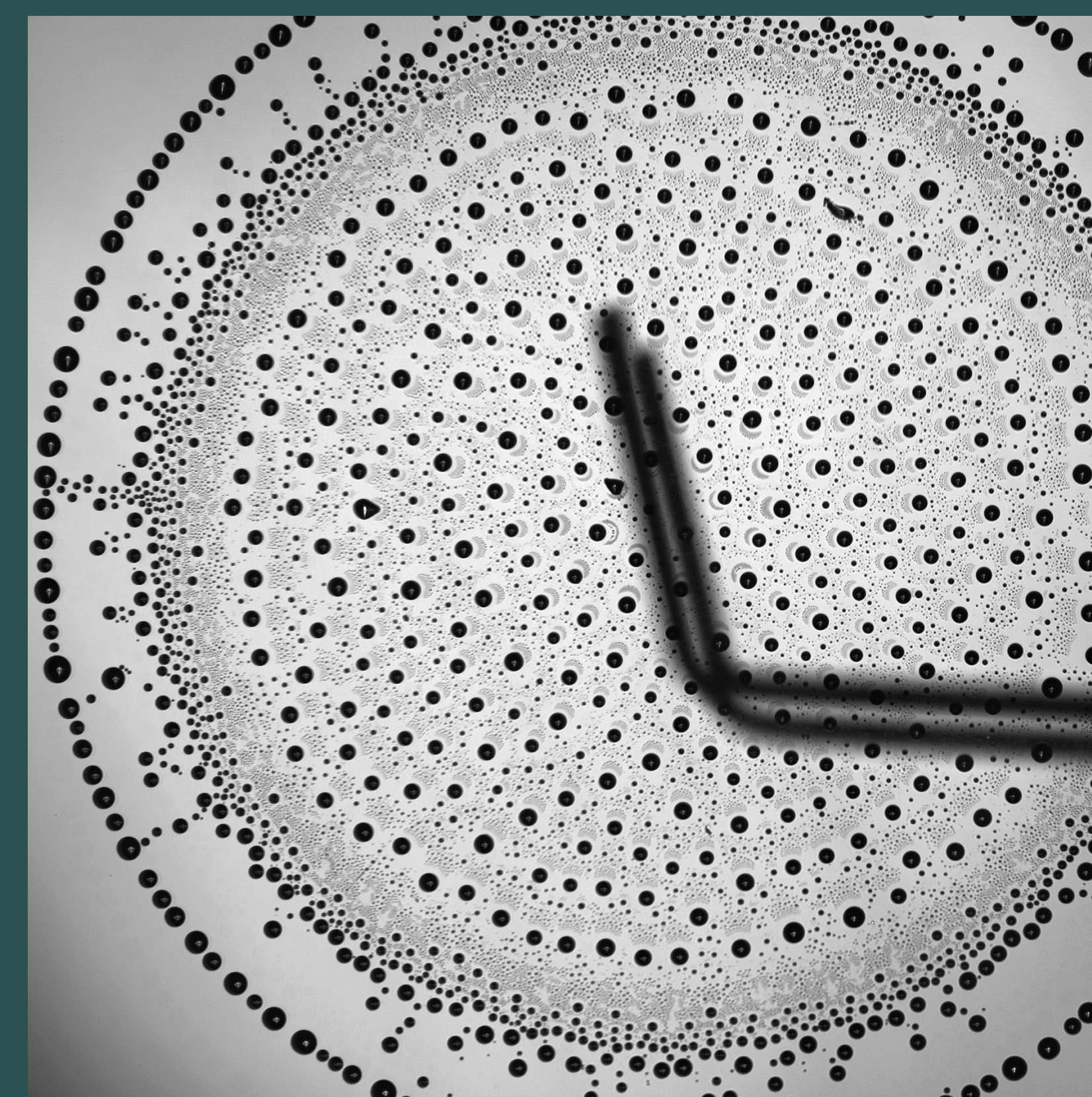
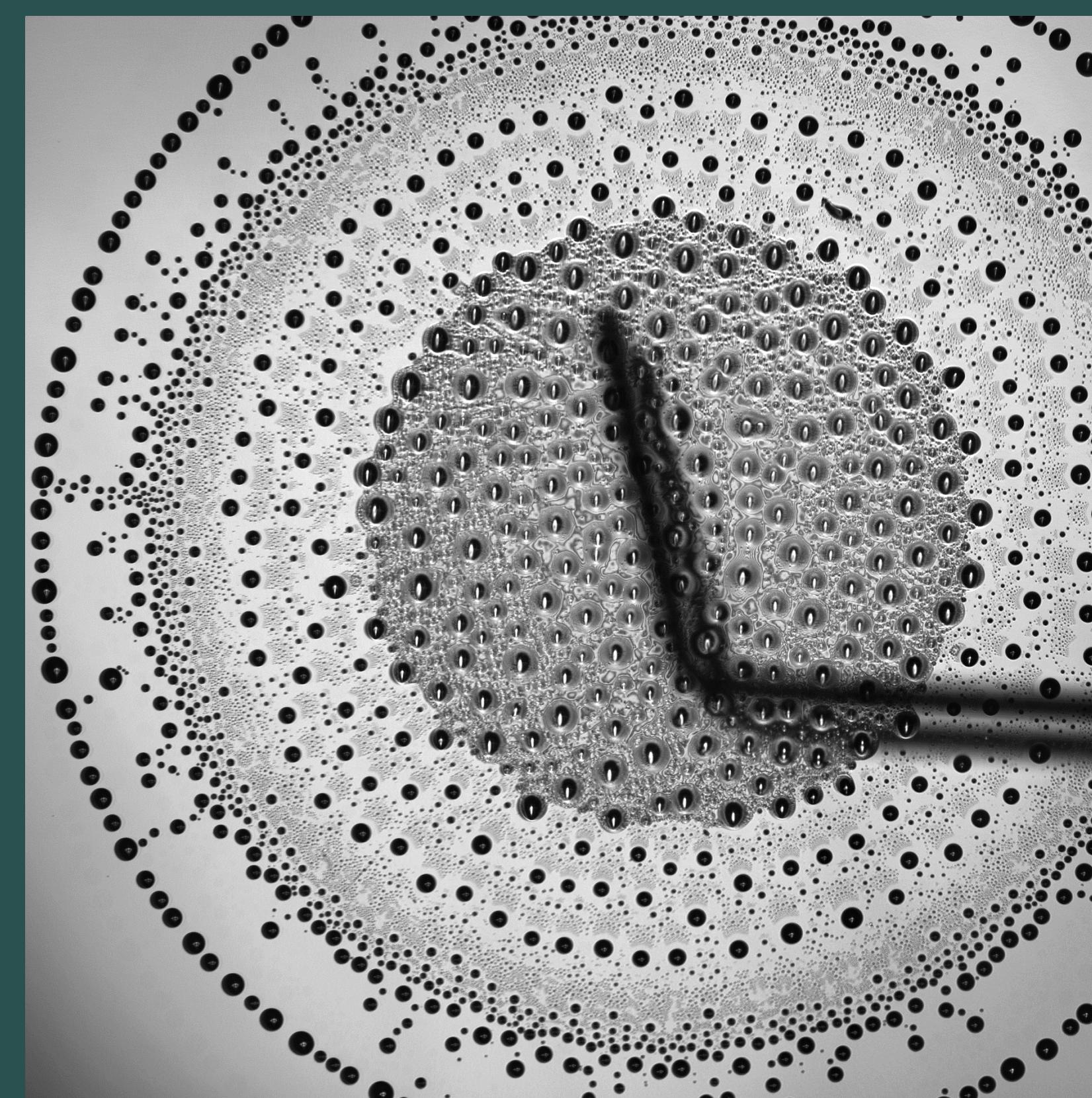
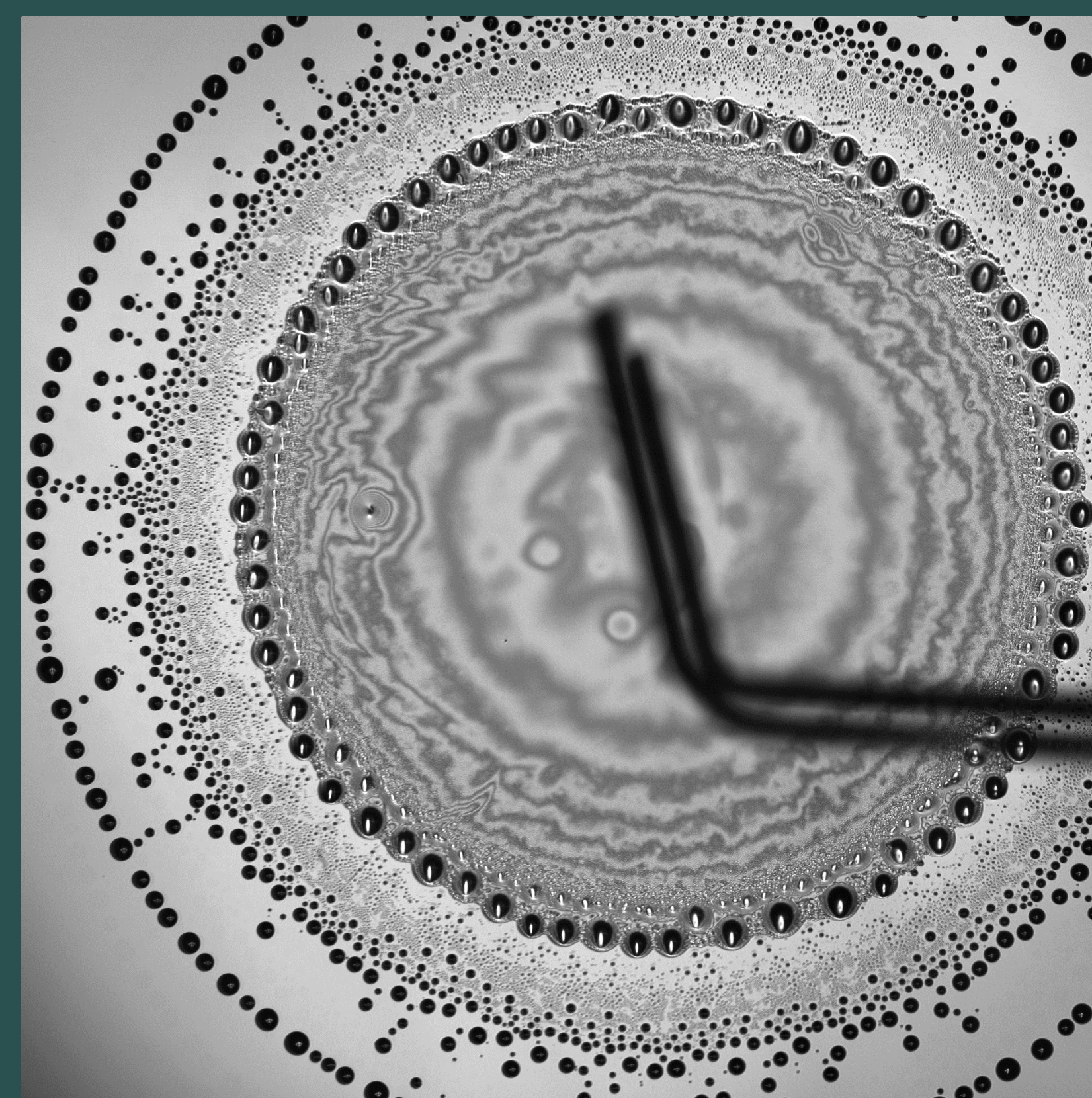
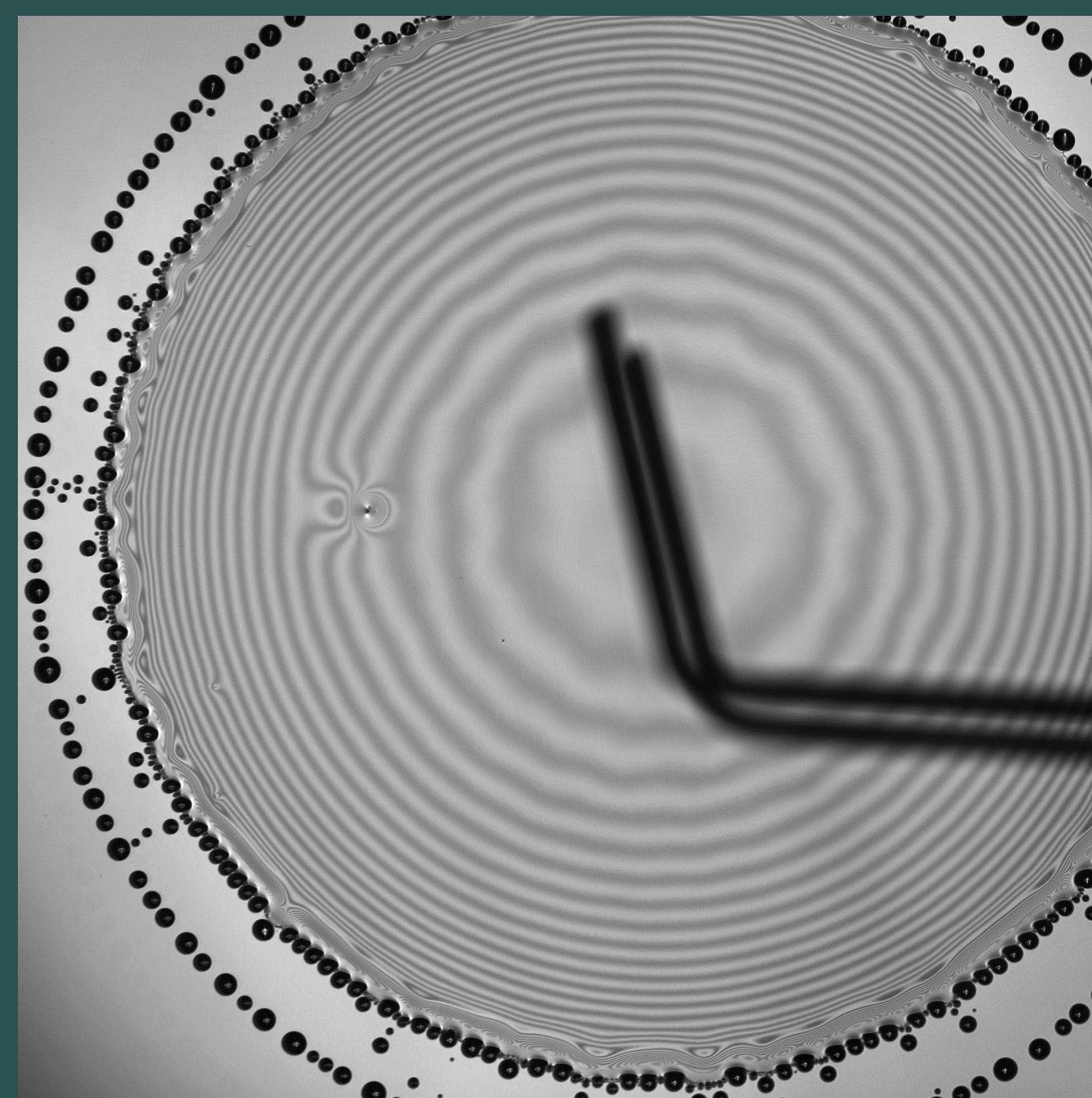
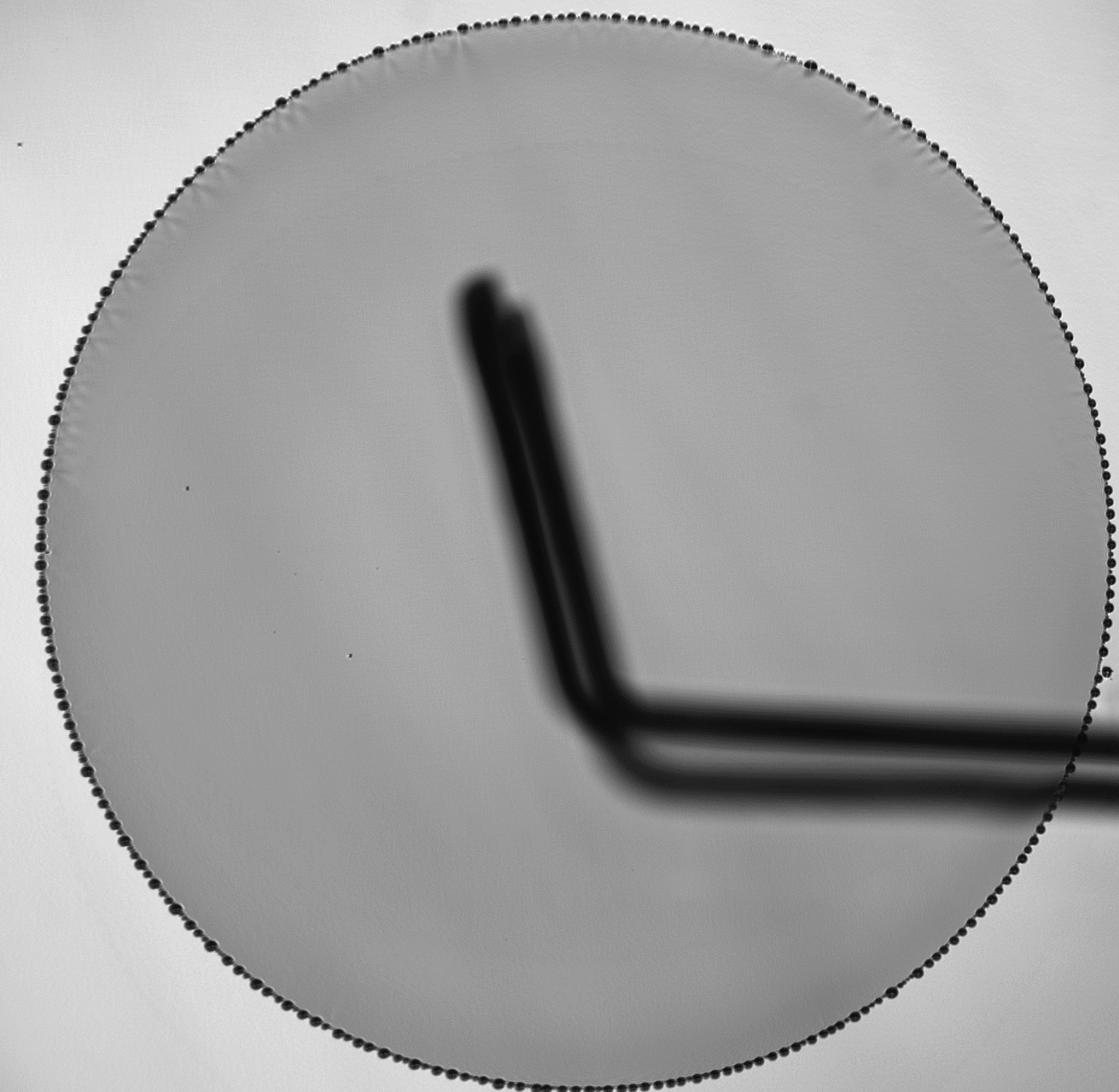
Experiment – isopropanol (IPA) + solute  
spreading on silicon wafer. Forces:  
Marangoni + surface wetting



IPA + 10% ethylene glycol  
large surface tension difference



IPA + 10% dodecane  
no surface tension difference



behavior can be  
tuned with surface  
affinity – oxygen  
plasma treatment

