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Coupled adhesion of bacteria to surfaces

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Stellingen

Behoerend bij het proefschrift

“Coupled adhesion of bacteria to surfaces”

Rebecca van der Westen Skogvold

1. QCM-D can be applied to analyze the viscoelasticity of the bond between bacteria adhering to solid-liquid interfaces over a large number of adhering bacteria.

This thesis
2. The bacterium-substratum bond can be described by a combination of a linearly responding spring and dashpot, representing elasticity and viscous drag, respectively.

This thesis
3. The use of a phenomenological Kelvin-Voigt or Maxwell model in a coupled-resonator approaches yield good fits to the QCM-D data.

This thesis
4. There is experimental evidence for the existence of two modes of bacterial adhesion; floating and tether-coupled.

This thesis
5. QCM offers a new and versatile including low cost quantitative tool for the determination of forces involved in bacterial adhesion.

This thesis
6. Only mediocrity is sure of itself, so take risks, and do what you really want to do.

Paulo Coelho
7. Only the boring get bored.

Charles Bukowski
8. Not all who wander are lost.

J.R.R Tolkien
9. Our lives begin to end the day we become silent about things that matter.

Martin Luther King Jr.
10. When one door closes another one opens.