Suspended Particulate Matter Formation And Accumulation In The Delta From Monitoring To Modelling

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Propositions

Accompanying the dissertation

Suspended Particulate Matter formation and accumulation in the Delta

By

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1. To model flocculation in natural environments the standard Population Balance Equation (PBE) is not adequate, due to the dominant role of organic matter in flocculation (this thesis).

2. The effect of organic matter on flocculation can best be described using a logistic growth theory (this thesis).

3. To model interactions between the SPM particle classes, organic matter content needs to be incorporated as a parameter in large scale sediment transport models (this thesis).

4. Flocculation models based on current Particle Size Distribution (PSD) are biased, because in-situ particles are not spherical as it is assumed in the calculation of PSD (this thesis).

5. In order to reduce stress during the PhD, more flexibility and better communication with the graduate school would be an asset.

6. Competition within the academic world prevents team spirit.

7. Combination of in-situ monitoring techniques should be used to properly assess both composition and structure (shape, density) of particles.

8. Due to Covid-19 home quarantine, people started to think differently about life and take responsibility towards society.

9. Covid-19 measures changed people's perception about working from home.

10. Finding an academic job after a PhD is a challenge that has to be worked on from the beginning of the PhD for instance by starting networking and learning how to present your work to your network.

These propositions are regarded as opposable and defendable, and have been approved as such by the promotors prof. dr. J.D. Pietrzak and dr. C. Chassagne.