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## Accessible remote sensing of water

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*Propositions accompanying the thesis*  
**Accessible remote sensing of water**

1. Consumer cameras, including smartphone cameras, can perform professional-grade spectroradiometry when using RAW data. *(Chapters 3 and 4)*
2. The iSPEX 2 add-on enables accurate spectropolarimetry using smartphone cameras. *(Chapter 6)*
3. Colour blindness significantly increases the uncertainty on Forel-Ule colour measurements for a significant fraction of users. *(Chapter 2)*
4. Spectral convolution of hyperspectral reflectance is often performed incorrectly, causing significant systematic errors. *(Chapter 5)*
5. Vague terms like *water quality* should be replaced with specific quantities like constituent concentrations and inherent optical properties.
6. To ensure reproducibility and facilitate novel research, data should be published in full, including raw data and calibration materials.
7. For successful citizen science, the citizens should come first and the science will follow.
8. A small systematic error is more interesting than a large random error.
9. Methodological research is just as scientific as applied research.
10. The best way to gain new insights into one's own field of research is to study seemingly unrelated fields.
11. Predatory publishing is the logical end result of modern academic culture.
12. There is little difference between mechanical engineering and magic.

Olivier Burggraaff  
Leiden, August 2022