

Propositions

1. Researchers conducting SEM-based backscattered electron imaging of biological tissue without the use of a negative potential bias are (literally) wasting time.
This proposition pertains to this dissertation.
2. Integrated array tomography is the most viable solution for acquiring large-scale correlative light and electron microscopy datasets with sub-micron registration precision.
This proposition pertains to this dissertation.
3. By mitigating nonspecific labeling artefacts and correcting for registration errors, neural networks trained on correlative light and electron microscopy data are capable of providing higher quality fluorescence information than fluorescence microscopes.
This proposition pertains to this dissertation.
4. The future of correlative light and electron microscopy relies on improved protocols for sample preparation rather than instrumentation.
This proposition pertains to this dissertation.
5. The next revolution in dense reconstruction of biological specimens will come from X-ray nano-tomography.
6. By manufacturing women's clothing with impractical or nonexistent pockets, the fashion industry has exploited women into the purchasing of hand bags.
7. If intelligent lifeforms existed elsewhere in our galaxy, we would be aware of them by now.
8. Humanity and asteroids pose the two greatest existential threats to our planet; the best way to ensure the survival of our planet is therefore for all humans not contributing to an asteroid-detonation strategy to die.
9. Art is not open to interpretation; it means precisely what the artist meant it to and nothing more.
10. Inaccessibility of glass recycling facilities undermines the "green" credentials of TU Delft.

These propositions are regarded as opposable and defensible, and have been approved as such by the promotor Dr. ir. J.P. Hoogenboom and copromotor Dr. E.C.M. Carroll.