

# Queen's International Photocatalytic Standards Centre

- Queens is an international testing center located in Belfast.
  - Led by Dr. Andrew Mills, a respected scientist in this field
- This fills an important missing link in our credibility story. We can now present independent third party validation of our product efficacy.
- Able to perform a full range of ISO tests and their variants for <\$250 each.
- They conduct testing for the existing PCO players such as Pilkington, Saint Gobain, Toto
- They have reported that we have outperformed relative to competitive products. See examples on next two slides from their report.
- They seem to be quite impressed by our product, and are even using PURETi treated materials to highlight their photocatalytic test methods.

# PURETi Clear vs. Hydrotect Tiles



## Reduction of RZ Ink

### HYDROTECT Tiles

These tiles are slow to interact with the RZ ink, with only one of the treated regions producing any reasonable colour change within an hour of irradiation. As the profile did not fully level out within the test time, an exact bleach time cannot be determined, however from the shape of the profile (plot 4) this could be estimated to be approximately 20 minutes, at least an order of magnitude slower than any of the PURETi coatings.

### Conclusions

Both PURETi coatings showed signs of photocatalytic activity using an RZ ink test. Both PURETi Clean and PURETi Clear greatly outperformed HYDROTECT in this test on both tile and glass surfaces. PURETi Clean applied to a smooth tile surface could not be assessed using the RZ ink test, possibly due to incredibly high activity. Alternate testing with an AV7 ink test revealed the coating to have very high activity.

# PURETi Clear vs. Hydrotect Tiles

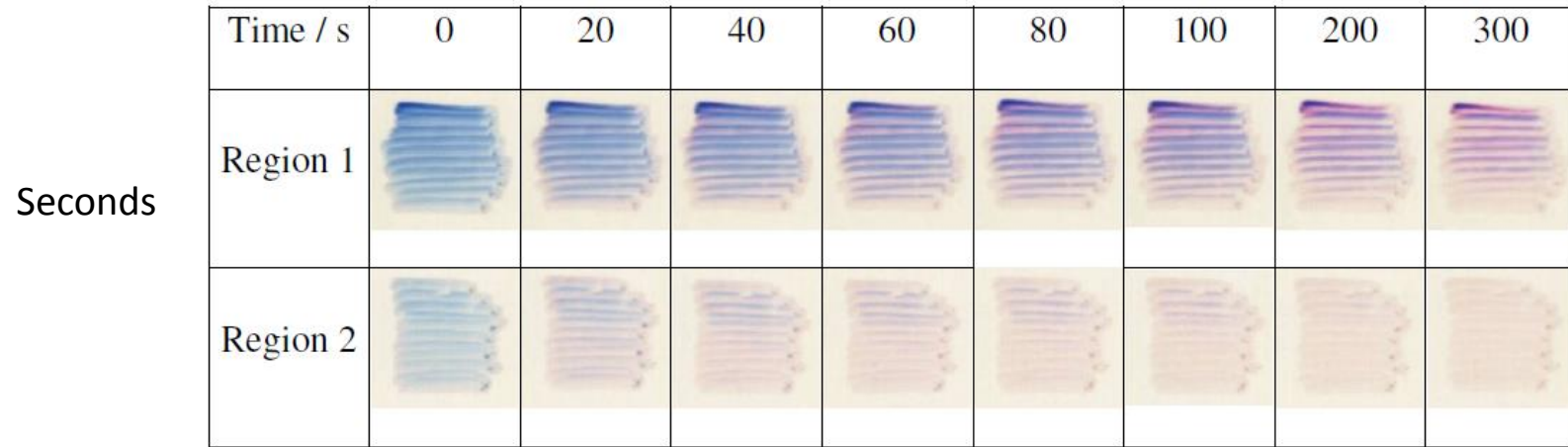


Figure 1 – Visual change in Rz on PURETi Clear smooth tile sample

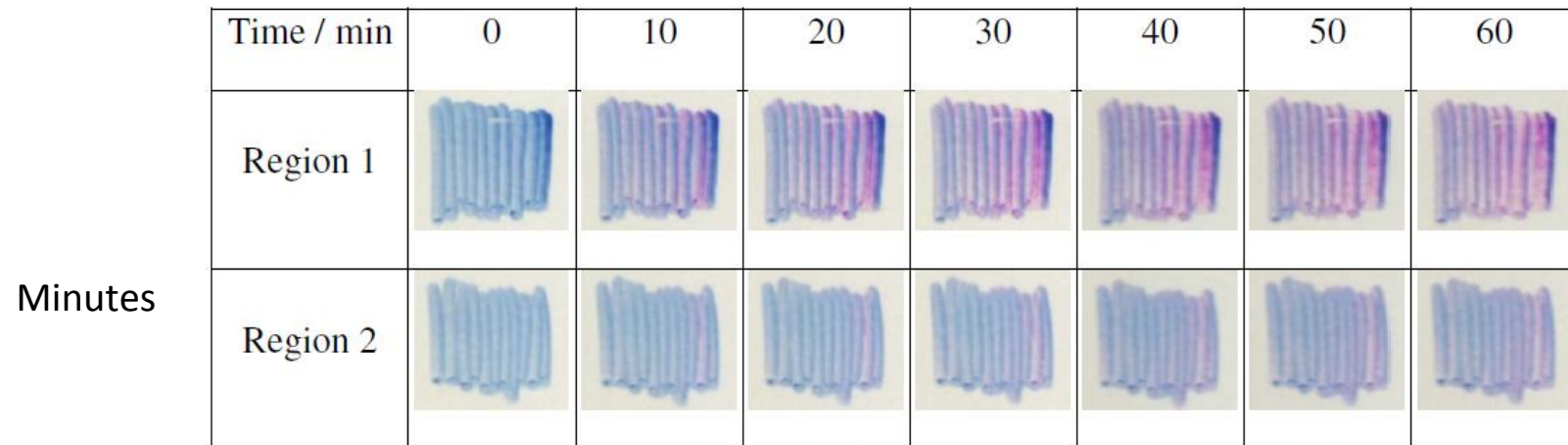
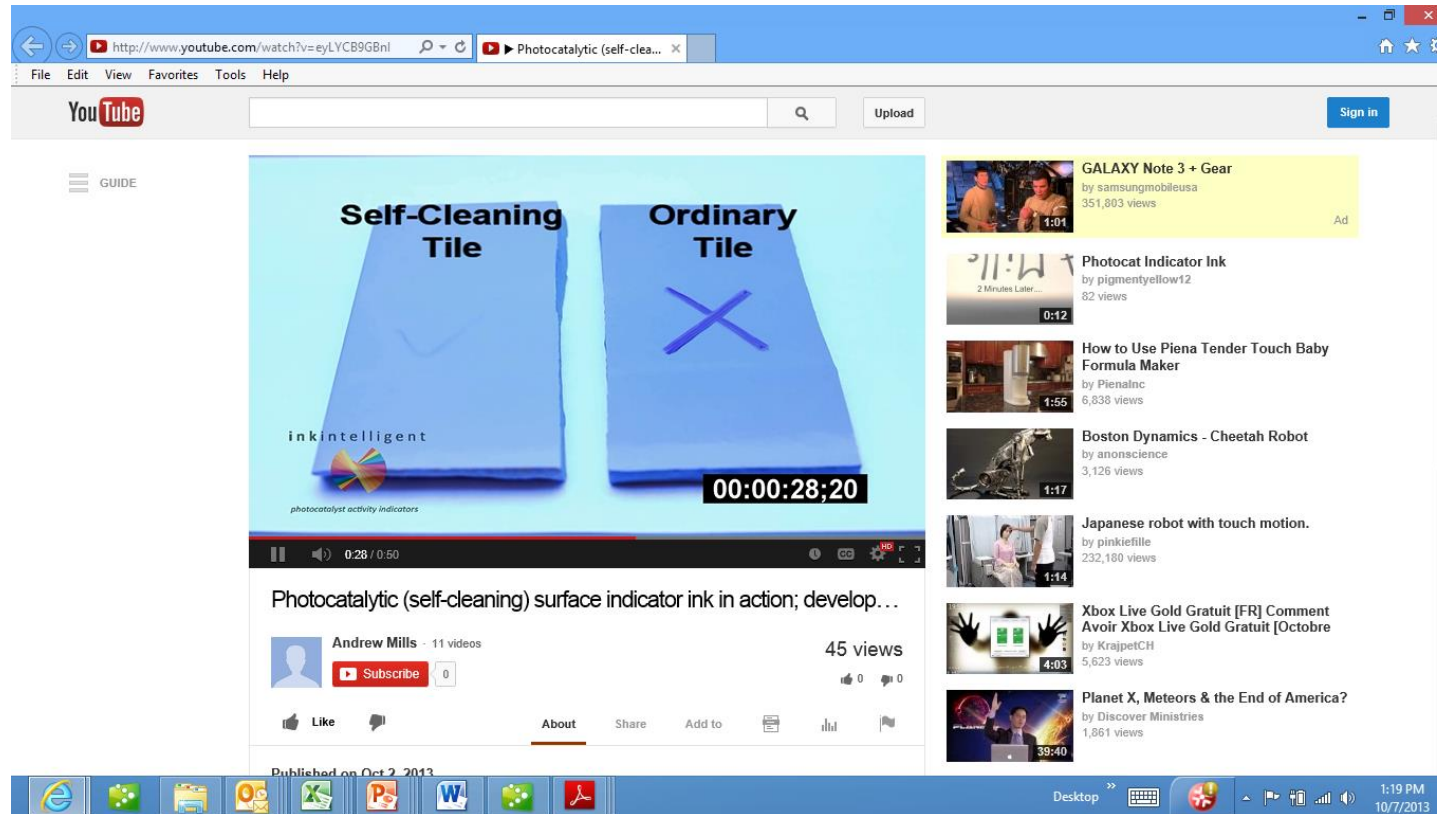


Figure 5 – Visual change in Rz on HYDROTECT tile surface

# Queen's Credibility video



<http://www.youtube.com/watch?v=eyLYCB9GBnl>