Clay Drying Experiment – WUR iGEM 2017

1. Inoculate 50mL of LB (+antibiotic) with an *E. coli* strain and antibiotic resistance of choice and incubate overnight at 37ºC, 200rpm.
2. Next day, measure the OD_{600} and divide the culture in two aliquots for *in duplo* measurements.
3. Weigh the following amounts of kaolin (Aluminum silicate hydroxide) in 15mL Greiner tubes:

Duplo 1:						
0 gram	0.1 gram	0.2 gram	0.4 gram	0.6 gram	0.8 gram	1.0 gram
Duplo 2:						
0 gram	0.1 gram	0.2 gram	0.4 gram	0.6 gram	0.8 gram	1.0 gram

4. Dissolve each amount of kaolin, using 2mL of culture. Vortex if necessary.
5. Spin the tubes down at 4,700rpm for 5 minutes at 20ºC and discard the supernatant.
6. Dissolve each pellet separately in 1mL of LB.
7. Spread this solution on small, empty Petri dishes (ø=5 cm) and dry these overnight in a Laminar Flow Cabinet, turned on.
8. Scrape off all the kaolin+culture dust from each plate and collect it separately into 50mL Greiner tubes.
9. Add 1mL of SOC medium to each respective tube and dissolve until the pellet at the bottom (more or less) disappears. Measure the OD_{600} of the blank (=0 gram kaolin added).
10. Plate the 100µL of this suspension on normal-sized, pre-warmed LB Agar (+appropriate antibiotics) plates and incubate at 37ºC overnight.
11. The next day, count the colonies and send this data (+both OD values) to igemwageningen@gmail.com.