

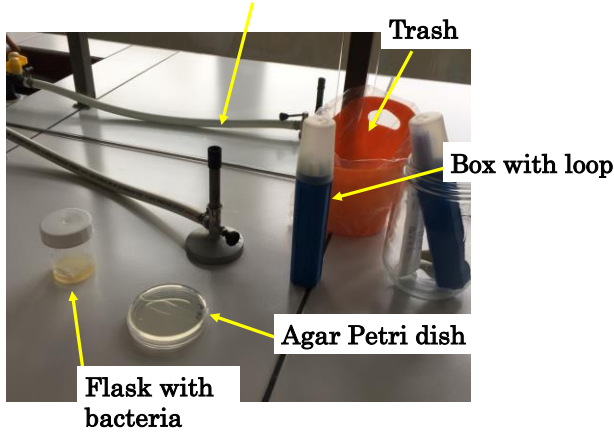
# Bacterial degradation of PHB:

## Test for viability and development of bacteria

### 1. Preparation

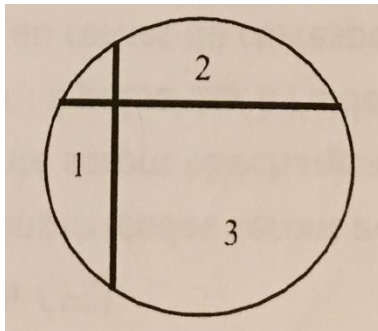
- 1.1 Tie your hair.
- 1.2 Set your workspace like in the picture.

Flame to create a sterile air area



- 1.3 Turn on the Bunsen burner.
- 1.4 Along the edge of the bottom of the petri dish, write:
  - the date,
  - the plastic material,
  - the type of bacteria,
  - group number.

- 1.5 on the bottom of the Petri dish draw two lines as it is shown.



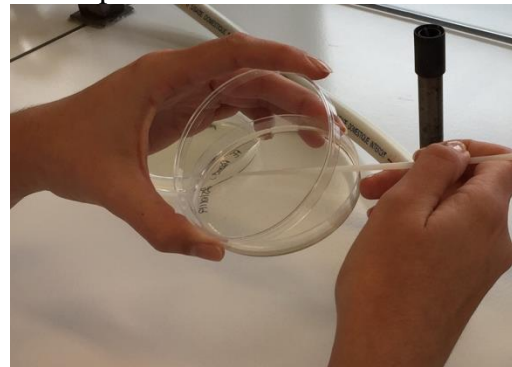
### 2. Sample collection

- 2.1 Sterilize the loop by heating in the flame of the Bunsen burner for 10 seconds.
- 2.2 Cool it down by touching the agar.
- 2.3 Collect a sample of the liquid medium with the sterilized loop.

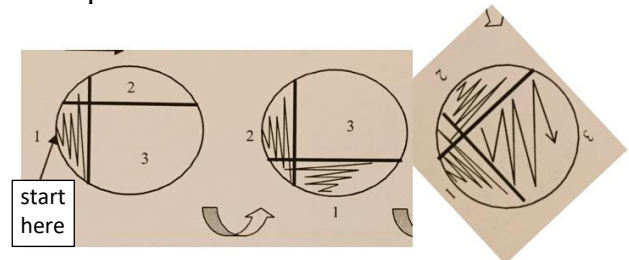


### 3. Inoculation

- 3.1 Inoculate the nutrient agar with the bacteria sample as shown.



- 3.2 Spread the bacteria as shown below.



First, spread the sample carefully on part 1 of the petri dish, turn the petri dish +90°, spread the sample on part 2 and turn at new for the part three. The sample should only be spread on the surface of the agar.

### 4. Incubation

- 4.1 Petri dishes are incubated at 37° C for 24 hours.

### 5. Tasks:

- 5.1 Observe the result. Are there any differences among treatments? Compare your results with other groups.
- 5.2 Take a picture of each petri dish and interpret the result.
- 5.3 Prepare a presentation of the result to present it to the audience.