



## **Chemical Transformation protocol**

Goal- to transform chosen bacteria with cloned DNA by heat shock.

## Materials:

- \*Ice
- \*Competent cells
- \*SOB
- \*LB-agar plates with antibiotics
- \*DNA

## Procedure:

- 1. Pre-heat water bath to 42 °C and warm plates in incubator.
- 2. Defrost 100  $\mu$ L of Competent cell for 10-15 minutes on ice.
- 3. Add DNA to the cells.
- 4. Incubate on ice for 30 minutes. During this time make SOC and <u>Pre-heat</u> it to 37°C (in shaker)
- 5. heat shock cells:
- 6. incubating cells at 42°C for 30 seconds in water bath.
- 7. Incubate on ice for 2 minutes.
- 8. Add 900  $\mu L$  of SOC using bunsen and incubate at 37°C for 1 hour.
- 9. Plate the cells on appropriate antibiotic plates- 100  $\mu$ L and rest.
- 10. Incubate overnnight at 37°C in a static incubator.