

# FE 305 Experiment 6

## ATP Hygiene Test (Bioluminescence Test)

# Contents

- ATP Hygiene Test
- Principle and using hygiene test device

Experiment sheet is given in the link below:

[ATP TEST Lab Sheet](#)

**Aykut Barazi Announcement Page**

Samples needed for this experiment

- **Surface swab samples**
- **ATP Test Device Reader**

# Principle and Importance

- For Hygiene and Sanitation monitoring ATP Bioluminescence technique is used.
- ATP (Adenosine tri phosphate) is main energy producing molecules found at any living organism metabolic activities.
- Presence of ATP → Living Microorganisms
- Perfect indicator when trying to determine if a surface is clean or not.
- ATP + Luciferase enzyme → Light



# Procedure



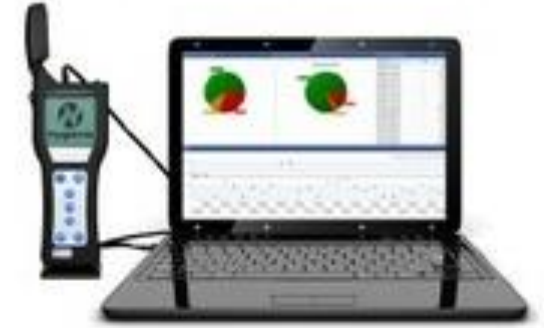
Open swab and  
apply on a surface 10 cm<sup>2</sup>



Close the swab and  
break the upper holder  
to release Luciferase  
enzyme



Insert the swab into reader  
and press start



Record the reading of  
every individual and surface

Higher RLU → High microorganisms  
Min and Max RLU is defined by you.

# Results

- Cellphone → 130 RLU
- Hands → 350 RLU
- Desk surface → 15 RLU
- Notebook → 0 RLU