



# MTE 2023

## Malaysia Technology Expo™

A Leading Global Innovation and Technology Event

Advanced Healthcare  
& Life Sciences  
International Innovation  
Awards & Expo

9-11

August 2023  
Virtual Event



FACULTY OF  
PHARMACEUTICAL  
SCIENCES



# Green Innovation of Anti-acne MagFix Face Serum

---

## Inventors:

---

Ms. Saiqa Afroze\*

Ms. Yap Jeck Yee

Ms. Tan Qinwei

Asst. Prof. Dr. Ashok Kumar Janakiraman

Category: Treatment





# Causes of acne

- Genetics
- Cosmetic products
- Exposure to bacterial, dirt and chemicals
- Stress and emotional extremes
- Hormone alterations
- Diet





---

## Current commercial ingredients for **acne** and **drawbacks**

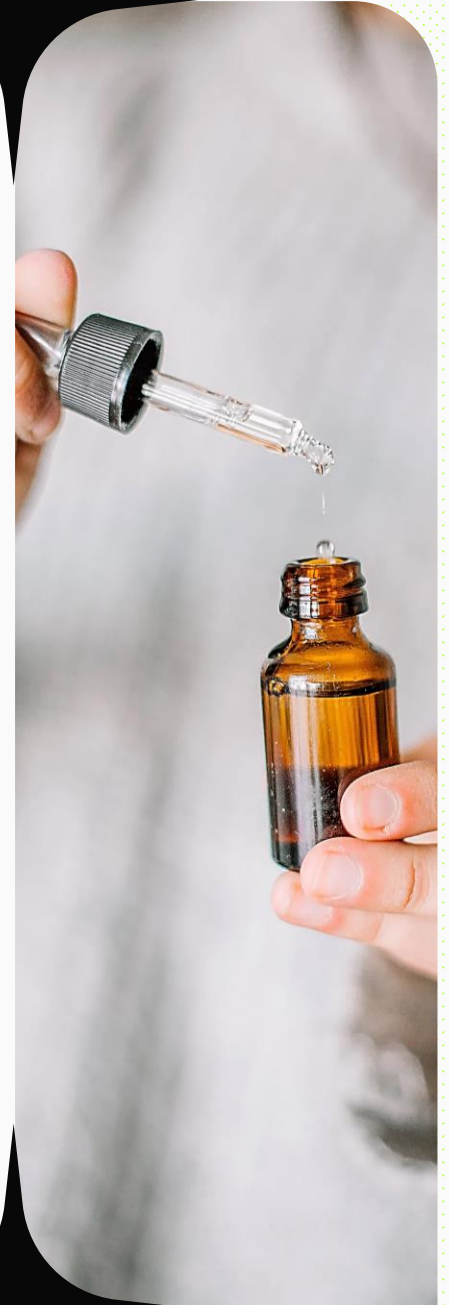
---

- ❖ Dryness
- ❖ Photo-sensitivity
- ❖ Skin peeling
- ❖ Skin redness

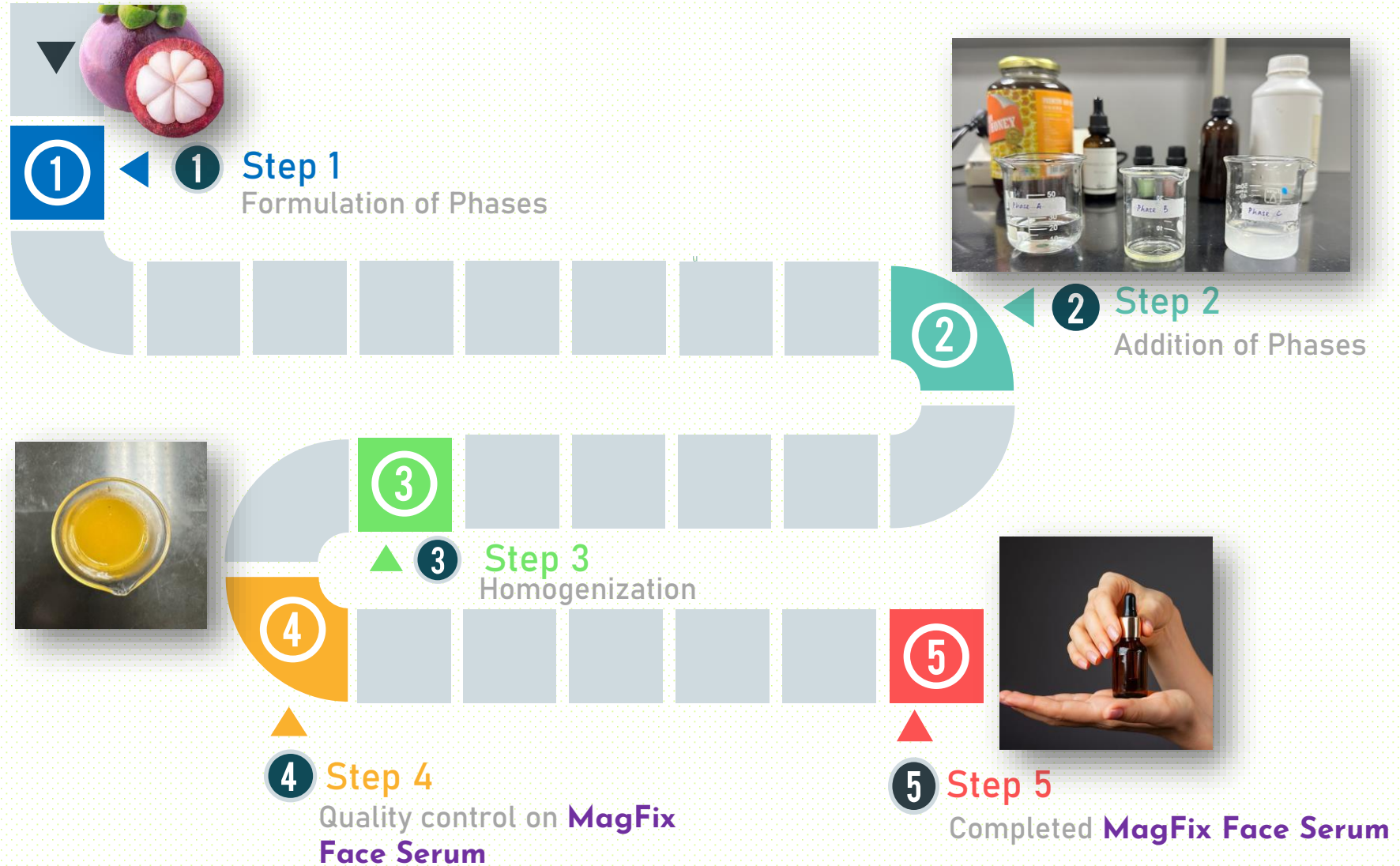
# MagFix for anti-acne

## Benefits of Mangosteen

- Inhibits enzymes
  - Elastase
  - Collagenase
  - Matrix metalloproteinase
- Antioxidant activity
- Antibacterial properties against *Staphylococcus aureus*



# Manufacturing process



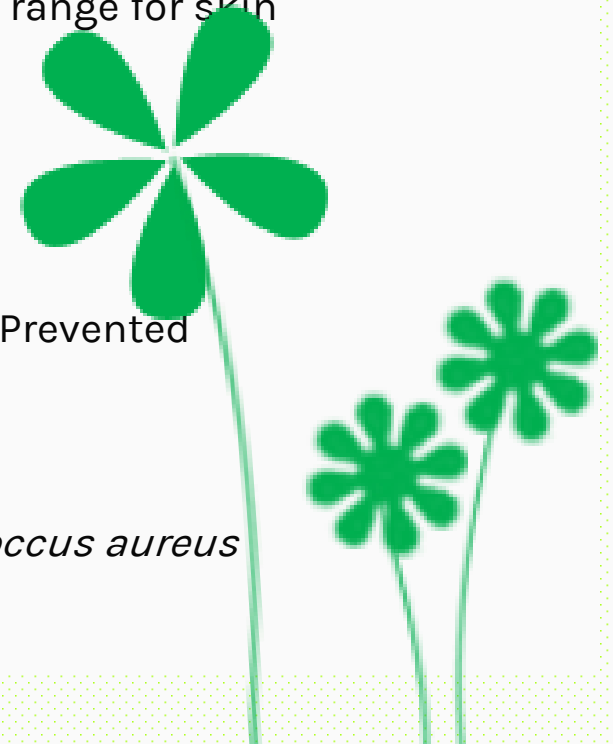
# Characterization

## Parameters

- ❑ FTIR- Study
- ❑ Colour
- ❑ Texture of formulation
- ❑ pH test
- ❑ Antioxidant properties
- ❑ Redispersion test
- ❑ In-vitro Occlusive property
- ❑ Spread-ability
- ❑ Antibacterial test

## Results

- ✓ Showed No incompatibility
- ✓ Yellowish brown
- ✓ Smooth
- ✓ Within the suitable range for skin
- ✓ Positive
- ✓ Positive
- ✓ 48% Moisture Loss Prevented
- ✓ 6-7 cm
- ✓ Against *Staphylococcus aureus*







# Additional characteristics

---



Fast absorption

Skin moisturizing

Soothing effect

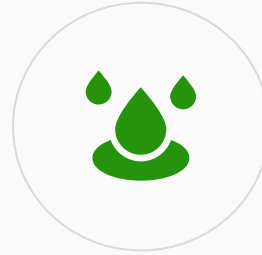
---



# Unique Selling Points

**100%**

**Natural product**



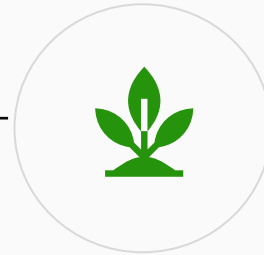
**Paraben, SLS and alcohol-free**

**Environmentally friendly**

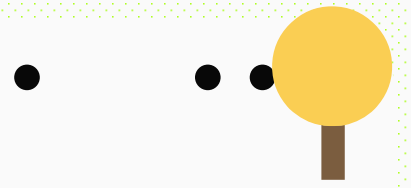


**Microplastic free**

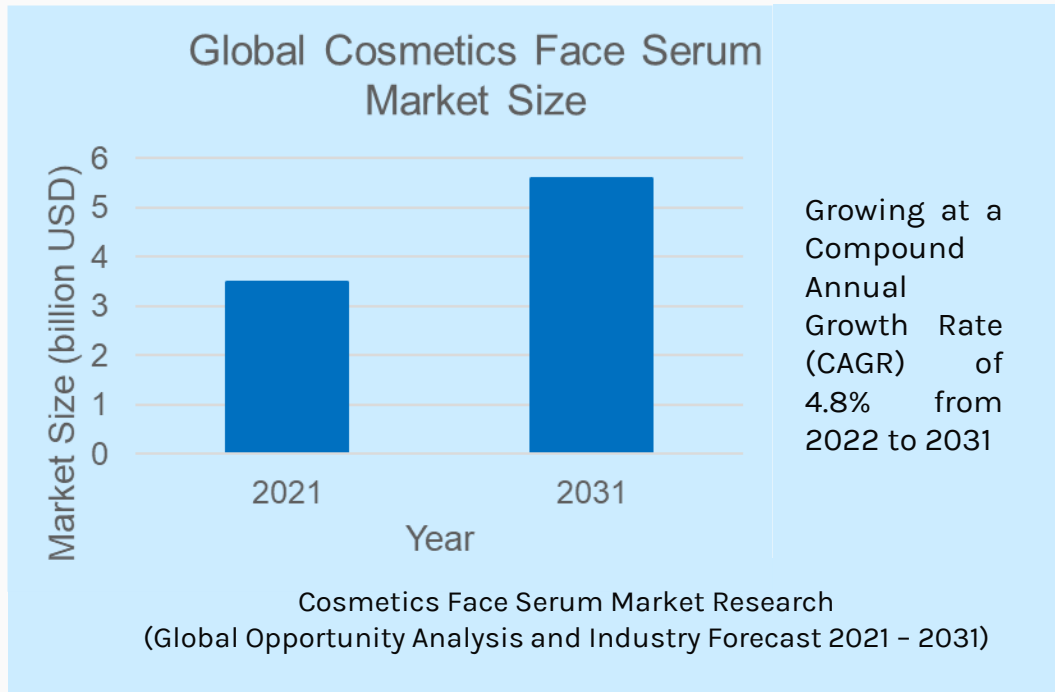
**Usage of fruit waste**



**Animal testing free**



# Commercial potential



As **MagFix Face Serum** is produced naturally using the extract of mangosteen, its commercial potential could be foreseen.





**Thank you**