

ALGAL BIOMASS (ALGAE)

- Associate Professor, Dr. Koji Iwamoto (Head of iKohza)
- Associate Professor, Dr. Shaza Eva binti Mohamad
- Associate Professor, Dr. Norhayati binti Abdullah

NUMBER OF STUDENTS

- Ph.D : 7 students
- Master: 8 students
- Bachelor: 8 students

RESEARCH KEYWORDS

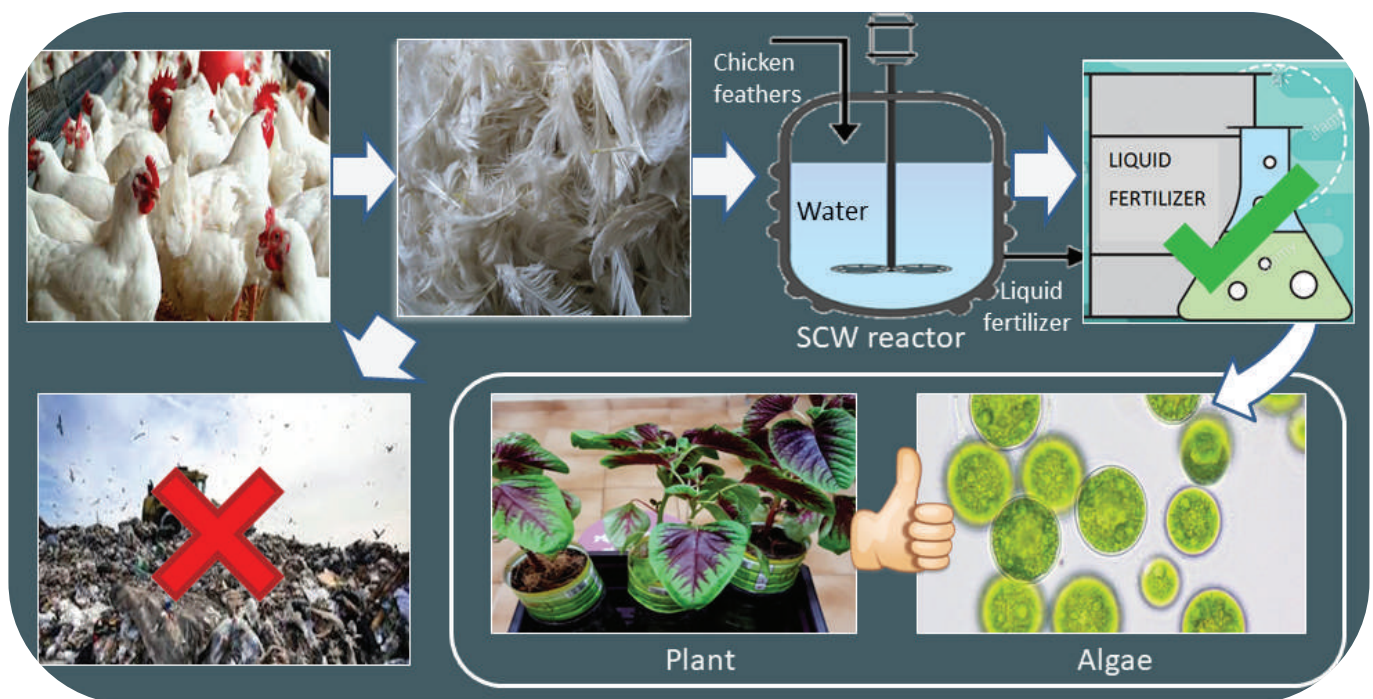
Algae, Microbes, Biomass production, Wastewater, Organic waste

OUTLINE OF IKOHA

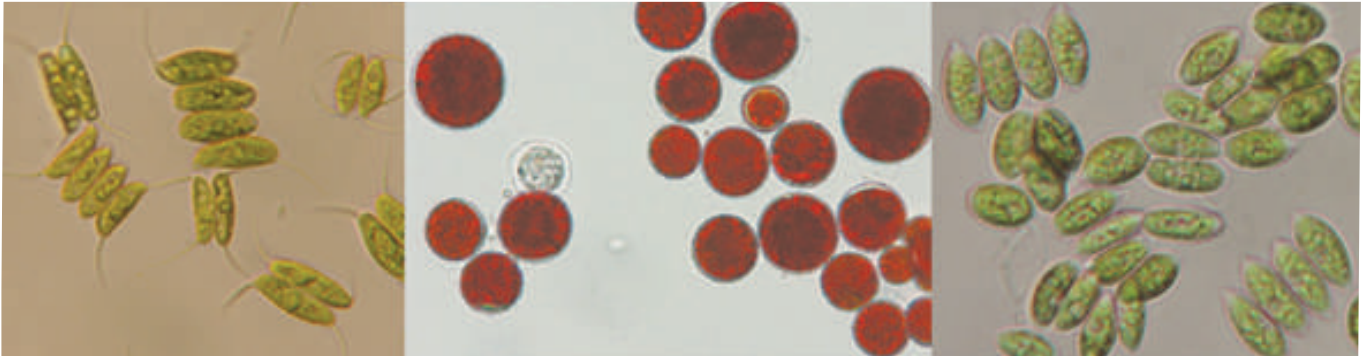
The final goal of my research is to construct the sustainable society by solving the energy and environmental problems using aquatic plants, algae, and microbes. Since the Algae and Biomass Research Laboratory will be established soon, we speed up our research to the goal.

CURRENT RESEARCH

- **RESEARCH1:**
Utilization of chicken feather for fertilizer production by subcritical water treatment.



- **RESEARCH 2:**
Enhancement of valuable products such as astaxanthin, omega-3 fatty acid and lipids in microalgae.



- **RESEARCH 3:**
Energy effective wastewater treatment by activate granular sludge and microalgae-bacteria aerobic granular sludge.



MERIT OF THE TECHNOLOGY

- 1) Isolation, Identification and characterization of algae and microbes.
- 2) Facility and technology of algae mass culture.
- 3) Subcritical water treatment technology.
- 4) Water treatment and phytoremediation technology.

POSSIBLE INDUSTRY APPLICATION

- Isolation and identification of new capable algal strains.
- Mass cultivation (1000L scale) of algae.
- Removal/ recovery of heavy metals/ precious metals
- Wastewater treatment.

Contact: Dr. Koji Iwamoto
k.iwamoto@utm.my
