

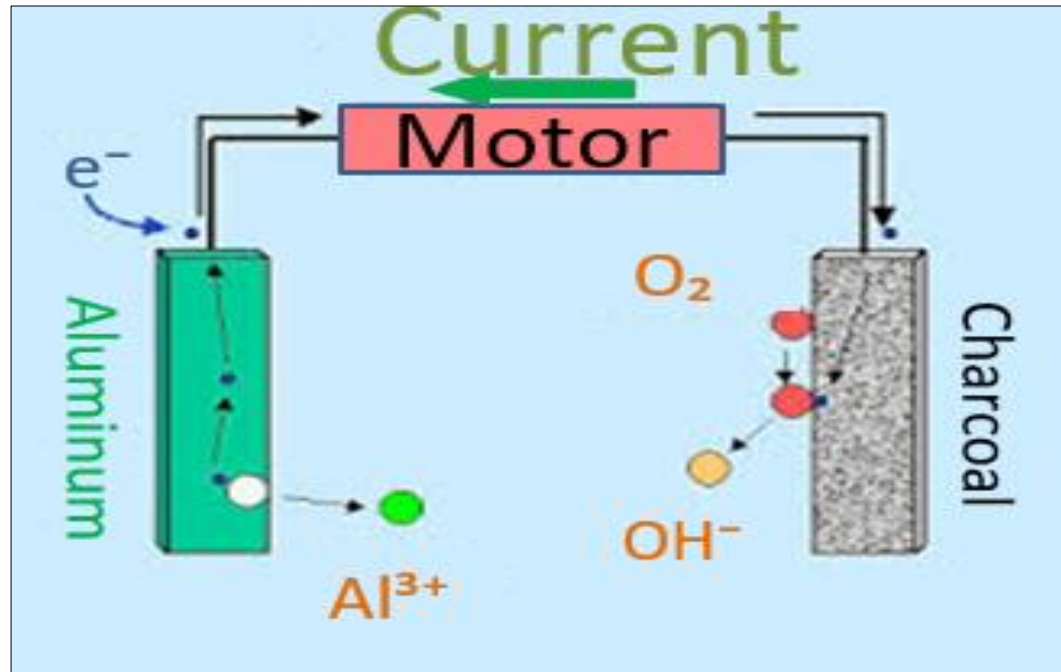
High Quality Charcoal Battery

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Team 13

What is Charcoal Battery ?

Construction of conventional charcoal battery



Good points

Cheaper than others.

Easy to make.

Bad points

Poor performance.

Produce only low current.

Purpose

To find a high quality charcoal battery

▪ Search how to generate a large electric current.

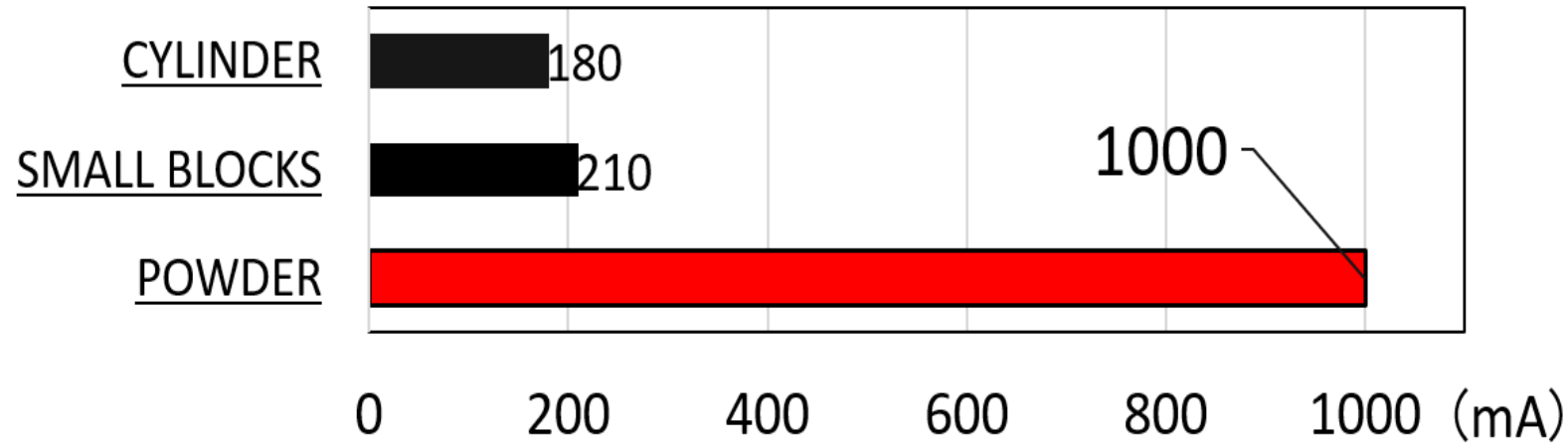
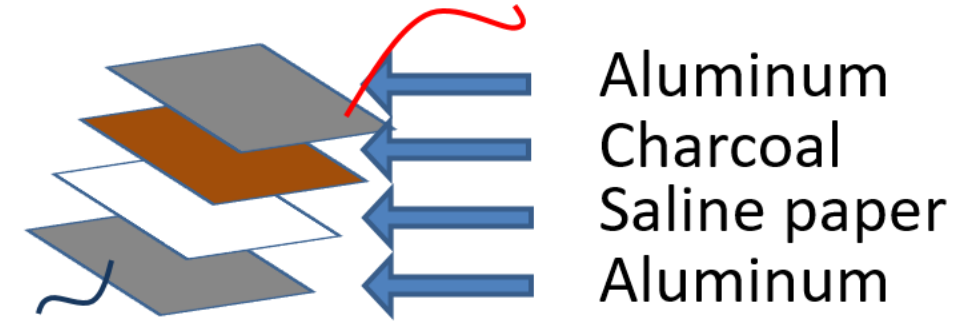
▪ Search how to flow electric current for a long time.

1st experiment Shape of charcoal

3types

→cylinder, powder, small blocks (4mm ~ 6mm)

✂Each charcoal piece has a mass of 30 gram

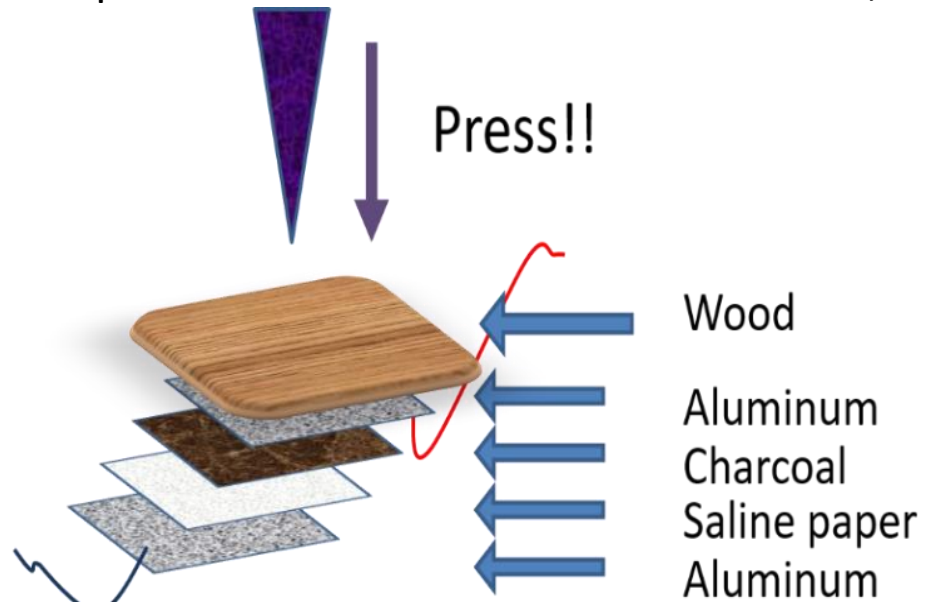


Powder type is the best shape of charcoal !

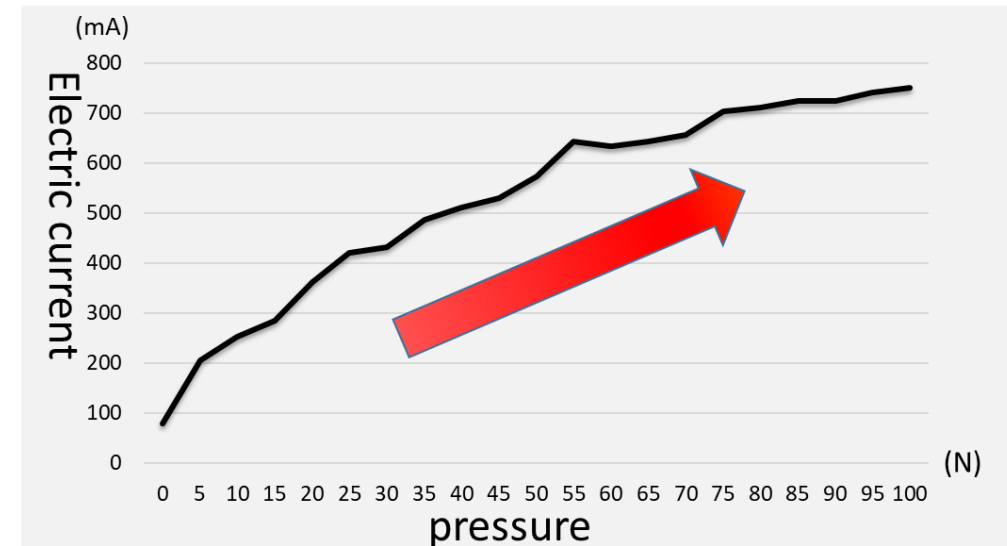
2nd experiment The relationship between pressure and current

Materials

1st experiment's material + Pressure machine, wooden plates



- ✘ Each charcoal piece has a mass of 30 gram
- ✘ We prepared wood plates to add pressure to the entire of charcoal.
- ✘ We used powder-type charcoal (from the result of 1st experiment)



- Grounding area between metal and charcoal became larger.
- The electric resistance of charcoal reduced because the space of each charcoal particles got closer with each other.

Practical use and reusability

Method

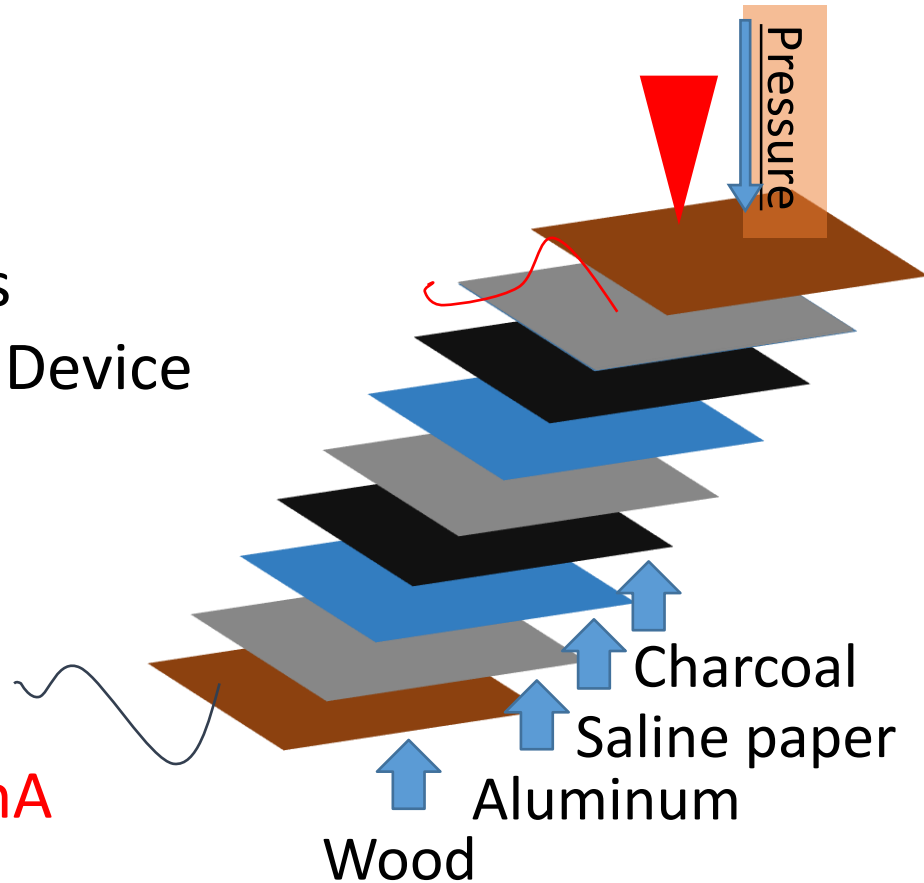
1. Pile up two charcoal batteries
2. Pressured them with a Pickle Device
3. Measured a current

Result

Pressure → About **1200mA**

-After 30 minutes → About **150mA**

-changed air → About **800mA**



Consideration

The number of battery increases → **Get more current**

The electricity recovered in the 2nd time → **Oxygen is necessary for reaction**