

How heat turns into electricity by gravity in simple terms.

English Version of the Dialogue

(Characters: Emily (female), Jason (male))

Emily: Jason, I heard you're working on a new kind of green energy that doesn't emit carbon and doesn't create nuclear waste. Is that true?

Jason: Yep, totally true! It's a clean energy system that converts heat into electricity — no fuel needed, no pollution.

Emily: Whoa, that sounds like science fiction! How does it work?

Jason: The basic idea goes back to 1910, when a physicist named Tolman discovered that in a gravity field, different electrolyte solutions can show different electric potentials.

Emily: Wait, you mean gravity alone can make electricity?

Jason: Exactly. If you line up two different electrolyte solutions and connect them at the bottom with a wire, a natural voltage difference appears at the top. It's like a small battery that can output electricity.

Emily: But wouldn't that battery run out quickly?

Jason: That's the interesting part. K.T. Chen's experiment shows that as long as there's thermal energy — meaning the molecules are vibrating — the system keeps generating electricity. The heat causes ions to move, and gravity makes heavier and lighter ions shift differently, creating a stable voltage.

Emily: That's amazing! But you said Earth's gravity is too weak — how do you deal with that?

Jason: That's where centrifugal force comes in. We put the system in a spinning centrifuge. If we double the speed, the output goes up by about 16 times. Spin it fast enough, and you get a usable amount of energy.

Emily: That's genius! Can you explain more about how heat actually turns into

electricity?

Jason: That part's a bit more technical, so K.T. Chen made a short video explaining it in more detail. You should check it out!

Emily: Definitely! If this works, you might be changing the whole future of clean energy.

Jason: Fingers crossed! Let's hope it can get out into the real world.

Video:

重力熱轉電簡單說中文版(How heat turns into electricity by gravity – in simple terms. Chinese Version.) <https://youtu.be/djSZXFJ8DjY>

How heat turns into electricity by gravity in simple terms - English Version. (重力熱轉電簡單說英文版). <https://youtu.be/SfhBsoXdN0o>