

**School of Languages, Cultures and Societies**

CENTRE FOR TRANSLATION STUDIES

**Translation Test**

**English into Arabic**

The following translation tests must be completed by all students who wish to study Specialised Translation modules as part of their Masters or Postgraduate Diploma course. This test is for those students commencingstudies in **September 2023** only.

For information on current course module options please follow the course catalogue weblinks on the MA course webpages.

**Instructions**

1. **Save this document** as an ‘MS Word’ document titled “En-Ar ST Test [FirstName Surname]” (include all pages of the document).
2. You are free to use any dictionaries and reference material you wish, however, **the work must be entirely your own**.
3. **Upload the document** in the Supporting Information (Personal Statement) section of the online application form via the applicant (or agent) portal.
4. **Complete the declaration** below to declare the translation is your own work.

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**ENGLISH INTO ARABIC TRANSLATION TEXT**

**How Much Power Can We Get from Raindrops?**

Here's how researchers are working to harvest energy from unconventional sources such as falling droplets of water

While the tiny amount of energy from raindrops won’t power your house for very long, there are plenty of other potential applications that draw inspiration from similar concepts.

“Water droplet energy is indeed small, so that people did not realize such energy can be harvested previously. But with the rapid development of ‘Internet of Things,’ many smart devices raise demand for the distributed sensors and energy sources,” wrote Hao Wu, an engineer from the Chinese University of Hong Kong and an author of a paper which looked into new ways to harness the kinetic energy of droplets. “Some ‘environmental energy’ such as water droplet, wind, motions in our human body are expected to support this demand.”

Zuankai Wang, an engineer from City University of Hong Kong and an author of a separate paper on the same subject, published in the journal Nature, said that self-contained devices that don't need a lot of power, such as implantable medical devices, are ideal candidates to benefit from the ability to harvest power from otherwise untapped sources, which could eliminate the need for battery changes. Scientists are looking into new ways to harvest the kinetic energy from droplets inside the body to further that goal.

Humans have harnessed the power of water for centuries. From watermills to hydroelectric dams, many devices run on rainwater that is gathered from drainage basins as large as thousands of square miles, flows into rivers and reservoirs, and eventually turns heavy wheels, milling grains and electric generators.

However, this conventional energy harvesting strategy, which usually depends on using moving water to push a wheel, can’t generate power efficiently from tiny energy sources or in miniature devices.

Both Wu and Wang used a combination of two phenomena to harvest energy from small droplets. Both used hydrophobic surfaces -- surfaces that imitate the way lotus leaves cause water to bead up instead of spreading out or soaking through -- and the triboelectric effect, which explains the way two materials can generate electricity when they come into contact with each other, like the electric charges that build up in rain clouds and cause lightning strikes.

“Many scientists have already started studying the utilization of the so-called triboelectric nanogenerator into implantable medical devices,” wrote Wu. “I think they will be utilized in implantable medical devices in the near future.”

**ENGLISH INTO ARABIC TRANSLATION WORK**

[Please enter your translation of the above article here]