

UV light stick purifies water

February 25 2010, by Lisa Zyga



STER UV: a new concept for UV water purification. Image credit: Olivia Blechschmidt.

(PhysOrg.com) -- Today, about one billion people on Earth don't have access to clean drinking water, and that number is expected to increase even more in the coming years. To solve this problem, inventors have been trying to come up with water purification methods that are easy, inexpensive, and energy-efficient. A new concept called the STER UV, which is a UV light stir stick, seems to meet each of these requirements.

The [UV light](#) stick, designed by industrial designer Olivia Blechschmidt, works simply by being stirred in a glass or pitcher of [drinking water](#). Like other UV water disinfection techniques, the UV light inactivates [bacteria](#) by destroying its DNA. The lightweight UV light stick comes with an induction charger, both of which are made of clean, smooth ABS

plastic housing.

Since its 23A battery is designed to run for several years, the charger doesn't require battery replacement. Also, since the device doesn't produce heat and has no moving parts, it can operate in a way that is more energy-efficient and environmentally friendly compared with other UV water purification systems.

By testing the device in different 1.5-liter containers, Blechschmidt found that the most suitable length of the stirring stick is about 20 cm. In addition, she notes that the conical shape of the stick provides "effective visual clues, great grip comfort and semantics."

More information: via: [Tuvia.com](http://tuvia.com)

© 2010 PhysOrg.com

Citation: UV light stick purifies water (2010, February 25) retrieved 27 April 2024 from <https://phys.org/news/2010-02-uv-purifies.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--