

Japan robotics experts unveil sci-fi wheelchair

August 26 2009



The design allows users to slide more easily on and off the vehicle, lessening reliance on care-givers to lift them. Photo: AFP

Robotics and medical experts in Japan on Wednesday unveiled the prototype of a new hi-tech electric wheelchair that resembles a scooter and promises greater mobility.

Users ride astride the four-wheeled Rodem -- rather than sitting in it, as in a conventional wheelchair -- steer it with a joystick and hold onto motorbike-style handles while the knees and chest rest on cushions.

The design allows users to slide more easily on and off the vehicle, lessening reliance on care-givers to lift them, the inventors said.

"I believe this is a whole new idea for a [wheelchair](#)," said Makoto Hashizume, head of the Veda International [Robot](#) Research and Development Centre and a medical professor of Kyushu University.



An "injured" model demonstrates the medical universal vehicle, "Rodem" during its press preview in Tokyo. Robotics and medical experts in Japan on Wednesday unveiled the prototype of a new hi-tech electric wheelchair that resembles a scooter and promises greater mobility.

"With this vehicle, users can move around more freely and more actively without much help from other people."

It is the first invention unveiled by the Veda centre, which opened in May in southwestern Munakata city and is a joint project of Japanese robot maker Tmsuk Co. and researchers from 10 universities and

institutes.

The robotics and medical specialists, including from Germany and Italy, aim to invent robots for use in health and nursing, an area where high-tech [Japan](#), with its fast-greying population, is seen as a world leader.

The inventors said they had no immediate plans to commercialise the new vehicle, which would first have to meet government safety standards, but said they were open to offers from private companies in Japan and overseas.

Tmsuk president Yoichi Takamoto said the Rodem may also be used by people who are not disabled to simply ride and enjoy.

Takamoto said the Rodem was too simple to be called a robot, but added that it may evolve into one.

"We can add more robot-like functions in future," he said. "For example, we could add a new function so it comes to your bedside when you call."

(c) 2009 AFP

Citation: Japan robotics experts unveil sci-fi wheelchair (2009, August 26) retrieved 1 May 2024 from <https://phys.org/news/2009-08-japan-robotics-experts-unveil-sci-fi.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>
--