

Prototype car using joystick engineering at Disability Drive Expo

NGO Nicky's Drive, the Cape Peninsula University of Technology (CPUT) and the Disabled People Inclusion Institute (DPII) have partnered to produce the first ever locally engineered prototype car using joystick engineering. The car is set to make driving more accessible for disabled persons in South Africa.



The prototype will be unveiled at the Disability Drive Expo in Cape Town on Thursday, 7 March 2013, along with a racing car that is also being developed by the same teams. This racing car will be driven and maintained by disabled persons and is a combined project of Disabled People Inclusion Institute and CPUT.

Nicky Abdinor, a clinical physiologist, born without arms and with shortened legs, runs an NGO, Nicky's Drive which raises funds for car adaptations for people with disabilities in South Africa. She herself drives a specially adapted vehicle which uses joystick steering technology that was developed in the UK. The vehicle she currently uses was donated to her in 2001.

Abdinor was the inspiration behind the pioneering project between Cape Peninsula University of Technology and Nicky's Drive. She has been the 'guinea pig,' using her experience and knowledge of driving with joystick steering to guide the design and development of a new vehicle being adapted for research and development purposes in South Africa.

Unveiling at the Disability Drive Expo

The CPUT Design and Engineering Departments, headed by Professor Oscar Philander and world-renowned design and universal access consultant, Professor Mugendi M'Rithaa, are currently completing the prototype/simulator vehicle to be unveiled at the Disability Drive Expo.

The launch of the prototype at the Disability Drive Expo will include a car museum in which adapted vehicles from drivers with various disabilities will be on display. Volkswagen is a partner of the expo and has partly sponsored a VW Caddy for the project to be adapted for Abdinor, which will also be on display along with the adapted prototype simulator vehicle.

The launch will also feature expert contributions by Prof Vuyisa Mazwi-Tanga, vice-chancellor, CPUT; Minister Dr Blade Nzimande, minister of higher education and training; deputy minister: Hendrietta Ipeleng Bongopana-Zulu, Women, Children and People with Disabilities; and Prof Sharon Shields and Prof Dayle Savage from Vanderbilt University, USA.

Nicky Abdinor, founder and chairperson for Nicky's Drive, will demonstrate the technology following the unveiling of the prototype and simulator for the collaborative car project.

The team maintains that by engineering this technology in South Africa, a world of affordable and accessible driving opportunities will open up for disabled persons in South Africa. In addition, spin off opportunities related to the research and development and eventually production and roll out of the technology will create jobs for disabled persons.

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