

Fish-shaped robot for underwater research

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The project of underwater bionic robotic fish co-developed by the Institute of Robot under Beijing University of Aeronautics and Astronautics (BUAA) and the Institute of Automation under Chinese Academy of Sciences (CAS) has passed the relevant check and test on 5 Dec.

Featuring outstanding creativeness the achievement of the project has laid an important theoretic and practical basis for the engineering of underwater navigating objects.

With a black body, the 1.23-meter-long robot is much like a real fish in shape and movement. Through a palm-size remote control pad, technicians gave different instructions, making it swim supplely up and down, said Tan Min, deputy director of the CAS Institute of

Automation.

The experiment shows the underwater bionic robotic fish, which has independent intellectual property right of China, has the advantages of stability, flexible movement, automatic navigation control and underwater operation for two-three hours at a speed of 4 kilometres per hour.

"The robot is able to work for two to three hours under water with the maximum speed of 1.5 meters per second," said Wang Tianmiao, director of the Institute of Robotics at Beijing University of Aeronautics and Astronautics.

The robot is flexible in action, easy to operate and makes little disturbance to surrounding environment. The robot had been tested in an underwater search of a sunken ancient warship last August.

Additionally, the robotic fish also sees bright future for use in the fields of underwater archaeology, photography, mapping, water cultivation and fishing as well as underwater carrying of small-sized object.

Source: CAS

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