Education

Mechatronics education has been a constant source of interest to nearly all engineering conferences, and the first chapter in this book is dedicated to this most important subject.

The first paper discusses a very original idea from one of the more innovative pioneers of mechatronics education. This looks at the movement and control of a six legged omni-directional mobile robot, and determines how it can be programmed to perform the movements needed for a Viennese waltz.

This is followed by something completely different! A description of an underwater robot competition held in Hong Kong, mainly for school students. The winners would attend the World Championships in the USA.

From under the sea into the air; the next paper describes an aerial robot propelled by four rotors. It contains details of the control system needed to keep the platform stationary, and in position. It’s a pity that videos can’t be shown in books (yet?) as the demonstration of this robot is very impressive.

Then it's back underwater again, with a paper from Portugal about a small project-based vehicle which is used to teach the basics of mechatronics syllabus.

Finally, James Trevelyan has an interesting opinion piece concerning mechatronics engineering work, and how some sort of coordination between those institutions offering mechatronics courses may be beneficial.