

# 3rd International Conference on Advanced Systems and Emergent Technologies (IC\_ASET'2019)

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## SPECIAL SESSION

### Mobile Robot Control Where we arrived and new challenges

The control of mobile robots is a well-known challenge in robot control community. In recent year an increasing interest in mobile robots has appeared, due to their use more and more frequent in hazardous or inaccessible environment where the human can hardly intervene. We can mention the intervention in underwater environment, nuclear sites or space exploration. The models used for controlling these robots are complex and the property of non-holonomy which characterizes a number of these robots, makes the task of control more difficult.

The general problematic for controlling these robots is reduced in most cases to move the robot in a known or unknown environment, while avoiding possible fixed or mobile obstacles, for perform a prescribed task. It follows that it must be possible to define a movement strategy and then run the prescribed displacement.

This special session aims at providing a deep insight on the evolution of the research works and projects in this area. It will be an opportunity for researchers to present and discuss their contributions.

#### Keywords:

Mobile robots; obstacle avoidance; delay system in robotic; vision control; adaptive control; predictive control; nonlinear control; fault-tolerant control; robot localization;...

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