



Call for Papers

Special Session

3<sup>RD</sup> International Conference on  
Control, Decision and  
Information Technologies

April 6-8, 2016

CoDIT'16

Website : [www.codit2016.com](http://www.codit2016.com)

Saint Julian's, Malta

CALL FOR PAPERS  
SPECIAL SESSION ON

Papers submission deadline  
extended to **January 07, 2016**

**“Toward Smart, Smooth and Fast Sliding Mode Tracker – Recent Innovations and Applications”  
for CODIT'16  
April 6-8, 2016 – Malta**

**Session Chair :**

Prof. Karim Khayati, *Royal Military College of Canada, Canada*

**Session description**

One important issue in control and estimation methods is the limitation of the mathematical models to represent the actual plants in different areas of applications (robotic systems, transportation devices, actuators, industrial tools, etc.). Then, continuing to control such apparatuses in efficient ways and to emphasize the stability and robustness to unknown disturbances and uncertainties proves challenges for the control community. Sliding mode (SM) principles cope with modern control methods to solve these problems. The ideal in these techniques is mainly about robustness and finite time stability. However, their use in real world control applications and the challenges that these applications present are still very timely in terms of chattering, discontinuous control efforts, overestimated control actions, measurement and computation limits (noise and sampling issues). Far from the initial conventional SM framework, numerous approaches have been derived recently; SM control design with feedback gain adaptively compensating for the lumped uncertainties, integral high order SM, super-twisting SM, etc.; allowing for many of them chatter reduction, accuracy improvement and speeding up the system response to the lumped uncertainties without needing to know the upper bounds of these uncertainties. This special session will evaluate the latest advances in theory and applications of these SM-based methods. The topics that can be discussed in this session are, but not limited to:

- State-of-the-art, theory and applications of advanced SM structure
- High order, Integral, Adaptive SM, and Twist Control processes
- Industrial applications and real-world implementations of SM control, observer and perturbation estimation strategies
- Numerical and experimental applications to robotic and power systems, actuators, etc.

---

#### **SUBMISSION**

Please submit your full paper choosing the right track on the Conference Management Toolkit (Microsoft's CMT) site: <https://cmt.research.microsoft.com/CODIT2016/>

All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format). Click on the icon to download the Call For Papers.

December 7, 2015: deadline for paper submission

February 2, 2016: notification of acceptance/reject

February 20, 2016: deadline for final paper and registration.