

CALL FOR PAPERS

The Fourth Symposium on Small Unmanned Aerial Vehicle Technologies and Applications (SUAVTA)*as a part of the**The 8th ASME/IEEE International Conference on Mechatronics and Embedded Systems and Applications (ASME/IEEE MESA12)*

July 8-10, 2012, Suzhou, China

<http://www.asmemesa.org>

In recent years, new developments in MEMS sensors, embedded systems, control and wireless technologies as well as cognitive sciences and artificial intelligence make it possible to use small and affordable unmanned aerial vehicles (UAVs) in both military and civilian applications. While the UAV market so far has been mainly driven by military and security applications, this new generation of UAVs also has the potential to generate a broader range of civilian applications like in- and out-door surveillance, disaster management, agriculture, remote sensing etc. However, there are still many unsolved problems in the area of small UAVs like the design of vehicles with a higher degree of intelligence and autonomy, the integration in the airspace, sense and avoidance technologies or the coordination of teams of small UAVs, to mention only a few. This symposium aims at presenting latest results in small UAV research and application. Manuscripts are solicited in the following topics but not limited to:

- Fixed-wing small UAV technologies | Rotary-wing small UAV technologies
- Low cost UAV platforms | Low cost IMU and autopilot development
- State estimation and fault diagnosis for small UAVs | Vision-based navigation for small UAVs
- Multi-UAV cooperative navigation and cooperative control | Fault-tolerant control
- Small UAV software architectures | Small UAV as flying sensors and applications in searching, rescuing, monitoring, surveillance, and disaster management etc
- Resilient flight controls | Cognitive UAVs | Airworthiness
- Student UAV/UAS competitions

Full-length papers with the e-mail addresses of the authors must be submitted at <http://www.asmemesa.org> by **30-01-2012**. All manuscripts after a successful review procedure will be published in the conference proceedings. It will be EI indexed. For further information, please contact:

Prof. Youmin Zhang

Diagnosis, Flight Control and Simulation (DFCS) Lab.
 Networked Autonomous Vehicles (NAV) Lab.
 Department of Mechanical & Industrial Engineering
 Concordia University
 1455 de Maisonneuve Blvd. W.
 Montreal, Quebec H3G 1M8, Canada
 Email: ymzhang@encs.concordia.ca
<http://users.encs.concordia.ca/~ymzhang>

Prof. YangQuan Chen

Center for Self-Organizing and Intelligent Systems
 (CSOIS)
 Department of Electrical & Computer Engineering
 Utah State University
 Logan, UT 84322-4160, USA
 Tel: 1-435-797-0148, Fax: 1-435-797-3054
 Email: yqchen@ieee.org
<http://mechatronics.ece.usu.edu/yqchen/>