



北京理工大学  
BEIJING INSTITUTE OF TECHNOLOGY



## International Micro Air Vehicle Conference and Competition

# IMAV 2016

<http://www.imavs.org/2016/>  
October 17–21, 2016, Beijing, China

### Organizers:

Beijing Institute of Technology,  
China

National University of Singapore,  
Singapore

### Technical Sponsors

Mathworks

ZHZ Technology

AeroLion Technologies

### General Chairs

Jie Chen, China

### General Co-Chairs

Ben M. Chen, Singapore

Gangyin Tian, China

### Conference Program Chairs

Feng Lin, Singapore

Zhihong Peng, China

### Competition Program Chairs

Defu Lin, China

Jinjiang Cui, Singapore

Swee King Phang, Singapore

### MAV Committee

Pascual Campoy, Spain

Ben M. Chen, Singapore

Jie Chen, China

Guido de Croon, Netherlands

Christophe De Wagter, Netherlands

Gautier Hattenberger, France

Abdulghani Mohamed, Australia

Jean-Marc Moschetta, France

Dieter Moormann, Germany

Tobias Ostermann, Germany

Bart Remes, Netherlands

Sergey Serokhovostov, Russia

Simon Watkins, USA

### Call for Papers

The 2016 International Micro Air Vehicle Conference and Competition (IMAV 2016) will take place in Beijing, China. The IMAV is a yearly event that combines a scientific conference with a technological competition involving Micro Air Vehicles (MAVs). Such a combination allows research groups from all over the world to share their knowledge, and stimulates them to focus on research that can be used in real life scenarios. It aims to create a forum for scientists and practicing engineers throughout the world to present the latest research findings and ideas in the areas of the state-of-art MAVs. It is technically sponsored by Mathworks, Beijing ZHZ Technology and AeroLion Technologies.

Beijing, the Capital of China, has a history of three millennia. Beijing is renowned for its opulent palaces, temples, parks, gardens, tombs, walls and gates, and its art treasures and universities have made it a center of culture and art in China. The city is rich of popular tourist destinations with tremendous historical importance, including seven world heritage sites in the UNESCO's list of world heritage, such as the Forbidden City, Temple of Heaven and Summer Palace.

#### Topics of interest include but not limited to

- Low-Reynolds and MAV aerodynamics
- Enhanced autonomy & AI applied to MAVs
- Sense and avoidance
- MAV swarms, formation flight
- Flapping wings, morphing & bio-inspired MAVs
- Vision-based sensing
- Control theory and state estimation
- Autonomous navigation without GPS
- Design methodologies and optimization
- System architecture for MAV operation
- MAV applications and flight testing
- Embedded image processing
- Motion control
- Path planning and trajectory generation
- Localization
- New energy technologies for MAVs

Authors may choose to submit two different kinds of papers:

#### Scientific papers

Submitted articles will be subjected to a single-blind review process of the entire article. Key figures and references to pertinent publications in the existing literature are required. The maximum length of an article is 8 pages. The scientific presentations will be 25 minutes long including questions.

#### Technical papers

Technical papers may be submitted as an extended abstract (with a minimum of 2 pages) highlighting new or significant aspects of the authors' work in one of the MAV's technical field. Submitted abstracts will be subjected to a single-blind review process. The technical presentations will be 15 minutes long + 5 minutes for discussions and questions.

#### Best Paper Award

*International Journal of Micro Air Vehicles* offers the opportunity to participate in an expedited review process for the authors of the articles nominated for the Best Paper Award to be published in the journal. Selected papers will be published in a special issue of *Unmanned Systems* (<http://www.worldscientific.com/us/>), which is indexed by Thomson Reuters' Emerging Sources Citation Index (ESCI).

#### Proceedings

The proceedings of the conference are free (free access) for anybody.

#### Submission of Papers

Scientific and Technical papers in the full version should be submitted online at the conference website at <http://www.imavs.org/2016/index.html>. General inquiries should be addressed via Email at [imav2016@foxmail.com](mailto:imav2016@foxmail.com) to the Conference Program Chair, Dr. Feng LIN.

Submission of Scientific and Technical Papers: **May 1, 2016**  
Notification of Acceptance: **June 30, 2016**

