

# The Third CMI Symposium



Collaborative Research Center for Manufacturing Innovation, IIS, U-Tokyo  
Consortium for Manufacturing Innovation (CMI\*)

Co-hosted by : Department of Mechanical and Aerospace Engineering, School of Engineering, Nagoya University

## New Development in Aircraft Manufacturing Technology

World's aircraft industry is maintaining a high rate of growth of 5% per year and it is expected to continue on thanks to the economic growth in emerging countries and the development of globalization. Besides, a large amount of CFRP, titanium alloy, and Al-Li alloy have been applied to aircrafts for making the airframe lighter to improve fuel efficiency. They are difficult-to-cut materials, and establishment of new strategies for their high speed machining is required. Aiming for the rapid development of manufacturing technologies including high speed machining, CMI, a project through industry-university-government collaboration, was launched in April 2013. CIM aims for innovation of the technologies by taking scientific approach rather than skill-based one, and we work on multiple research tasks simultaneously to speed up the development. This symposium is co-hosted by the Department of Mechanical and Aerospace Engineering, School of Engineering, Nagoya University. A speaker from Boeing will talk about current market outlook. Speakers from the University of Tokyo will introduce CMI activities and researches, and those from Nagoya University, Nagoya Institute of Technology and CMI industrial members in Nagoya area will talk about latest cutting technologies.

### Time and Date :

**November 6, 2015 (Friday)**

**13:00~17:00**

(The hall will open at 12:15)

**Venue : Main Hall, Second Floor of Nagoya Head Office, DMG MORI CO., LTD.**

※3-min walk from Sakuradori Side of JR Nagoya Station

**Conference Fee : Free of Charge**

### Registration

(Starting from August 7)

Please register from this webpage written below.

<http://www.cmi.iis.u-tokyo.ac.jp/>

150 people available (first-come-first-served basis)

(We will stop accepting registration as soon as we reach the capacity.)

※Registration in advance is necessary

### Contact :

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(\*Members of CMI)

### Program

※Contents may be partially modified.

#### 13:00-13:05 Opening Speech

Dr. Masahiro ARAI, Professor, Chairperson of Department of Mechanical and Aerospace Engineering, School of Engineering, Nagoya University

#### 13:05-13:30 "Researches in CMI"

Dr. Toshiyuki OBIKAWA, Professor, IIS, The University of Tokyo

#### 13:30-14:00 "2015 Boeing Current Market Outlook" Presentation in Japanese

Mr. Steve E. Hahn, Director, Japan Enterprise Technology Programs, Boeing R&T

#### 14:00-14:40 "Toward next-generation machining technologies for aircraft parts"

Dr. Eiji SHAMOTO, Professor, Graduate School of Engineering, Nagoya University

#### 14:40-15:15 "Utilization of 5 axes machining center for aerospace part"

Mr. Satoshi KAJI, DMG MORI CO., LTD.

#### (15:15-15:30 Coffee Break)

#### 15:30-16:10 "Cutting Tool Edge Design for Machining of Difficult-to-Cut Materials"

Dr. Fumihito ITOIGAWA, Professor, Graduate School of Engineering, Nagoya Institute of Technology

#### 16:10-16:45 "CFRP Machining Solutions with Diamond Coated Tools"

Mr. Keiji Tsujimura, OSG CORPORATION

#### 16:45-17:00 "The Activities of CMI"

Dr. Akira Hashimoto, Project Professor, IIS, The University of Tokyo

#### 17:00 Closing Remarks