

Press Release

July 13, 2018

MTTRF Annual Meeting

The annual general meeting of MTTRF - Machine Tool Technologies Research Foundation, whose operation is mainly supported by DMG MORI CO., LTD. (hereafter “the company”), was held at the InterContinental Mark Hopkins Hotel in San Francisco, California, USA from July 1 to 3, 2018, with the attendance of around 65 machine tool researchers from countries worldwide.

Following an opening speech by Prof. Dr. Kazuo Yamazaki, President of MTTRF, and a presentation by Dr. Masahiko Mori, President of the company, on “Sustainable Development Challenges for Machine Tool Manufacturers”, participants presented their cutting-edge research activities that would have a significant impact on development of machine tools and machining technologies.

The company will continue its contribution activities to support MTTRF on a global scale basis, by donating machine tools to MTTRF such that MTTRF can loan the machine tools to universities and public research institutions for their innovative research and education on technologies for machine tools.

* MTTRF (the Machine Tool Technologies Research Foundation) is a non-profit foundation approved by the United States government and established through contribution of basic financial resources by DMG MORI CO., LTD. in October 2002. (then, MORI SEIKI CO., LTD.). Its President is Dr. Kazuo Yamazaki, Professor of the University of California, Davis and Berkeley, and Dr. Masahiko Mori, President of DMG MORI CO., LTD., serves as one of Directors.

< Contents of MTTRF Annual Meeting >

1	Future Oriented Research for Integration of Digital Design and Digital Manufacturing	Professor H. Aoyama/ Keio University
2	Fabrication of Injection Mould Components on a Multi-axis Machining Centre with Integrated Laser Hardening	Professor B. Lauwers/ Katholieke Universiteit Leuven

3	1. Tool-chip interface temperature measurement 2. Material Removal Mechanism of Ceramics in Ultra-precision Machining, and Metal Cutting Training & Outreach	Professor F. Pfefferkorn/ University of Wisconsin Madison
4	1. Cutting Force and Finish Surface Simulation of End-Milling Operation under Consideration of Static Tool Deflection by Using Voxel Model 2. Virtual Milling Force Monitoring Method Based on In-process Milling Force Prediction Model to Eliminate Predetermination of Cutting Coefficients	Professor K. Shirase/Koben University
5	Technologies of Magnescale Corporation Now and Future	Dr. T. Fujimori/ Magnescale Co.,Ltd.
6	Performance of CAD/CAM post processor on S-shaped Machining Test for 5-axis machining center	Professor Y. Ihara/ Osaka Institute of Technology
7	Spatial Frequency Analysis of Chatter Marks	Professor G. Campatelli/ University of Florence
8	1. Turning of Difficult-to-Machine Materials with High Pressure Coolant 2. Cutting Characteristics of VN-Coated Tool Having High-Temperature Lubricity	Professor A. Hosokawa/ Kanazawa University
9	Application of Iterative Learning and Adaptive Control to Feed Drive	Professor N. Uchiyama/ Toyohashi University of Technology
10	1. Updates on education program at UC Davis 2. Dynamic Powder Feeder System Design for the Directed Energy Deposition Process	Professor M. Soshi/ University of California Davis

11	Determination of Friction Coefficients Using an Inverse Pin-on-disc-test Setup Implemented on a Machining Center	Professor F. Bleicher/ Vienna University of Technology
12	1. The Use of MTTRF Equipment for Teaching and Research at University College Dublin 2. Tool Wear Modes and Progression in Milling of Medical Grade Cobalt Chromium Alloy	Professor G. Byrne/ University College Dublin
13	1. Generation Milling of Internal Helical Gears 2. Force Modeling for Hybrid Manufacturing 3. Optical Sensor for Use in the R-Test	Professor G. Goch/ University of North Carolina at Charlotte
14	Learning Efficient Modelling and Compensation for Thermal Behavior of Machine Tools	Professor K. Wegener/ETH Zurich



Group Photo at MTTRF Annual Meeting



Dr. Mori during his Lecture