

Press Release

August 1 2019

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 June 27 to 29, 2019, with the attendance of around 60 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 “Front runner in automation”, 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	High throughput femtosecond laser processing	Mr. Eric Mottay / Amplitude
2	Hollow-core photonic crystal fiber: Enabling and transformative technology for fast laser micromachining	Dr. F. Benabid / GLOPhotonics
3	MTTRF equipment loan: Research & education at UW-Madison	Professor F. Pfefferkorn / University of Wisconsin Madison
4	1. Machining error correction based on predicted machining error caused by elastic deflection of tool system 2. Intelligent monitoring system to detect tool chipping in peripheral end-milling based on in-process milling force prediction	Professor K. Shirase / Kobe University
5	Latest R&D achievement by Magnescale Co.,Ltd. -Super-Accurate Angular Encoder System with Multi-Detecting Heads Using VEDA Method-	Dr. T. Fujimori, N.Ishii / Magnescale Co., Ltd.
6	Influence of CAM software on S-shaped machining test of 5-axis machining center	Professor Y. Ihara / Osaka Institute of Technology
7	Adaptive toolpath for milling of thin walled parts	Professor G. Campatelli / University of Florence
8	1. Application of low and high frequency vibration assistance in grinding and surface structuring 2. Cognitive machining by sensor integration in tooling system	Professor F. Bleicher / Vienna University of Technology
9	Iterative learning and nonlinear control of industrial feed drive systems	Professor N. Uchiyama / Toyohashi University of Technology

10	Design and characterization of a dynamic powder splitting system for powder flow control in the Directed Energy Deposition manufacturing process	Professor M. Soshi / University of California Davis
11	Advanced diamond materials	Mr. Y. Kobayashi / Sumitomo Electric Industries, Ltd.
12	1. Overview and report on the use of the MTRF award for research and teaching at UCD Ireland 2. Control of surface integrity of bioceramics in ultrasonic grinding	Professor G. Byrne / University College Dublin
13	Challenges of a general approach for machining external and internal involute gears	Professor G. Goch / University of North Carolina at Charlotte
14	In process measurement of lubricated friction coefficient & virtual investigation of thermal machine tool errors	Professor K. Wegener / ETH Zurich
15	Manufacturing of components with a hardened top layer on a Turn-Mill-Laser Center	Professor B. Lauwers / Katholieke Universiteit Leuven
16	1. Turning of difficult-to-machine materials with high pressure coolant 2. High-quality and high-efficiency machining of CFRP with DLC-coated and diamond-coated end mills	Professor A. Hosokawa / Kanazawa University



Group Photo at MTRF Annual Meeting



Dr. Mori during his lecture