

4th Malaysia-Japan Tribology Symposium 2016 (MJTS 2016)



25th - 26th August 2016
Theme of keynote/invited speech
"Fundamentals of Tribology"
Theme of symposium
"All Aspects of Tribology"

Tribology, Where Engineering Meets Science
TriPreM
Tribology & Precision Machining

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MALAYSIA-JAPAN INTERNATIONAL INSTITUTE OF TECHNOLOGY

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JAST
Japanese Society of Tribologists

MYTRIBOS
Malaysian Tribology Society

MJTS 2016 4th Malaysia-Japan Tribology Symposium

25th & 26th August 2016
Malaysia-Japan International Institute of Technology
Universiti Teknologi Malaysia
Kuala Lumpur, Malaysia

Organized by Tribology and Precision Machining i-Kohza (TriPreM)
In collaboration with Japanese Society of Tribologists (JAST) and Malaysian Tribology Society (MYTRIBOS)

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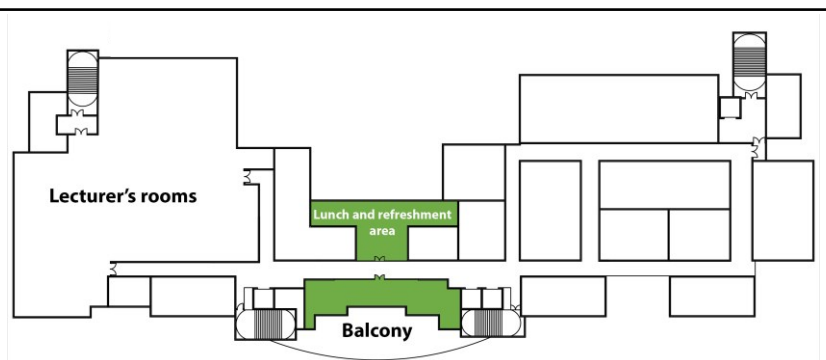
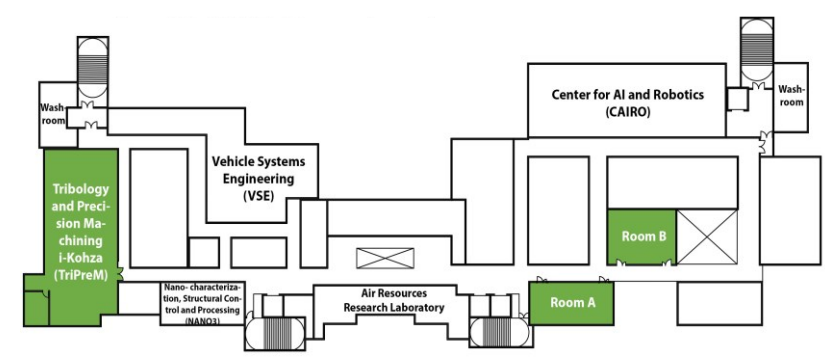
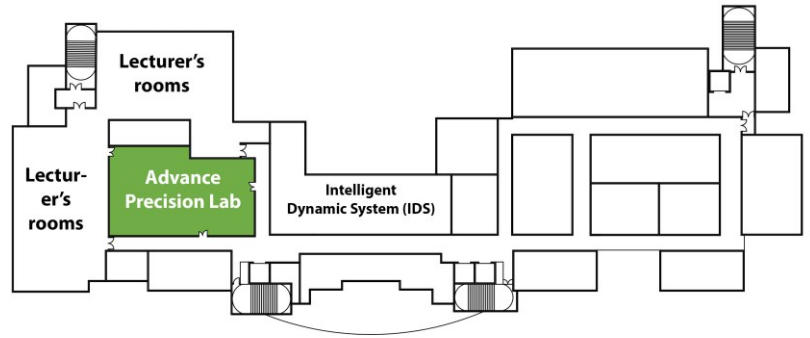
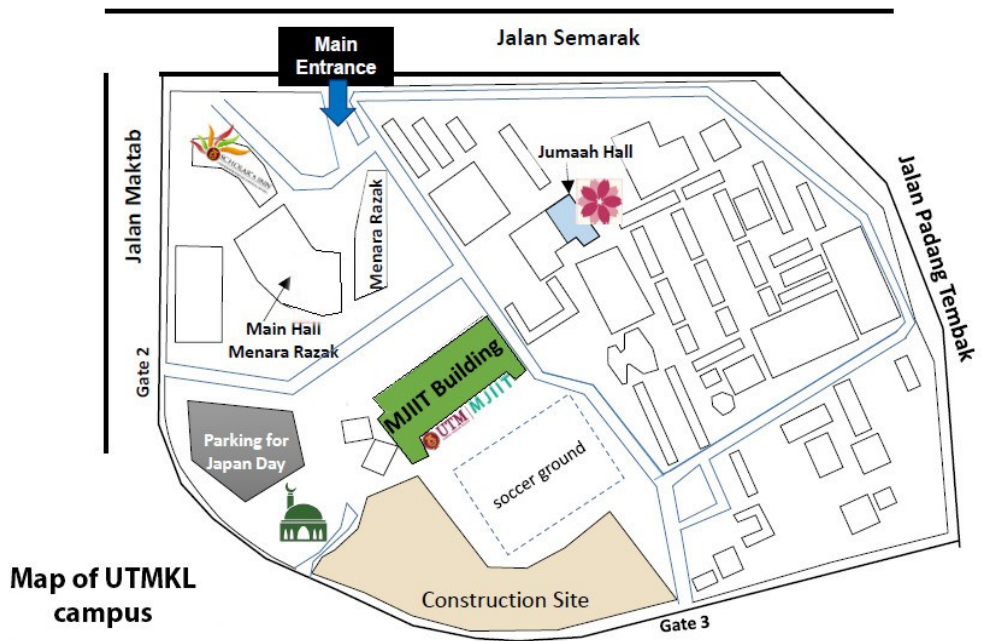
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4th Malaysia-Japan Tribology Symposium 2016 [MJTS 2016]

Day	Time	Activities	
Day 1 [25 th Aug. 2016 (Thu.)]	09:00-09:30	Registration	
	09:30-09:40	Opening talk Prof. Datin Dr. Rubiyah bt Yusof , Dean of Malaysia-Japan International Institute of Technology	
	09:40-10:00	Introduction to Tribology Dr. Nurin Wahidah binti Mohd Zulkifli, University of Malaya	
	10:00-11:00	Keynote speech 1 (Different Facets of Tribology) Prof. Dr. Salmiah Kasolang, Faculty of Mechanical Engineering, Universiti Teknologi MARA	
	11:00-12:00	Keynote speech 2 (Sustainable Tribology) Prof. Dr. Shinya Sasaki, Department of Mechanical Engineering, Tokyo University of Science	
	12:00-14:00	Photo session and symposium lunch	
	14:00-14:45	Invited speech 1 (Simulation Studies of Micro/Nano Tribology) Prof. Dr. Hitoshi Washizu, Graduate school of simulation studies , University of Hyogo	
	14:45-15:30	Invited speech 2 (Cutting Tool wear condition monitoring (TCM) and Dynamic Assisted Tooling for Turning process) Prof. Dr. Jaharah A. Ghani, Department of Mechanical and Material Engineering, Universiti Kebangsaan Malaysia	
	15:30-16:00	Coffee break	
	General Session 1		
		Bio-Medical Tribology (Room A) Session Chair: Assoc. Prof. Dr. Syahrullail bin Samion	Machining Technology (Room B) Session Chair: Dr. Jun Ishimatsu
		A - 1 - 1 Frictional Characteristics of Highly Hydrated Hydrogel Artificial Cartilage Y. Sawae ¹ , R. Baba ² , Y. Hong ² , T. Yamaguchi ¹ , and T. Morita ¹ <i>¹Faculty of Engineering, Kyushu University, Japan ¹Graduate School of Engineering, Kyushu University, Japan.</i>	B - 1 - 1 Surface Roughness of Hyper-Eutectic Al-Si A390 In High Speed Milling K. Othman ¹ , J. A. Ghani ² , C. H. C. Haron ² , and M. S. Kasim ³ <i>¹Production Technology Department, German Malaysian Institute, Malaysia. ²Department of Mechanical and Material Engineering, Universiti Kebangsaan Malaysia, Malaysia. ²Department of Process, Universiti Teknikal Malaysia Melaka, Malaysia.</i>
		A - 1 - 2 Frictional Properties of Poly Vinyl Alcohol Hydrogel in Pseudo-Synovial Fluid Using A Pendulum-Type Friction Tester C. Sawayama ¹ , T. Iwai ¹ , and Y. Syoukaku ¹ <i>¹Graduate School of Natural Science and Technology, Kanazawa University, Japan.</i>	B - 1 - 2 Tribological Action and Cutting Performance of Lubricant Ester in MQL Machining T. Wakabayashi ¹ <i>¹Kagawa University, Japan.</i>
		A - 1 - 3 Formation Process of Protein Film Adsorbed on Joint Prosthesis Material K. Nakashima ¹ , S. Kudo ¹ , Y. Sawae ¹ , and T. Murakami ² <i>¹Kyushu University, Japan. ²Teikyo University, Japan.</i>	B - 1 - 3 The Difference of Dimple Structures Fabricated using Turning and Milling Machines M. N. A. B. Mohd Dali ^{1,2} , J. A.Ghani ² , and C. H. C. Haron ² , and S. Hassan ^{1,2} <i>¹Politeknik Ungku Omar, Malaysia. ²Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia, Malaysia.</i>

Day	Time	Activities	
Day 2 [26 th Aug. 2016 (Fri.)]	General Session 2		
	09:00-09:20	Composite Materials (Room A) Session Chair: Assoc. Prof. Dr. Tomoaki Iwai	Fluid Lubrication (Room B) Session Chair: Prof. Dr. Yoshinori Sawae
		A - 2 - 1 Effect of Stir Casting Process Parameters on Tribological Performance of Al6061-SiCp Composite A. A. Adebisi ¹ , M. A. Maleque ¹ , and K. A. Bello ¹ <i>¹Faculty of Engineering, Department of Manufacturing and Material Engineering, International Islamic University Malaysia, Malaysia.</i>	B - 2 - 1 Tribological Performance Evaluation of Palm Trimethylolpropane (TMP) Ester as A Substitute for Conventional Lubricant Base Oil R. Zahid ^{1,2} , M. B. H. Hassan ¹ , M. Varman ¹ , R. A. Mufti ² , M. A. Kalam ¹ , N. W. B. M. Zulkifli ¹ , and M. Gulzar ¹ <i>¹Center for Energy Sciences, Department of Mechanical Engineering, University of Malaya, Malaysia.</i> <i>²School of Mechanical and Manufacturing Engineering, National University of Sciences and Technology, Pakistan.</i>
	09:20-09:40	A - 2 - 2 The Influence of Friction Force on the Higher-Order Structure of Filled Rubber T. Iwai ¹ , K. Murata ¹ , and Y. Shoukaku ¹ <i>¹College of Science and Engineering, Kanazawa University, Japan.</i>	B - 2 - 2 Performance Evaluation of Polyol Esters from Palm Oil as A Lubricant for Bentonite Suspension Drilling Fluid D. Kania ¹ , R. Yunus ¹ , R. Omar ¹ , S. A. Rashid ² , and B. M. Jan ³ <i>¹Department of Chemical and Environmental Engineering, Universiti Putra Malaysia, Malaysia.</i> <i>²Institute of Advanced Technology, Universiti Putra Malaysia, Malaysia.</i> <i>³Department of Chemical Engineering, Faculty of Engineering, University of Malaya, Malaysia.</i>
	09:40-10:00	A - 2 - 3 Bearing Load Capacity of A Palm Kernel Activated Carbon-Epoxy Composite D. N. F. Mahmud ¹ , M. F. B. Abdollah ² , N. A. B. Masripan ² , F. F. Shuhimi ¹ , H. Amiruddina ² , and N. Tamaldina ² <i>¹Faculty of Mechanical Engineering, Universiti Teknikal Malaysia Melaka, Malaysia.</i> <i>²Centre for Advanced Research on Energy, Universiti Teknikal Malaysia Melaka, Malaysia.</i>	B - 2 - 3 Vibration Characteristic on Ball Bearing Operated With Hexagonal Boron Nitride (HBN) Nanoparticle Mixed with Diesel Engine Oil N. S. R. Apandi ¹ , R. Ismail ¹ , M. F. B. Abdollah ^{1,2} , and R. Ramlan ¹ <i>¹Faculty of Mechanical Engineering, Universiti Teknikal Malaysia Melaka, Malaysia.</i> <i>²Centre for Advanced Research on Energy, Universiti Teknikal Malaysia Melaka, Malaysia.</i>
10:00-10:20	A - 2 - 4 Lubricated Wear Behaviour of Sic Reinforcement on Ti-6Al-4V Alloy Based on Taguchi Approach M. A. Maleque ¹ , L. H. Paijan ¹ , K. A. Bello ¹ , and M. Azwan ¹ <i>¹Department of Manufacturing and Materials Engineering, International Islamic University Malaysia, Malaysia.</i>	B - 2 - 4 The Effect of Pure Aluminium Pin on Steel Disc with Varies Speed and Constant Load A. M. S. Zuan ¹ , S. Syahrullail ¹ , and S. M. Azhar ¹ <i>¹Faculty of Mechanical Engineering, Universiti Teknologi Malaysia, Malaysia.</i>	

Day	Time	Activities	
Day 2 [26 th Aug. 2016 (Fri.)]	10:20-10:40	Coffee break	
		General Session 3	
	10:40-11:00	Coating Materials (Room A) Session Chair: Dr. Nurin Wahidah binti Mohd Zulkifli	Fundamental (Room B) Session Chair: Prof. Dr. Prof. Toshi Wakabayashi
		A - 3 - 1 Tribological Behaviour of Surface Textured Hydrogenated Amorphous Carbon Coating in the Presence of PAO at Various Temperatures A. Arslan ¹ , H. H. Masjuki ¹ , M. A. Kalam ¹ , M. Varman ¹ , R. A. Mufti ² , M. H. Mosarof ¹ , and L. S. Khoung ¹ ¹ Center of Energy Sciences, University of Malaya, Malaysia. ² SMME, NUST, Islamabad, Pakistan.	B - 3 - 1 Tribological Properties of Plastic Materials Rubbed Against 6061-T6 Aluminum Alloy under High-Temperature Hydrogen Atmosphere T. Yasugi ¹ , T. Iwai ¹ , T. Ueda ¹ , and Y. Shoukaku ¹ ¹ Graduate School of Natural Science and Technology, Kanazawa University, Japan.
	11:00-11:20	A - 3 - 2 Friction Behavior of Polymer Overlays Containing Solid Lubricants Coated on the Micro-Textured Aluminum Substrate T. Doi ¹ , K. Enomoto ² , and H. Usami ² ¹ Division of materials science and engineering, Graduate school of Meijo University, Japan. ² Department of materials science and engineering, Meijo University, Japan.	B - 3 - 2 Analysis on the Early Stage of Contact Adhesion in Different Relative Humidity Z. A. Subhi ¹ , and K. Fukuda ¹ ¹ Department of Mechanical Precision Engineering, Malaysia Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia.
	11:20-11:40	A - 3 - 3 Dry Sliding Wear Characterization of TIG Embedded Composite Coatings using Taguchi Based Grey Relational Analysis Approach K. A. Bello ^{1,2} , M. A. Maleque ^{1,2} , and A. Adebisi ¹ ¹ Department of Manufacturing and Materials Engineering, International Islamic University Malaysia, Malaysia. ² Department of Metallurgical and Materials Engineering, Ahmadu Bello University Zaria, Nigeria.	B - 3 - 3 Effects of Sliding Speed on Friction and Wear of Carbon Fiber Filled PTFE in Hydrogen T. Morita ^{1,2} , Y. Abe ³ , Y. Sawae ^{1,2} , and J. Sugimura ^{1,2,4} ¹ Faculty of Engineering, Kyushu University, Japan. ² International Institute for Carbon-Neutral Energy Research, Kyushu University, Japan. ³ Graduate School of Engineering, Kyushu University, Japan. ⁴ Research Center for Hydrogen Industrial Use and Storage, Kyushu University, Japan.
	11:40-12:00		B - 3 - 4 Time Dependent Change of Water Adsorption on Austenitic Stainless Steel N. D. A. Manaf ¹ , K. Fukuda ¹ , Z. A. Subhi ¹ , and M. F. M. Radzi ¹ ¹ Department of Mechanical Precision Engineering, Malaysia Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia.
12:00-13:00	Lunch		



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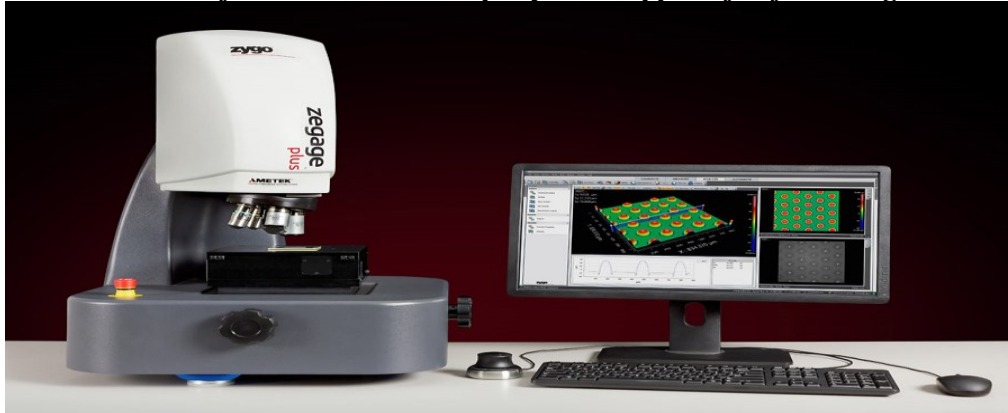
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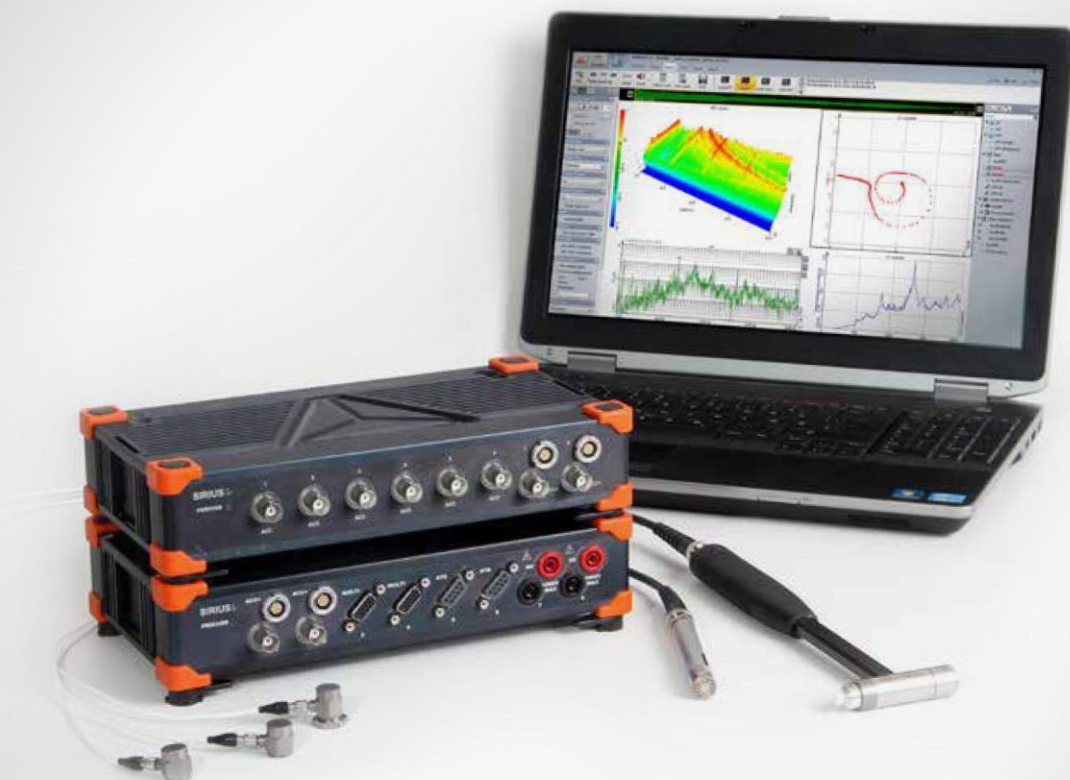
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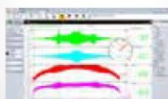
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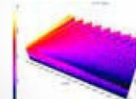
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