

20<sup>th</sup> Jan. 2014



**Kanao Fukuda, Professor, Ph.D.**

Head of “Tribology and Precision Machining” i-Kohza (TriPreM)  
Mechanical Precision Engineering (MPE)  
Malaysia Japan International Institute of Technology (MJIT)  
Universiti Teknologi Malaysia (UTM)

Jalan Semarak, 54100 Kuala Lumpur, Malaysia  
E-mail: fukuda@ic.tum.my, fukudaka@mech.kyushu-u.ac.jp  
H/P: +60-(0)13-683-7803

**DATE OF BIRTH / NATIONALITY:**

17<sup>th</sup> Nov. 1960 / JAPANESE

**EDUCATION AND ACADEMIC DEGREES:**

2006 **Kyushu University** Fukuoka, Japan  
Doctor of Engineering, Mechanical Engineering  
1986 **Tokyo Institute of Technology** Tokyo, Japan  
Master of Engineering, Mechanical Engineering for Production  
1984 **Tokyo Institute of Technology** Tokyo, Japan  
Bachelor of Engineering, Mechanical Engineering for Production

**WORK EXPERIENCE:**

2011-Present **Universiti Teknologi Malaysia** Kuala Lumpur, Malaysia  
Professor Malaysia-Japan International Institute of Technology  
2006-2011 **Kyushu University** Fukuoka, Japan  
Professor, Assoc. Professor  
2004-2006 **Siltronic Japan Corp.** (Former Wacker NSCE)\* Yamaguchi, Japan  
Manager, Process Technology  
1997-2004 **Wacker NSCE Malaysia Sdn. Bhd.** (Former NSCE Malaysia)\* Kedah, Malaysia  
General Manager, Manager, Process Tech. and Equipment Maintenance & Utilities  
1996-1997 **NSCE Corp.** \* Yamaguchi, Japan  
Assistant Manager, Inspection Technology  
1994-1996 **NEDO** \* Tokyo, Japan  
Project Leader of Japanese National Project “Micro Machine” etc.  
1986-1994 **Nippon Steel Corp.** Kanagawa, Japan  
Senior Researcher, Researcher

(\*be on loan from Nippon Steel Corp.)

**AWARDS:**

- **2013 Tribology Online Awards Best Paper Award**, Japanese Society of Tribologists
- **Distinguished Presentation Award**, Int. HYDROGENIUS and I2CNER Joint Symp. 2011
- **2000 Best Paper Award**, Japanese Society of Tribologists
- **1995 Award for Excellent Young Tribologist**, Japanese Society of Tribologists

In addition to the above, some organization internal awards have been presented.

**PROFESSIONAL BODY MEMBERSHIP:**

2011-Present Malaysian Tribology Society (2013-Present Executive Committee Member)  
2011-Present Kyushu University (Research Professor, Guest Professor, World Premiere Institute Professor)  
2009-Present The Japan Society of Mechanical Engineers  
2005-Present Society of Tribologists and Lubrication Engineers  
2004-Present The Surface Science Society of Japan  
1984-Present Japanese Society of Tribologists (1996 Journal Editor, 2009-Present English Online Journal Editor)

**SELECTED PUBLICATIONS:**

**Book Chapter**

- 1) Kanao Fukuda and Masanori Ueki, "Tribology of Ceramic Matrix Composites against Metals", Composite Materials Series 8, ADVANCES IN COMPOSITE TRIBOLOGY / Elsevier 1993, Edited by Klaus Friedrich, Chapter 7

**Journals**

- 1) Kanao Fukuda and Takehiro Morita, "Analytical method for temporal changes in repeated sliding phenomena," Procedia Engineering, (accepted)
- 2) Kanao Fukuda and Joichi Sugimura, "Influences of Trace Water in a Hydrogen Environment on the Tribological Properties of Pure Iron," Tribology Online, **8**, 1 (2013) 22-27.
- 3) Kanao Fukuda, "Influencing Factors on the Wear of Materials", J. Japanese Society of Tribologists, **57**, 5 (2012) 327-332. (in Japanese)
- 4) Kanao Fukuda, Masaaki Hashimoto and Joichi Sugimura, "Friction and Wear of Ferrous Materials in a Hydrogen Gas Environment", Tribology Online, **6**, 2 (2011) 142-147.
- 5) Kanao Fukuda, Yoshie Kurono, Naoshi Izumi and Joichi Sugimura, "Influence of Trace Water and Oxygen in a Hydrogen Environment on Pure Fe Friction and Wear", Tribology Online, **5**, 2 (2010) 80-86.
- 6) Kanao Fukuda, Masaaki Hashimoto and Joichi Sugimura, "Effects of Trace Impurities in Hydrogen Environment on Tribological Properties of Steels", J. Japanese Society of Tribologists, **55**, 1 (2010) 53-61. (in Japanese)
- 7) Kanao Fukuda, "Combinational analysis of multi-data obtained in a repeated sliding system", Wear, **264**(2008)499-504.
- 8) Kanao Fukuda, "Analysis of Specimen Displacement in Repeated Sliding System", J. Japanese Society of Tribologists, **49**, 9 (2004) 738-745. (in Japanese)
- 9) Kanao Fukuda, "Friction Force Distribution and Its Alternation with Repeated Sliding", J. Japanese Society of Tribologists, **43**, 9 (1998) 788-795. (in Japanese)

In addition to the above, 97 publications including journal papers, proceedings and reviews have been presented.

**PATENTS:**

**Granted Patents**

- 1) US Patent 5278109, "Composite materials for sliding members"
- 2) Japanese Patent 2719275, "Friction force measurement and apparatus"
- 3) Japanese Patent 3973962, "Lapping method and lapping machine"

In addition to the above, 3 patents (1 in US, 2 in Japan) have been granted.

**Filed Patents**

- 1) Filed in Japan H5-306171, "Tribo-ceramic material"
- 2) Filed in Japan H6-116548, "Sliding parts"
- 3) Filed in Japan H6-308017, "Analysis method on sliding wear and apparatus"
- 4) Filed in Japan H7-238345, "Tribo-material"
- 5) Filed in Japan 2005-277089, "Polisher, polishing pad and polishing method"
- 6) Filed in Japan 2012-176057 "Moisturizing method and moisturizer"

In addition to the above, 9 patents (all in Japan) have been filed.