

New trends in drives and power converters Japan – Catalan Workshop



Barcelona, 14th November 2017

Aula Capella

Escola Tècnica Superior d'Enginyeria Industrial de Barcelona,
Universitat Politècnica de Catalunya.

UPC BarcelonaTech, Av. Diagonal 647, Barcelona



8:30	Register
9:00	Welcome , <i>Neus Cónsul (ETSEIB-UPC Director)</i>
9:05	Opening CITCEA-UPC , <i>Daniel Montesinos-Miracle (CITCEA-UPC Director)</i>
9:15	Opening Shizuoka Univ. , <i>Toshihiko Noguchi (Shizuoka University Professor)</i>
9:30	New trends in European electricity markets, EMPOWER and INVADE , <i>Pol Olivella (CITCEA-UPC)</i>
9:50	Simplification of Bearingless Motor Drive <i>Junichi Asama (Shizuoka University)</i>
10:10	Source Power Factor Improvement for an Isolated Three-Phase AC/DC Converter using a Soft-Switching Technique <i>Takumi Hamaguchi (Nagoya Institute of Technology)</i>
10:30	Isolated Three-Phase AC/DC Converter for Input Medium Voltage Application <i>Kazuma Suzuki (Nagoya Institute of Technology)</i>
10:50	Pure Sinusoidal Output Current-Source Inverter Using Inductor Modules <i>Yosuke Iwata (Shizuoka University)</i>
11:10	Coffee break
11:30	Magnetic Bearing Drive System Using Zero-Phase Current <i>Yusuke Fujii (Shizuoka University)</i>
11:50	Development of High-Efficiency Permanent Magnet Synchronous Generator for Motorcycle Application <i>Yuki Kurebayashi (Shizuoka University)</i>
12:10	Dual-Port Output Control of Isolated DC/DC Converter Focusing on Duty Cycle and Frequency of Primary Inverter <i>Kazuki Shimizu (Shizuoka University)</i>
12:30	Space Vector Modulation of Dual Inverter with Battery and Capacitor across DC Buses <i>Yoshiaki Ohto (Shizuoka University)</i>
12:50	Current-Doubler Based Multiport DC/DC Converter with Galvanic Isolation <i>Yoshinori Matsushita (Shizuoka University)</i>
13:10	Development of High-Speed and High-Voltage Pulse Generator for NOx Decomposition Plasma Reactor <i>Hafidz Elmana (Shizuoka University)</i>
13:30	Vector Control and Experimental Verification of Magnetically Modulated Motor for HEV Application <i>Sawanth Krishna Machavolu (Shizuoka University)</i>
13:50	Closure



National University Corporation

Shizuoka University

Toshihiko Noguchi Department of Electrical and Electronic Engineering, Shizuoka University, Japan.

Toshihiko Noguchi (M'95–SM'02) was born in 1959. He received the B.Eng. degree in electrical engineering from Nagoya Institute of Technology, Nagoya, Japan, in 1982, and the M.Eng. and D.Eng. degrees in electrical and electronics systems engineering from Nagaoka University of Technology, Nagaoka, Japan, in 1986, 1996, respectively. In 1982, he was at Toshiba Corporation, Tokyo, Japan. From 1991 to 1993, he was a Lecturer at Gifu National College of Technology, Gifu, Japan. From 1994 to 1995, he was a Research Associate in electrical and electronics systems engineering at Nagaoka University of Technology, where he was an Associate Professor from 1996 to 2009. Since 2009, he has been a Professor in the Department of Electrical and Electronic Engineering, Shizuoka University, Shizuoka, Japan. His current research interests include static power converters and motor drives. Dr. Noguchi is a member of the Institute of Electrical Engineers Japan.

Takaharu Takeshita Department of Electrical and Computer Engineering, Nagoya Institute of Technology, Nagoya, Japan.

Takaharu Takeshita (M'92) was born in Aichi, Japan, on August 23, 1959. He received the B.S. and M.S. degrees in electrical engineering from Nagoya Institute of Technology, Nagoya, Japan, in 1982 and 1984, respectively, and the Ph.D. degree in electrical engineering from Nagoya University, Nagoya, in 1990. Since 1991, he has been with Nagoya Institute of Technology, where he is currently a Full Professor and is involved in research on power converters and motor drives. Dr. Takeshita is a member of the Society of Instrument and Control Engineers, the Society of Signal Processing Applications and Technology of Japan, and the Institute of Electrical Engineers of Japan.

Junichi Asama Dept. of Mech. Eng., Shizuoka Univ., Hamamatsu, Japan.

Junichi Asama (M'08) was born in Niigata, Japan, in 1979. He received the B.S., M.S., and Ph.D. degrees in mechanical engineering from Tokyo Institute of Technology, Tokyo, Japan, in 2002, 2004, and 2006, respectively. In 2006, he was a Postdoctoral Researcher with the Precision and Intelligence Laboratory, Tokyo Institute of Technology. In 2007, he joined Tokyo University of Science, Chiba, Japan, as a Research Associate with the Department of Electrical Engineering, Faculty of Science and Technology. In 2009, he joined Shizuoka University, Hamamatsu, Japan, as an Associate Professor with the Department of Mechanical Engineering, Faculty of Engineering. He is engaged in research on bearingless motor drive systems and their applications. Dr. Asama is a member of the Institute of Electrical Engineers of Japan, the Japan Society for Precision Engineering, and the Japan Society of Mechanical Engineers.