

# International Workshop on New Generation Power Electronics and Systems (1<sup>st</sup> NPES)

January 16, 2017, 10:30-16:40

Venue: **Hatsumei-Kaikan hall**, Toranomom 2-9-14, Minato-ku, Tokyo, Japan

(Conjunction with 4th NPERC-J Workshop and 7th Workshop on Reliability Science for Future Ubiquitous Power Electronics)

## Special topic:

**Reliability Science for Future Ubiquitous Power Electronics**

## Program:

Jan. 16, 2016

10:30 **Opening remarks**

10:40 **Prof. Alberto Castellazzi**, *The University of Nottingham, UK*

*Modular Integration of Power Modules for Improved Performance, Reliability and Availability*

11:20 **Prof. Francesco Iannuzzo**, *Aalborg University, Denmark*

*Mission-Profile-Based Methodologies for Bond Wire Stress Analysis in Power Modules*

12:00-13:30 Lunch break

13:30 **Dr. Yuki Negoro**, *Keihin Corporation, Japan*

*High Power Density Power Control Unit for Two-Motor Hybrid System*

14:00 **Prof. Kimihiro Yamanaka**, *Chukyo University, Japan*

*Electromigration Reliability of Solder Joints in Power Modules*

14:30 **Mr. Takashi Nishimura**, *Mitsubishi Electric Corporation, Japan*

*Packaging Technologies for the Power Module with Organic Insulating Layer*

15:00-15:20 Coffee break

15:20 **Prof. Hiroshi Tadano**, *Tsukuba University, Japan*

*Reliability of Power Semiconductor Devices on the Circuit Operation*

15:50 **Prof. Nando Kaminski and Dr. Christian Zorn** *University of Bremen, Germany*

*Impact of Humidity on High Voltage Semiconductor Devices*

16:30 **Closing remarks**

## Venue:

**Hatsumei-Kaikan hall**

Address; Toranomom 2-9-14, Minato-ku, Tokyo, Japan

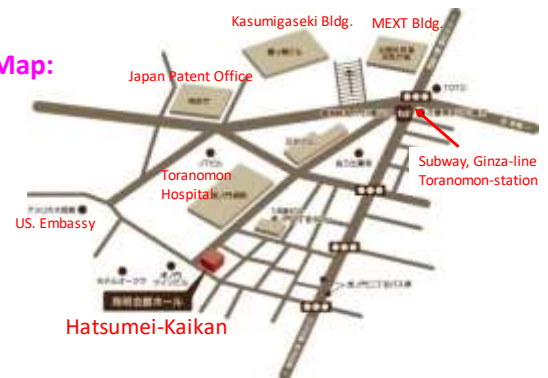
Access to Hatsumei Kaikan:

Tokyo Metro, Ginza-line, Toranomom station No.3 exit, 5-min. walk

Tokyo Metro, Hibiya-line, Kamiyacho station No.4 exit, 6-min. walk

Tokyo Metro, Chiyoda-line, Kasumigaseki station A-13 exit, 10-min. walk

## Map:



General Chair: Ichiro Omura (Kyushu Institute of Technology)

Program committee: Mutsuhiro Mori (Hitachi), Katsumi Sato (Mitsubishi Elec.), Yuichi Kado (Kyoto Inst. of Tech.), Tamotsu Ninomiya (GRIK), Shin-ichi Nishizawa (AIST), Keiji Wada (Tokyo Met. Univ.), Wataru Hatano (Toshiba), Hazime Shimizu (NPERC-J)

Advisory Committee: Hiromichi Ohashi (NPERC-J, GRIK), Atsuo Kawamura (Yokohama Nat. Univ.), Koji Tomita (Yaskawa Elec.), Noriyuki Miyazaki (GRIK)

Workshop secretary: Hazime Shimizu (NPERC-J), Yasuhiro Morinaga (GRIK)

Secretary: Masanori Tsukuda (GRIK), Yusuke Hayashi (GRIK)

Sponsors: NPERC-J (\*1), City of Kitakyushu/GRIK (\*2)

Co-sponsor: Kyushu Institute of Technology

Supported by: ISPSD 2017 Steering committee

This workshop is also supported by following organizations:

Kitakyushu Foundation for the Advancement of Industry, Science and Technology (FAIS)

The Institute of Electrical Engineers of Japan (IEEJ)

The Japan Society of Mechanical Engineers (JSME)

The Institute of Electronics, Information and Communication Engineers (IEICE)