

The Sixth International Conference on Power Electronics and Drive Systems

28 Nov - 1 Dec, 2005

Renaissance Hotel, Kuala Lumpur, MALAYSIA

Advance Technical Program

(As of Oct 12, 2005)

Monday Nov 28

2.00pm - 5.40pm

REGISTRATION

TUTORIAL 1 Prof. Boon-Teck Ooi - Flexible AC Transmission System (FACTS)

TUTORIAL 2 Assoc. Prof. Muhammed Faz Rahman - Design and Control of IPM Motors

TUTORIAL 3 Prof. Dr. Leo Lorenz - New Power Semiconductor Devices for high switching Frequencies In future power converters

TUTORIAL 4 Prof. Vassilios Agelidis - State-of-the-Art Power Electronics Technologies for the De-regulated Power Systems

6.30pm

WELCOMING RECEPTION

Tuesday Nov 29

8.40am - 12.40pm

OPENING CEREMONY

KEYNOTE 1 by Prof. Dean J. Patterson - University of Nebraska Lincoln (Conference Chairman)

KEYNOTE 2 by Prof. Dr.-Ing. Joachim Holtz - University of Wuppertal, Germany

KEYNOTE 3 by Prof. Boon-Teck Ooi - McGill University, Canada

PLENARY LECTURE 1

PLENARY LECTURE 2

Notes: Only affiliation of the first authors are shown.

Session 1A Induction Motor Drives Tuesday, Nov 29 (2.00pm - 5.40pm)

1A.1	P0195	Perfect Speed Tracking of Direct Torque Controlled-Induction Motor Drive using Fuzzy Logic	Tawfik Radwan	Riyadh College of Technology, SAUDI ARABIA
1A.2	P0154	Dual Output Power Conditioning Supply using Vector Controlled Three-Phase Induction Generator for Automotive System	Tarek Ahmed, *Mutsuo Nakaoka, Toshihiko Tanaka, **Katsumi Nishida	Yamaguchi University, JAPAN
1A.3	P0456	Sensorless Traction System with Low Voltage High Current Induction Machine for Indoor Vehicle	Conilh Christophe, Maria Pietrzak-David	Laboratoire d'Electrotechnique et d'Electronique Industrielle, FRANCE
1A.4	P0136	Sliding-Mode Control for Speed Sensorless Induction Machine Drive Using an Adaptive Nonlinear Rotor Flux Observer	Golam Reza Arab Markadeh, Jafar Soltani, N.R. Abjadi	Isfahan University of Technology, IRAN
1A.5	P0137	A New Fuzzy-PI-based Torque Controller for DTC of Induction Motor Drives	Fazli Patkar, *Nik Rumzi Nik Idris, *Nik Din Muhamad	Kolej Universiti Teknikal Kebangsaan Malaysia, MALAYSIA
1A.6	P0565	Predictive Control of Torque and Flux of Induction Motor Drives	Yongdong Li, Chenchen Wang, Hu Hu	Tsinghua University, CHINA
1A.7	P0507	Design and Implementation of a Direct Torque Control of Induction Machine Utilizing a Digital Signal Processor and the Field Programmable Gate Arrays	Chuen Ling Toh, *Nik Rumzi Nik Idris, *Abdul Halim Mohd Yatim, **Fazli Patkar	Universiti Teknologi Malaysia, MALAYSIA
1A.8	P0627	A New Artificial Neural Network - Direct Torque Control for Matrix Converter Fed Three-Phase Induction Motor	Phan Quoc Dung, Le Minh Phuong	HCM City University of Technology, VIETNAM
1A.9	P0378	Closed-Form Analytical Investigation of an Induction Motor Drive Fed from Four-Switch Inverter in Six-step Operation Mode	Jiri Klima	Technical Faculty of CZU in Prague, CZECH REPUBLIC

Session 1B Soft-switching Converters Tuesday, Nov 29 (2.00pm - 5.40pm)

1B.1	P0538	Application of Natural Commutation Technique to Center-Tapped HF Link Inverter	Chee Lim Nge, *Zainal Salam	Motorola Technology Sdn Bhd, MALAYSIA
1B.2	P0332	A Compasion of Zero-Voltage and Zero-Current Switching Phase-Shifted PWM DC-DC Converters	Anuwat Jangwanitert, *Jirasak Songboonkaew	King Mongkut's Institute of Technology Ladkrabang, THAILAND
1B.3	P0155	A Novel Edge-Resonant Soft Switching PWM Controlled High Frequency Inverter with Minimum Circuit Components	Ahmad Eid, Joo-Kwang Choi, Woo-Hyun Lee, Mutsuo Nakaoka	Kyungnam University, KOREA
1B.4	P0209	New Fully Soft-Switched Boost-Converter with Reduced Conduction Losses	Shib Sankar Saha, *Biswajit Majumdar, **Tapas Halder, **Sujit Kumar Biswas	College of Textile Technology, INDIA
1B.5	P0315	Advanced High Power DC-DC Converter using Novel Type Half-Bridge Soft Switching PWM Inverter with High Frequency Transformer for Arc Welder Transformer for Arc Welder	Keiki Morimoto, Toshimitsu Doi, Haruhiko Manabe, *Nabil A Ahmed, **Hyun-Woo Lee, **Mutsuo Nakaoka	Daihen Corporation, JAPAN
1B.6	P0334	Evaluation of Conducted EMI Emissions on ZVZCS PWM dc-dc Converters with a Fixed Switching Frequency	Anuwat Jangwanitert, *Jirasak Songboonkaew	King Mongkut's Institute of Technology Ladkrabang, THAILAND
1B.7	P0599	A Modeling Based Approach for the Characteristic Analysis of Buck Zero-Voltage Switching Quasi-Resonant Converters	Yi-Cheng Lin, Der-Cheng Liaw	National Chiao Tung University, TAIWAN
1B.8	P0218	High Frequency Transformer Linked Soft Switching DC-DC C Power Converter with Secondary Side-Phase Shifted PWM Active Rectifier	Nabil A Ahmed, Masafumi Miyatake, *Kazunori Nishimura, **Hyun-Woo Lee, **Mutsuo Nakaoka	Sophia University

Session 1C DC-DC Converters 1 Tuesday, Nov 29 (2.00pm - 5.40pm)

1C.1	P0262	Electronic Ballast Using Neutral Point Type Step-down Converter	Yoshito Kato, *Masaaki Nakamura, **Nobuo Takahashi, ***Ichiro Yokozeki	Tottori University, JAPAN
1C.2	P0597	An Adaptive Fuzzy Logic Controller by Sliding Mode Control Method for DC/DC Converter	Noppadol Khaehintung, *Anatawat Kunakorn, *Manop Aorpimai, Phaophak Sirisuk	Mahanakorn University of Technology, THAILAND
1C.3	P0447	Analysis of an Active Clamp Forward Converter	Bor-Ren Lin, Huann-Keng Chiang, *Chien-En Huang, Kao-Cheng Chen, *David Wang	National Yunlin University of Science and Technology, TAIWAN
1C.4	P0385	Interleaved-Boost-Input Type Isolated Full Bridge PFC Converter	Satoshi Tomioka, Hiroto Terashi, *Tamotsu Ninomiya	Densei-Lambda K K, JAPAN
1C.5	P0611	A New Approach to Hi-Power DC-DC Converters Under Large Load and Input Voltage Variations	Seyed Reza Hadian Amrei, Dianguo Xu, Yong Qiang Lang	Harbin Institute of Technology, CHINA
1C.6	P0311	Realizing 200 Watt/Cubic Inch in VRM	Alan Elbanhawy	Fairchild Semiconductor, UNITED STATES
1C.7	P0500	A Novel Converter for Fuel Cells Applications	B P Divakar, D Sutanto	The Hong Kong Polytechnic University, HONG KONG S.A.R.
1C.8	P0678	Fast and Accurate Current Sensing in a Multiphase Buck Converter	Hadja Marecar, Ramesh Oruganti	National University of Singapore, SINGAPORE

Session 1D Inverters 1 Tuesday, Nov 29 (2.00pm - 5.40pm)

1D.1	P0562	A Multilevel Hybrid Converter Combined with Voltage and Current Type Converter for Static VAR Compensator	Kazuhiko Hayashi, katuhiko Naito	Meijo University, JAPAN
1D.2	P0234	A Simple DC Imbalance Rejection Technique for UPS Inverters	Kai Zhang, Xiong Jian, Kang Yong, Chen Jian	Huazhong University of Science and Technology, CHINA
1D.3	P0217	Time-Sharing Sinewave Absolute Value Tracking Boost Chopper Controlled one Stage Power Conditioner with Non Electrolytic Capacitor DC Filter Link	Nabil A Ahmed, Masafumi Miyatake, *Hyun-Woo Lee, *Mutsuo Nakaoka	Sophia University, JAPAN
1D.4	P0638	A Graphical Approach to Switching Losses and Harmonics Distortion for Carrier SVPWM Methods in Multilevel Inverters	Nguyen Van Nho	Hochiminh City University of Technology, VIETNAM
1D.5	P0216	Switched Capacitor Snubber Assisted Zero Current Soft Switching PWM High Frequency Inverter with Lossless Inductive Snubbers	Manal H Hashem, Nabil A Ahmed, *Eiji Hiraki, **Khiry Fathy, **Hyun-Woo Lee, **Mutsuo Nakaoka	Sophia University, JAPAN
1D.6	P0576	Power Losses for IGCTs and Diodes in MV Three-level Inverters	Liqiang Yuan, Zhengming Zhao, *Yang Zhi	Tsinghua University, CHINA
1D.7	P0157	The Analysis of Conduction and Switching Losses in Three-Phase OHSW Multilevel Inverter Using Switching Functions	Mir Ghasem Hosseini Aghdam, Seyed Hamid Fathi, *Azadeh Ghasemi	Amirkabir University of Technology, IRAN
1D.8	P0363	An Eight-level Inverter System for an Induction Motor with Open-end Windings	Koritala Chandra Sekhar, *G Tulasi Ram Das	R.V.R & J.C.College of Engineering, INDIA
1D.9	P0322	A New Commutation Method for a Full-Bridge Current-Source Inverter	Yu-Kang Lo, Jian-Ming Wang, Sung-Tung Wu	National Taiwan University of Science and Technology, TAIWAN

Session 1E Distributed Generation 1 Tuesday, Nov 29 (2.00pm - 5.40pm)

1E.1	P0220	A Control Method of Prolonging the Service Life of Battery in Stand-alone Renewable Energy System using Electric Double Layer Capacitor (EDLC)	Yan Jia, Ryosuke Shibata, Naoki Yamamura, Muneaki Ishida	Mie University, JAPAN
1E.2	P0338	Voltage Compensation in Weak Grids using Distributed Generation with Voltage Source Converter as a Front End	Fainan Magueed, Hilmy Awad	Chalmers University of Technology, SWEDEN
1E.3	P0593	An Electronic Voltage and Frequency Controller for Single-Phase Self-Excited Induction Generators for Pico Hydro Applications	Bhim Singh, S Murthy, *Sushma Gupta	Indian Institute of Technology, Delhi, INDIA
1E.4	P0615	High-efficient Soft-Switching Converter for Three-Phase Grid Connections of Renewable Energy Systems	Klaus Rigbers, *Peter Luerkens, *Matthias Wendt, Stefan Schroeder, *Ulrich Boeke, Rik W. De Doncker	RWTH Aachen University, GERMANY
1E.5	P0333	Development of an Analog Maximum Power Point Tracker for a Photovoltaic Panel	Abu Tariq, M Syed Jamil Asghar	Aligarh Muslim University, INDIA
1E.6	P0341	A Consise Two-phase Flow Model for Direct Methanol Fuel Cell Performance Modelling	Yuming Yang, Yung C Liang	National University of Singapore, SINGAPORE
1E.7	P0246	Smart and Accurate State-of-Charge Indication in Portable Applications	Valer Pop, *Henk Jan Bergveld, *Notten Peter, Regtien Paul	University of Twente, NETHERLANDS, THE
1E.8	P0651	Decoupling Load and Power System Dynamics to Improve System Stability	Xiaoyu Wang, Don Mahinda Vilathgamuwa, San Shin Choi	Nanyang Technological University, SINGAPORE
1E.9	P0535	Power Quality Enhancement with DSTATCOM for Small Isolated Alternator Feeding Distribution System	Bhim Singh, *Alka Adya, *AP Mittal, *JRP Gupta	Indian Institute of Technology, Delhi, INDIA

Session 1F Power Quality 1 Tuesday, Nov 29 (2.00pm - 5.40pm)

1F.1	P0392	A Novel Method of Suppressing the Inrush Current of Transformers using a Series-Connected Voltage-Source PWM Converter	Hiroaki Yamada, *Eiji Hiraki, *Toshihiko Tanaka	Shimane University, JAPAN
1F.2	P0626	Simultaneous Operation of a PSS and a Series Power Electronics-Based Controller with Minimum Interaction	Jafar Ghaisari, *Alireza Bakhshai, *Praveen K Jain	Isfahan University of Technology, IRAN
1F.3	P0418	Optimization of Hybrid Filters for Distributed Harmonic and Reactive Compensation	Paolo Tenti, Elisabetta Tedeschi, *Paolo Mattavelli	University of Padova, ITALY
1F.4	P0616	Improved Broadband Harmonic Filter Design for Adjustable Speed Drives	Ahmet Hava, Hazem Zubi	Middle East Technical University, TURKEY
1F.5	P0199	Development of a DSP-Based Power Quality Monitoring Instrument for Real-Time Detection of Power Disturbances	Mohammed Salem, *Azah Mohamed, Salina Abd Samad, Ramizi Mohamed	Universiti Kebangsaan Malaysia, MALAYSIA
1F.6	P0153	Study of Dynamic Voltage Restorer under the Abnormal Voltage Conditions	Huann-Keng Chiang, Bor-Ren Lin, Kuan-Wei Wu	National Yunlin University of Science and Technology, TAIWAN
1F.7	P0400	Robust Signal Processing System for Identification of Harmonics in an Active Power Filter Application	Thip Manmek, *Chathura P. Mudannayake, Colin Grantham	The University of New South Wales, AUSTRALIA
1F.8	P0151	A multi-function single-phase voltage source inverter with current harmonic elimination and voltage regulation features	Bor-Ren LIN, Huann-Keng CHIANG, Cheng-Chang YANG, Kuan-Wei WU	National Yunlin University of Science and Technology

Session 2A Control of Motor Drives 1 Wednesday, Nov 30 (8.40am - 12.40pm)

2A.1	P0497	Phase-Shift-Based Synchronous Modulation of Dual Inverters for an Open-End Winding Motor Drive with Elimination of Zero Sequence Currents	Valentin Oleschuk, Alexandar Sizov, *Bimal K Bose, **Alexandar Stankovic	Academy of Sciences of Moldova, MOLDOVA
2A.2	P0669	Evaluation of Secondary Slot Effects on Performance of High-Speed Linear Induction Motors Using a Quasi Three-Dimensional Space Harmonic Method	Mehran Mirzayee, *Mahmood Joorabian	Amirkabir University of Technology, IRAN
2A.3	P0617	Studies of Inverter Ratings of BDFM Adjustable Speed Drive or Generator Systems	Xiaoyan Wang, Paul Roberts, *Richard McMahon	University of Cambridge, UNITED KINGDOM
2A.4	P0463	Closed-Loop Control and Performance of an Inverterless Interior PM Automotive Alternator	Chong-Zhi Liaw, Wen L. Soong, Nesimi Ertugrul	The University of Adelaide, AUSTRALIA
2A.5	P0331	Investigation of Velocity Ripple Suppression for the Discontinuous Permanent Magnet Linear Synchronous Motor by Open Loop	Yongjae Kim, Hideo Dohmeki, Daiki Ebihara	Musashi Institute of Technology, JAPAN
2A.6	P0548	Sensorless Rotor Position Detection using Differential High Frequency Phase Current method	Ram Chandru, Jianguo Zhu	University of Technology Sydney, AUSTRALIA
2A.7	P0224	A Novel Implementation Method of a Programmable Cascaded Low Pass Filters for a Low Speed Sensorless Control of Synchronous Reluctance Motors	Ahmad Ghaderi, Tsuyoshi Hanamoto, Teruo Tsuji, *Mohammad Ebrahimi	Kyushu Institute of Technology, JAPAN

2A.8	P0389	Nonlinear Feedback Control of a Bearingless Brushless DC Motor	Herbert Grabner, *Wolfgang Amrhein, *Siegfried Silber, Klaus Nenninger	Linz Center of Competence in Mechatronics, AUSTRIA
2A.9	P0351	Sensorless Control of Permanent Magnet Machine Drives for Aerospace Applications	Alan Budden, R. Wrobel, Derrick Holliday, Phil Mellor, *Parminder Sangha	University of Bristol, UNITED KINGDOM

Session 2B DC-DC Converters 2 Wednesday, Nov 30 (8.40am - 12.40pm)

2B.1	P0665	Simulation and Experimental Results of the Bi-Directional DC-DC Converter Operating as an Active Damping Device in a Simple System	Awang Jusoh, Zainal Salam, Shahrin Md Ayob, M.R. Sahid	Universiti Teknologi Malaysia, MALAYSIA
2B.2	P0423	Integrated Magnetic Component based Analysis for Interleaved DC-DC Buck Converter	Nagaraja H N, Amit Patra, Kastha Debaprasad	Indian Institute of Technology, Kharagpur, INDIA
2B.3	P0551	A New Hybrid Current Source Rectifier with Common Mode Voltage Elimination	Mohd Junaidi Abdul Aziz, Christian Klumpner, Jonathan Charles Clare	University of Nottingham, UNITED KINGDOM
2B.4	P0187	AC/DC Flyback Converter With A Single Switch Controlled DC Motor Drives	Elwy El-Kholy	Menoufiya University, EGYPT
2B.5	P0458	Improved Asymmetrical Half-Bridge Converters	Valery Meleshin, Denis Ovchinnikov	Svyaz Engineering, RUSSIA
2B.6	P0443	Analysis and Implementation of an Asymmetrical Half-Bridge Converter	Bor-Ren Lin, Huann-Keng Chiang, Chao-Hsien Tseng, Kao-Cheng Chen	National Yunlin University of Science and Technology, TAIWAN
2B.7	P0536	A New Control Circuit Extends the Effective Duty Cycle Range of Flyback Converters	Tapas Halder, Sujit Kumar Biswas, *Shib Sankar Saha, **Biswajit Majumdar	Jadavpur University, INDIA
2B.8	P0310	An Improved Control Scheme for Multiphase Buck Converter Circuits used in Voltage Regulator Modules	Jitendra Agrawal, Kastha Debaprasad, Amit Patra, *Barry Culpepper	Indian Institute of Technology, Kharagpur, INDIA
2B.9	P0211	Analysis, Design and Implementation of an Active Clamp Flyback Converter	Bor-Ren Lin, Huann-Keng Chiang, Kao-Cheng Chen, *David Wang	National Yunlin University of Science and Technology, TAIWAN
2B.10	P0395	Increasing Efficiency of an DSP-controlled Converter by On-the-fly Changing of the Gate Drive Method	Frank Bertling, Stefan Soter	University of Dortmund, GERMANY

Session 2C Converters Control 1 Wednesday, Nov 30 (8.40am - 12.40pm)

2C.1	P0417	Modelling, Analysis and Design of Cascaded Forward and Interleaved Converter for Powering Future Microprocessors	Ravinder Pal Singh, Ashwin M Khambadkone, Ganesh Samudra, Yung C Liang	National University of Singapore, SINGAPORE
2C.2	P0624	Modulation and Control Schemes for A New Power Converter Based on Z-source and Matrix Converters for ISA 42 V PowerNet System	Kepong You, Muhammed Faz Rahman	The University of New South Wales, AUSTRALIA
2C.3	P0564	Control of High Performance DC-AC Inverters using Frequency Domain Based Repetitive Control	Wei Wang, Sanjib Kumar Panda, Jian-Xin Xu	National University of Singapore, SINGAPORE
2C.4	P0671	Predictive Digital Control For Voltage Regulation Module Applications	Erik Della Monica, W. Stefanutti, Paolo Mattavelli, *Elisabetta Tedeschi, *Paolo Tenti, **S. Saggini	University of Udine, ITALY
2C.5	P0179	New Current Sensing Circuit for Hysteresis-Current- Controlled Buck Converters	Jiann-Jong Chen, Yuh-Shyan Hwang, *Juing-Huei Su, *Wei-Chung Shih	National Taipei University of Technology, TAIWAN
2C.6	P0537	Control of a Three-Phase PWM Rectifier Based on a Dual Single-Input Single-Output Linear Model	Bo Yin, Ramesh Oruganti, Sanjib Kumar Panda, Ashoka K S Bhat	National University of Singapore, SINGAPORE
2C.7	P0309	Small-Signal Model of a High-Power-Factor, Three-Phase AC-DC Converter with High-Frequency Resonant Current Injection	Mohammad Nawawi Seroji, *Andrew Forsyth	The University of Birmingham, UNITED KINGDOM
2C.8	P0382	Modeling and Simulation of DC-DC Power Converters in CCM and DCM using the Switching Functions Approach: Application to the Buck and Cuk Converters	Hadi Kanaan, *Kamal Al-Haddad	Saint-Joseph University, LEBANON
2C.9	P0420	Analysis and Implementation of a High Efficiency, Interleaved Current-fed Full Bridge Converter for Fuel Cell System	Xin Kong, Ashwin M Khambadkone	National University of Singapore, SINGAPORE

Session 2D Distributed Generation 2 Wednesday, Nov 30 (8.40am - 12.40pm)

2D.1	P0366	Deadbeat Current Control for AC and DC Power Applications of a Stand-Alone Induction Generator System	Katsumi Nishida, *Tarek Ahmed, **Mutsuo Nakaoka	Ube National College of Technology, JAPAN
2D.2	P0577	Optimum Input Volt-Ampere Control of Three-Phase Induction Motors Connected to Distributed Generating Systems	Haroon Ashfaq, M Syed Jamil Asghar	Aligarh Muslim University, INDIA
2D.3	P0542	An Improved Maximum Power Point Tracking Algorithm with Current-Mode Control for Photovoltaic Applications	Chee Wei Tan, Tim C Green, Carlos A Hernandez Aramburo	Imperial College London, UNITED KINGDOM

2D.4	P0513	Smoothing Control of Wind Farm Output Fluctuation with Doubly-fed Asynchronous Machine	Li Wu, Z.X. Wang, *Junji Tamura	Shanghai Jiaotong University, CHINA
2D.5	P0675	Battery Energy Storage System for Power Conditioning of Renewable Energy Sources	Ravinder Singh Bhatia, SP Jain, *Dinesh Kumar Jain, **Bhim Singh	NIT Kurukshetra, INDIA
2D.6	P0602	A Solar-powered Battery Charger with Neural Network Maximum Power Point Tracking Implemented on a Low-Cost PIC-microcontroller	Panom Petchjaturon, Wannaya Ngamkham, *Noppadol Khaehintung, *Phaophak Sirisuk, *Wiwat Kiranon	Mahanakorn University of Technology, THAILAND
2D.7	P0451	Transient Stability Analysis of Wind Generator System with the Consideration of Multi-Mass Shaft Model	S M Muyeen, Mohd. Hasan Ali, Rion Takahashi, Toshiaki Murata, Junji Tamura, *Yuichi Tomaki, *Atsushi Sakahara, *Eiichi Sasano	Kitami Institute of Technology, JAPAN
2D.8	P0594	Grid-connected Photovoltaic System with Maximum Power Point Tracking using Self-Organizing Fuzzy Logic Controller	Noppadol Khaehintung, Chaiboon Kangsajian, Phaophak Sirisuk, *Anatawat Kunakorn	Mahanakorn University of Technology, THAILAND
2D.9	P0614	Grid-Connection Technique for a Photovoltaic System with Power Factor Correction	Yu-Kang Lo, Jin-Yuan Lin, Tin-Yuan Wu	National Taiwan University of Science and Technology, TAIWAN

Session 2E Power Quality 2 Wednesday, Nov 30 (8.40am - 12.40pm)

2E.1	P0301	Simulation and Experimental Investigation of an Optimum UPQC with Minimum VA Loading	Yashomani Y Kolhatkar, Shyama P Das	Indian Institute of Technology, Kanpur, INDIA
2E.2	P0130	Locating Voltage Sag Source at the Point of Common Coupling in Industrial Distribution Systems	Noraliza Hamzah, *Azah Mohamed, Aini Hussain	Universiti Kebangsaan Malaysia, MALAYSIA
2E.3	P0124	The Novel Detection Approach of Shunt Active Filter Based on Adaptive Inverse Control	Yanfeng Wu, Zhengguo Wu	Naval University of Engineering, CHINA
2E.4	P0238	Analysis of Instantaneous Representative Active Power Equality based Control Method for Three-Phase Shunt Active Power Filter	Slamet Riyadi, Yanuarsyah Haroen	LPKEE-ITB, INDONESIA
2E.5	P0539	Fundamental Frequency Model of a Dynamic Voltage Restorer	Rengan Krishnan Iyer, Aglieswari K Ramasamy, Vigna Kumaran Ramachandaramurthy, Ravindra Nath Mukerjee	Universiti Tenaga Nasional, MALAYSIA
2E.6	P0613	Design, Simulation and Analog Circuit Implementation of a Three-phase Shunt Active Filter using the Icos(phi) Algorithm	Manjula G Nair, G Bhuvaneswari	Indian Institute of Technology, Delhi, INDIA
2E.7	P0393	Real Time Tracking of RMS Quantities in Three-Phase Systems under Nonsinusoidal Conditions	Thip Manmek, Colin Grantham, Toan Phung	The University of New South Wales, AUSTRALIA
2E.8	P0566	A Soft-Switching Utility-Interfaced Power Conditioner with High-Frequency	Srawouth Chandhakhet, *Mutsuo Nakaoka	Walailak University, THAILAND
2E.9	P0676	Design of a Prototype D-Statcom using DSP Controller for Voltage Sag Mitigation	Hendri Masdi, Norman Mariun, S.M. Bashi, *Azah Mohamed, *Sallehudin Yusuf	Universiti Putra Malaysia, MALAYSIA

Session 3A Motor Design 1 Wednesday, Nov 30 (2.00pm - 3.40pm)

3A.1	P0639	Study of A PMSM Model Incorporating Structural and Saturation Saliencies	Ying Yan, Jianguo Zhu, Haiwei Lu, YouGuang Guo, *Shuhong Wang	University of Technology Sydney, AUSTRALIA
3A.2	P0314	A New Motor Design for Hermetic DC Compressor	Chih-Chung Lo, Chun-Chung Yang, Hung-Chi Chen	Industrial Technology Research Institute, TAIWAN
3A.3	P0399	Stability Limits of Saturated Interior Permanent Magnet Motors	Essam Eddin Rashad	Buraydah College of Technology, SAUDI ARABIA
3A.4	P0466	A Permanent Magnet Linear Motor for Micro Robots	Haiwei Lu, Jianguo Zhu, YouGuang Guo	University of Technology Sydney, AUSTRALIA

Session 3B Permanent Magnet Motor Drives Wednesday, Nov 30 (2.00pm - 3.40pm)

3B.1	P0149	Adaptive Backstepping based Controller Design for Interior type PMSM using Maximum Torque Per Ampere Strategy	Jafar Soltani, Majid Pahlavaninezhad	Isfahan University of Technology, IRAN
3B.2	P0298	Intelligent Speed Control of Permanent Magnet Synchronous Motor Drive Based-on Neuro-Fuzzy Approach	Tawfik Radwan, *Mohamed Gouda	Riyadh College of Technology, SAUDI ARABIA
3B.3	P0474	A Novel Direct Load Angle Control for Interior Permanent Magnet Synchronous Machine Drives with Space Vector Modulation	Jun Zhang, *Zhuang Xu, Lixin Tang, Muhammed Faz Rahman	The University of New South Wales, AUSTRALIA
3B.4	P0434	A Novel and Simple Initial Rotor Position Detecting Method for PMSMs	Jun'ichi Sugawara, Tomoaki Kaimori, Shoji Nishikata	Tokyo Denki University, JAPAN
3B.5	P0674	Hybrid Model Reference Adaptive Speed Control for Vector Controlled Permanent Magnet Synchronous Motor Drive	Mutasim Nour, Ishak Arris, *Norman Mariun, S. Mahmoud	University Putra Malaysia, MALAYSIA

Session 3C Inverters 2 Wednesday, Nov 30 (2.00pm - 3.40pm)

3C.1	P0506	200kW/400kHz High Frequency Inverter for Induction Heating Application	Xiaorong Zhu, Yonglong Peng, Xinchun Shi, Heming Li	North China Electric Power University, CHINA
3C.2	P0421	Analysis and Research of a Multiple-loop Control Strategy for Single-Phase UPS Inverters	Wei Yao, Chongfeng Zheng, Min Chen, Zhaoming Qian	Zhejiang University, CHINA
3C.3	P0156	Modeling and Simulation of Three-Phase OHSW Multilevel Voltage-Source Inverter by Means of Switching Functions	Mir Ghasem Hosseini Aghdam, Seyed Hamid Fathi, *Azadeh Ghasemi	Amirkabir University of Technology, IRAN
3C.4	P0122	High-Frequency Transformer-Link Inverter with Regenerative Snubber	Leong Soon Toh, Zainal Salam, Zulkifli Ramli	Universiti Teknologi Malaysia, MALAYSIA
3C.5	P0178	Proposed Nine Switches Five Level Inverter With Low Switching Frequencies for Linear Generator Applications	Mahrous Ahmed, Nasrudin Abd Rahim, Hew Ping, Khalid Mohamed Nor	University of Malaya, MALAYSIA

Session 3D Lighting and display Wednesday, Nov 30 (2.00pm - 3.40pm)

3D.1	P0578	Igniter for HID Lamp Based on Discontinuous Working Mode of Piezoelectric Transformers	Manh Cuong Do, *Thomas Hanisch, *Henry Guedner	Dresden University of Technology, GERMANY
3D.2	P0263	Study on Improvement of Buck-boost Inverter Suitable for Compact Self-ballast Fluorescent Lamp	Nobuo Takahashi, *Yoshito Kato, **Mutsuo Nakaoka	Matsue National College of Technology, JAPAN
3D.3	P0670	A High-Voltage Input Backlight Module Driver for Multi-Lamp LCD Panels	Yu-Kang Lo, Kai-Jun Pai, Shang-Chin Yen	National Taiwan University of Science and Technology, TAIWAN
3D.4	P0291	High-Frequency Operating Characteristics of Metal Halide Lamps	Sheng-Yi Tang, Chin-Sien Moo, *Ching-Ran Lee	National Sun Yat-Sen University, TAIWAN

Session 3E Power Electronics Components Wednesday, Nov 30 (2.00pm - 3.40pm)

3E.1	P0328	Design of Superjunction Power MOSFET Devices using the Gradient Oxide-Bypassed Structure	Yu Chen, Yung C Liang, Ganesh Samudra	National University of Singapore, SINGAPORE
3E.2	P0367	Static Model Verification of IRF Power MOSFETs using Fluke Temperature Probe (80T-150U) and Performance Comparison of TEHPWM Methods	S Jeevananthan, P Dananjayan	Pondicherry Engineering College, INDIA
3E.3	P0498	The Gate Drive Requirements for New Generation of High Current Low Voltage IGBTs Employed in Motor Converters	Petar Grbovic	Schneider Toshiba Inverter Europe, FRANCE
3E.4	P0601	Implementation and Comparison of Power Diode Models for System Simulation	Zhihan Wang, Angus Bryant, Junyang Wu, *Patrick Palmer	University of Cambridge, UNITED KINGDOM
3E.5	P0303	Device Temperature and Stress Distributions in Power Diode $\text{ }^{\circ}\text{C}$ A Finite Element Method	Guangyu Huang, Cher Ming Tan	Nanyang Technological University, SINGAPORE

Session 4A Control of Motor Drives 2 Thursday, Dec 1 (8.40am - 12.40pm)

4A.1	P0286	Recent Hot Strip Mill in China	Horomi Hosoda, Satoshi Wada, Sumiyasu Kodama, *Junfeng Li	Toshiba Mitsubishi-Electric Industrial Systems Corporation, JAPAN
4A.2	P0250	A New Sensorless Control Scheme for Brushless DC Motors without Phase Shift Circuit	Cheng-Hu Chen, Ming-Yang Cheng	National Cheng-Kung University, TAIWAN
4A.3	P0284	Generalized Predictive Controller For A Boost AC To DC Converter Fed DC Motor	Elwy El-Kholy	Menoufiya University, EGYPT
4A.4	P0233	Modeling of a Converter-Connected Six-Phase Permanent Magnet Synchronous Generator	Kai Zhang, *Hossein M Kojabadi, **Peter Z Wang, **Liuchen Chang	Huazhong University of Science and Technology, CHINA
4A.5	P0184	Chattering Free Neuro-Sliding Mode Control of DC Drives	Mohammed Golam Sarwer, Md Abdur Rafiq, Manoj Datta, Bashu Dev Chandra Ghosh, *Satoshi Komada	Khulna University of Engineering and Technology, BANGLADESH
4A.6	P0409	Indirect Back-EMF Zero Crossing Detection for Sensorless BLDC Motor Operation	P Damodharan, Krishna Vasudevan	Indian Institute of Technology, Madras, INDIA
4A.7	P0457	Development of Closed Loop Control Schemes for Constant Speed operation of a Thyristorized Commutatorless Series Motor Drive	Kaushik Mukherjee, *Sabyasachi Sengupta, *Tapas Kumar Bhattacharya, **Ajit Kumar Chattopadhyay	Jadavpur University, INDIA
4A.8	P0452	RTLinux Based Online Real Time Simulator of SPMSM using the Block Pulse Approximation	Tsuyoshi Hanamoto, Ahmad Ghaderi, Teruo Tsuji	Kyushu Institute of Technology, JAPAN

Session 4B Analysis and Design of Motor Systems Thursday, Dec 1 (8.40am - 12.40pm)

4B.1	P0515	A Torque Estimation Method for a Switched Reluctance Machine	Sittichai Kaewthai, Supat Kittiratsatcha	King Mongkut's Institute of Technology Ladkrabang, THAILAND
4B.2	P0543	Optimal Design and Speed Increasing Method of Solenoid Actuator using a Non-Magnetic Ring	Baek Ju Sung, *Eun-Woong Lee	Korea Institute of Machinery & Materials, KOREA
4B.3	P0229	Practical Implementation of the Bridge Configured Winding for Self-Bearing Machines	W K S Khoo, S D Garvey	The University of Nottingham, UNITED KINGDOM
4B.4	P0646	A Novel Flux-Reversal Axial Flux Generator for High Speed Applications	Mehran Mirzayee, Hamid Bahrami, Amin Zabih, *Mahmood Joorabian	Amirkabir University of Technology, IRAN
4B.5	P0468	Finite-element Study on a Two-phase Switched-reluctance Motor with Split Stator Poles.	Sei Chan, Mohamed Nazim Hamid	University Technology Mara, MALAYSIA
4B.6	P0287	Analysis and Design of the Stator Windings of a Bearingless Motor for Comparisons of Radial Force Capabilities with Different Rotors	Armando Morales-Castorena, Wen L Soong, Nesimi Ertugrul	The University of Adelaide, AUSTRALIA
4B.7	P0477	A Magnetic Model of a Three-Phase Switched-Reluctance Machine using Cubic Spline Interpolation Technique	Srisavath Khotpanya, Supat Kittiratsatcha, *Ishibashi Kazuhisa	King Mongkut's Institute of Technology Ladkrabang, LAOS
4B.8	P0488	Design of the Single Phase SRM Considering the Torque Ripple	Jong-Han Lee, Eun-Woong Lee, Jun-Ho Kim	Chungnam National University, KOREA
4B.9	P0484	Innovative Actuator with Two Controlled Degrees of Freedom for Precision Technology Applications	Juraj Makarovic, Elena Lomonova, *Johan Compter	Technical University of Eindhoven, NETHERLANDS, THE

Session 4C PE Applications 1 Thursday, Dec 1 (8.40am - 12.40pm)

4C.1	P0431	Fluorescent Lamp Model for High-Frequency Electronic Ballasts	Hau-Chen Yen, Zi-Jiann Huang, Kuo-Hsing Lee	Fortune Institute of Technology, TAIWAN
4C.2	P0173	The Low Power Induction Heating using Resonant Technique	Fatimah Rusbihty Ahmad, Ahmad Maliki Omar	Universiti Teknologi Mara, MALAYSIA
4C.3	P0529	GA-trained GRNN for Intelligent Ultra Fast Charger for Ni-Cd Batteries	Panom Petchjatupom, *Noppadol Khaehintung, *Khamron Sunat, *Wiwat Kiranon, *Phinyo Wicheanchote	Mahanakorn University of Technology, THAILAND
4C.4	P0608	Effects of Source Voltage Harmonic Distortion on Power Factor Compensation in Triac Controlled AC Chopper Circuits	Murat Balci, Hakan Hocaoglu	Gebze Institute of Technology, TURKEY
4C.5	P0485	A Hybrid Genetic Algorithm for Selective Harmonic Elimination Control of a Multilevel Inverter with Non-Equal DC Sources	Mohamed Dahidah, *Vassilios Agelidis	Multimedia University, MALAYSIA
4C.6	P0621	Single Phase PWM Controlled Voltage Converter for Pumps and Fans without DC Link Electrolytic Capacitors	Martin Reisinger, *Wolfgang Amrhein, *Siegfried Silber	LCM GmbH, AUSTRIA
4C.7	P0255	A Novel Single-Switch Single-Stage Electronic Ballast With High Input Power Factor	Chien-Ming Wang, *Juing-Huei Su, *Ming-Tsung Liu	National Ilan University, TAIWAN
4C.8	P0478	New Piezoelectric Transformer Adapter with Universal Input Voltage Range	Taeil Kim, Sungjin Choi, Sangmin Lee, Bo H Cho	Seoul National University, KOREA

Session 4D Converters Control 2 Thursday, Dec 1 (8.40am - 12.40pm)

4D.1	P0405	TMS320F2407 DSP Based Fuzzy Logic Controller for Negative Output Luo Re-Lift Converter: Design, Simulation and Experimental Evaluation	Ramanujam Kayalvizhi, Sirukarumbur Panduranga Natarajan, V Kavitharajan, R Vijayarajeswaran	Annamalai University, INDIA
4D.2	P0397	Control of Paralleled Negative Output Elementary Luo Converters	Ramanujam Kayalvizhi, Sirukarumbur Panduranga Natarajan, Perumalsamy Suresh Pandiyarajan, R Vijayarajeswaran	Annamalai University, INDIA
4D.3	P0609	A Forward Converter Having an FPGA-based PID Controller with Parameters On-line Tuned	K I Hwu, *Y T Yau	National Taipei University of Technology, TAIWAN
4D.4	P0571	Stability Comparison of Three Control Schemes for Bus Converter in Distributed Power System	Seiya Abe, Tamotsu Ninomiya, *Masahiko Hirokawa, **Toshiyuki Zaitso	Kyushu University, JAPAN
4D.5	P0115	A Single-Phase Hybrid Active Power Filter using Extension p-q Theorem for Photovoltaic Application	Peng Cheng Tan, Zainal Salam, Awang Jusoh	Universiti Teknologi Malaysia, MALAYSIA
4D.6	P0158	Interactive Simulation and Verification SIMULINK Models for DC-DC Switching Converter Circuits using PWM Control ICs	Juing-Huei Su, *Chien-Ming Wang, **Jiann-Jong Chen, Jing-Da Lee, Tzu-Ling Chen	Lunghwa University of Science and Technology, TAIWAN
4D.7	P0174	A Direct Approach to the Positioning of the Reference Vector for Space Vector Modulation	Mohammad Tavakoli Bina, Mahmood Samimi	University of K. N. Toosi, IRAN

4D.8	P0295	Improvement of the Transient Performance of a Voltage-Type PWM Rectifier with Active Filtering Function	Tatsuya Kitamura, Teruo Kataoka	Tokyo Denki University, JAPAN
4D.9	P0172	Secondary Side Post Regulation Application in Multiple Outputs Flyback Converter	Huiming Chen, Wenhui Dong, Yingyan He, Zhaoming Qian	Zhejiang University, CHINA

Session 4E Power Quality 2 Thursday, Dec 1 (8.40am - 12.40pm)

4E.1	P0510	Intelligence-Driven Power Quality Monitoring	Hazlinda Hakimie, Vigna Kumaran Ramachandaramurthy, Ravindra Nath Mukerjee	Universiti Tenaga Nasional, MALAYSIA
4E.2	P0182	A Novel Control Strategy to Reduce Transformer Inrush Currents by Series Compensator	Juei-Lung Shyu	Kao Yuan Institute of Technology, TAIWAN
4E.3	P0427	Dynamic Voltage Restorer for Voltage Sag Compensation	Agileswari K Ramasamy, Rengan Krishnan Iyer, Vigna Kumaran Ramachandaramurthy, Ravindra Nath Mukerjee	Universiti Tenaga Nasional, MALAYSIA
4E.4	P0619	Performance Comparison of Various Passive Harmonic Filters for Adjustable Speed Drives	Ahmet Hava, Hazem Zubi	Middle East Technical University, TURKEY
4E.5	P0659	A 3-Phase 4-Wire Voltage Sag Compensator Based on Three Dimensions Space Vector	Kosol Oranpiroj, *Suttichai Premrudeepreechacharn, Yuttana Kumsuan, **T. Boonsai, ***Chem Nayar	Rajamangala University of Technology Lanna, THAILAND
4E.6	P0175	Passive Hybrid Filter for Varying Rectifier Loads	Bhim Singh, *Vishal Verma, **Vipin Garg	Indian Institute of Technology, Delhi, INDIA
4E.7	P0469	Modular Structured Multilevel Inverter with Unified Constant-Frequency Integration Control for Active Power Filters	Naziha Azli, *Pei Yi Lim	Universiti Teknologi Malaysia, MALAYSIA
4E.8	P0472	Voltage Sag Mitigation using NAS Battery-based Standby Power Supply	Zahrul Faizi Hussien, Amir Basha Ismail, Lee Wei Chung, *A.M. Busrah, *Mohd Fadzil Mohd Siam	Universiti Tenaga Nasional, MALAYSIA
4E.9	P0561	Design and Implementation of a Hybrid Series Active Power Filter	Chih-Chiang Hua, Chih-Wei Chuang	National Yunlin University of Science and Technology, TAIWAN

Session 4F Applications in Power Systems Thursday, Dec 1 (8.40am - 12.40pm)

4F.1	P0496	Determination of Total Transfer Capability Incorporating FACTS Devices in Power Markets	Gengyin Li, Ming Zhou, Yajing Gao	North China Electric Power University, CHINA
4F.2	P0445	Inductively Loaded Current Controlled Solid-State Lead-Lag Var Compensator: Special Feature and Performance	Poritosh Shadhu Khan, *Jayanta Chatterjee, Gobbi Ramasamy	Multimedia University, MALAYSIA
4F.3	P0546	Switching DC Excitation System on Harmonic-Current Amplification of Self-Excited Wind Induction Generators (WIG)	Wang Li, Shiang-Shong Chen	National Cheng-Kung University, TAIWAN
4F.4	P0522	Research on Flywheel Energy Storage System using in Power Network	Jiancheng Zhang	North China Electric Power University, CHINA
4F.5	P0236	Thyristor based Sequential Switching of Transmission line Improves Power System Stability	Basu K P, Naeem M H	Multimedia University, MALAYSIA
4F.6	P0369	Assessment Study of Shunt FACTS Devices for Improving Dynamic Behavior of Induction Motors	Mahdi Hedayati, *Hashem Oraee	Islamic Azad University, IRAN
4F.7	P0509	Design and Operation of SVC for Voltage Support at Mussafah Substation in Abu Dhabi	Junichi Arai, Takeru Murao, Takafumi Karube, Kikuo Takagi, *Mohamad Ibrahim, *Ahmed Atiah, ***Yasutomo Moriura	Toshiba Corporation, JAPAN
4F.8	P0116	Two Control Schemes to Control Flow of Current Using Series Connected PWM-Voltage-Sourced Converter	Fawzi Al Jowder	University of Bahrain, BAHRAIN
4F.9	P0416	Research on Super Capacitor Energy Storage System for Power network	Jiancheng Zhang	North China Electric Power University, CHINA

Session 5A Motor Design 2 Thursday, Dec 1 (2.00pm - 5.40pm)

5A.1	P0339	Double Side Interior Permanent Magnet of Linear Synchronous Motor	Norhisam Mison, Kim Chai Wong, *Wakiwaka Hiroyuki, Norman Mariun	Universiti Putra Malaysia, MALAYSIA
5A.2	P0444	Design and Experiments of Two Glued Axially-Laminated Synchronous Reluctance Permanent Magnetic Motors	Wei Guo, Zhengming Zhao	Tsinghua University, CHINA
5A.3	P0227	160,000-r/min, 2.7-kW Electric Drive of Supercharger for Automobiles	Toshihiko Noguchi, Yosuke Takata, *Yukio Yamashita, *Seiichi Ibaraki	Nagaoka University of Technology, JAPAN
5A.4	P0640	Design of a Linear Permanent Magnet Synchronous Motor with Extra Low Force Pulsations	Arash Hassanpour Isfahani, Sadegh Vaez-Zadeh	University of Tehran, IRAN

5A.5	P0454	Simulation of Internal Faults in Permanent Magnet Synchronous Machines	Ali Abdallah Ali, Jeremi Regnier, Jean Faucher, Buno Dagues	Laboratoire d'Electrotechnique et d'Electronique Industrielle, FRANCE
5A.6	P0453	Comparison of Core Loss Prediction Methods for the Interior Permanent Magnet Machine	Rukmi Dutta, Muhammed Faz Rahman	The University of New South Wales, AUSTRALIA
5A.7	P0436	Analysis of the Pole Numbers on Flux and Power Density of IPM Synchronous Machine	Chaohui Zhao, Haihong Qin, Yangguang Yan	Nanjing University of Aeronautics and Astronautics, CHINA
5A.8	P0337	Thrust Density Characteristics of Linear DC Motor	Norhisam Mison, *Noor Azita Awaludin, J. I. Syed, Norman Mariun, **Hirama Yutaka	Universiti Putra Malaysia, MALAYSIA
5A.9	P0414	Design and Analysis of a Permanent Magnet Claw Pole/Transverse Flux Motor with SMC Core	YouGuang Guo, Jianguo Zhu, Haiwei Lu	University of Technology Sydney, AUSTRALIA

Session 5B Modulation Techniques Thursday, Dec 1 (2.00pm - 5.40pm)

5B.1	P0637	A Simple On-line SHE PWM With Extension to Six Step Mode in Two-Level Inverters	Nguyen Van Nho, *Myung-Joong Youn	Hochiminh City University of Technology, VIETNAM
5B.2	P0201	Analysis of the Optimal Voltage Spectrum in RPWM Tables	Hung-Chi Chen, Yu-Choung Chang, Jeng-Da Lin	Industrial Technology Research Institute, TAIWAN
5B.3	P0455	Realization Study of Class D Power Amplifier by Sigma-Delta Modulation	Guan-Chyun Hsieh, *Hung-Liang Chen, *Pan-You Liu	Tung Nan Institute of Technology, TAIWAN
5B.4	P0208	Random Pulse-Width Modulated Neutral-Point-Clamped Inverter with Reduced Common-Mode Switching	Poh Chiang Loh, Don Mahinda Vilathgamuwa, F. Gao, Chandana Jayampathi Gajanayake, Lay Woon Gay, Pui Fun Leong	Nanyang Technological University, SINGAPORE
5B.5	P0383	Selective Harmonic Elimination Techniques for Multilevel Cascaded H-Bridge Inverters	Eryong Guan, Pinggang Song, Manyuan Ye, *Bin Wu	East China Jiaotong University, CHINA
5B.6	P0579	Modulation and Control of a Three-Level Class-D Audio Power Amplifier	Shiang-Hwua Yu, Ming-Hung Tseng	National Sun Yat-Sen University, TAIWAN
5B.7	P0567	Analysis of Discontinuous PWM Strategies of Three-Level Inverters (II)	Sandor Halasz	Budapest University of Technology and Economics, HUNGARY
5B.8	P0470	Development of a DSP-based Fuzzy PI Controller for an Online Optimal PWM Control Scheme for a Multilevel Inverter	Naziha Azli, Sze Ning Wong	Universiti Teknologi Malaysia, MALAYSIA
5B.9	P0348	SPWM-An Analytical Characterization, and Performance Appraisal of Power Electronic Simulation Softwares	S Jeevananthan, P Dananjayan, S Venkate San	Pondicherry Engineering College, INDIA
5B.10	P0471	Analysis of Natural Sampled PWM Switching Strategy for a Cascaded Multilevel Inverter using Double Integral Fourier Method	Azziddin Mohamad Razali, *Zainal Salam	Kolej Universiti Teknikal Kebangsaan Malaysia, MALAYSIA

Session 5C PE Applications 2 Thursday, Dec 1 (2.00pm - 5.40pm)

5C.1	P0386	Development of 13-V, 5000-A DC Power Supply with High-Frequency Transformer Coupling	Toshihiko Noguchi, Kousuke Nishiyama, *Yoshihisa Asai, *Toru Matsubara	Nagaoka University of Technology, JAPAN
5C.2	P0589	Application of Load Current Forward Compensating in Digital Voltage Regulation for Doubly Salient Brushless DC Generator	Li Wang, Xiaoqing Cao, Zhuoran Zhang, Yangguang Yan	Nanjing University of Aeronautics and Astronautics, CHINA
5C.3	P0521	Design of Smart Charger for Series Lithium-ion Batteries	Mohd Fathi Mohd Elias, Khalid Mohamed Nor, A.K. Arof	University of Malaya, MALAYSIA
5C.4	P0161	Scott-Connected Autotransformer Based Multipulse AC-DC Converters for Power Quality Improvement In Vector Controlled Induction Motor Drives	Bhim Singh, G Bhuvaneswari, *Vipin Garg	Indian Institute of Technology, Delhi, INDIA
5C.5	P0185	UPS Outage-Mode Output Power Capacity Expansion Approach via Bi-directional Converter	Juei-Lung Shyu	Kao Yuan Institute of Technology, TAIWAN
5C.6	P0193	A New Approach to the Modulation and DC-Link Balancing Strategy of Modular Multilevel AC/AC Converters	Mohammad Tavakoli Bina, Hassan Mohammadi Pirouz, Khalil Kanzi	University of K. N. Toosi, IRAN
5C.7	P0660	Multi-Level Active Filter for Medium Voltage Applications	Mukul Rastogi, Peter Hammond, Stan Simms	Siemens Energy & Automation, Inc., UNITED STATES
5C.8	P0200	Eighteen-Pulse AC-DC Converter for Harmonic Mitigation in Vector Controlled Induction Motor Drives	Bhim Singh, G Bhuvaneswari, *Vipin Garg	Indian Institute of Technology, Delhi, INDIA

Session 5D Converters Control 3 Thursday, Dec 1 (2.00pm - 5.40pm)

5D.1	P0396	Development of Neuro Controller for Negative Output Re-lift Luo Converter	Ramanujam Kayalvizhi, Sirukarumbur Panduranga Natarajan, Palanisamy Padmaloshani, R Vijayarajeswaran	Annamalai University, INDIA
5D.2	P0206	Energy Based Switching Control Scheme for DC-DC Buck-Boost Converter Circuits	Pawan Gupta, *Amit Patra	Indian Institute of Technology Kharagpur, INDIA
5D.3	P0207	Modeling, Analysis, Simulation and Design Optimization (Genetic Algorithm) of DC-DC Converter for Uninterruptible Power Supply Applications	Choon Keat Chew, Siva Rama Rao Kondapalli	Universiti Sains Malaysia, MALAYSIA
5D.4	P0142	Implementation of Single-Phase Matrix Converter as a Direct AC-AC Converter Synthesized using Sinusoidal Pulse Width Modulation with Passive Load Condition	Zahirrudin Idris, Mustafar Kamal Hamzah, Ahmad Maliki Omar	Universiti Teknologi Mara, MALAYSIA
5D.5	P0253	Variable On-time Control of the Critical Conduction Mode Boost Power Factor Correction Converter to Improve Zero-crossing Distortion	Jung Won Kim, Seok Mun Choi, Ki Tae Kim	Fairchild Semiconductor, KOREA
5D.6	P0433	Deadbeat Current Controller of Front-end Converter with State-Observer based Predictor	Hong Viet Luu, Peter Bjšuchner, Volkmar Miuller, Phung Ngoc Lan	Dresden University of Technology, GERMANY
5D.7	P0598	Design of Double Closed Loop in Boost Aerospace DC-DC Power Supply	Xiang Liu, Xijun Yang, Jianguo Jiang, Xu Cai	Shanghai Jiaotong University, CHINA
5D.8	P0139	Modelling & Simulation of a new Single-phase to Single-phase Cycloconverter based on Single-phase	Zahirrudin Idris, Mustafar Kamal Hamzah, Ngah Ramzi Hamzah	Universiti Teknologi Mara, MALAYSIA
5D.9	P0583	Voltage Regulator Modules with Double-Loop Relay Feedback Control	Shiang-Hwua Yu, Chia-Len Huang	National Sun Yat-Sen University, TAIWAN

Session 5E Distributed Generation 3 Thursday, Dec 1 (2.00pm - 5.40pm)

5E.1	P0528	A Fuzzy Logic-Controlled Superconducting Magnetic Energy Storage (SMES) Unit for Augmentation of Transient Stability	Mohd. Hasan Ali, Toshiaki Murata, Junji Tamura	Kitami Institute of Technology, JAPAN
5E.2	P0482	Wind Farm Stabilization by Doubly-Fed Synchronous Wind Generator	Rion Takahashi, Junji Tamura, *Moto-o Futami, *Mamoru Kimura, **Ide Kazumasa	Kitami Institute of Technology, JAPAN
5E.3	P0225	A Bi-directional Charge Equalization Circuit for Series-connected Batteries	Yao-Ching Hsieh, *Chin-Sien Moo, *Wen-Yi Ou-Yang	Kao Yuan University, TAIWAN
5E.4	P0476	Stabilization of Grid Connected Wind Generator by STATCOM	S M Mueyen, Mohammad Abdul Mannan, Mohd. Hasan Ali, Rion Takahashi, Toshiaki Murata, Junji Tamura	Kitami Institute of Technology, JAPAN
5E.5	P0525	Control of Induction Generator in a Wells Turbine Based Wave Energy System	Sandepudi Srinivasa Rao, Bhagwan K Murthy	National Institute of Technology, Warangal, INDIA
5E.6	P0475	A Calculation Method of the Total Efficiency of Wind Generator	Akira Inoue, Mohd. Hasan Ali, Rion Takahashi, Toshiaki Murata, Junji Tamura, *Mamoru Kimura, *Moto-o Futami, *etc Al	Kitami Institute of Technology, JAPAN
5E.7	P0440	Implementation of a Stand-Alone Photovoltaic Lighting System with MPPT, Battery Charger and High Brightness LEDs	Chih-Chiang Hua, Pi-Kuang Ku	National Yunlin University of Science and Technology, TAIWAN
5E.8	P0109	An Embedded Microchip System Design for Programmable Solar Panel Simulator	Yew Thean Cham, Junbo Jia, Eric Wing Kong Au	Temasek Polytechnic, SINGAPORE
5E.9	P0479	Stabilization of Power System Including Wind Generator by Fuzzy Logic-Controlled Superconducting Magnetic Energy Storage	Mohd. Hasan Ali, Toshiaki Murata, Junji Tamura	Kitami Institute of Technology, JAPAN
5E.10	P0373	Power Optimization in a Grid-Connected Wind Energy Conversion System	Anandavel Palanisamy, Rajambal Kalyana Sundaram, *Chellamuthu Chinna Gounder	Pondicherry Engineering College, INDIA

Session 5F Test and Measurement Thursday, Dec 1 (2.00pm - 5.40pm)

5F.1	P0197	Measurement and Mitigation of Conducted Emission for Voltage Phase Controlled Capacitor-Run Single Phase Induction Motor	Yuang-Shung Lee, Te-Tsung Yang, Ming-Wang Cheng	Fu-Jen Catholic University, TAIWAN
5F.2	P0534	An ESR Meter for High Frequencies	Acacio Amaral, *Antonio Cardoso	Polytechnic of Coimbra, PORTUGAL
5F.3	P0257	Troubale Call Based Outage Determination In Power Distribution Networks Using ANFIS	Babak Amini, *Seyyed Hosein Khatoonabadi, Azadeh Zamanifar	Niroo Research Institute, IRAN
5F.4	P0191	Time Domain Measurement System for Conducted EMI and CM/DM Noise Signal Separation	Yuang-Shung Lee, Yu-Ling Liang, Ming-Wang Cheng	Fu-Jen Catholic University, TAIWAN
5F.5	P0280	Hardware-In-the-Loop Simulation of Power Drives with RT-LAB	Christian Dufour, Simon Abourida, Jean Belanger	Opal-RT Technologies, CANADA
5F.6	P0329	Very Fast Measurement of Speed by Rotating Magnetic Field	M Syed Jamil Asghar, Abu Tariq, Syed Javed Arif	Aligarh Muslim University, INDIA

5F.7	P0219	Analysis of the Thermal Expansion Effect on Measurement Precision of Rogowski Coils	Haiming Wang, Feng Liu, Hongling Zhang, Shengxuan Zheng	Yanshan University, CHINA
5F.8	P0240	BMF Fuzzy Neural Network with Genetic Algorithm for Forecasting Electric Load	Yuang-Shung Lee, Chia-Hui Kao, Wei-Yen Wang	Fu-Jen Catholic University, TAIWAN
5F.9	P0375	Real-Time Power Quality Monitoring System Based on TMS320CV5416 DSP Processor	Abdul Rahim Abdullah, *Ahmad Zuri Sha'ameri	KUTKM, MALAYSIA

POSTERS Wednesday, Nov 30 (4.00pm - 6.00pm)

P.1	P0603	A New Scheme for Field-Orientation Control of Induction Motor Drive with Adaptive Neural Flux Estimator	Md Abdur Rafiq, Manoj Datta, Mohammed Golam Sarwer, Bashu Dev Chandra Ghosh	Khulna University of Engineering and Technology, BANGLADESH
P.2	P0352	Variable Structure Speed Regulation of Induction Motor in Steel Manufacture	Rulin Pei, Ying Fang	Baoshan Iron & Steel Co Ltd, CHINA
P.3	P0442	A Simplified Analytical Averaged Model of a Thyristorized Commutatorless Series Motor	Kaushik Mukherjee, *Sabyasachi Sengupta, *Tapas Kumar Bhattacharya, **Ajit Kumar Chattopadhyay, ***Sailendra Nath Bhadra	Jadavpur University, INDIA
P.4	P0575	Evaluation of Sparse PWM Converter for Switched Reluctance Generator	Nand Kishor Singh, *John Edward Fletcher, **Steve J. Finney, **Douglas M. Grant, *Barry Williams	University of Strathclyde, UNITED KINGDOM
P.5	P0165	Frequency Spectrum of the Generated Voltage of Claw Pole Automotive Alternators on No Load	K P P Pillai, Mini K Idiculla, *Achuthsankar S Nair	College of Engineering Trivandrum, INDIA
P.6	P0495	The Force Requisite for the Starting Device in the Single-Phase SRM	Jun-Ho Kim, Eun-Woong Lee, Jong-Han Lee	Chungnam National University, KOREA
P.7	P0486	A Sensorless Control based on MRAS Method in Interior Permanent-Magnet Machine Drive	Xi Xiao, Yongdong Li, Meng Zhang, Yan Liang	Tsinghua University, CHINA
P.8	P0192	A Distributed Parameter Thermal Model for Induction Motors	Suparna Kar Chowdhury	Jadavpur University, INDIA
P.9	P0202	Performance Improvement of the Speed Control for DC Compressors	Hung-Chi Chen, Yu-Choung Chang, Jeng-Da Lin	Industrial Technology Research Institute, TAIWAN
P.10	P0657	A Direct Torque Control of Induction Motor using V/f PWM Technique	Yuttana Kumsuwan, *Suttichai Premrudeepreechacharn, Kosol Oranpiroj, **T. Boonsai, ***Hamid Toliyat	Rajamangala University of Technology Lanna, THAILAND
P.11	P0241	Simulation Analysis of a Novel Multiphase SVPWM Strategy	Shan Xue, *Xuhui Wen	Chineses Academy of Sciences, CHINA
P.12	P0247	Optimum Pole Arcs for Switched Reluctance Machine with Reduced Ripple	R T Naayagi Ramasamy, V Kamaraj	Sri Venkateswara College of Engineering, INDIA
P.13	P0430	Duty Cycle and Modelling Considerations in Three-Phase Induction Motors Drives for Washing Machines	Paul Malliband, Richard McMahon	Cambridge University, UNITED KINGDOM
P.14	P0502	Speed Drive Based on Torque-Slip Characteristic of the Single Phase Induction Motor	Auzani Jidin, Jurifa Mat Lazi, Abdul Rahim Abdullah, *Fazli Patkar, Aida Fazliana Abdul Kadir, *Mohd Ariff Mat Hanafiah	KUTKM, MALAYSIA
P.15	P0524	Neuro-Fuzzy On-Line Optimal Energy Control for Variable Speed Compressor Motor Drive System	Abdul Halim Mohd Yatim, Wahyu Mulyo Utomo	Universiti Teknologi Malaysia, MALAYSIA
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