International Conference on Advances in Electrical and Electronics

(AEE 2010)

Kerala, India
21-22 December 2010

Editor:

Vinu V. Das

ISBN: 978-1-62993-397-9

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2010) by The Institute of Doctors Engineers and Scientists (IDES)
All rights reserved.

Printed by Curran Associates, Inc. (2014)

For permission requests, please contact IDES-CPS
at the address below.

IDES-CPS
Prins Hendriklaan 19
1075 AZ Amsterdam, Netherlands

Phone: +31-6855 84465

cps.info@theides.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

Table of Contents

1. Design and Analysis of Adaptive Neural Controller for Voltage Source Converter for STATCOM 1-5
   Aman Ganesh, G.K.Singh, and Ratna Dahiya

2. Design of a 45nm TIQ Comparator for High Speed and Low Power 4-Bit Flash ADC 6-10
   S.S. Khot, P. W. Wani, M S Sutaone and Shubhang Tripathi

3. Multidimensional scaling algorithm and its current applications in wireless localization 11-15
   Kulvir Kaur and Manjit Sandhu

4. The Role of Advance Voltage Source Inverter in Power System Transmission line 16-20
   Rahul Somalwar and Moharir

5. Light Triggering Thyristor for HVDC and other Applications 21-26
   C.K.Dwivedi and M.B.Diagavane

6. Performance Comparison of Rerouting Schemes of Multi Protocol Label Switching Network 27-29
   Yogesh P Kosta, Minesh P Thaker and Bhaumik Nagar

7. New Model Variable Frequency Transformer (NMVFT) – A Technology for V/f Control of Induction Motors 30-35
   Farhad Ilahi Bakhsh, Mohammad Irshad and Shirazul Islam

8. Identification of Reactive Power Reserve in Transmission Network 36-38
   Robert A. Lis, Grzegorz Blajszczak and Magdalena Wasiluk-Hassa

9. Static Synchronous Series Compensator (SSSC) with Superconducting Magnetic Energy Storage (SMES) for the Enhancement of Transient Stability in Multi-Area System 39-43
   S. Padma and R. Lakshmipathi

10. Assessment of Market Power in Deregulated Electricity Market with Congestion 44-48
    J. Vijaya Kumar and D.M.Vinod Kumar

11. Genetic Algorithm based Optimal Placement of Distributed Generation Reducing Loss and Improving Voltage Sag Performance 49-51
    Soma Biswas and S.K. Goswami

12. Novel Anti Punch doping in Recessed Source Drain UTB SGOI MOSFETs for Reduced Static Power Dissipation 52-55
    Kiran Bailey and K.S. Gurumurthy

13. Optimally Learnt, Neural Network Based Autonomous Mobile Robot Navigation System 56-60
Maulin M.Joshi and Mukesh A.Zaver

14. Loss Reduction by Optimal Placement of Distributed Generation on a Radial feeder 61-67
Sampath Kumar Bodapatla and Dr .H.P.Inamdar

15. Performance Analysis of Interconnect Drivers for Ultralow Power Applications 68-73
S.D.Pable and Mohd. Hasan

16. Design of UPQC with Minimization of DC Link voltage for the Improvement of Power Quality by Fuzzy Logic Controller 74-80
R.V.D.Rama Rao and Subhransu Sekhar Dash

17. Characterization of Performance of Paper-Oil Insulation System of Power Transformers in Presence of Copper Corrosion 81-85
Faheem Ahmed Khan, J. Sundara Rajan and Mohd. Z. A. Ansari

18. Real Time Speaker Identification System – Design, Implementation and Validation 86-88
M. Meenakshi

19. Novel Voltage Mode Multifunction Filter based on Current Conveyor Transconductance Amplifier 89-92
Neeta Pandey, Sahil Kapur, Pushkar Arora and Sagar Malhotra

20. A Novel Controller Based 48-Pulse STATCOM for Reactive Power Compensation and Voltage Stabilization in High Voltage Applications 93-99
S.M. Padmaja and G. Tulasiram Das

21. On the Performance Analysis of Multi-antenna Relaying System over Rayleigh Fading Channel 100-104
Anup Dey, Pradip Kumar Ghosh and Kapil Gupta

22. Application of Solar Powered High Voltage Discharge Plasma for NO_X Removal in Diesel Engine Exhaust 105-109
Sayantani Das, P V S Manaswini, Pooja Kumari, S Mohapatro and B S Rajanikanth

23. Treatment of NOx from Diesel Engine Exhaust by Dielectric Barrier Discharge Method 110-113
S Mohapatro, B S Rajanikanth, R B Rajkumar, C Ramadas and Ansuman Mishra

24. TCAD Based Analysis of Gate Leakage Current for High-k Gate Stack MOSFET 114-117
Ashwani Kumar, Narottam Chand and Vinod Kumar

25. Influence of Skin and Proximity effects on Surge Voltage Distribution in Transformers 118-122
B.V.Sumangala and G.R.Nagabhushana

26. Improved Dynamic Performance and Stability of a Three Phase Induction Motor fed by a Tri-State CSI with Reduced Total Harmonic Distortion on the Input side of the Motor 123-127
B. Jaganathan, C.Anuradha, N.Kiran, S.Archana and Pallavi Murthy

27. SVPWM Control of Five Level Five Phase Voltage Source Inverter 128-131
M.M.Irfan

28. A New Method of Determining Instability of Linear System 132-136
Yogesh V. Hote

29. Low Cost Device to Measure the Thickness of Thin Transparent Films 137-140
R.SakthiVignesh, S.Sudharssun, R.SaiDhamodaran, SabreenFathima.G and R.Rangarajan

30. Built-in Self Repair for SRAM Array using Redundancy 141-144
A. Padma Sravani and M. Satyam

31. Energy Efficiency and Latency Analysis of IEEE 802.15.4 MAC Layer for Wireless Body Sensor Networks 145-148
Ajeya B and Durga Prasad

32. Analysis of pavement management activities programming by particle swarm optimization 149-154
Navid Reza Tayebi, Fereidun Moghadasnejhad and Abolfazl Hassani

33. Wideband Low Profile Double Inverted-F Antenna for 5.2/5.8 GHz WLAN and 5.5 GHz WiMAX Applications 155-159
Debabrata Kumar Karmokar, Khaled Mahbub Morshed, Md. Selim Hossain and Md. Nurunnabi Mollah

34. Analysis and Minimization Technique for Leakage Reduction in Two Input NOR gate 160-164
Vaibahav Neema and Sanjiv Tokekar

35. Wind Energy Validation Using Available Wind Potential 165-167
Hapse Manik M, Dr. A.G. Thosar, Sanjay M. Shinde and Satish A. Markad

36. Two Phasing Method for Conducting Heat Run Test of Three Phase Induction Motors 168-173
Harish Kumar Sahu

37. Dynamic Sub-Channel Allocation in Multiuser OFDM Systems to Achieve Variable Data Rate 174-177
Harish Kumar, G. Venkat Babu and Upadhayay M D

38. Sensor Aided Automatic Path Finding Wheelchair 178-183
Apratim Majumder, Niladri Banerjee and Badal Chakraborty

39. A Sensitive Wavelet-Based Algorithm for Fault Detection in Power Distribution Networks 184-188
N. Zamanan and M. Gilany

40. An Online Tuning of a PMSM for Improved Transient Response Using Ziegler-Nichol's Method 189-192
B.Jaganathan, R.Brindha, Pallavi Murthy, Nagulapati Kiran and Swetha.S

41. A Novel Compensating Technique for Power Factor Improvement in Power Electronic Systems 193-198
B.Jaganathan, C.Anuradha, R.Brindha, Vijayalakshmi and S.Pavithra

42. Simultaneous Generation Expansion Planning and Natural Gas Expansion Planning 199-204
A.Nobakht, M.S.Javadi, Z.Manoochehri, S.V.Heidari

43. Simulation Studies of Shunt Passive Harmonic Filters: Six Pulse Rectifier Load – Power Factor Improvement and Harmonic Control 205-211
Seema P. Diwan, H. P. Inamdar and A. P. Vaidya

44. A CMOS Buffer without Short Circuit Power Consumption for Low Power Application 212-215
Rakesh Kumar Yadav, Deepesh Ranka, Kamalesh Yadav and Ashwani K. Rana

AUTHOR INDEX