# 2015 IEEE IAS Joint Industrial and Commercial Power Systems / Petroleum and **Chemical Industry Conference (ICPSPCIC 2015)**

Hyderabad, India 19-21 November 2015



**IEEE Catalog Number: CFP1558Z-POD ISBN:** 

978-1-5090-3893-0

# Copyright © 2015 by the Institute of Electrical and Electronics Engineers, Inc All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP1558Z-POD

 ISBN (Print-On-Demand):
 978-1-5090-3893-0

 ISBN (Online):
 978-1-5090-3892-3

#### **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) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



## 2015 IEEE JOINT INDUSTRIAL AND COMMERCIAL POWER SYSTEMS PETROLEUM AND CHEMICAL INDUSTRY CONFERENCE

DAY 1: 20/11/2015

9:00 10:00 Registration10:00 10:30 Inaugural Session

10:30	11:00 Invited Talk: Delivering firm power for electrifying India using PV 8					/ & energy sto	& energy storage : By Dr.Nagendra Cherukupalli, USA	
11:00								
11:15	1:30 SESSION-1		N-1	TRACK-1	Venue: Cont	erence Hall -I	TRACK-2	SESSION-2 Venue: Conference Hall -II
11:15	11:40		1		Systems" - Chun Li	rent in Shore Power en Su, Khoshing	Islanding Bel	k for Investigative Analysis of Islanding and Pre- haviour of Solar PV inverters Connected to Grids", Shashank Vyas, NIT, Jaipur. 140
11:40	12:05		2	Cogeneration	erience at a Petro n Facility"- Tusl SE India Exports Pv	nar Patil, GE Energy	grid tied sola	Chakravarthy Muktevi, Vasavi College
12:05	12:30		3	Requirement	nsfer Systems - Cu is and Implementa artech Solonics Lin	ition Experiences",	Buck-Boost ( Water Pump	Converter Fed SRM Drive for Solar PV Array based bing" Bhim Singh, IIT Delhi. 153
12:30	12:55		4	Using Combi	ned Transmission els- Himanshu Jai	on of Power Systems and Distribution n: ECE Department,	A Decoupled for Multifund	I Adaptive Noise Detection based Control Approach ctional SECS", Chinmay Jain, IIT Delhi 161
12:55	1:20		5	Frequency O	scillations in Mult		Photovoltaic	f power management circuit in a Standalone Solar F-Fuel Cell- Battery Hybrid Power System" - Ashok R-SERC, Taramani 600113 168

1:30 2:30 Lunch Break

	2:30	4:10	SESSION-3		SESSION-4
	2:30	2:55	1	Design and Application of Variable Frequency Constant Pressure Technology in Closed System Pumps on Marine Vessels", - Chun Lien Su, Khoshing University, Taiwan. 37	Implementation of Emperical Mode Decomposition for Shunt Active Filter", - Sukumar Mishra, IIT Delhi 174
	2:55	3:20	2	A Study of Experimental Investigations on Two Winding Single-Phase Self Excited Induction Generators", Ujjwal Kalla, Indian Institute of Technology Delhi. 45	Power Quality Enhancement by Current Controlled Voltage Source Inverter based DSTATCOM for Load Variations"- Hareesh M, NIT Warangal. 182
	3:20	3:45	3	Performanced Improvement using a Multi-level Converter in a DTC based Induction Motor Drive", Gautham, BITS-Hyderabad. 52	Damped-SOGI Based Control Algorithm for Solar PV Power Generating System", Bhim Singh, Shilendra Dwivedi, IIT Delhi. 189
	3:45	4:10	4	Real Time Models for FPGA based Control of Power Electronic Converters: A Graphical Programming Approach", Prof. V.V. Sastry, GVPCE, Vizag 60	LED Based Street Lighting with Automatic Intensity Control Using Solar PV" G Bhuvaneswari, BITS Pilani Hyderabad Campus. 197
,	4:10	4:30	5	A PFC Modified-Landsman Converter Based PWM-Dir Applications", A.K. Jha, IIT Delhi. 66	nmable RGB HB-LED ,Driver for Large Area Projection

5:15 Invited Talk: High power / High density power electronic converters with medium frequency transformer isolation.. By: Prof 4:45 Prasad Enjeti

5:15 **5:30** Supporters ( Platinum) Presentation

5:30 **6:15** Visit to Exhibition

4:45 Tea Break

4:30

## 2015 IEEE JOINT INDUSTRIAL AND COMMERCIAL POWER SYSTEMS PETROLEUM AND CHEMICAL INDUSTRY CONFERENCE

DAY 2: 21/11/2015

21/11/201	.5						
9:45	10:30	10:30 Invited Talk: Understanding National Electrical Safety Code (ANSI C2) for Global adoption for reducing fatalities from overhead power lines. By:					
	Mr.John Nelson						
10:30		10:45 Supporters ( Gold) Presentations					
10:45	11:00	11:00 Tea Break					
11:00	1:05	SESSION-	Venue: Conference Hall- I	SESSION-6 Venue: Conference Hall: II			
11:00	11:25		IEC 61850 Based Predictive Power Management System for Industrial Networks" Prasanna Narasimhan, ABB India Limited. 76	Improved Limited Power Tracking of a Photovoltaic Plant Connected across Voltage-Controlled DC Bus", Sarkar, IIT Hyderabad. 203			
11:25	11:50		Life Cycle Extension of Electrical Equipment and Systems in a Large Metallurgical Plant — A Case Study"- Vinod V.Nair, Binani Zinc Ltd, Ernakulam — 683502, Kerala. 81	Multi-Functional Solar Inverter for Grid Harmonic Elimination and Support, Shravana Kumar, Eaton 209			
11:50	12:15		A Coordinated Solution for the Network Wide Circuit Breaker Synchronization using IEC 61850, Arinjai Gupta, ABB India Limited 86	Electrical Safety Practices in Cement Industry for sustainable operation", Navin Agarwal, Ultratech Cement Limited, Hirmi. 214			
12:15	12:40		Placing IPFC at multiple generator connected grid for reducing Short circuit current", Tippana Vishnu Charan, BITS-Hyderabad 90	Towards Globalization of Standards For Electrical Safety in the Workplace" Giuseppe Parise, Sapienza University, Roma 00184 & Satish Chaparala 220			
12:40	1:05		Reactive Power Compensation in Microgrids Using Custom Power Devices" - Gayatri, BITS-Hyderabad 96	Electrical Safety Sensor for Unskilled Technicians in India", Phulare, Raychem RPG Limited, Gujrath. 226			

1:05 1:30 Visit to Exhibition1:30 2:30 Lunch Break

2:30 4	:30 SESSION-7	SESSION-8
--------	---------------	-----------

2:30	2:55		•	6MW AFE drive harmonic mitigation solution by Passive filter", Ronac Desai, L&T-MHPS Turbine Generator Pvt. Ltd 230
2:55	3:20		•	Real Life Case Studies on Diagnosis and Solutions of Electrical Network Quality Related Problems", Rajen Mehta, Efficienergi Consulting Private Limited 243
3:20	3:45		A 3-D Procedure To Trace The Air Path Inside A Flux Reversal Generator for Mechanical Characterization" Vidhya B, B.S.Abdur Rahman University. 119	Medium Voltage Single Core Cable Armor Grounding - Issues and Solutions" Mr. Neeraj Bhatia, Bechtel, USA 251
3:45	4:10		,	Robust High Voltage Cable Joint Design", Shubhankar Das, Rachem RPG Ltd, Gujrath. 260
4:10	4:30		Design and Development of Rapid Prototype Controlled PMSM Drive", Akash Deep, IIT (BHU). 134	Practical Industrial Applications of Ultra Capacitor Technology in India - A Case Study", Amit Raje, Aartech Solonics Limited 265

4:30 5:15 Invited Talk: Low Voltage DC – The Scope and Challenges: By Prof. Krishna Vasudevan, IIT, Chennai

**5:15 5:45** Vote of Thanks