

**PROF. UDAYKUMAR R. Y.**  
**DIRECTOR (MNIT, JAIPUR)**



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## EDUCATION

Program	Institution	Stream	Year of completion
Ph.D.	Indian Institute of Technology Bombay (IITB), Powai	Energy Systems Engineering	2000
M.Tech	KREC, Mangalore University, karnataka	Industrial Electronics	1990
B.Tech	KREC, Mysore University, karnataka	Electrical Power Engineering	1984
P.U.C	Govinda Dasa College, Mangalore, karnataka	PCMB	1979

## RESEARCH PROFILE AT A GLANCE

- **Google Scholar:** h-index: 18, i10-index: 34, citations: 1141.  
<https://scholar.google.co.in/citations?user=oo-u26YAAAAJ&hl=en>
- **Publons:** <https://publons.com/researcher/1417358/prof-udaykumar-yaragatti/>
- **Scopus:** h-index: 11, citations: 422.  
<https://www.scopus.com/authid/detail.uri?authorId=6505900708>

## PROFESSIONAL / TEACHING EXPERIENCE

- Professor (On-lien), E&E Department, NITK, Surathkal, India. 2016(Oct) - Present
- Professor, E&E Department, NITK, Surathkal, India. 2005 - 2016(Oct)
- Assistant Professor, E&E Department, NITK, Surathkal, India. 1997 - 2005
- Senior Lecturer, E&E Department, NITK, Surathkal, India. 1996 - 1997
- Lecturer, E&E Department, NITK, Surathkal, India. 1990 - 1996
- Lecturer, E&E Department, SDMCET, Dharwad, India. 1984 - 1990

## ADMINISTRATIVE AND ACADEMIC POSITIONS

- Director - MNIT, Jaipur, India. 2016(Oct) Onwards
- Mentor Director - IIIT Kota, India. 2016(Oct) Onwards
- Director (in-charge)- NIT, Goa, India. 2016(Oct)- 2017(June)
- Dean Students' Welfare, NITK Surathkal, India. 2013-2016
- Chief Warden, NITK Surathkal, India. 2010-2014
- Faculty In-charge (Electrical Works), NITK Surathkal, India. 2005-2008
- H.O.D (E & E), NITK Surathkal, India. 2005-2008
- Warden, NITK Surathkal, India. 2000-2006
- NSS Officer, NITK Surathkal, India. 1992-1994
- Warden, NITK Surathkal, India. 1992-1994
- Executive Member, Center for Rural Energy and Sustainable Technology, NITK Surathkal, India. 1990-1992

## RESEARCH ACCOMPLISHMENTS (SPONSORED R&D PROJECTS)

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- Cooperative Isolated Renewable Energy System for Enhancing Reliability of Power in Rural Areas, MI OFF-grid, DST India, **2.8 Crores** (On going)
- Cooperative Micro Grids Integrated Smart Electric Transportation Systems (CMGSETS) Coordinated Technologies for Seamless Energy Management, SPARC -DST-MHRD India, **97 Lakhs**, (On going)
- Investigation on the Operation & Control of Multiple DG resources in a Microgrid (Phase-I), CPRI, Bangalore, May-2011 to March-2013.
- Grid connected Photovoltaic Systems, Ministry of Human Resources Development (MHRD), Government of India.
- DSP Based Embedded Controller for Multilevel Inverters, MHRD, Government of India (Principal Investigator – Dr. A.R.Beig).

## ACHIEVEMENTS

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- Chairperson - NWRC Chandigarh since 22-11-2018.
- Mentor Director, IIIT Kota (from oct 2016-present).
- Director in-charge, NIT Goa (from 18-10-2016 to June 2017)
- Member - Executive committee AICTE.
- Member - Committee constituted for implementation and support of ERP system in NITs.
- Board member - JN Govt Engineering college Sundarnagar.
- Member - CAGE, New Delhi.
- Member - Finance committee IIT Jammu.
- Chairperson - External committee to examine and finalise the revised DPR of NITs.
- Chairman CSAB-2017, 2018.
- Chief Patron - IEEE India International Conference on Power Electronics held at MNIT Jaipur, 2018.
- General Chair - IEEE International Conference on Industrial and Information Systems (IEEE-ICIIS) held at NITK, Surathkal, 2010.
- Co-Chair - IEEE International Conference on Industrial and Information Systems (IEEE-ICIIS) held at Peredeniya University, Srilanka, 2009.
- Session Chair- IEEE International Conference on Industrial and Information Systems (IEEE-ICIIS) held at Peredeniya University, Srilanka, 2009.
- Regular reviewer for IEEE Transactions on Power Electronics and IET Journal of Power Electronics and other international IEEE society peer-reviewed conferences.
- One of the TWO Indians Selected and Invited to Participate in Global Development Program 2001 (GDP- 2001) on “Industrial Automation” organized by Rockwell Automation, Milwaukee, and MSOE Milwaukee USA. In the month of June – July 2001. Participants were from 25 countries.
- Participated/Chaired in 11th European conference on power electronics and applications EPE 2006 held at Dresden Germany.
- Visited Department of Electrical and Computer Engineering at University of Victoria, Victoria BC, CANADA as Visiting Research Professor between 21st Nov to 9th Dec 2008.
- Participated in 2nd IEEE International Conference on Power Electronics Drives and Energy Systems PEDES’98, 26th Nov. to 4th Dec. Perth, Western Australia.
- Selected as Technical Paper Committee Reviewer for IEEE PELS society International Conference APEC 06 ( Applied Power Electronics Conference 2005 USA) and APEC 07 (Applied Power Electronics Conference 2006-07 USA).
- Co-Chair for 34th National Systems Conference 2010 (NSC 2010) of Systems Society of India (SSI) at NITK Surathkal. from Dec 10th to 12th 2010.

- Organized 15 Days AICTE-ISTE STTP on Solar Energy and Applications.
- Expert Committee Member of NBA of AICTE – New Delhi.
- Expert Committee Member of NAAC-UGC, Bengaluru.
- Expert member (Examination paper) of UPSC, New Delhi and KPSC, Bengaluru, Karnataka.
- Member- Board of Studies(BOS), Anna University, Guindy; Goa University,Goa; Kuvempu university, Karnataka.
- Member- Board of Studies(BOS), BVBCET, Hubli during 2005-2008.
- Member- Board of Studies(BOS), SDMCET,Dharwad during 2008-2012.
- Advisor Committee Member for ME/M.Tech Programmes, SDMIT, Ujire, DK.
- Organizer for Institute’s Technical festival (ENGINEER) and cultural festival (INCIDENT) since 1990.
- Organizing member of Institute’s Technical International/National Conferences, IE and ISTE conventions.
- Convener of NITK Alumini Association (AA) 10th Global Convention and active member of NITK-AA since 1990.
- Organized and coordinated a National workshop on “Energy Audit”(Sponsored by TEQIP) during 19- 21,Dec-2005.
- Appointed as Coordinator of Energy and Environmental Cell of TEQIP of the Institute.
- Executive member of PAN-NIT Forum, New Delhi.
- Keynote address/ Invited Talks/Lectures: 55, Courses/Events Organized : 15, Research Interactions Abroad: 05 ( USA, Canada and UAE), Senate Member, NITK since 2005.
- Participated in Management Development Programme, MDI, Gurgaon during 2011.
- Participated in e-Governance: Transforming Government Sector organized by National Productivity Council, Port Blair, November 2015.
- Participated in Management Capacity Enhancement Programme organized by TEQIP organized by IIM Udaipur, June 2015.

## PARTICIPATION IN SOCIAL ACTIVITIES IN THE CAMPUS AND AROUND

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- Secretary KREC Hr Pry School Management Committee
- Member of ABHYUDAYA SANGA (to help poor children)
- Member of JAGRUTHI (committee to reduce resource wastage)
- Member of NITK Alumni to keep the campus GREEN
- Member of Campus Employees Welfare Society
- Member of Lok Rajya Sanghatana (LRS), A voluntary organization to spread awareness of Our Constitution.

## RESEARCH SUPERVISION

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- Ph.D. : **15** Completed and **04** Ongoing
- M.Tech Theses : **45**

## PROFESSIONAL MEMBERSHIPS

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- Senior Member, *IEEE*
- Life Member, *ISTE*
- Life Member, *SESI*
- Life Member, *IE*
- Fellow, *ISLE*

## LIST OF PUBLICATIONS (JOURNALS/CONFERENCES/BOOKS: 220)

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### Papers published (2020)

#### International journal:

1. N. Sandeep, J S M Ali, Udaykumar R Y, Vijaykumar K, Arun Kumar Verma and H R Pota , "Common-Ground-Type Five-Level Transformerless Inverter Topology With Full DC-Bus Utilization", *IEEE Transactions on Industry Applications*, 2020.
2. P Kushwaha, R Bhakar, U Yaragatti, V Prakash, "PFR Constrained Energy Storage & Interruptible Load Scheduling under High RE Penetration", *IET Generation, Transmission & Distribution*, 2020.
3. K V L Narayana Santoshkumar H, Rajashekar Mandi, Swapna Mansani, Udaykumar R Y, "Agent Based Wireless Sensor System for V2G Aggregation in Smart Grid" *Lecture Notes in Electrical Engineering*, 2020.
4. Santoshkumar, Suresh Chavan, Udaykumar R Y and Swapna M "Electric Vehicle Traffic Pattern Analysis and Prediction in Aggregation Regions/Parking Lot Zones to Support V2G Operation in Smart Grid: A Cyber-Physical System Entity" *International Journal of Emerging Electric Power Systems*, 2020.

#### International Conference Proceedings:

1. N. Sandeep, J S M Ali, Arun Kumar Verma and Udaykumar R. Y, "Reduced Component Boost Seven-Level Inverter (RCB7LI) with Self-Voltage Balancing ", 2020 IEEE International conference on Power Electronics, Smart Grid and Renewable Energy (PESGRE 2020).
2. Sangeeta Kumari, N. Sandeep, Arun Verma and Udaykumar R Y , "An Improved Unipolar SPWM for Transformerless PV Grid Connected Inverter" 2019 8th International Conference on Power Systems (ICPS), 2020
3. Diksha Jain, N. Sandeep, Arun Verma and Udaykumar R Y , "A Simple Methodology for Sizing of Stand-Alone PV-Battery System" 2019 8th International Conference on Power Systems (ICPS), 2020

### Papers published (2019)

#### International journal:

1. N. Sandeep, J. S. M. Ali, Udaykumar R. Y and K. Vijayakumar, "Switched-capacitor based quadruple boost nine-level inverter" *IEEE Transactions on Power Electronics*, vol. 34, no. 8, pp. 7147-7150, Aug. 2019.
2. N. Sandeep, J. S. M. Ali, Udaykumar R. Y and K. Vijayakumar "A self-balancing five-level boosting inverter with reduced components" *IEEE Transactions on Power Electronics*, vol. 34, no. 7, pp. 6020-6024, July. 2019.
3. Santoshkumar, Suresh Chavan and Udaykumar R Y "A Stochastic Model Based on Markov Chain to Support Vehicle-to-Grid (V2G) Operation in Smart Distribution Network " *International Journal of Emerging Electric Power Systems* 20 (3), 2019.

#### International Conference Proceedings:

1. N. Sandeep, J S M ALi, Arun Kumar Verma and Udaykumar R. Y, "Three-Phase Magnetic-Less Boosting Multilevel Inverter Topology With Reduced Components ", IEEE International Transportation Electrification Conference-India ITEC- 2019.
2. N. Sandeep, Arun Kumar Verma and Udaykumar R. Y, "Seven-Level Active-Neutral-Point-Clamped Inverter Topology With Voltage Boosting Capability ", 2019-IACC-0850, 54th IEEE Industry Applications Society Annual Meeting, Baltimore, USA, pp. 1-5, 2019.

### Papers published (2018)

#### International journal:

1. J. S. M. Ali, R. S. Alishah, N. Sandeep, S. H. Hosseini, E. Babaei, K. Vijayakumar and Udaykumar R. Y., "A new generalized multilevel converter topology based on cascaded connection of basic units" *IEEE Journal of Emerging and Selected Topics in Power Electronics*, paper accepted, in press, 2018.
2. B. Siva, N. Sandeep and Udaykumar R. Y., "Design and implementation of transformer-based multilevel inverter topology with reduced components," *IEEE Transactions on Industry Applications*, paper accepted, in press, 2018.
3. N. Sandeep and Udaykumar R. Y., "A switched-capacitor-based multilevel inverter topology with reduced components," *IEEE*

**Transactions on Power Electronics**, vol. 33, no. 7, pp. 5538-5542, Jul. 2018.

4. N. Sandeep and Udaykumar R. Y., "Operation and control of a nine-level modified ANPC inverter topology with reduced part count for grid-connected applications," **IEEE Transactions on Industrial Electronics**, vol. 65, no. 6, pp. 4810-4818, Jun. 2018.
5. B. Siva, N. Sandeep and Udaykumar R. Y., "A simplified transformer-based multilevel inverter topology and generalizations for renewable energy applications," **IET Power Electronics**, vol. 11, no. 4, pp. 708-718, Apr. 2018.

International Conference Proceedings:

1. N. Sandeep, J. S. M. Ali, Udaykumar R. Y. and K. Vijayakumar, "Switched-capacitor-based three-phase five-level inverter topology with reduced components" *8th IEEE India International Conference on Power Electronics (IICPE-2018)*, 2018, pp. 1-5.
2. J. S. M. Ali, N. Sandeep, K. Vijayakumar, Udaykumar R. Y. and F. Blaabjerg, "Hybrid multilevel inverter topology with reduced part count" *8th IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES)*, 2018, pp. 1-5.

**Papers published (2017)**

International journal:

1. N. Sandeep and Udaykumar R Y, "Operation and control of an improved hybrid nine-level inverter," **IEEE Transactions on Industry Applications**, Early Access, 2017.
2. N. Sandeep and Udaykumar R Y, "Design and implementation of active neutral-point-clamped nine-level reduced device count inverter: an application to grid integrated renewable energy sources," **IET Power Electronics**, Early Access, 2017.
3. Santoshkumar, Udaykumar R. Y, Suresh Chavan, and Anant Naik "Gridable Electric Vehicle (GEV) Aggregation in Distribution Network to Support Grid Requirements: A Communication Approach" , **International Journal of Emerging Electric Power Systems**, Berkeley Press, Early Access, 2017.
4. N. Sandeep and Udaykumar R. Y, "Design and Implementation of a Sensorless Multilevel Inverter with Reduced Part Count" , **IEEE Transactions on Power Electronics**, Vol. 32, No. 9, pp. 6677-6683, 2017.

**Papers published (2016)**

International journal:

1. Swapna M and Udaykumar R Y, "A novel approach for phase balancing of secondary distribution power system," *Indian Journal of Science and Technology* , Vol. 9, No. 44, pp. 1-6, 2016.
2. Santoshkumar, Udaykumar R. Y, Suresh Chavan, and Anant Naik "Stochastic model of electric vehicle parking lot occupancy in vehicle-to-grid (V2G)" , *Energy Procedia*, Elsevier, Vol. 90, 2016.
3. Rajashekar P. Mandi and Udaykumar R. Y, "Thermal Power Plants: Modeling, Control, and Efficiency Improvement" , CRC Press, Chapters 2-4, pp. 19-114, 2016.
4. N. Sandeep and Udaykumar R. Y, "Single-phase seven-level grid-connected photovoltaic system with ripple correlation control maximum power point tracking" , *International Journal of Renewable Energy Research*, Vol. 6, No. 4, pp. 1260-1266, 2016.
5. Shalavadi B S and Udaykumar R. Y, "Modelling and analysis of a standalone PV/micro turbine/ ultra Capacitor hybrid system" , *International Journal of Renewable Energy Research*, Vol. 6, No. 3, pp. 847-855, 2016.
6. Rajashekar P. Mandi and Udaykumar R. Y, "Carbon emission reduction by improving performance of primary air fans in thermal power plants through energy conservation techniques" , *International Journal of Environmental Engineering*, Vol. 8, No. 1, pp. 54-69, 2016.

International Conference Proceedings:

1. Sandeep N, and Udaykumar R Y, "A new nine-level single-DC source-based inverter topology for distributed generation " *Power Electronics, Drives and Energy Systems (PEDES)*, pp 1-6, 2016.
2. Swapna M, and Udaykumar R Y, "An algorithm for optimal phase balancing of secondary distribution systems at each node " , *Transmission & Distribution Construction, Operation & Live-Line Maintenance (ESMO)*, 2016 IEEE PES 13th International Conference on, pp 1-5, 2016.
3. Siva Behara, Sandeep N, and Udaykumar R Y, "Transformer-based seven-level inverter with single-dc supply for renewable energy applications " *India International Conference on Power Electronics (IICPE-2016)*, IEEE, pp 1-6, 2016.

**Papers published (2015)**

International journal:

1. Santoshkumar, and Udaykumar R. Y, "Development of Markov Chain-Based Queuing Model and Wireless Infrastructure for EV to Smart Meter Communication in V2G," International Journal of Emerging Electric Power Systems, Berkeley Press, vol. 16, no. 2 pp 153-163, 2015.
2. M. Kappali & R. Y. Udayakumar, Solar Load Voltage Tracking for Water Pumping: An Algorithm', Journal of The Institution of Engineers (India): Series B, Electrical, Electronics & Telecommunication and Computer Engineering, vol. 96, no. 2, pp 159-164, 2015.
3. Santoshkumar, and Udaykumar R. Y, "Development of Wireless Access Support for EV to Smart Meter Communication in Vehicle-to-Grid (V2G)," International Journal of Renewable Energy Research (IJRER), vol. 5, no. 2 pp 419-426, 2015.
4. Santoshkumar, and Udaykumar R. Y, "Modeling and Comprehensive Analysis of WiMAX Protocol for Grid Control Center to Aggregator Communication in V2G," International Journal of Renewable Energy Research (IJRER), vol. 5, no. 1, pp. 133-138, 2015.

National journal:

1. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Reduction of Auxiliary Power of In-house HT Equipment in Thermal Power Plant by Energy Conservation", IEEMA Journal, ISBN 0970-2946, Vol. 6, Issue No. 5, pp. 44-53, 2015.

International Conference Proceedings:

1. Santoshkumar Hampannavar, and Udaykumar R Y, "Performance Analysis of LTE Protocol for EV to EV Communication in Vehicle-to-Grid (V2G)," IEEE Canadian Conference on Electrical and Computer Engineering", pp 1-5, 2015.
2. Sandeep N, and Udaykumar R Y, "Single Phase Modular Multilevel Inverter based Grid-Connected Photovoltaic System," IEEE Annual India conference (INDICON), pp 1-6, 2015.
3. Satyendra Shet, and Udaykumar R Y, "Stability Analysis of a Novel PMSM Motor Drive for Electric Scooter Application," IEEE Annual India conference (INDICON), pp 1-6, 2015.
4. Santoshkumar Hampannavar, and Udaykumar R Y, "Markov Chain Based Stochastic Model of Electric Vehicle Parking Lot (EVPL) Occupancy in Vehicle-to-Grid (V2G)," IEEE International Conference on Computational Intelligence and Computing Research (IEEE-ICCIC-2015), 2015.
5. Santoshkumar Hampannavar, and Udaykumar R Y, "Stochastic Model of Electric Vehicle Parking Lot Occupancy in Vehicle-to-Grid (V2G)," International Conference on Advances in Energy Research, IIT Bombay, 2015.
6. Swapna M, Peddi Reddy, Udaykumar R.Y, "Performance Study of Secondary Distribution Feeder for Phase Balancing at each Candidate Node", 2nd IEEE International Conference on Innovations in Information, embedded and Communication systems (ICIIECS 2015)
7. Swapna M and Udaykumar R.Y, "Phase Balancing Techniques", 4th International Engineering Symposium (IES 2015).
8. GD Moger, CSN Murthy, RY Udaykumar, "Experimental, simulation and a case study on electrical energy consumption in mine drive haulage system", International Conference on Power and Advanced Control Engineering (ICPACE), pp. 322-326, 2015.
9. Santoshkumar, and Udaykumar R. Y, "Development of WSN system for precision agriculture," 2nd IEEE International Conference on Innovations in Information, embedded and Communication systems (ICIIECS 2015).

**Papers published (2014)**

International journal:

1. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Control of CO2 emission through enhancing energy efficiency of auxiliary power equipment in thermal power plant", International Journal of Electrical Power & Energy, Elsevier, Vol 62, November 2014, Pages 744-752.
2. Santoshkumar, and Udaykumar R. Y, "Modeling and Architectural Frame Work of Off-Board V2G Integrator for Smart Grid," International Journal of Renewable Energy Research (IJRER), vol. 4, no. 4, pp. 826-831, 2014.
3. R. P. Mandi, and Udaykumar R. Y, "Reduction of Carbon Emission by Enhancing Energy Efficiency of Forced Draft Fans in Thermal Power Plants," International Journal of Power and Energy Systems, ACTA Press, vol. 34, no. 4, 2014.
4. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Energy Conservation Techniques of HT Equipment in Thermal Power Plant", Electrical and Power Review, Volume 2, Issue No. 9, June 2014.

5. M. kappali, and Udaykumar R. Y, "Solar Load Voltage Tracking for Water Pumping: An Algorithm", Journal of The Institution of Engineers (India): Series B, Springer, vol. 96, no. 2, pp. 159-164, 2014.
6. Rajashekar P. Mandi, S. Seetharamu and Udaykumar R Yaragatti, "Enhancing Energy Efficiency of Boiler Feed Pumps in Thermal Power Plants through Operational Optimization and Energy Conservation", International Research Journal of Power and Energy, Premier Publication, Vol. 1, No. 2, Sept. 2014, pp. 013-016

National journal:

1. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Technological advances in distribution transformers", Electrical Power & Review Magazine, Vol. 2, Issue 11, Sept. 2014, pp. 39 – 41.
2. Rajashekar P. Mandi, S. Seetharamu and Udaykumar R Yaragatti, "Improving Performance of Primary Air Fans in Thermal Power Plants through Energy Conservation Techniques", The Journal of CPRI, Volume 10, Issue No. 3. Sept. 2014, pp. 569 – 580.
3. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Energy conservation techniques of HT equipment in thermal power plant", Electrical Power& Review Magazine, Vol. 2, Issue 9, July 2014, pp. 34 – 37.
4. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Improvement of Energy Efficiency of Boiler Feed Pumps in Thermal Power Plants through Intelligent Prediction and Operational Optimization", The Journal of CPRI, Volume 10, Issue No. 2, June 2014, pp.331-344.
5. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Reducing Auxiliary Power of Induced Draft Fans in Coal Fired Thermal Power Plants by Energy Audit", The Journal of CPRI, Volume 10, Issue No. 1, March 2014, pp. 65-74.

International Conference Proceedings:

1. Santoshkumar, Udaykumar R.Y, "Performance Investigation of Mobile WiMAX Protocol for Aggregator and Electrical Vehicle Communication in Vehicle-to-Grid (V2G)", Proc., IEEE Canadian Conference on Electrical and Computer Engineering, Toronto IEEE-CCECE, Canada, 2014.
2. Rajashekar P. Mandi and Udayakumar R. Yaragatti, "Reduction of Auxiliary Power in a Coal Fired Thermal Power Plant Through Energy Conservation Measures", Proc. of International Conference on 'Energy Generation and Conservation for Meeting India's Futuristic Needs', Organized by Babu Banarasi Das Institute of Technology, Gaziabad, during 22nd March 2014.
3. Rajashekar P. Mandi and Udayakumar R. Yaragatti, "Methodology of Energy Audit", Proc. of National Workshop on "Energy Conservation in Buildings, Hospitals, Hotels, Offices, Commercial Complexes and ECBC Codes", Organized by CPRI, Bangalore, March 2014.
4. Rajashekar P. Mandi and Udayakumar R. Yaragatti, "Energy Conservation in Electrical Equipments and Case Studies", Proc. of National Workshop on "Energy Conservation in Buildings, Hospitals, Hotels, Offices, Commercial Complexes and ECBC Codes", Organized by CPRI, Bangalore, March 2014.
5. Sandeep N, P S Kulkarni, and Udaykumar R. Y, "A single-stage active damped LCL-filterbased grid-connected photovoltaic inverter with maximum power point tracking, "in Conf. Rec. Power Systems Conference (NPSC), Eighteenth National, pp. 1-6, 2014.
6. P Salodkar, Sandeep N, P S Kulkarni, and Udaykumar R. Y, "A Comparison of Seven-Level Inverter Topologies for Multilevel DC-AC Power Conversion, "in Power Electronics, Drives and Energy Systems (PEDES), 2014 IEEE International Conference on, pp. 1-6, 2014.
7. N Koduri, Santoshkumar, and Udaykumar R. Y, "On-board Vehicle-to-Grid (V2G) integrator for power transaction in smart grid environment, "in Computational Intelligence and Computing Research (ICCIC), IEEE International Conference on, pp. 1-4, 2014.
8. Kamalapur G D, Udaykumar Yaragatti: Rural electrification in India and pre-sizing of solar home systems. 2014 IEEE Global Humanitarian Technology Conference - South Asia Satellite, GHTC-SAS 2014; 09/2014.
9. Kamalapur G D and Udaykumar Yaragatti, "Flexible A C Transmission and study of TCSC," International Conference on Computer communication and Informatics, Coimbatour, Jan 3-5, 2014
10. Rajashekar P. Mandi, S. Seetharamu and Udaykumar R Yaragatti, "Optimization of Carbon Emission by Enhancing Energy Efficiency of Condensate Extraction Pumps in Thermal Power Plants through Energy Conservation Techniques", Ninth International Conference on Industrial and Information Systems (ICIIS)-2014' 15th – 17th Dec. 2014.IE
11. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Reduction of Auxiliary Power in a Coal Fired Thermal Power Plant Through Energy Conservation Measures", Proc. of International Conference on 'Energy Generation and Conservation for Meeting India's Futuristic Needs', Organized by Babu Banarasi Das Institute of Technology, Gaziabad, India, pp. 47 – 56. ernational Conference ICIIS-2014, 15th – 17th Dec. 2014.

## **Papers published (2013)**

### International journal:

1. Sreenivasappa B.V, Udaykumar R.Y, "Improved Space Vector PWM Algorithm for Three-Level Voltage Source Inverter in Over Modulation Region", International Journal of Power Electronics-Inderscience, 2013.
2. Anant Naik, Udaykumar R.Y," Modeling a Grid Connected Photovoltaic System with Perturb and Observe based Maximum Power Point Tracking", International Journal of Distributed Generation and Alternate Energy, Taylor and Francis, Vol 28, Issue-4, pp-49-72,2013.
3. G.D. Kamlapur and Udaykumar R.Y "Flexible a c Transmission and Static Voltage Compensator" International Journal of Current Engineering and Technology, ISSN 2277 – 4106, pp. 329-332, 2013.
4. M. Kappali, Udaykumar Yaragatti, and V R Sheelavant" Solar photovoltaic water pumping: harnessing maximum power", International journal of electrical and power engineering, vol. 4, No. 1, 2013.
5. M. Kappali, Udaykumar Yaragatti, and V R Sheelavant" Harnessing maximum power from solar PV panel for water pumping application", Mobile communication and power engineering, pp. 236-241, 2013.

### National journal:

1. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Optimal Hybridization of Renewable Energy Systems to Improve Energy Efficiency", The Journal of CPRI, Vol. 9, No. 4, pp. 521-532, 2013.
2. Rajashekar P. Mandi and Udaykumar R Yaragatti, "Integration of Renewable Energy System Solar PV with Diesel", The Journal of CPRI, Vol. 9, No. 4, pp. 533-542, 2013.

### International Conference Proceedings:

1. Santoshkumar, Udaykumar R.Y, "IEEE 802.16-2004(WiMAX) Protocol For Grid Control Center and Aggregator Communication In V2G for Smart Grid Application", IEEE-ICCIC 2013, Madurai, India.

## **Papers published (2012)**

### International journal:

1. Sreenivasappa B.V, Udaykumar R Y and Beig A.R, "Space Vector Based Synchronised Bus-Clamping PWM Algorithms for Three-Level Voltage Source Inverter in Over Modulation Region", Power Electronics, IET, Vol.5, Issue 4, PP 493- 500,2012.
2. Anant Naik, Udaykumar Yaragatti, "A novel MPPT controlled grid connected photovoltaic system with dual functionality of active power injection and reactive power compensation in a single phase system", Journal of Electrical Engineering, Romania, "Politechnica" publishing house, volume 12/2012-edition:2, pp-165-172.
3. M.Kappali, Udaykumar Yaragatti, " A Novel Approach to Harness Maximum Power from Solar PV Panel", The Journal of Central Power Research Institute (CPRI), India., Dec 2012.
4. M. Kappali, Udaykumar Yaragatti, " Harnessing Maximum Power from Solar PV Panel for Water Pumping Application: A Simple Approach", International Energy Journal (IEJ), Vol.13 No.3, Page 145-160, 2012.
5. M.Kappali, Udaykumar Yaragatti, " Solar Photo Voltaic Water Pumping: Harnessing Maximum Power", International Journal on Electrical and Power Engineering (IJEPE) , ACEEE, USA, Vol.3, No.4, Page: 1-8, 2012.
6. S.B.Karajgi, Udaykumar R.Y and G.D. Kamlapur," Modeling of Power Generation using Municipal Solid waste in India", International Journal of Electrical and Computer Engineering (IJECE) Vol.2, No.2, Page:197-202, 2012.
7. S.B.Karajgi, Udaykumar R.Y and G.D. Kamlapur," An Approach to Quantify the Loss Reduction due to Distributed Generation", International Journal of Computer Applications (IJCA)Vol.52,No.17,Page 13-18, 2012.
8. S.B.Karajgi, Udaykumar R.Y and G.D. Kamlapur," Fault Location Estimation in Distribution Systems with High Penetration of Distributed Generation", International Journal of Computer and Electrical Engineering(IJCEE), Oct 2012.
9. G.D. Kamlapur and Udaykumar R.Y, "Rural Electrification in the Changing Paradigm of Power Sector Reforms in India " International Journal of Electrical and Computer Engineering (IJECE) Vol.2, No.2, pp. 147-154, 2012.
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