





6th International Advance Computing Conference (IACC - 2016)

27-28 February 2016, S R K R Engineering College, Bhimavaram - 534204,
Andhra Pradesh, India

Pre Conference Workshop on

Research Avenues and Emerging Trends in Electrical Engineering

World over electrical engineering has opened new opportunities for young engineers to do research on renewable energy from sun, wind and tide to reduce carbon footprints on earth. The attention created by policy makers towards this target opened abundant opportunities for qualified engineers in power systems and power electronics. This workshop is aimed to expose the engineering faculty and professional engineers to these developments and the challenges ahead.

| 26-Feb-2016 (Friday) | |
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| 8.00-9.00 am: Registration | 9.00-9.30 am: Inauguration |
| Morning | Afternoon |
|  Speaker: Dr Vaskar Sarkar, Asst. Professor, IIT, Hyderabad. |  Speaker: Dr K. Sivakumar, Asst. Professor, IIT, Hyderabad. |
| Session-I (9.30-11.00 am) Microgrid Architecture and Control Microgrid includes multiple loads and distributed energy resources that can be operated in parallel with the broader utility grid or as an electrical island. Future microgrids could exist as energy balanced cells within the existing power distribution grids or stand alone power networks within small communities. | Session-I (2.00-3.15 pm) Multilevel Inverters Today's industry requires high power to low power to drive their motors. Using same source to all the motors may damage other load. To overcome this problem, the Multilevel Inverter is being used in high power and medium voltage situations. |
| Tea Break (11.00-11.15 am) | Tea Break (3.15-3.30 pm) |
| Session-II (11.15 am-12.45 pm) Power Generation Control of Photovoltaic Plants Solar Photovoltaics is now, after hydro and wind power, the third most important renewable energy source in terms of globally installed capacity. Due to its importance, currently India is running the largest renewal capacity expansion program in the world by targeting 175 GW by the year 2022. | Session-II (3.30-4.45 pm) Research Avenues in Power Electronics Silicon carbide (SiC) with its wide band-gap is a promising replacement for Silicon in power semiconductor devices. It can operate up to 400°C and has a lower thermal resistance than silicon, allowing for better cooling. |
| Lunch Break (12.45-2.00 pm) | Valedictory (4.45-5.00 pm) |

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Website: <http://iacc2016.com/Workshops.html>

Registration: <http://iacc2016.com/payment.html>