

International Conference on Emerging Electronics and Automation (E2A)

Organized by Department of E&IED, NIT Silchar, Assam 788010

Title: *Symposium on Control of Power Electronic Drives and Instruments*

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Abstract:

Power electronics has emerged as a key technology in the conversion and control of electrical power in multiple applications: electric drives and generators, renewable energy systems, energy storage systems, smart cities, smart grids, power systems, transport (vehicles, aircraft, ships, and others), industrial, medical, military, telecommunications, consumable and home apparatus. Now a days the development in power Electronics instruments are very rapid and they are fulfilling the need of advancement in technology by their tremendous applications in new emerging areas of research like Robotics, Cyber physical systems, Networked Control Systems, improving the efficiency by improvement in power converters etc. This symposium covers control technologies in the field of power electronics and its various application in different instruments not only related to biomedical as well as solar power converters, generation of renewable energy etc.

In this symposium, it is expected that the submission of high quality papers will be more than 12. This area will covers the new trends in control of power electronics with fulfilling the aim to exchange views on research progress and technological developments related to this field.

The broad research area is Power Electronics but not limited to this

Power Electronics

- ❖ Application of control theory and circuit design techniques.
- ❖ Development of analytical tools used in efficient and effective energy conversion, control and its utilization.
- ❖ Control techniques for power converters.
- ❖ Adjustable speed drives and their application in Power System.

- ❖ Cyber security issues and its control in the renewable energy, power quality and Power system utilities.
- ❖ Power devices and its components modelling and control.