



I Nyoman Wahyu Satiawan, S.T., M.Sc., Ph.D.

Power Electronic Converters

Bachelor's degree (Electrical Engineering) Departement of Electrical Engineering, Udayana University, Denpasar-Bali 1996

Master degree (Intelligent Control, Liverpool John Moores University, England) Liverpool, England, UK 2003

Doctor degree in Liverpool John Moores University, England(Multi-level PWM methods for variable speed drives) Liverpool, England, UK 2018

Employment Lecturer Undergraduate's program in Electrical Engineering, Engineering Faculty University of Mataram, Indonesia February, 1998

Research and development projects over the last 5 years

1. Design of Electronic Transformer (Solid State Transformer) on the power distribution system (Dikti funds-2020)
2. Desain power converter for improving efficiency and sustainability of solar panel power plant (PLTS) (Dikti funds-2019)
3. Performance analisis of mini Solar panel Power plant with using DC network (Internal fund-2018)
4. Design of DC/DC Converter for Fast Charging Batere (Internal fund-2017)

Industry collaborations / Community Services over the last 5 years

1. Counseling of using and principle of mini solar panel for house electricity at Dusun Buani, North Lombok (2022)
2. Workshop conversion of lighbulb LED 220 V into lighbulb 12 V for night lighting at Dusun Buani, Nort Lombok (2019)
3. Development of independent power suplay at Desa Gili Gede Indah Kecamatan Sekotong West Lombok (2018)
4. Counseling of the save electricity sistem and development of independent power suplay at Dusun Cemara, Desa lembar Selatan, Kecamatan Lembar, West Lombok (2017)

Patents and proprietary rights

1. Power Electronics Transformator (book) 2021
2. Teknik Modulasi Inverter Jembatan-H (book) 2020

Important publications over the last 5 years

1. Modeling and Power Management of Electric Vehicle Charging System (2021)
2. Carrier Based PWM Methods of Dual Cascaded Inverter for Solar Power Plant Solid State Transformer (2021)

3. Design and Control a high gain synchronous Buck Converter for a Solid state Distribution transformer , (2020)
4. Teknik Modulasi untuk Inverter Multilevel Cascaded H-Bridge Satu Fasa menggunakan Arduini Mega 2560 (2022)
5. Perbandingan teknik modulasi inverter 3phase 2-tingkat untuk menghasilkan tegangan keluaran variable (2020)
6. Pengaruh teknik modulasi PWM pada keluaran inverter tiga fase untuk pengaturan kecepatan variable motor induksi (2018)
7. A New Modulation Technique for A Three-Cell Single-Phase CHB Inverter with Un-Equal DC-Link Voltage for Improving Output Voltage Quality (2018)
8. Realisasi inverter multi-level cascaded H-Bridge 5 tingkat 1 fase menggunakan Arduino Mega 2560 (2017)

Activities in specialist
bodies over the last 5
years