

**EDUCATION**

Doctor of Engineering, Electrical Engineering, Cleveland State University, May 1999

Master of Science, Electrical Engineering and Computer Science, University of Illinois at Chicago, May 1995

Bachelor of Science, Electrical Engineering & minor in Computer Science, Northern Arizona University, May 1993

PROFESSIONAL AFFILIATIONS

- Senior Member, Institute of Electrical and Electronics Engineers (IEEE)
- Member, American Society of Engineering Education (ASEE)

ACADEMIC EXPERIENCE

06/09 – present	Professor of Electrical Engineering, Cal Poly State University, California, USA
09/11 – present	Director of Electric Power Institute, Cal Poly State University, California, USA
08/04 – 06/09	Associate Professor of Electrical Engineering, Cal Poly State University, California, USA
08/99 – 07/04	Assistant Professor of Electrical Engineering, Cal Poly State University, California, USA
09/97 – 05/99	Research Assistant to Power Electronics Lab, Cleveland State University, Ohio, USA
08/96 – 08/97	Teaching Assistant to Control Systems Lab, Cleveland State University, Ohio, USA
01/96 – 08/96	Research Assistant to Microelectronics Laboratory, University of Illinois Chicago, Illinois, USA
01/94 – 12/95	Graduate Assistant to English Department, University of Illinois Chicago, Illinois, USA

ORGANIZATIONAL EXPERIENCE

- Chair, IEEE Power and Energy Society Chapter, Central Coast Section, 01/20 – present
- Chair, IEEE Central Coast Section, 01/04 – 12/05
- President, Ikatan Silaturahmi Muslim Indonesia Cleveland (ISLAMIC), 1997 – 1999
- President, Indonesian Student Association, Northern Arizona University, 08/91 – 05/93

INDUSTRY EXPERIENCE

- Engineering Consultant, Substation Engineering, San Diego Gas & Electric, California, 01/19 – 01/20
- Summer Faculty Fellow, Distributed Energy Resources, San Diego Gas & Electric, California, 06/25 – 08/31
- Engineering Consultant, NV5, California, 03/17 – 08/17
- Summer Faculty Fellow, Substation Engineering & Design, San Diego Gas & Electric, California, 06/16 – 09/16
- Engineering Consultant, Semptra Energy, California, 07/14 – 06/15
- Engineering Consultant, Partoe Inc., Berkeley, California, 07/09 – 07/14
- Summer Faculty Fellow, Innovation and Technology, San Diego Gas & Electric, California, 06/12 – 09/12; 06/13 – 09/13
- Engineering Consultant, Enerpro Inc., Goleta, California, 06/09 – 06/10
- Engineering Consultant, Diodes Inc., Westlake Village, California, 09/07 – 09/08
- Summer Faculty Fellow, Transmission Engineering, San Diego Gas & Electric, California, 06/08 – 09/08
- Summer Faculty Fellow, APD Semiconductor, Redwood City, California, 07/06 – 09/06
- Summer Faculty Fellow, Power Quality, San Diego Gas & Electric, San Diego, California, 06/05 – 09/05
- Engineering Consultant, Rantec Power Systems, Inc., Los Osos, California, 06/02 – 06/04
- Summer Faculty Fellow, Transmission Planning, San Diego Gas & Electric, San Diego, California, 07/01 – 09/01
- Engineering Intern, Power Electronics Group, Capstone Turbine Corporation, Tarzana, California, 05/97 – 08/97
- Engineering Technician, Power Electronics Group, Picker International, Cleveland, Ohio, 09/98 – 06/99
- Hardware Engineer, Fast Ethernet Module Group, Rockwell Automation - Allen Bradley, Cleveland, Ohio, 01/97 – 09/98

AWARDS & RECOGNITIONS**STATE AND NATIONAL:**

- Best Paper Award, 2020 10th Electrical Power, Electronics, Communications, Control, and Informatics Seminar, Paper entitled "Design and Development of a DC Light Bulb Using High Power LEDs"
- Best Paper Award, 2019 International Conference on Engineering and Computing - Malaysia, for paper entitled "Battery Management System on Electric Bike Using Lithium-Ion 18650"
- 2019 Outstanding Achievement Award - In Recognition and Appreciation of the Research Contributions to the Field of Power Electronics, presented at the International Conference on Computational Science and Computational Intelligence, Las Vegas, December 2019.
- 2013 Power Engineering Society Chapter Outstanding Engineer Award, IEEE Central Coast Section

- 2012 Outstanding Teaching Award, American Society of Engineering Education – Pacific Southwest Region
- Indonesian Diaspora Award on Education, Los Angeles, July 2012
- Appeared on the cover of EEWeb PULSE magazine, Sept 2011, <http://www.eeweb.com/pulse/issue-10-2011>
- 1st Place at the 2004 California State University Wide Research Competition under the category “Undergraduate Engineering”
- 3rd Place at the 2008 National Junior Space Elevator Competition sponsored by NASA

UNIVERSITY:

- 2018 Distinguished Scholarship Award, Cal Poly State University, San Luis Obispo
- 2005 – 2006 Outstanding Faculty Advisor Award, Recipient Academic Advising Council, Cal Poly, SLO

COLLEGE OF ENGINEERING:

- 2021 Raytheon Excellence in Teaching and Applied Research Award, College of Engineering, Cal Poly State University
- 2018 Don and Paula Heye Annual Award for Outstanding Club Advisement, College of Engineering, Cal Poly State University, San Luis Obispo.
- 2014 Outstanding Professor, College of Engineering, Cal Poly State University, SLO.
- 2014 Faculty/Staff Appreciation Award, "For Going Above and Beyond in Inspiring and Assisting MEP Students", Multicultural Engineering Program, Cal Poly, SLO.
- 2013 Faculty/Staff Appreciation Award, "For Going Above and Beyond in Inspiring and Assisting MEP Students", Multicultural Engineering Program, Cal Poly, SLO.
- 2005 Professor of The Year, Society of Hispanic Professional Engineers, Cal Poly, SLO
- 2005 Lockheed Martin "Most Supportive Professor", Society of Women in Engineering, Cal Poly, SLO

ELECTRICAL ENGINEERING DEPARTMENT (PARTIAL LIST):

- AY 13–14, 15–16, 16–17, 17–18 Recipient of Hood Endowed Professor, EE Department, Cal Poly, SLO
- 2014 – 2015 The Most Influential Professor, IEEE Student Branch and EE Department, Cal Poly, SLO
- 2011 – 2012 High Pass Filter Faculty Award, IEEE Student Branch and EE Department, Cal Poly, SLO
- 2010 – 2011 Fourier Faculty, IEEE Student Branch and EE Department, Cal Poly, SLO
- 2009 – 2010 Favorite Professor, IEEE Student Branch and EE Department, Cal Poly, SLO
- 2008 – 2009 Favorite Professor, IEEE Student Branch and EE Department, Cal Poly, SLO
- 2007 – 2008 Professor With Best Class Projects, IEEE Student Branch and EE Department, Cal Poly, SLO
- 2006 – 2007 Best Overall Professor, IEEE Student Branch and EE Department, Cal Poly, SLO
- 2005 – 2006 Most Outstanding Lecturer, Electrical Engineering Department, Cal Poly, SLO
- 2006 – 2007 Electrical Engineering – Lockheed Martin Excellence in Teaching Award, Cal Poly, SLO
- 2004 – 2005 Best EE Lab Instructor, Electrical Engineering Department, Cal Poly State University, SLO
- 2003 – 2004 Instructor From Whom Students Learn The Most, Electrical Engineering Department, Cal Poly, SLO
- 2001 – 2002 Best EE Lecturer, Electrical Engineering Department, Cal Poly, SLO

SENIOR PROJECTS AND MASTER'S THESES

- Main Faculty Advisor to completed 223 senior design projects at Cal Poly State University
- Main Faculty Advisor to completed 96 master's theses at Cal Poly State University

RESEARCH AND SCHOLARLY ACTIVITIES

1) PATENTS

- Taufik and Owen Jong, “Zero Voltage Switching Hybrid Voltage Divider”, US Patent No. 11,699,953.
- Taufik and Owen Jong, “Multiple Input Single Output DC-DC Converter with Equal Load Sharing on the Multiple Inputs”, US Patent No.10,404,061.
- D. Garinto, Taufik, K. Ohn, and I. Waters, “System Method and Apparatus for a Multi-Phase DC-to-DC Converter”, US Patent No. 7,782,032.

2) CURRENT PROJECT/RESEARCH

- The DC House Project with 14 International Partners (<http://dchouse.calpoly.edu>)

3) INVITED TUTORIALS, LECTURES AND PRESENTATIONS

INTERNATIONAL:

- Keynote Speaker, the 3rd International Conference on Engineering, Technology, and Social Sciences, Malang, Indonesia, November 2022.
- Keynote Speaker, the 12th International Conference on Green Technology, Malang, Indonesia, October 2022
- Keynote Speaker, the 1st International Conference on Advanced Transportation, Engineering, and Applied Science, Surabaya, Indonesia, October 2022
- Keynote Speaker, the 11th National Physics Seminar, Universitas Negeri Jakarta, June 2022.
- Keynote Speaker, the 7th International Engineering Student Conference, University of Indonesia, June 2022.
- Guest Speaker, Global Citizenship Webinar Series, Enhancing Inclusive Education Through Sustainable Technology, University of Perpetual Help, Philippines, April 2022.

- Guest Speaker, Cultivating Creativities to Promote Inventions, Universitas Terbuka, March 2022.
- Keynote Speaker, 7th International Conference on Electrical, Electronics, and Information Engineering, October 2021.
- Keynote Speaker, 3rd International Conference on Green Energy and Environment, September 2021
- Keynote Speaker, International Conference on Technology, Informatics, and Engineering, July 2021
- Keynote Speaker, "DC House System for Future Homes and Off-Grid Electrical System", the 3rd International Conference on Engineering and Applied Sciences, July 2021
- Keynote Speaker, "DC House System for Future Homes and Off-Grid Electrical System", the International Conference on Technology, Informatics, and Engineering, July 2021
- Keynote Speaker, The 8th International Conference on Sustainable Energy Engineering and Application, November 2020
- Keynote Speaker, Indonesia Science Expo, November 2020
- Guest Speaker, "DC Electricity for Future Homes and DC Grid with Distributed Renewable Energy Sources", Diaspora Scientist Visitation Webinar, Universitas Indonesia, November 2020.
- Guest Speaker, Focus Group Discussion on Industry Partnerships, Politeknik Perkapalan Negeri Surabaya, November 2020.
- Guest Speaker, "DC House Technology for Rural Electrification", Studium Generale at Universitas Jenderal Soedirman, Indonesia, November 2020.
- Guest Speaker, "Study and Scholarship Opportunities in American Campuses", Online Talk Show, IEEE Student Branch at Universitas Brawijaya, November 2020.
- Guest Speaker, "Capstone Design in Electrical Engineering", 3 in 1 Visiting Professor Program, Universitas Brawijaya, November 2020.
- Guest Speaker, "DC House as Future Residential Electrical System", International Webinar, Universitas Palangkaraya, November 2020.
- Guest Lecture, "The Renaissance of DC Electricity: Technology of the Past, Present and Future", Politeknik Negeri Malang, November 2020.
- Guest Speaker, "DC-DC Converter Topologies and Design", Online Colloquium, Universitas Brawijaya, November 2020.
- Guest Speaker, "Cultivating Creativities to Promote Inventions", People to People Relationship, Virtual Public Lecture Series in Engineering, Institut Teknologi Sepuluh Nopember, October 2020
- Guest Speaker, "The Renaissance of DC Electricity: Technology of the Past, Present and Future", Studium Generale, Universitas Diponegoro, October 2020.
- Guest Speaker, Youth Collaboration on the Technology Innovation for Society 5.0 Era, International Diponegoro Annual Summit 5.0, Universitas Diponegoro, October 2020.
- Guest Speaker, Kebermanfaatan Reka Cipta di Bidang Saintek dan Sosial dalam Pembangunan Desa and Kota, International Webinar, Indonesian Ministry of Education, October 2020.
- Guest on Tilik Bang Sem Radio Show, Tilik DC House Karya Ilmuwan Indonesia, Salam Radio, September 2020.
- Keynote Speaker, The 10th Electrical Power, Electronics, Communications, Controls and Informatics Seminar (EECCIS), Universitas Brawijaya, August 2020.
- Guest Speaker, "Learning About Renewable Energy", Teach-Talks Session 8, Indonesian Faculty Association, August 2020.
- Guest Speaker, "The DC House Project: Progress, Challenges, and Opportunities", Distinguished Lecture Series, Universiti Teknologi Malaysia, August 2020.
- Guest Speaker, "Capstone Design in Electrical Engineering Program", Forum Teknik Elektro Indonesia, June 2020.
- Guest on Radio Talk Show, "Menuju Peradaban Baru Paska Pandemi; Pemanfaatan Energi Terbarukan", Salam Radio, May 2020.
- Keynote Speaker, International Conference on Renewable Energy, Malang, Indonesia, August 2019.
- Guest Speaker, "Harmonics in Power Systems", Universitas Bhayangkara Surabaya, August 2019.
- Guest Speaker, Workshop on ABET Accreditation", Politeknik Perkapalan Negeri Surabaya, August 2019.
- Guest Speaker, "Harmonics in Power Systems", Electrical Engineering Department Universitas Padjadjaran, Jatinangor, August 2019.
- Guest Speaker on Technical Seminar, "Harmonics in Power Systems", PGE Diablo Canyon, October 2018.
- Guest Speaker, "DC Electricity" and "ABET Accreditation", Politeknik Elektronika Negeri Surabaya, Indonesia, Sept 2018.
- Presenter of Tech Talk, "Harmonics in Power Systems", Distributed Energy Resources, San Diego Gas & Electric, Aug 2018.
- Lectures on "Energy Resources" and "Renewable Energy", Universitas Pertamina, Indonesia, November 2017.
- Guest Speaker, "DC Electricity: Technology of the Past, Present and Future", Politeknik Elektronika Negeri Surabaya, September 2018.
- Keynote Speaker, International Conference on Technology and Applications, Universitas Bhayangkara, Surabaya, July 2017.
- Lecture, Short Course on Introduction to Magnetic Design, Politeknik Negeri Malang, July 2017.
- Guest Speaker, "The DC House Project for Rural Electrification", Institut Teknologi Nasional, Malang, July 2017.
- Guest Speaker, "The DC House Project for Rural Electrification", Universitas Indonesia, July 2017.
- Guest Speaker, "The DC House Project for Rural Electrification", Universitas Cokroaminoto Makassar, July 2017.
- Guest Speaker, "The DC House Project for Rural Electrification", Syarikat Islam, Jakarta, June 2017.
- Visiting Professor, Electrical Engineering Department, Universitas Padjadjaran, Jatinangor, August 2016.
- Guest Speaker, "Cal Poly at a Glance", Universitas Pendidikan Indonesia, Bandung, August 2016.
- Guest Speaker, "The DC House Project as an Alternate Solution to Rural Electrification", Universitas Pertamina, August 2016.
- Keynote Speaker, "Intelligent Systems in DC House for Residential Electricity", International Seminar on Application for Technology of Information and Communication Science and Technology, Semarang, August 2016.
- Invited Lecture, "Seminar on How to Write a Successful Paper", Universitas Muhammadiyah Yogyakarta, August 2016.
- Keynote Speaker, "Residential Electricity the DC House Way: Progresses, Challenges, and Opportunities", the 6th International Annual Engineering Seminar, Yogyakarta, August 2016.
- Keynote Speaker, "Intelligent Systems in DC House for Residential Electricity", International Seminar on Intelligent Technology and Its Applications, Lombok, July 2016.

- Guest Speaker, "Rural Electrification: The DC House Solution", Universitas Mataram Lombok, July 2016.
- Keynote Speaker, "The DC House Project as an Alternate Solution to Rural Electrification", International Conference on Applied Electrical, Electronics, and Informatics Engineering, Pontianak, July 2016.
- "Pengelolaan dan Pengembangan Laboratorium Sebagai Pusat Riset Terapan Yang Berkelanjutan", Guest Speaker, Politeknik Negeri Semarang, Indonesia, July 2015
- "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Universitas Dian Nuswantoro, Indonesia, July 2015.
- "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Institut Teknologi Surabaya, July 2015.
- "A Discussion of Potential Collaboration Between Cal Poly and PENS", Guest Speaker, Politeknik Negeri Surabaya, July 2015.
- "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Universitas Bhayangkara, July 2015.
- "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Universitas Islam 45, June 2015.
- "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Universitas Negeri Jember, June 2015.
- "Toward an ABET Accredited Electrical Engineering Curriculum", Guest Speaker, Universitas Padjadjaran, Bandung, April 2015.
- "Cal Poly at a Glance" and "The DC House Project: An Alternate Solution to Rural Electrification", Guest Lecturer, Universitas Sultan Ageng Tirtayasa, Indonesia, April 2015.
- A Discussion on Engineering Curriculum, Universitas Prof. Dr. Moestopo (Beragama), Jakarta, Indonesia, April 2015.
- "Cal Poly at a Glance" and "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Universitas Borneo Tarakan, Indonesia, April 2015.
- "DC Electricity: Technology of the Past and the Future", Guest Speaker, Universitas Muhammadiyah Sidoarjo, April 2015.
- "DC Electricity: Technology of the Past and the Future", Guest Speaker, Universitas Muhammadiyah Malang, April 2015.
- "DC Electricity: Technology of the Past and the Future", Guest Speaker, Politeknik Negeri Malang, Indonesia, April 2015.
- "Writing for Publication in International Journals", Guest Speaker, Electrical Engineering Department, Universitas Brawijaya Malang, Indonesia, April 2015.
- "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Politeknik Negeri Ujung Pandang, Indonesia, April 2015.
- "DC Electricity: Technology of the Past and the Future", Guest Speaker, Technological Institute of the Philippines, April 2015.
- "Design of Practical Buck Converter", Guest Lecturer, Technological Institute of the Philippines, April 2015.
- "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Technological Institute of the Philippines, April 2015.
- "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Universitas Muhammadiyah Tangerang, Indonesia, April 2015.
- "Cal Poly at a Glance" and "The DC House Project: An Alternate Solution to Rural Electrification", Guest Speaker, Universitas Jendral Soedirman, Indonesia, April 2015.
- "Powering Future Microprocessor", Guest Speaker, ST3 Telkom, Purwokerto, Indonesia, April 2015.
- "DC Electricity: Technology of the Past and the Future", Guest Lecturer, Telkom University, Bandung, Indonesia, April 2015.
- "DC Electricity: Technology of the Past and the Future", Guest Lecturer, Universitas Padjadjaran, Bandung, April 2015.
- "Rural electrification: The "DC House" solution", Panelist, Powering up Perspectives on Indonesia's energy future, Indonesian Summit, The Economist, Jakarta, Indonesia, Feb 2014.
- "Recent Status and Challenges of the DC House Project for Rural Electrification", Guest Lecturer, Universitas Negeri Jakarta, Indonesia, 2013.
- "Getting Scholarships for Graduate Studies in the U.S.", Guest Lecturer, Universitas Bakrie, Indonesia, May 2013.
- "Recent Status and Challenges of the DC House Project for Rural Electrification", Guest Lecturer, Surya University, May 2013.
- "Recent Status and Challenges of the DC House Project for Rural Electrification", Guest Lecturer, Universitas Muhammadiyah Malang, Indonesia, May 2013.
- "Smart House for a Smarter Grid: An Electrical Engineering Perspective", Guest Lecturer, Politeknik Negeri Malang, May 2013.
- "Recent Status and Challenges of the DC House Project for Rural Electrification", Invited Speaker, Padjadjaran International Physics Symposium, Indonesia, May 2013.
- "DC House Project for Sustainable Rural Electrification", Panelist at the EBTKE Conference and Exhibition, Jakarta Convention Center, Indonesia, July 2012.
- "DC House Untuk Akses Listrik di Pedalaman dan Beasiswa Kuliah Di Amerika Serikat", Guest Lecturer, Universitas Trunojoyo Madura, Indonesia, July 2012.
- "DC House Untuk Akses Listrik di Pedalaman dan Pengalaman Studi di Amerika Serikat", Guest Lecturer, Universitas Brawijaya Malang, Indonesia, July 2012.
- "DC House Untuk Akses Listrik di Pedalaman", Panggung Inovasi, Ikatan Ilmuwan Indonesia Internasional, Aula RRI, Indonesia, July 2012.
- "The DC House Project: Providing Access to Electricity for the Unfortunates", Guest Lecturer, Universitas Negeri Jakarta, March 2012.
- "The DC House Project: Providing Access to Electricity for the Unfortunates", International Conference on Sustainable Innovation, Yogyakarta, March 2012.
- Keynote Speaker at the Conference on Information Technology and Electrical Engineering (CITEE 2011), "Solar Energy: Potential and Product Development for Remote Areas", Yogyakarta, July 2011.
- "Kesempatan Beasiswa Studi Lanjut di Amerika Serikat dan Sekilas Tentang Cal Poly", Balai Pendidikan dan Latihan, Department Perdagangan Republik Indonesia, Bandung, Indonesia, July 2010.
- "Kegiatan Riset di Cal Poly", Physics Department, University of Padjadjaran, Bandung, Indonesia, July 2010.
- "Sekilas Tentang Cal Poly dan Potensi Kerjasama Akademis Dengan Universitas Padjadjaran", Physics Department, University of Padjadjaran, Bandung, Indonesia, July 2010.

- "Sekilas Tentang Cal Poly dan Potensi Kerjasama Akademis Dengan IEU", Indonesian European University, Surabaya, Indonesia, July 2010.
- "Sekilas Tentang Cal Poly dan Potensi Kerjasama Akademis Dengan Politeknik Sakti", Polytechnic Sakti, Surabaya, Indonesia, July 2010.
- Guest Speaker for the Master & Doctoral Consortium at the 2nd Indonesia International Conference on Innovation, Entrepreneurship, and Small Business, Universitas Multimedia Nusantara, Indonesia, July 2010.
- "Solar Energy: Potential and Product Development for Remote Areas", The 2nd Indonesia International Conference on Innovation, Entrepreneurship, and Small Business, Universitas Multimedia Nusantara, Indonesia, July 2010.
- "Solar Energy: Potential and Product Development for Remote Areas", Politeknik Negeri Malang, June 2010.
- "Academic Exchange Program: Where To Go From Here?" Politeknik Negeri Malang, June 2010.
- "Soft-Switching in DC-DC Converters", Universitas Muhammadiyah Malang, June 2010.
- "Solar Energy: Potential and Product Development for Remote Areas", Universitas Muhammadiyah Malang, June 2010.
- "Solar Energy: Potential and Product Development for Remote Areas", Universitas Negeri Jakarta, June 2010.
- "Beasiswa Studi Lanjut di Amerika Serikat", Institut Sains & Teknologi Al-Kamal, June 2010.
- "A Short Course in DC-DC Converters", Technological Institute of the Philippines, Quezon City, December 2009.
- "Practical Design of Buck Converter", A Tutorial Session at the 2008 IEEE Power Engineering Conference, Johor Bahru, Malaysia, December 2008.
- One-Day Workshop on "Practical DC-DC Converter Design", IEEE Power Electronics Chapter of Malaysia Section, July 2007.
- Two-Day Workshop on "DC-DC Converter Design and Simulation Using MathCAD and OrCAD Pspice", Politeknik Negeri Malang, Indonesia, June 2007.
- Two-Day Workshop on "DC-DC Converter Design and Simulation Using MathCAD and OrCAD Pspice", Universitas Muhammadiyah Malang, Indonesia, June 2007.
- "Powering Future Microprocessors", Wesleyan University, Cabanatuan City, Philippines, Aug 2007.
- "Powering Future Microprocessors", Technological Institute of the Philippines, Quezon City, Aug 2007.
- "Powering Future Microprocessors", Technological Institute of the Philippines, Manila, Aug 2007.
- "Power Program at Cal Poly State University", Universiti Teknologi Malaysia, Skudai – Malaysia, July 2007.
- "Powering Future Microprocessors", Universiti Teknologi Malaysia, Skudai – Malaysia, July 2007.
- "Learning Theory – Training For Trainers", PT. Delta Metro, Jakarta, Indonesia, July 2007.
- "Adjustable Speed Drives: Impacts on Power Quality", Universitas Diponegoro, Semarang, Indonesia, July 2007.
- "Electrical Engineering Curriculum at Cal Poly", Universitas Brawijaya Malang, Indonesia, June 2007.
- "Powering Future Microprocessors", Politeknik Negeri Malang, Indonesia, June 2007.
- "Powering Future Microprocessors", Universitas Muhammadiyah Malang, Indonesia, June 2007.
- "Higher Education System in U.S.A.", Universitas Muhammadiyah Malang, Indonesia, June 2007.
- "Recent Status of Wind Energy in the U.S.", Universitas Muhammadiyah Malang, Indonesia, June 2007.
- "Higher Education System in U.S.A.", Sekolah Tinggi Manajemen Informatika dan Komputer (STMIK), Bandung, June 2007.
- "Efficiency Improvement for Low Voltage DC-DC Converter Using Synchronous Rectification", NUEST Cabanatuan, Philippines, August 2004.
- "Role of Power Electronics in Power Transmission and Distribution", Universitas Trisakti, July 2004.
- "Switching Mode DC-DC Converters: Circuits and Design Considerations", Universitas Muhammadiyah Malang, July 2004.
- "Getting Scholarships in the US", Universitas Muhammadiyah Malang, July 2004.
- "Efficiency Improvement for Low Voltage DC-DC Converter Using Synchronous Rectification", Universitas Kristen Indonesia, June 2004.
- "Soft-switching Method in Power Converters", University of Muhammadiyah, Malang, Indonesia, July 2000
- "Resonant Power Converters: An Overview", IEEE International Conference on Power Electronics and Electric Machines, Indonesia, July 2000.

NATIONAL & STATE:

- "Education: Perpetual Impact; A Self Reflection and Personal Stories", Keynote Speaker, Cerdas Foundation Fundraising Dinner, Seattle, Washington, USA, April 2014.
- Panelist, panel session on Smart Grid Integration, 2012 North America Renewable Energy World and Exposition
- "Power Program at Cal Poly, San Luis Obispo", Helix Electric, San Diego, July 2008.
- A Short Course on "DC-DC Converter Topologies and Design", Advanced Analogic Technologies Inc., Sunnyvale, May 2007
- "Power Program at Cal Poly, San Luis Obispo", Chevron Energy Solutions, San Francisco, August 2006.
- "Power Program at Cal Poly, San Luis Obispo", ChevronTexaco, Richmond, August 2006.
- "Power Program at Cal Poly", Linear Technology, Milpitas, August 2006.
- "Adjustable Speed Drives: Impact on Harmonics", Arup Inc., Los Angeles, June 2006.
- "Improving Efficiency of DC-DC Converters Using Soft-Switching", Qualcomm, San Diego, February 2006.
- "A Crash Course in Switching Regulators", Cal Poly State University, San Luis Obispo, California, May 2006.
- "Power Electronics: Basic Circuits and Applications", San Diego Gas and Electric, San Diego, California, August 2005.
- "Power Electronics: Basic Circuits and Applications", San Diego Gas and Electric, San Diego, California, July 2005.
- "Providing Power For Digital Society: A Summary and Recommendations", San Diego, August 2005.
- "Cal Poly's Power Program: An Overview", General Atomics, San Diego, July 2005.
- "Technical Training on Power Electronics for Engineers", April – June 2004, Los Osos.
- "Resonant Converter Design Improves Efficiency of Switching Power Supply", University of Wisconsin Platteville, April 2003.
- "Cal Poly Power Electronics Emphasis: An Overview", IEEE Power Electronics Society – LA Chapter Meeting, Nov 2002.

LOCAL:

- EIT Review Session on Electrical Engineering, PEITRCC (www.peitrcc.com), San Luis Obispo, March 2007.

- "A Simple DC Motor Experiment", Saint Joseph High School, Santa Maria, February 2007.
- "Electrical Power", Arroyo Grande High School, February 2006.
- "Delivering Electrical Power", San Luis Obispo High School, February 2006.
- "Electrical Power", Saint Joseph High School, Santa Maria, January 2006.
- EIT Review Session on Electrical Engineering, PEITRCC (www.peitrcc.com), San Luis Obispo, March 2005.
- "Renewable Energy Sources", Saint Joseph High School, Santa Maria, February 2005.
- "Zero Current Switching Resonant Switch Converters", IEEE Central Coast Section, Goleta, October 2004.

UNIVERSITY:

- "Recent Status and Results of the Multiphase Project: Paving a Path to Power Future Microprocessors", Graduate Seminar, Cal Poly, San Luis Obispo, October 2007.
- "A Conversation with Distinguished Advisors", Workshop Panelist, the Center for Teaching and Learning, Cal Poly, Jan 2007.
- "Powering Future Microprocessors", Graduate Seminar, Cal Poly, San Luis Obispo, November 2006
- EIT Review Session on Electrical Engineering, Chi Epsilon, April 2004
- EIT Review Session on Electrical Engineering, Chi Epsilon, October, 2003
- "Technical Training on Power Electronics for Technicians", April – June 2003, Los Osos.
- EIT Review Session on Electrical Engineering, Chi Epsilon, April 2003
- EIT Review Session on Electrical Engineering, Chi Epsilon, October 2002
- "Improving DC-DC Converter Efficiency Using Synchronous Rectification", Graduate Seminar, Cal Poly, Nov 2002.
- "PG&E Workshop on Power System and Power Electronics", Electric Power Institute, Sep 2002
- "Synchronous Rectification", Graduate Seminar, Cal Poly, San Luis Obispo, CA, Mar 2002.
- "Paralleled Series Loaded Resonant Converter", Graduate Seminar, Cal Poly, San Luis Obispo, March 2000.

4) GRANTS (PARTIAL LIST)

2021 – 2022	Engaging Cal Poly Faculty and Students for Power System Reliability, San Diego Gas & Electric, \$295,000
2021 – 2022	Development of Load Slammer for DC-DC Converter Applications, Monolithic Power System, \$10,000
2020 – 2021	Hybrid AC/DC House, Electric Power Institute, \$5,000
2020 – 2021	Modeling of Vanadium Redox Flow Battery, San Diego Gas & Electric, \$10,000
2020 – 2021	Power System Capacitor Study, Aera Energy, \$10,000
2019 – 2020	Impact of Spread Spectrum Frequency Modulation on Reducing Radiated Electrical Noise in Multiple Power Supplies, R-IDC, College of Engineering, Cal poly, \$4,225
2019 – 2020	Environment-friendly electric bicycles charging station for CalPoly campus by wind power energy, Baker/Koob, Cal Poly \$4,700
2017 – 2018	Power Quality Monitoring & Protection System of Adjustable Speed Drives, R-IDC College of Engineering, \$4,600
2017 – 2018	Performance Analysis and Study of a Novel Voltage Regulator Module for Powering Modern Processors, College of Engineering Summer Undergraduate Research Program
2017 – 2018	Battery Energy Storage System for Building 20 Microgrid, Chevron, \$10,000
2017 – 2018	AC LED Direct Drive Circuit Modeling and Simulation, SLOANLED, \$2,500
2017 – 2018	Assigned Time for Exceptional Levels of Service to Student, 4-WTU Released Time for Spring 2018
2017 – 2018	Reducing Residential Electrical Energy Consumption with Hybrid DC and AC Electrical System Using Multiple-Input Single-Output Power Converter, College of Engineering Summer Undergraduate Research Program, \$8,000
2016 – 2017	PSCAD Modeling of Microgrid and Its Components, San Diego Gas and Electric, \$10,000
2016 – 2017	Microgrid System Protection, Electric Power Research Institute, \$5,000
2016 – 2017	Development of Photovoltaic-powered DC Modular Electrical System, Research, Scholarship, and Creative Activities (RSCA), \$13,849.20, Grant program, the Office of Research and Economic Development
2015 – 2016	Assigned Time for Exceptional Levels of Service to Student, 4-WTU Released Time for Spring 2017
2014 – 2015	High Density Inverter for the Little Box Google Challenge, Power Integrations, Inc. and Enerpro, Inc., Maxim, and Cal Poly, Total Amount: \$38,000
2012 – 2014	Arc Fault Circuit Interrupter Development for Residential DC Electricity, California Energy Commission, \$150,000
2013 – 2014	Condition Based Maintenance for Power Transformer, San Diego Gas and Electric, \$7,500
2013 – 2014	Portable Nanohydro Generator, Chevron, \$5,000
2013 – 2014	Propulsion High Voltage Power Supply, NASA Jet Propulsion Lab, \$5,000
2012 – 2013	Smart Grid Technology Projects, San Diego Gas and Electric, \$10,000
2012 – 2013	Solar Concentrator Design and Development, Cal Poly CPConnect, \$3,000
2011 – 2012	Regenerative Braking for Electric Bicycle, Cal Poly CPConnect, \$3,000
2011 – 2014	Algae Biofuel, Boeing and Cal Poly, \$25,000
2010 – 2011	Ground Fault Interrupter Circuit, Chevron, \$100,000
2009 – 2013	Development of Power Electronics Lab, Enerpro Inc., \$40,000
2009 – 2011	Bidirectional DC-DC Converter for Battery Charger, Amperex, \$10,000
2009 – 2010	Development of Sustainable Energy Lab, Sempra Energy, \$66,400
2009 – 2010	Design and Development of High-Performance High-Density DC-DC Converters, C3RP Cal Poly, \$33,000
2008 – 2009	Power Quality and Performance Study of a Fuel Cell Based Power Electronics System. Malaysian Ministry of Science, Technology and Innovation, \$50,000
2004 – 2005	Investigation of Efficiency Improvement in High-Density Light-Weight DC-DC Converter, C3RP Cal Poly, \$33,000
2003 – 2004	Technical Training on Power Electronics for Engineer, Rantec Power Systems, \$8,000
2001 – 2002	Building Photovoltaic Facility, C3RP Cal Poly, \$30,000
2001 – 2002	Optimization of Water and Energy Resources Associated with Irrigation Water Delivery and Management,

SERVICES

NATIONAL/INTERNATIONAL

- Associate Editor, Jurnal Material dan Energi (2011 - present)
- Associate Editor, International Journal of Science and Technology, <http://www.jost-journal.com>, (Feb 2010 - present)
- International Advisory Committee, the International Conference on Advanced Science, Engineering and Information Technology
- International Advisory Committee, International Conference on Pattern Analysis and Intelligent Robotics
- International Advisory Committee, International Conference on Power Engineering and Renewable Energy
- Technical Reviewer, Jurnal Rekayasa Elektrika, Universitas Syiah Kuala, Aceh, Indonesia (Sep 2009 – present)
- Technical Reviewer, 2009 IEEE Technical Conference, Singapore 2009
- Technical Reviewer, IEEE Transactions on Industry Applications Society, (2000 – 2002)
- Technical Reviewer, Annual IEEE Transactions on Industry Applications Society Conference, (2000)
- Technical Reviewer, California Energy Commission, Energy Innovations Small Grant Program, (2000 – 2004)
- Technical Reviewer, American Power Electronic Conference (APEC) 2012
- Technical Reviewer, International Conference on Power Electronics - ECCE Asia (2011)
- Technical Reviewer, International Conference on Business, Engineering and Industrial Applications (2011)
- Technical Reviewer, International Conference on Electronic Devices, Systems & Applications (2011)
- Technical Reviewer, The International Conference on Information Technology - New Generations (2011)
- Technical Reviewer, IEEE Applied Power Electronics Colloquium (2011)
- Technical Reviewer, International Conference on Advanced Science, Engineering and Information Technology (2011)
- Technical Reviewer, Applied Power Electronics Colloquium (2011)
- Technical Reviewer, International Power and Energy Conference (2010)
- Technical Reviewer, Annual IEEE Transactions on Industry Applications Society Conference, (2000)
- Member, IEEE Industry Applications Society, Industrial Automation Control Subcommittee, (2000 – 2002)
- Member of Steering Committee, North American Power Symposium, Steering Committee, (1999, 2001)

UNIVERSITY LEVEL

- Faculty Advisor, Philippine Cultural Exchange Program, Cal Poly State University (2002 – 2014)
- Faculty Member, Electric Power Institute, Cal Poly State University, San Luis Obispo (1999 – present)
- Faculty Member, 2005 Cal Poly Solar Decathlon Team, (2003 – 2004)
- College Representative and Member, International Education and Program Council, (2004 – present)
- College Representative and Member, University Scholarship Committee, (2006 – 2008)
- Member, University Academic Senate Fairness Board Committee, (2001 – 2004)
- Member, University Academic Senate Instructional Advisory Committee on Computing, (2001 – 2002)
- Member, University Campus Dining Advisory Committee, (2001 – 2004)

COLLEGE LEVEL

- Member, CENG International Exchange Program (2002 – present)
- Member, CENG Curriculum Committee, (2006 – 2009)
- Member, CENG ABET Assessment Committee, (2006 – 2009)
- Member, CENG Scholarship Committee (2002 – 2005)
- Member, CENG Computer Advisory Committee (2000 – 2001)

DEPARTMENT LEVEL

- Chair, Tenured and Probationary Faculty Committee (2012 – 2014)
- Coordinator for the Accreditation (ABET) for the Electrical Engineering Department (2006 – 2008)
- Chair (2006 – 2009) and Member (2002 – 2006) of the Curriculum Committee
- Chair, EE Student Awards Committee, (2002 – 2006)
- Power Technical Area Committee
 - Chair (2000 – 2001; 2002 – 2003)
 - Member (1999 – 2000, 2001 – present)
- Faculty Advisor, Power Engineering Society Club, (2000 – 2009)
- Member, EE Laboratory Committee, (1999 – 2004)
- Member, EE Microwave and Photonics TAC, (2000 – 2001)
- Member, EE Lab Manual Improvement Committee, (1999 – 2001)
- Member, EE Network Administration Committee, (1999 – 2001)
- EE Webmaster and Web-designer (2000 – 2001)

PUBLICATIONS

1) BOOKS

- Taufik, Introduction to Power Electronics, Lulu Press, Inc. ISBN: 978-1-716-69586, 2022.

- Editors: Taufik, T., Prabasari, I., Rineksane, I.A., Yaya, R., Widowati, R., Putra Rosyidi, S.A., Riyadi, S., Harsanto, P., "ICOSI 2014: Proceedings of the 2nd International Conference on Sustainable Innovation", Springer, April 2016, ISBN: 978-981-287-660-7.
- Taufik, "Beasiswa Kuliah di Amerika", (Indonesian), 1st edition, PT. Citra Aditya Bakti, Bandung, 2007, ISBN: 979-414-958-6.

2) PEER REVIEWED JOURNALS (50 TOTAL)

- R. Hasanah, F. Yuniar, O. Setyawati, H. Suyono, D. Sawitri, T. Taufik, "A Modified Perturb-and-Observe Control for Improved Maximum Power Point Tracking Performance on Grid-Connected Photovoltaic System", International Journal of Technology, Volume 15(1), pp. 99-109.
- A. Alimuddin, R. Arafiah, L. Okariadi, I. Muttakin, R. Alfanz, X. Yu, T. Taufik, "Modeling and Control of a Series DC Motor Using a Proportional Integral Controller for a Three-Wheel Electric Vehicle", Journal of Southwest Jiaotong University, Vol. 58, No. 5, October 2023.
- Rosmaliati, O. V. Putra, I. Hafidz, A. Priyadi, T. Taufik, and M. H. Purnomo, "Implementation of Extreme Learning Machine to Predict Distribution Power Transformer Lifetime", International Review of Electrical Engineering, Vol. 17, N. 5, ISSN: 1827-6660, September - October 2022.
- A. P. Satriawan, S. Saidah, and T. Taufik, "Study of Power and Voltage Delivery after Successful Black Start", SINERGI Journal 26(3):355, October 2022.
- B. Ikawanty, M. Anshari, H. Suryatmojo, Taufik, "Design of A Novel Multiphase Interleaved Boost Converter with Split Inductance and Bypass Capacitance", International Review of Electrical Engineering.
- B. Ikawanty, M. Anshari, H. Suryatmojo, Taufik, "A Novel Multiphase Interleaved DC-DC Boost Converter with Reduced Input Current Ripple for Renewable Energy Application", International Journal on Engineering Applications (IREA) Vol.10, No.1, 2022. ISSN: 2281-2881. DOI: <https://doi.org/10.15866/irea.v10i1.20941>.
- R. Hasanah, L. Ardhenta, T. Nurwati, O. Setyawati, D. Sawitri, H. Suyono, Taufik, "Design of PI Sliding Mode Control for Zeta DC-DC Converter in PV System". Technical Sciences, Vol. 70, No. 3, 2022.
- Y. Herlambang, Kurnianingsih, A. Roihatin, T. Prasetyo, Marliyati, Taufik, and J. Shyu, "A Numerical Study of Bubble Blockage in Microfluidic Fuel Cells", Processes 2022, 10, 922. <https://doi.org/10.3390/pr10050922>.
- Alimuddin, R. arafiah, I. Saraswati, R. Alfanz, P. Hasudungan, and Taufik, "Development and Performance Study of Temperature and Humidity Regulator in Baby Incubator Using Fuzzy-PID Hybrid Controller", Energies 14, no. 20: 6505.
- M. P. Jati, E. Purwanto, B. Sumantri, M. R. Rusli, A. Nasuha, A. Tjahjono and Taufik Taufik, "A Fuzzy Supervisory Scalar Control for Matrix Converter Induction Motor Drives", International Journal on Electrical Engineering and Informatics (Printed ISSN 2085-6830/ online e-ISSN 2087-5886), Vol. 13, No. 1, March 2021.
- N.A. Windarko, M.N. Habibi, B. Sumantri, E. Prasetyono, M.Z. Efendi, and Taufik, "A New MPPT Algorithm for Photovoltaic Power Generation under Uniform and Partial Shading Conditions", Energies (ISSN 1996-1073), 14(2), 483, Jan 2021.
- T. Prasetyo, M. Surindra, W. Caesarendra, Taufik, A. Glowacz, M. Irfan and W. Glowacz, "Influence of Superheated Vapour in Organic Rankine Cycles With Working Fluid R123 Utilizing Low Temperature Geothermal Resources", Symmetry in Mechanical Engineering II, Volume 12, Issue 9, September 2020.
- R. Hasanah, A. Setyawan, E. Maulana, T. Nurwati, Taufik, "Computer-based solar tracking system for PV energy yield improvement", International Journal of Power Electronics and Drive System, Vol. 11, No. 2, pp. 743-751, June 2020.
- Taufik, M. Guevara, A. Shaban, and A. Nafisi, "Modeling and Load Flow Analysis of a Microgrid Laboratory", International Journal of Smart Grid and Sustainable Energy Technologies, Vol. 3, No. 2, January 2020.
- R. Hasanah, Taufik, and Onny Setyawati, "Impact of transformer's leakage inductance on duty cycle in isolated dc-dc converters", International Journal of Smart Grid and Clean Energy, vol. 9, no. 1, pp. 61-68, January 2020.
- Saidah, H. Sutiksno, B. Purwahyudi, and Taufik, "Modelling of Three-Phase SVPWM AC-AC Converter Using Unity Power Factor Control", International Journal of Power Electronics and Drive System, *to appear*.
- Soeprapto, R. Hasanah, and Taufik, "Battery Management System on Electric Bike using Lithium-Ion 18650", International Journal of Power Electronics and Drive Systems, Vol. 10, No. 3, September 2019.
- M. Surindra, W. Caesarendra, T. Prasetyo, T. Mahlia, and Taufik, "Comparison of the Utilization of 110C and 120C Heat Sources in a Geothermal Energy System Using Organic Rankine Cycle (ORC) with R245fa, R123, and Mixed-Ratio Fluids as Working Fluids", Processes, Vol. 7, Issue 2, February 2019. International Journal of Power Electronics and Drive Systems, Vol 9, No 3, September 2018
- Taufik, W. Xiong, J. Sato and Saidah, "Ambient Light Adaptive LED Light Dimmer", TELKOMNIKA Telecommunication, Computing, Electronics and Controls, 2018.
- R. Hasanah, Y. D. Handari, Soeprapto, and Taufik, "LED-Lamp Design for Renewable Energy-Based DC House Application", International Journal of Power Electronics and Drive Systems, Vol 9, No 3, September 2018.
- R. I. Putri, I. Mahmudi, M. Pujiatara, A. Priyadi, Taufik, M. H. Purnomo, "Modified Firefly Algorithm for Improved Maximum Power Extraction on Wind Energy Conversion System", International Journal of Renewable Energy Research, 2018.
- W. Utomo, A. Abubakar, S. Alias, S. Yi, M. Setiawan, S. Mudjanarko, A. Sukoco, Y. Buswig, Taufik, "Modeling of A Single Phase 7-Level Cascaded H-Bridge Multilevel Inverter", International Journal of Engineering & Technology, Vol. 7, No. 2.6., 2018.
- A. Abubakar, A. Ponniran, and Taufik, "Simulation and Analysis of Multiphase Boost Converter with Soft-Switching for Renewable Energy Application", International Journal of Power Electronics and Drive Systems, Vol. 8, No. 4, December 2017.
- A. Tjahjono, D. O. Anggriawan, A. K. Faizin, A. Priyadi, M. Pujiatara, Taufik, and M. H. Purnomo, "Adaptive modified firefly algorithm for optimal coordination of overcurrent relays", IET Generation, Transmission & Distribution, Vol. 11 Iss. 10, pp. 2575-2585, July 2017.
- M. F. E. Purnomo, S. H. Pramono, M. A. Pamungkas, and Taufik, "Study of the Effect of Air-Gap to Array Microstrip Antenna for Mobile Satellite Communications", Asian Research Publication Network Journal of Engineering and Applied Sciences, Vol. 10, No: 20, November 2015.

- A. B. Afarulrazi, M.U. Wahyu, T. Taufik, S. Aizam, Jumadri, "Design Study of Zero Voltage Switching for DC/DC Boost Converter", *Applied Mechanics and Materials*, Vol. 785, pp. 136-140, April 2015.
- M. F. E. Purnomo, Taufik, "Study of the Effect of Air-Gap to Array Microstrip Antenna for Mobile Satellite Communications", *Asian Research Publication Network Journal of Engineering and Applied Sciences*, 2015.
- M. Taufik, Taufik, J. Brinsfield, G. Bergdoll, "Effect of Resonant Capacitance and Inductance on Peak Capacitor Voltage and Inductor Current in SLR Converter", *International Review on Modeling and Simulations (IREMOS)*, 2015.
- A. Muqorobin, P. Irasari, Taufik, "Comparison of Unmodulated Current Control Characteristics of Permanent Magnet Synchronous Motor", *Journal of Mechatronics, Electrical Power, and Vehicular Technology*, Volume 5, No. 2, 2014.
- R. I. Putri, S. Wibowo, M. Rifa'i, Taufik, "Fuzzy Incremental Conductance for Maximum Power Point Tracking in Photovoltaic System", *International Journal of Engineering, Science and Innovative Technology*, Volume 3, Issue 6, November 2014.
- B. Y. Husodo, S. M. Ayob, M. Anwari, Taufik, "Simulation of Modified Simple Boost Control for Z-Source Inverter", *International Journal of Automation and Power Engineering*, Vol. 2, Issue 4, May 2013.
- W.M.Utomo, Z.A. Haron, A. A. Bakar, M. Z. Ahmad and Taufik, "Voltage Tracking of a DC-DC Buck-Boost Converter Using Neural Network Control", *International Journal of Computer Technology and Electronics Engineering*, Volume 1, Issue 3, 2011.
- A. S. Samosir, Taufik and A. H. M. Yatim, "Simulation and Implementation of Interleaved Boost DC-DC Converter for Fuel Cell Application", *International Journal of Power Electronics and Drive Systems*, Dec 2011.
- M. Anwari, M. I. Hamid, A. Hiendro and Taufik, "Power Quality Analysis of Adjustable Speed Drive with Multi-Pulse Rectifier", *Journal of the Japan Society for Applied Electromagnetics and Mechanics*.
- Taufik, A. Polleri, and M. Taufik, "Modeling of Paralleled Series-Loaded-Resonant Converter with Phase-Shifting Control", *International Journal of Modeling, Simulation, and Scientific Computing*, Vol. 2, June 2011.
- B. Y. Husodo, M. Anwari, S. M. Ayob, Taufik, "Analysis and Simulation of a New Three Phase LLC Resonant Inverter for Fuel Cell Applications", *International Review on Modeling and Simulations*, Vol. 4 N. 1, February 2011.
- D. D. Romero, A. S. Prabuwo, Taufik, and A. Hasniaty, "A Review of Sensing Techniques for Real-time Traffic Surveillance", *Journal of Applied Science*, Vol. 11, No. 1, pp. 192-198, 2011.
- Xiao-Hua Yu, Weiming Li, and Taufik, "Design and Implementation of a Neural Network Controller for Real-time Adaptive Voltage Regulation", *Journal of Neurocomputing*, Science Direct, Elsevier, ISSN: 0925-2312, Volume 73, Issues 1-3, December 2009, Pages 531-535.
- M. I. Hamid, M. Anwari, and Taufik, "Comparison of Current Control Methods on Carrier Based VSI-PWM Inverter Drives from Line Power Quality Aspect", *TELKOMNIKA Journal*, ISSN: 1693-6930, Vol. 6, No. 2, August 2008.
- Charles M. Burt, Xianshu Piao, Franklin Gaudi, Bryan Busch, and Taufik, "Electric Motor Efficiency Under Variable Frequencies and Loads", *ASCE Journal of Irrigation and Drainage Engineering*, April 2008.
- V. Rodov, A. Ankoudinov, Taufik, "Super Barrier Rectifier – A New Generation of Power Diode", *IEEE Transactions on Industry Applications*, January 2008.

3) REPORTS

- 2008 EE ABET Accreditation Self Study Report developed the first draft, and co-authored the final version.
- Taufik, "Distributed Temperature Sensing for Underground Cables", submitted to SDGE, July 2008.
- C. Burt, X. Piao, F. Gaudi, B. Busch, and Taufik, "Electric Motor Efficiency under Variable Frequencies and Loads", *Irrigation Training and Research Center, Cal Poly State University, San Luis Obispo*, October 2006
- Taufik and Bisrat Yohannes, "Diode Voltage Spike Measurements in Flyback Circuit using PN, SBR and Schottky Diodes", submitted to APD Semiconductor, August 2006
- Taufik, "Calculation of Diode Losses", submitted to APD Semiconductor, August 2006.
- Taufik, "Junction Capacitance: Contribution to Diode Loss and Inrush Currents", submitted to APD Semiconductor, Aug 2006
- Taufik, "Impact of Diode's Reverse Recovery Time and Junction Capacitance to Rectifier's Voltage Spike in Flyback Circuit", submitted to APD Semiconductor, July 2006.
- Taufik, "Providing Power For Digital Society: A Summary and Recommendations", submitted to SDGE, August 2005.
- Taufik, "Improving Efficiency of High-Density DC-DC Converters", submitted to ONR/C3RP, June 2005.
- Taufik, "Building Photovoltaic Facility", submitted to ONR/C3RP, June 2003.
- Taufik, et.al., "Study on SDGE Transmission Circuit Breaker Replacement Criteria", submitted to SDGE, September 2001.

4) MAGAZINE ARTICLES

- "Featured Engineer – Interview with Dr. Taufik", *EEWeb Electrical Engineering Online Community*, 2011.
- Taufik, J. Chiem, and Y. Ang, "Replacing Schottky Diodes with Super Barrier Rectifier Diodes", *Bodo's Power Systems – Electronics in Motion and Conversion*, February 2009.
- Taufik, "Snubber Circuit Implementation in Electronic Switch", *Elektro National Indonesian Electronics Engineering Society Magazine*, v., November 2000.
- Taufik, "On the Impact of Power Electronics Technology Advancement to Power Transmission", *Teknologi Indonesian Magazine*, October 2000.
- Taufik, "Resonant Switching Mode DC-DC Converters", *Elektro National Indonesian Electronics Engineering Society Magazine*, v.29, January 2000.
- Taufik, "Switching Mode DC-DC Converters", *Elektro National Indonesian Electronics Engineering Society Magazine*, v.25, April 1999.
- Taufik, "Various Methods For DC Supply", *Elektro National Indonesian Electronics Engineering Society Magazine*, v.24, January 1999.
- Taufik, "Internet Services Using Power Transmission Lines", *Swasembada Indonesian Business Magazine*, November 1998.
- Taufik, "FACTS as The Future Technology in Electrical Power Transmission", *Elektro National Indonesian Electronics Engineering Society Magazine*, v.15, November 1998.
- Taufik, "Micro Turbine Generators for Business Applications", *Swasembada Indonesian Business Magazine*, December 1997.

5) PEER REVIEWED CONFERENCE PAPERS (216 TOTAL)

- D. A. Rahardianto, W. Djuriatno, R. N. Hasanah and T. Taufik, "Design and Implementation of a RCD Snubber Circuit on Full-Bridge DC-DC Converter", Proc. International Conference on Technology and Policy in Energy and Electric Power, October 2023.
- D. Garinto, T. Valerie, T. Taufik, S. Budiyo, and J.W. Simatupang, "Wireless Power Transfer with Resonant Pulsed Current Converter", Proc. the 32nd International Symposium on Industrial Electronics, June 2023.
- M. Munir, M. A. W. Maulana, I. Fadlika, A.N. Afandi, and T. Taufik, "Effect of Non-Ideal on the Design and Efficiency of High Voltage Gain Transformerless DC-DC Converter Topology", Proc. Conference Toward Adaptive Research and Technology Development for Future Life, January 2023.
- L. Rotsios, T. Taufik, S. Vyas, M. Poshtan, A. Banadaki, "Modeling of DC House Distribution Network", Proc. 9th Annual Conf. on Computational Science & Computational Intelligence, December 2022.
- J. C. G. Darato, J. R. Perlas, T. Taufik, A. Banadaki, M. Poshtan, "Modeling of Electrical Distribution System Reliability with Local and Interregional Bidirectional Centralized Electric Vehicle Charging Stations", Proc. 9th Annual Conf. on Computational Science & Computational Intelligence, December 2022.
- Taufik, "The House Project: A Sustainable Alternative for Rural Electrification", Proc. International Conference on Science and Technology, November 10, 2022.
- E. F. Muttaqin, M. A. W. Maulana, I. Fadlika, Aripriharta, A. N. Afandi and Taufik, "Design and Validation Non-Isolated Boost Converter for Cascaded Photovoltaic Application", Proc. 5th International Conference on Power Engineering and Renewable Energy, November 2022.
- E. F. Muttaqin, I. Fadlika, A. Aripriharta, A. Affandi, T. Taufik, M. A. W. Maulana, "Design and Analysis of Non-Isolated Boost Converter for Cascaded Photovoltaic Application", Proc. 3rd International Conference on Sustainable Engineering and Creative Computing, December 2021.
- M. A. W. Maulana, M. Munir, I. Fadlika, A. Affandi, and Taufik, "Design and Control of High Voltage Gain Transformerless DC-DC Converter", Proc. International Conference on Industrial, Enterprise, and System Engineering, December 2021.
- K. Chan, T. Taufik, R. Hasanah, S. Suprpto, M. Jati, A. Nasuha, "Multiple Input Single Output Converter With Uneven Load Sharing Control for Improved Efficiency", 2021 IEEE Conference on Energy Conversion, October 2021.
- B. Ikawanty, M. Ashari, H. Suryoatmojo, T. Taufik, "Low Current Ripple Control Using Particle Swarm Algorithm Based Modified Boost Converter for MPPT Application", 2021 1st International Conference on Electronic and Electrical Engineering and Intelligent System, October 2021.
- O. Setyawati, N. Nurussa'adah, T. Taufik, "Energy Saving Inverter on A Single-Phase Induction Motor for Albumin Production Process, October 2021.
- J. Darato, J. Kawate, N. Marta, F. Huzayfa, R. Mahatvayodha, O. Setyawati, T. Taufik, "Power Line Coupling Power Supply for Early Wildfire Detection Sensor", 2021 7th International Conference on Electrical, Electronics and Information Engineering, October 2021.
- T. Valerie, D. Garinto, M. Alaydrus, T. Taufik, E. Ma'arif, "Modified 555 Timer IC Using Only Two Comparators", 2021 International Conference on Electronic and Electrical Engineering and Intelligent System, October 2021.
- M. R. Rusli, M. A. B. Nugroho, M. P. Jati, A. W. Aditya, M. B. Fauziah, H. Toar, and T. Taufik, "Digital Implementation of Space Vector PWM for Three Phase Inverter with Simplified C-Block PSIM Utilization", 2021 International Electronics Symposium, September 2021.
- S. Suprpto, T. Taufik, A. Nasuha and E. Riyanto, "Synchronization of Dual Servo Motor Using CMAC Neural Network-based Lugre Friction Model", 3rd IEEE International Conference on Artificial Intelligence in Engineering and Technology, September 2021.
- T. Taufik, B. Nghe, A. Hernadi, R. Hasanah and L. Syafaah, "Cascaded Switching Regulator and Linear Regulator with Positive Voltage Tracking for Improved Efficiency, July 2021.
- I. Setiawan, M. Facta, Hermawan, T. Andromeda, M. Purnomo, and Taufik, "Sinusoidal Current Control Strategies for Single Phase Grid-Connected Renewable Power Generation Systems", 7th International Conference on Information Technology, Computer, and Electrical Engineering, September 2020.
- O. Ambriz, L. Onofre, J. Hamlin, R. N. Hasanah, and Taufik, "Bi-Directional DC-DC Converter for the DC House Project", Proc. of FORTEI-International Conference on Electrical Engineering, September 2020.
- B. H. Yuditya, R. N. Hasanah, L. Ardidenta, and Taufik, "Performance Comparison of Single-Phase Multilevel Inverter with SPWM Unipolar and Bipolar Switching Techniques", Proc. of FORTEI-International Conference on Electrical Engineering, September 2020.
- K. Nguyen, Taufik, R. N. Hasanah, and T. Nurwati, "Multiple Input Single Output Converter with MPPT for Renewable Energy Applications", Proc. of 10th Electrical Power, Electronics, Communications, Controls and Informatics Seminar, August 2020.
- T. Nurwati, R. N. Hasanah, Nurussa'adah, and Taufik, "Design and Development of a DC Light Bulb Using High Power LEDs", Proc. of 10th Electrical Power, Electronics, Communications, Controls and Informatics Seminar, August 2020.
- M. Thoren and Taufik, "Designing Introductory Hands-on Power Electronics Lab Exercises", Proc. of 2020 ASEE Conference, June 2020.
- E. Erickson, R. Slobodin, M. Poshtan, Taufik, and J. Callenes, "Using Power Infrastructures for Wildfire Detection in California", Proc. of the 11th IEEE Conference on Innovative Smart Grid Technologies, February 2020.
- L. Ardidenta, Taufik, R. K. Subroto, and R. N. Hasanah, "Improvement of PID Parameters for Ćuk Converter Using Fuzzy Logic", Proc. of International Forum on Clean Energy Engineering, December 2019.
- P. Granieri, B. Tan, and Taufik, "Smart DC Wall Outlet with Load Voltage Detection", Proc. of International Conference on Computational Science and Computational Intelligence - Smart Cities & Smart Mobility, December 2019.
- R. N. Hasanah, R. Ramadhan, H. Suyono, and Taufik, "Performance Study of PID and Voltage Mode Controls in Voltage Regulator for Smart Wall-Plug", Proc. of International Conference on Computational Science and Computational Intelligence - Smart Cities & Smart Mobility, December 2019.

- M. Tuttle, M. Poshtan, Taufik and J. Callenes, "Impact of Cyber-Attacks on Power Grids with Distributed Energy Storage Systems", Proc. of IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids, October 2019.
- A. Tjahjono, S. Wahyu, Rosmaliati, R. Novita, and Taufik, "Modeling the Temperature of the Distribution Transformer Oil Using Transformer Body Temperature and Power Quality Parameters Based on Artificial Neural Network", Proc. of International Conference on Technology and Policy in Electric Power & Energy, October 2019.
- Rosmaliati, I. W. Farid, A. Priyadi, Taufik and M. H. Purnomo, "Backpropagation and Radial Basis Function Neural Network to Predict Top-Oil Temperature of Distribution Transformer", Proc. of International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation, October 2019.
- R. Hasanah, T. Starr, E. Gazali, and Taufik, "DC-DC Converter for USB-C Power Adapter in Residential DC Electricity", Proc. of 4th IEEE Conference on Energy Conversion, October 2019.
- Taufik, J. Baltierrez, and R. Hasanah, "Multiple Input Single Output Boost Converter", Proc. of 2nd International Conference on Electronics and Electrical Engineering Technology, September 2019.
- J. Chauvin, D. Leon-Gijon, Taufik and R. Hasanah, "Power Controller for Hybrid AC/DC House", Proc. of International Conference on Renewable Energy, August 2019.
- B. Ikawanty, M. Ashari and Taufik, "Low Input Current Ripple MPPT System with Two-Phase Boost Converter for Photovoltaics", Proc. of 5th International Conference on Science and Technology, July 2019.
- B. Ikawanty, M. Ashari, Taufik and D. Garinto, "Performance Comparison of Standard and Two-Phase DC-DC Boost Converter", Proc. of International Conference on Information and Communications Technology, July 2019.
- H. Masdi, R. Hasanah, H. Suyono, I. Musirin, and Taufik, "Modeling a D-STATCON for Voltage Sag Mitigation", Proc. of 13th International Power Engineering, Optimization and Computing Conference, July 2019.
- O. Setyawati, Taufik, and A. Satriya, "Energy Harvesting System with Multiple Inputs", Proc. of International Conference on Smart Power & Internet Energy Systems, April 2019.
- Taufik, R. Hasanah, and O. Setyawati, "Impact of transformer's leakage inductance on duty cycle in isolated dc-dc converters", Proc. of International Conference on Smart Power & Internet Energy Systems, April 2019.
- Taufik, R. Halbach, C. Cross, and M. Poshtan, "Development of Versatile Buck Converter Module for Laboratory Experiment in Power Electronic Course", Proc. of 2019 ASEE PSW Conference.
- Soeprapto, R. Hasanah, and Taufik, "Battery Management System on Electric Bike using Lithium-Ion 18650", Proc. of 2019 International Conference on Engineering and Computing.
- M. Head, Taufik, O. Setyawati, A. Satriya, "Flexible Computer Simulation for Power Loss Analysis of Direct AC LED Drive Systems", Proc. of 5th Annual Conference on Computational Science & Computational Intelligence.
- A. Satriya, O. Setyawati, Taufik, "Method of Moment Analysis of Truncation Number in a Homogeneous Spheroid Model", Proc. of 5th Annual Conference on Computational Science & Computational Intelligence.
- A. Banadaki, Taufik, A. Feliachi, "Big Data Analytics in a Day-Ahead Price Forecasting Using TensorFlow in Restructured Power Systems", Proc. of 5th Annual Conference on Computational Science & Computational Intelligence.
- Taufik, and R. Hasanah, "Light Sensing Smart Blinds", Proc. of 2018 Electrical Power, Electronics, Communications, Controls and Informatics Seminar, October 2018.
- Taufik, W. Xiong, J. Sato and Saidah, "Ambient Light Adaptive LED Light Dimmer", Proc. of 2018 1st International Conference and Workshop on Telecommunication, Computing, Electronics and Control, September 2018.
- R. Hasanah, Y. D. Handari, Soeprapto, and Taufik, "LED-Lamp Design for Renewable Energy-Based DC House Application", Proc. of 12th International Power Engineering, Optimization and Computing Conference, July 2018.
- Taufik and Rosmaliati, "Characterization of DC Arc Fault Currents in Low Voltage Residential Electricity", Proc. of International Conference on Applied Electromagnetic Technology, April 2018.
- E. Osborn, A. Shaban, and Taufik, "Development of Laboratory Experiments for Protection and Automation in Microgrid Power Systems", Proc. of American Society for Engineering Education Zone IV Conference, March 2018.
- Taufik, "Research Experience on the DC House Project for Rural Electrification", Proc. of International Conference on Computational Science and Computational Intelligence - Symposium on Education, December 2017.
- M. Taufik, Taufik, and B. Stafford, "Comparison of AC and DC LED Light Bulb Efficiency for Residential Electricity", Proc. of International Symposium on Materials and Electrical Engineering (ISMEE), November 2017.
- Taufik, A. Tjahjono, "A Flyback Inverter Without Input Electrolytic Capacitor", Proc. of International Electronics Symposium (IES), September 2017.
- Taufik, Rosmaliati, and M. Taufik, "Performance Analysis of Multiple Input Boost Converter with Inherent OR Diode Configuration", Proc. of 18th International Seminar on Intelligent Technology and Its Application, August 2017.
- Taufik, C. Aarstad, A. Kean, "Arc Fault Characterization System for the Low Voltage DC Arc Fault Circuit Interrupter", Proc. of International Conference on Systems Engineering, August 2017.
- A. Afarulrazi, M. Wahyu, A. Ponniran, and Taufik, "Simulation and Analysis of Multiphase Boost Converter with Soft-Switching for Renewable Energy Application", Proc. of International Conference on Systems Engineering, August 2017.
- Taufik, A. Mubarak, M. Wahyu, and A. Afarulrazi, "Impact of Photovoltaic System Penetration on the Operation of Voltage Regulator Equipment", Proc. of International Conference on Engineering Application, Physics, and Sciences, July 2017.
- Taufik, Z. Eldredge, Z. Hay, "A Single Board Buck and Boost Bidirectional DC-DC Converter for DC House Energy Management System", Proc. of The 2017 International Conference on Technology and Applications, July 2017.
- Taufik, A. Luan, "Bidirectional Flyback DC-DC Converter for the DC House Project", Proc. of the 2017 International Conference on Technology and Applications, July 2017.
- Taufik, "Teaching the Hands-on Magnetic Design Laboratory Course: Experience and Lessons Learned", Proc. of 2017 ASEE PSW Conference, April 2017.
- K. Pretzer, A. Shaban, Taufik, "Development of Laboratory Experiments for Protection and Communication in Radial and Bidirectional Power Systems", Proc. of 2017 ASEE PSW Conference, April 2017.

- A. Tjahjono, A. Priyadi, M. Pujiantara, M. H. Purnomo, Taufik, A. Shaban, X. Yu, "Modeling Characteristic Curves of Digital Overcurrent Relay (DOCR) for User-defined Characteristic Curve using Artificial Neural Network", Proc. of the 2016 International Conference on Computational Science and Computational Intelligence, December 2016.
- K. Htoo, Taufik, and G. Larson, "Multiple-Input Bridge Converter for Connecting Multiple Renewable Energy Sources to a DC System", Proc. of 2016 Future Technologies Conference, December 2016.
- D. Magdefrau, Taufik, M. Poshtan, and M. Muscarella, "Analysis and Review of DC Microgrid Implementations", Proc. of International Seminar on Application for Technology of Information and Communication Science and Technology, Aug 2016.
- Taufik, D. Sawitri, and M. Muscarella, "Power Quality Analysis of Variable Frequency Drives Connected to a Reactively Compensated Mixed Load System", Proc. of International Seminar on Technology of Information and Communication Science and Technology, August 2016.
- Taufik, and M. Muscarella, "Development of DC House Prototypes as Demonstration Sites for an Alternate Solution to Rural Electrification", Proc. of the 6th International Annual Engineering Seminar, July 2016.
- M. Muscarella, J. Mitchell, and Taufik, "Design Considerations of Diode Source Protection in Multiple Buck Converter", Proc. of International Conference on Applied Electrical, Electronics, and Informatics Engineering, July 2016.
- C. Aarstad, Taufik, A. Kean, and M. Muscarella, "Development of Arc Fault Interrupter Laboratory Testing for Low Voltage DC Electricity", Proc. of International Seminar on Intelligent Technology and Its Applications, July 2016.
- R. I. Putri, A. Priyadi, M.H. Purnomo, M. Pujiantara, and Taufik, "Optimum Control Strategy of Grid Connected PMSG Wind Turbine Based on Energy Storage System", Proc. of International Seminar on Intelligent Technology and Its Applications, July 2016.
- Taufik, F. Milan, and M. Taufik, "WIP: International Partnership on the DC House Project for Rural Electrification", ASEE PSW Conference, April 2016.
- F. Milan, M. Yumul, and Taufik, "Design for the Adaptation of Prepayment Energy Metering System for Multi-Tenant Office Building and Rented Accommodations", International Conference on Engineering and Information Technology, Cebu, Philippines, January 2016.
- Taufik, F. Milan, and M. Yumul, "An Isolated Bidirectional Converter for Battery Charging/Discharging System", International Conference on Engineering and Information Technology, Cebu, Philippines, January 2016.
- M. Taufik, and Taufik, "Unpad's DC House Prototype to Showcase an Alternative Solution to Rural Electrification", 1st International Conference on Rural Development and Community Empowerment, Bandung, November 2015.
- M. Taufik, Taufik, A. A. Bakar and W. M. Utomo, "Multiphase Charge Pump for High Output Voltage", IASTED International Conference on Advances in Power and Energy Systems, Marina Del Ray, October 2015.
- D. Sawitri and Taufik, "Fault Detection Using SVM Based Motor Current Signature Analysis for 3-Phase Induction Motors", IASTED International Conference on Advances in Power and Energy Systems, Marina Del Ray, October 2015.
- A. A. Bakar, W. M. Utomo, Taufik, S. A. Zulkifli and Jumadri Jn, "DC/DC Boost Converter with PI Controller using Real-Time Interface", The International Conference on Electrical and Electronic Engineering, Malaysia, August 2015.
- M. F. E. Purnomo, Taufik, "Study of the Effect of Air-Gap to Array Microstrip Antenna for Mobile Satellite Communications", The International Conference on Electrical and Electronic Engineering, Malaysia, August 2015.
- S. Westdal, K. Mendoza, Taufik, A. Parastiwi, "Calculating Frequency and Max Duty Cycle for the TI UCC38C4X Family PWM Controllers", 2015 National Seminar on Information Technology and Its Applications, June 2015.
- D. Dolan, V. Prodanov, Taufik, "Energy and Economic Losses due to Soiling on Utility Scale PV Systems to Guide Timing of Cost Effective Cleaning", 42th IEEE Photovoltaic Specialist Conference, New Orleans, June 2015.
- S. Westdal, K. Mendoza, Taufik, A. Parastiwi, "Calculating Frequency and Max Duty Cycle for the TI UCC38C4X Family PWM Controllers", National Seminar on Information Technology and Its Application, Indonesia, June 2015.
- Taufik, D. Dolan, "Work-In-Progress: Enhancing Students' Learning in Advanced Power Electronic Course Using a USB Solar Charger Project", ASEE PSW Conference, April 2015.
- A. Bakar, M. Wahyu, Taufik, S. Aizam, Jumadri, "Design Study of Zero Voltage Switching for DC/DC Boost Converter", Ninth International Power Engineering and Optimization Conference, March 2015.
- A. Afarulrazi, M. Wahyu, Taufik, S. Aizam, M. Yonis, "Design of Analog to Digital Converter for DC to DC Boost Converter with Constant Output Voltage", Third International Conference on Computer Engineering and Mathematical Sciences, Dec 2014.
- Taufik, "The DC House Project: An Alternate Solution for Rural Electrification", IEEE Global Humanitarian Technology Conference, October 2014.
- A. Parastiwi, Taufik, "Microhydro for Rural Electrification as a Learn-By-Doing and Multidisciplinary Project: Lessons Learned", ASEE PSW Conference, April 2014.
- A. Parastiwi, Taufik, "Experience from Faculty Exchange Program: Student Success Lesson from Cal Poly State University", ASEE PSW Conference, April 2014.
- Taufik, "Rural Electrification: The DC House Solution", The Economist, Power Up: Perspectives on Indonesia's Energy Future, January 2014.
- D. Dolan, M. Ducas, Taufik, "Variability in Detailed Energy Usage on Repeated Trips in the Chevrolet Volt", EVS27 27th International Electric Vehicle Symposium, Barcelona, Spain, November 2013.
- D. Dolan, J. Dunning, Taufik, "Analysis of Detailed Electric Vehicle Data in Electrical Engineering Education", EVS27 27th International Electric Vehicle Symposium, Barcelona, Spain, November 2013.
- D. Dolan, Taufik, "Characterizing Energy Usage of Chevrolet Volt Versus Speed", Proc. of SusTech, 2013.
- Taufik, K. Liang, and M. Taufik, "Design and Simulation of DC Light Bulb for DC House", Proc. of 2013 PIPS, May 2013.
- Taufik, D. Dolan, "WIP: Enhancing Students' Learning in Introductory Power Electronic Course Using an LED Driver Project", Proc. of 2013 ASEE-PSW Conference, April 2013, *to appear*.
- M. Taufik, A. Soriano, E. Loza, Taufik, and Soeprapto, "Steady-State Analysis of Step-Down Charge Pump", Proc. of 2012 MICEEI, December 2012.
- M. Taufik, C. Arntzen, G. Chavoor, Taufik, and S. Sidopekso, "Analysis of Flyback Current-Fed Push-Pull DC-DC Converter", Proc. of 2012 MICEEI, December 2012.

- M. Taufik, D. Gonzalez, R. Baake, and Taufik, "Steady-State Analysis of Step-Down Charge Pump", Proc. of 2012 MICEEI, December 2012.
- Taufik, Soeprapto, S. Sidopekso, M. Taufik, "A Comparison of Multiple Boost Configurations for Small Renewable Energy Battery Storage Systems", Proc. of 2012 International Conference on Sustainable Energy Engineering and Applications, November 2012.
- Soeprapto, Taufik, S. Sidopekso, M. Taufik, "The DC House Project for Sustainable Rural Electrification", Proc. of 2012 International Conference on Sustainable Energy Engineering and Applications, November 2012.
- M. Taufik, Taufik, J. Thornton, "Piezoelectric Wind Energy Harvesting for Small Scale Systems", Proc. of 2012 International Conference on Sustainable Energy Engineering and Applications, November 2012.
- A. Amin, S. Sidopekso, and Taufik, "Studi Rancang Bangun Portable Nano-Hydro Sebagai Alternatif Sumber Pembangkit Energi Listrik", (In Indonesian) Seminar Nasional Teknik Mesin, Jakarta, October 2012.
- M. Taufik, Taufik, T. Wong, "Multiple-Input Single-Output Converter for Renewable Energy Sources", IEEE Symposium on Industrial Electronics & Applications, September 2012.
- Taufik, M. Taufik, "The DC House Project: Promoting the Use of Renewable Energy for Rural Electrification", The International Conference on Power Engineering and Renewable Energy, July 2012.
- Taufik, J. Thornton, M. Taufik, "Small-Scale Wind Energy Harvesting Using Piezoelectric Converter", The International Conference on Power Engineering and Renewable Energy, July 2012.
- D. Dolan, V. Le, Taufik, "Geographic Variation in Environmental Benefits Achieved by Plug in Electric Vehicles and Electric Vehicles", Electric Vehicle Symposium, May 2012.
- D. Dolan, Taufik, "Use of Online Review to Increase Student Performance on Online and In-Class Evaluations in Power Electronics", 2012 ASEE PSW Conference, April 2012.
- D. Dolan, P. Lehn, Taufik, "Harmonics and Dynamic Response of a Virtual Air Gap Variable Reactor", Conference on Information Technology and Electrical Engineering, April 2012.
- Taufik, T. Wong, O. Jong, and Dale Dolan, "Design and Simulation of Multiple-Input Single-Output DC-DC Converter", Conference on Information Technology and Electrical Engineering, April 2012.
- Taufik, J. Thornton, and D. Dolan, "Piezoelectric Converter for Wind Energy Harvesting", Conference on Information Technology and Electrical Engineering, April 2012.
- Taufik, "The DC House Project: Promoting Sustainable Innovations in Renewable Energy Technology", International Conference on Sustainable Innovation, March 2012.
- A. S. Prabuwo, A. R. A. Besari, R. Zamri, M. D. M. Palil, and Taufik, "Surface Defects Classification Using Artificial Neural Networks in Vision Based Polishing Robot", Lecture Notes in Artificial Intelligence, the 2011 International Conference on Intelligent Robotics and Applications.
- A. Samosir, A. H. M. Yatim, K. Kamal, and Taufik, "Simulation and Implementation of Interleaved Boost DC-DC Converter for Fuel Cell Application", IEEE TENCON 2011, Nov. 2011.
- Taufik, J. Thornton, and M. Anwari, "Design and Simulation of Multiple Input DC-DC Converter for Piezoelectric Wind Harvesting", 2011 Jordan International Energy Conference, Sep. 2011.
- J. Wong, N. Idris, M. Anwari and Taufik, "A Parallel Energy-Sharing Control for a Fuel Cell-Battery-Ultracapacitor Hybrid Vehicles", IEEE Energy Conversion Congress and Exposition, Sep. 2011.
- D. Dolan, J. Durago, and Taufik, "Development of a Photovoltaic Panel Emulator Using Labview", Proc. of 37th IEEE Photovoltaic Specialist Conference, Seattle, Washington, Sept. 2011.
- Taufik, S. McClusky, J. Paolucci and D. Dolan, "A New Undergraduate Laboratory Course in Magnetic Design", Proc. of 2011 North American Power Symposium, Boston, August 2011.
- D. Dolan, Taufik, "Development of Wind Tunnel for Laboratory Wind Turbine Testing", Proc. of 2011 North American Power Symposium, Boston, August 2011.
- Taufik, and D. Dolan, "Web-Based Magnetic Design", Proc. of 118th ASEE Annual Conference and Exposition, Vancouver, Canada, June 2011.
- Taufik, and D. Dolan, "An Active Power Factor Correction Laboratory Experiment for Power Electronics Course", Proc. of 118th ASEE Annual Conference and Exposition, Vancouver, Canada, June 2011.
- D. Dolan, V. Prodonov, and Taufik, "Student Perception of Lecture Video Use as a Means to Increase Time for in Class Problem Solving Applications", Proc. of 118th ASEE Annual Conference and Exposition, Vancouver, Canada, June 2011.
- Taufik, B. Luc, and W. Utomo, "Analysis of Multiphase Zero-Voltage-Switching Buck Converter for Powering Microprocessor", Proc. of International Symposium on Humanities, Science and Engineering Research, June 2011.
- Taufik, J. Adamson, and A. Prabuwo, "Pulse Density Modulated Soft-Switching Single-Phase Cycloconverter", Proc. of IEEE Applied Power Electronics Colloquium, April 2011.
- Taufik, M. McCarty, M. Anwari and A. Prabuwo, "Optimization of Operating Parameters in a Unipolar PWM Inverter", Proc. of IEEE Applied Power Electronics Colloquium, April 2011.
- Taufik, D. Forbes, D. Dolan and R. Putri, "Digital Control of Parallel-Connected DC-DC Converters", Proc. of the 8th International Conference on Information Technology, April 2011.
- W. Utomo, A. Bakar, M. Ahmad, Taufik and R. Heriansyah, "Online Learning Neural Network Control of a DC-DC Buck Boost Converter", Proc. of the 8th International Conference on Information Technology, April 2011.
- Taufik, J. Arakaki, D. Dolan, M. Anwari, and M. Hamid, "Comparative Study of 4-Switch Buck-Boost Controller and Regular Buck-Boost", Proc. of the International Conference on Advanced Science, Engineering and Information Technology, Jan 2011.
- Taufik, R. Prasetyo, D. Janigian, A. Prabuwo, "A Bidirectional Flyback Topology for an Off-Line Battery Charger/Discharger", Proc. of the International Conference on Advanced Science, Engineering and Information Technology, January 2011.
- Taufik, Q. Le, A. Hilario, and R. Putri, "Comparative Analysis of Two-Switch and Four-Switch Buck-Boost Controllers", Proc. of the 5th Electrical Power, Electronics, Communication, Control and Informatics Seminar, December 2010.

- R. Putri and Taufik, "Pembangkit Pulsa Tegangan Tinggi Untuk Pasteurisasi PEF Dengan Pengaturan Waktu Dan Tegangan", Proc. of the 5th Electrical Power, Electronics, Communication, Control and Informatics Seminar, December 2010.
- Taufik, R. Prasetyo, D. Dolan, D. Garinto "A New Multiphase Multi-Interleaving Buck Converter With Bypass LC", Proc. of the 36th Annual Conference of the IEEE Industrial Electronics Society, Phoenix, November 2010.
- M. R. Sahid, A. H. M. Yatim, Taufik, "A New AC-DC Converter Using Bridgeless SEPIC", Proc. of the 36th Annual Conference of the IEEE Industrial Electronics Society, Phoenix, November 2010.
- N. Bahari, Z. Salam and Taufik, "Application of Differential Evolution to Determine the HEPWM Angles of a Three Phase Voltage Source Inverter", Proc. of the 36th Annual Conference of the IEEE Industrial Electronics Society, Phoenix, Nov 2010.
- D. Siddiqi, A. S. Prabuwo, Hasniaty A., Z. Tahir, Taufik, "Optimization Techniques of Hybrid Renewable Energy System: A Review", Proc. of 2nd Makassar International Conference on Electrical Engineering & Informatics.
- Akbar, A. S. Prabuwo, Hasniaty A., Z. Tahir, Taufik, "Product Quality Inspection Based on Machine Vision System", Proc. of 2nd Makassar International Conference on Electrical Engineering & Informatics.
- B. Y. Husodo, M. Anwari, S. M. Ayob, Taufik, "Analysis and Simulations of Z-Source Inverter Control Methods", Proc. of 9th International Conference on Power and Energy, Singapore, October 2010.
- M. McCarty, Taufik, D. Dolan, "Determining the Optimum Operating Parameters of A Unipolar PWM Inverter Using Experimental Approach", Proc. of 2010 North American Power Symposium, September 2010.
- D. Dolan, J. Durago, J. Crowfoot, Taufik, "Simulation of A Photovoltaic Emulator", Proc. of 2010 North American Power Symposium, September 2010.
- Taufik, R. Prasetyo, D. Dolan and D. Garinto, "A New Multiphase Interleaving Buck Converter With Bypass Cell Capacitor and Inductor", Proc. of the 53rd IEEE Int'l Midwest Symposium on Circuits & Systems, August 2010.
- M. I. M. Rashid, M. Anwari, and Taufik, "Harmonic Analysis of Grid-Connected Photovoltaic System with Adjustable Speed Drives", Proc. of International Conference on Control, Automation and Systems, Korea, August 2010.
- Taufik, "Lessons Learned: Encouraging Product Competitiveness through In-class Projects", Proc. of 2nd Indonesia International Conference on Innovation, Entrepreneurship, and Small Business, July 2010.
- M. McCarty and Taufik, "Determining the Optimum Operating Parameters of a Unipolar PWM Inverter", Proc. of 2010 Conference on Information Technology and Electrical Engineering, July 2010.
- B. Luc and Taufik, "Analysis and Simulation of Two-Phase Zero-Voltage-Switching Resonant Buck Converter", Proc. of 2010 Conference on Information Technology and Electrical Engineering, July 2010.
- M. Anwari, M. Hamid, A. Hiendro, and Taufik, "Power Quality Analysis of Adjustable Speed Drive with Multi-Pulse Rectifier", Proc. of The Asia-Pacific Symposium on Applied Electromagnetics and Mechanics, July 2010.
- Taufik, J. Ruckdaschel, D. Dolan and M. Anwari, "Modeling and Analysis of a Static VAR Compensated Mixed Load System", Proc. of IASTED International Conference on Modeling and Simulation, July 2010.
- Taufik, R. Prasetyo, D. Dolan and D. Garinto, "A Cell-Based Multiphase Interleaving Buck Converter with Bypass Capacitors", Proc. of International Conference on Computer, Electrical, and Systems Science, and Engineering, July 2010.
- Taufik, T. Gunawan, D. Dolan and M. Anwari, "Design and Analysis of Two-Phase Boost DC-DC Converter", Proc. of International Conference on Computer, Electrical, and Systems Science, and Engineering, July 2010.
- Taufik, R. Prasetyo, A. Hernadi and D. Garinto, "Multiphase Interleaving Buck Converter With Input-Output Bypass Capacitor", Proc. of 7th International Conference on Information Technology, April 2010.
- M. Anwari, B. Y. Husodo, Taufik, "Performance Study of a Fuel Cell Based Power Electronic System", Proc. of The 4th South East Asian Technical University Consortium (SEATUC) Symposium, Tokyo, February 2010.
- Taufik, M. McCarty, S. Watkins, and M. Anwari, "Performance Study of Series-Loaded Resonant Converter Using Super Barrier Rectifiers", Proc. of the IEEE TENCON 2009, Singapore, November 2009.
- M. Anwari, M. Rashid, M. Hamid, and Taufik, "Experimental Harmonic Analysis of a Network of Adjustable Speed Drives", Proc. of the IEEE TENCON, November 2009.
- Taufik, S. Watkins, M. McCarty and M. Anwari, "Performance Analysis of Series Loaded Resonant Converter", Proc. of IEEE Symposium on Industrial Electronics and Applications, October 2009.
- M. McCarty, Taufik and M. Anwari, "Harmonic Analysis of Input Current of Single-Phase Controlled Bridge Rectifier", Proc. of IEEE Symposium on Industrial Electronics and Applications, October 2009.
- M. Anwari, A. Hidayat and Taufik, "Wireless Data Acquisition System for Photovoltaic System", Proc. of International Telecommunications Energy Conference 2009, Incheon, Korea, October 2009.
- M. Anwari, M. I. Hamid and Taufik, "Photovoltaic Energy Conversion System using Single Phase Grid-Connected Inverter", Proc. of International Telecommunications Energy Conference 2009, Incheon, Korea, October 2009.
- M. Anwari, M. I. M. Rashid, M. Imran Hamid and Taufik, "Power Quality Analysis of Grid-Connected Photovoltaic System with Adjustable Speed Drives", Proc. of IEEE - PES/IAS Conference on Sustainable Alternative Energy, Spain, September 2009.
- Taufik, E. Schaefer, M. Anwari, and M. Taufik, "Performance Analysis of Shunt Reactive Power Compensators", Proc. of the Asia Modeling Symposium, May 2009.
- Taufik, A. Oi, M. Anwari, and M. Taufik, "Modeling and Simulation of Photovoltaic Water Pumping System", Proc. of the Asia Modeling Symposium, May 2009.
- Taufik, B. Butterfield, M. Anwari, and M. Taufik, "Modeling and Simulation of Multiple-Input Converter System with Equally Drawn Source Power", Proc. of the Asia Modeling Symposium, May 2009.
- M. Anwari, M. Hamid and Taufik, "Modeling and Simulation of a Network of Adjustable Speed Drives", Proc. of the 3rd International Conference on Modeling, Simulation, and Applied Optimization, January 2009.
- M. Anwari, M. Hamid and Taufik, "Modeling and Simulation of Multi-pulse Rectifier Connected to Adjustable Speed Drive", Proc. of the 3rd International Conference on Modeling, Simulation, and Applied Optimization, January 2009.
- Taufik, E. Matsumoto, and M. Anwari, "Impact of Multiple Adjustable Speed Drive System to Power System Harmonics", Proceedings of the 2008 Power Engineering Conference, December 2008.
- Taufik and B. Paet, "A Small Scale Static VAR Compensator Experiment", Proceedings of the 2008 Power Engineering Conference, December 2008.

- M. Hamid, M. Anwari, Taufik, and Z. Salam, "Load Sharing Characteristic of Single-Phase PV Inverter Connected to Grid", Proceedings of the 2008 Power Engineering Conference, December 2008.
- M. Anwari, M. Hamid, and Taufik, "Power Quality Behavior of Single-Phase Fed Adjustable Speed Drive from Grid of PV Generation", Proceedings of the 2008 Power Engineering Conference, December 2008.
- A. Polleri, Taufik and M. Anwari, "Modeling and Simulation of Paralleled Series-Loaded-Resonant Converter", Proceedings of the Asia Modeling Symposium, May 2008.
- A. Hernadi, Taufik and M. Anwari, "Modeling and Simulation of 6-Pulse and 12-Pulse Rectifiers under Balanced and Unbalanced Conditions with Impacts to Input Current Harmonics", Proceedings of the Asia Modeling Symposium, May 2008.
- Taufik and M. Anwari, "Modeling and Simulation of Current Ripple in DC Link Connecting two PWM Inverters Using Matlab/Simulink", Proceedings of the Asia Modeling Symposium, May 2008.
- Taufik, "Experience Learned: Incorporating Industry Supported Project In Power Electronic Course to Improve Learning", Proceedings of the ASEE PSW Conference, March 2008.
- N. Mulakken, Taufik, and M. Anwari, "Power Quality Measurements of a DC Motor Drive", Proceedings of the IASTED Asia Power Engineering Symposium, April 2008.
- C. Mitsui, S. Tu, Taufik, and M. Anwari, "Efficiency Study of Adjustable Speed Drive with Dual Motor Connection", Proceedings of International Power Engineering Conference, Singapore, Dec 2007.
- Taufik, P. Luther, and M. Anwari, "Digitally Controlled ZVS Quasi Resonant Boost Converter with M-Type Switch", Proceedings of International Conference on Intelligent and Advanced Systems, Malaysia, Nov 2007.
- Taufik, Y. Tam, and M. Anwari, "Comparative Study of Sinusoidal PWM and Hysteresis Modulation in Current Source Inverter", Proceedings of International Conference on Intelligent and Advanced Systems, Malaysia, Nov 2007.
- Taufik, "Work in Progress: Improving Learning Using Industry Supported Project in Power Electronics Course", Proceedings of Frontiers in Education Conference, October 2007.
- Taufik, "Work in Progress: Undergraduate Research in Power Electronics – The Super Barrier Rectifier Diode Project", Proceedings of Frontiers in Education Conference, October 2007.
- Taufik, A. Hernadi, R. Rudianto, and M. Anwari, "Performance Study of Power Factor Correction Circuits", International Conference on Electrical Engineering and Informatics, June 2007.
- Taufik, M. Starman, M. Anwari, "Digitally Controlled Synchronous Buck Converter", International Conference on Electrical Engineering and Informatics, June 2007.
- Taufik, "Teaching and Learning Components' Selection in DC-DC Converter Design Using MathCAD", Proceedings of the Science of Design Symposium, March 2007.
- A. Shaban, A. Nafisi, F. DePiero, and Taufik, "A Multidisciplinary Project in Energy Conversion Electromagnetics Course", Proceedings of the Science of Design Symposium, March 2007.
- V. Rodov, A. Ankoudinov, Taufik, "Super Barrier Rectifier – A New Generation of Power Diode", Proceedings of 2007 American Power Electronics Conference, February 2007.
- Taufik and J. Mullins, "Parallel Operation of Hybrid Loaded Resonant Converter Using Phase-Shift Control", Proceedings of 2006 IEEE International Symposium on Industrial Electronics, Montreal, October 2006.
- Taufik and E. Tahlman, "A Miniature 5.5 Amp DC Motor Drive", Proceedings of 2006 IEEE International Symposium on Industrial Electronics, Montreal, October 2006.
- Taufik, "Power Electronics Courses That Work", Proceedings of 2006 Frontier in Education Conference, October 2006.
- Taufik and J. Mullins, "Parallel Operation of Hybrid Loaded Resonant Converter Using Phase-Shift Control", Proceedings of 2006 North American Power Symposium, Carbondale, September 2006.
- Taufik and E. Tahlman, "A Miniature 5.5 Amp DC Motor Drive", Proceedings of 2006 North American Power Symposium, Carbondale, September 2006.
- W. Li, X. Yu, and Taufik, "A Neural Network Controller for a Class of Phase-Shifted Full-Bridge DC-DC Converter", Proceedings of 2006 International Conference on Artificial Intelligence, Beijing, August 2006.
- Taufik and E. Tahlman, "A Compact High-Current DC Motor Drive", Proceedings of 2006 Nordic Workshop on Power and Industrial Electronics, Sweden, June 2006.
- Taufik, "Experience From Switching Power Supply Design Course", Proc. of 2006 ASEE PSW Conference, April 2006.
- Taufik, "Small-Scale High Power Electronic Laboratory Experiments", Proc. of 2006 ASEE PSW Conference, April 2006.
- A. Oi and Taufik, "Design and Simulation Photovoltaic Water Pumping Systems", Proceedings of International Conference on Electric Machines and Power Electronics, Malang, December 2005.
- Taufik, "Recent Experience in Undergraduate Research on High-Density Converter at Cal Poly", Proceedings of 2005 ASEE PSW Conference, Los Angeles, April 2005.
- Taufik and J. Mullins, "Phase Shifting Control of High-Voltage Parallel Hybrid Resonant Converter", Proceedings of 2005 IASTED Conference on Energy and Power Systems, Thailand, April 2005.
- Taufik, "Development of Power Electronic Senior Project Bench at Cal Poly", Proceedings of NSF/ONR-Sponsored faculty Workshop on Teaching of First Courses on Power Electronics and Electric Drives, February 2005.
- D. Fowler and Taufik, "Modeling and Simulation of STATCOM Using PSpice Part I: 24-Pulse Inverter", Proceedings of 35th North American Power Symposium, October 2003.
- D. Fowler and Taufik, "Modeling and Simulation of STATCOM Using PSpice Part II: Pulse-Width Modulated Inverter", Proceedings of 35th North American Power Symposium, October 2003.
- Taufik, "Adjustable Speed Drive Experiment at Cal Poly", Proceedings of NSF/ONR-Sponsored faculty Workshop on Teaching of First Courses on Power Electronics and Electric Drives, June 2003.
- Taufik, "Development of Switching Power Supply Design Course at Cal Poly", Proceedings of NSF/ONR-Sponsored faculty Workshop on Teaching of First Courses on Power Electronics and Electric Drives, January 2003.
- Taufik, "Implementation Of New Approach To Two-Sequence Power Electronics Courses At Cal Poly", Proceedings of NSF/ONR-Sponsored faculty Workshop on Teaching of First Courses on Power Electronics and Electric Drives, January 2003.

- Taufik, "Study of DC Bus Current Ripple in a PWM-based Generator-Load System", Proceedings of International Conference on Electric Machines and Power Electronics, July 2002.
- Taufik, L. Kakinami, "A Web-based Harmonic Simulator", Proceedings of International Conference on Simulation and Multimedia in Engineering Education, January 2002.
- Taufik, L. Kakinami, "A Java-Applet-Based Three-Phase Power System Harmonics Simulator", Proceedings of 33rd North American Power Symposium, October 2001.
- Taufik, A. Shaban, and A. Nafisi, "Output Current Ripple Factor Performance of Half-Wave Rectifier With and Without Freewheeling Diode", Proceedings of IEEE Industry Application Society Conference, October 2000.
- Taufik, "Steady State Operating Characteristics of Hybrid Resonant DC-DC Converter", Proceedings of American Power Conference, April 2000.
- Taufik, "Computer Simulation Based Experiments In Power Electronics Laboratory Using Orcad Pspice Schematics", Proceedings of International Conference on Simulation and Multimedia in Engineering Education, January 2000.
- Taufik and F.E.Villaseca, "Parallel AC-AC Converters Using Stationary Master Slave Control", Proceedings of 31st North American Power Symposium, October 1999.
- Taufik and F.E.Villaseca, "Modeling and Simulation of Parallel AC-AC Converters with Master Slave Control using Matlab Simulink", Proceedings of 30th North American Power Symposium, October 1998.
- Taufik and P.L.E. Uslenghi, "Theory of Rectangular Waveguide Filled with a Magneto-electric Material", National Radio Science Meeting, Boulder, Colorado, January 1995.

RESEARCH INTERESTS

- Power Electronics, Power Systems, Energy Harvesting, Smart Grid, Renewable Energy, Power Quality