ISSA BATARSEH

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EDUCATION

Ph.D. Electrical Engineering (EE), *University of Illinois, Chicago*, June, 1990.
M.S. Electrical Engineering (EE), *University of Illinois*, *Chicago*, December, 1985.
B.S. Electrical Engineering and Computer Science (EECS), *University of Illinois*, Chicago, June, 1983. *Graduated with High Honors.*

Harvard Kennedy School, Certificate, "Leading in Times of Crisis". May 10-12, 2012, Athens, Greece.

ACADEMIC & ADMINISTRATIVE EXPERIENCE

Academic Experience:

- ***Professor, August 2002 – Present***
  Department of Electrical and Computer Engineering
  University of Central Florida, Orlando, Florida, USA

- ***Associate Professor, August 1996 – August 2002***
  School of Electrical Engineering and Computer Science
  University of Central Florida, Orlando, Florida, USA

- ***Fulbright Visiting Associate Professor, January, 1997 - August 1997***
  Electrical and Electronics Engineering Department
  Princess Sumaya University for Technology,
  Amman, Jordan

- ***Assistant Professor, August 1991 - August 1996***
  Department of Electrical and Computer Engineering
  University of Central Florida, Orlando, Florida, USA

- ***Postdoctoral Researcher, August 1990 - June 1991***
  Electrical Engineering and Computer Science Department
  University of Illinois, Chicago, Illinois, USA

- ***Visiting Assistant Professor, August 1989 - June 1990***
  Electrical Engineering Department
  Purdue University, Calumet, Indiana, USA

- ***Research & Teaching Assistant, September 1983- August 1989***
  Electrical Engineering and Computer Science Department
  University of Illinois, Chicago, Illinois, USA

- ***Research Electronics Engineer, June 1987 - Sept. 1987 & June 1988 - Sept. 1988***
  Switch Mode Power Supply Engineering Dept.
  Zenith Electronics Co., Glenview, Illinois, USA

Administrative Experience:

- ***Director, Florida Power Electronics Center, 1998 – Present.***

The center focuses on Research & Development as well as technology commercializing of solar energy power electronics conversion systems.

- ***President, Princess Sumaya University for Technology (PSUT), Sept. 1, 2010 to Aug. 8, 2014 Amman, Jordan***

  Dr. Batarseh was on half-time professional development leave from UCF when served as the transitional president at PSUT. He helped develop several new undergraduate and graduate degree programs, lead the ABET accreditation process for four degree programs, and developed renewable energy educational and research activities. Over his tenure period he helped improve PSUT reputation, engaged industry, increased research funding and graduate student enrollment, and recruited several graduate students to UCF.

- ***Director, July 2003 – August 2010***
  School of Electrical Engineering and Computer Science (EECS)
  College of Engineering and Computer Science
  University of Central Florida, Orlando, Florida, USA

  Dr. Batarseh was responsible for running the School EECS with 62 full-time faculty members, 18 staff members and more than 2,500 graduate and undergraduate students enrolled in four degree programs: electrical engineering, computer engineering, computer science, and information technology. Dr. Batarseh, provided the leadership to develop strategic plan to promote research and educational synergies in the school and he oversaw the School's vision, mission, research and educational direction, and budget.

- ***Associate Dean for Graduate Studies, August 1998 – May 2003***
  College of Engineering and Computer Science (CECS)
  University of Central Florida, Orlando, Florida, USA

  Dr. Batarseh was responsible for the applications, admissions, fellowship processes for more than 1100 graduate students in CECS. He was responsible for maintaining high quality graduate programs, and developing new and innovative graduate degree programs. The position reported to the dean directly.

- ***Assistant Chair, August 1997 – August 1998***
  Electrical and Computer Engineering (ECE) Department
  University of Central Florida, Orlando, Florida, USA

  Dr. Batarseh was responsible for faculty teaching assignments, managed the new courses, certificate and degree programs approval process at the departmental level. The position reported to the chairman of the ECE Department.

TEACHING

HONORS & AWARDS:

- *Teaching Incentive* Awards (two times), UCF, 1998, and 2004.
- *Fulbright Scholar*, Jordan 1997.
- *Outstanding Engineering Educator of the Year,* IEEE, 1998.
- Awarded one undergraduate *LEAD Scholar*, Spring 1997.
- *Excellence in Undergraduate Teaching Award*, College of Engineering, 1996.
- *Excellence in Undergraduate Teaching Award*, ECE Dept, 1995 & 1994.
- *Highest Student Evaluations for TAs,* University of Illinois, Chicago (UIC), 1987.
- Graduated with *High Honors*, Dean's List, *Honors College*, UIC, 1981-1985.

M.S. THESES SUPERVISED:

1. Siddhesh Shinde, Summer 2016.
   Working on AC Battery with frequency regulation and grid tied applications.

2. Utsav Somani, Summer 2013
   Design optimization of LLC topology and phase skipping Control of three phase inverter for PV applications

3. Anna Grishina, Summer 2012
   A New Quasi Resonant DC-Link For Photovoltaic Mico-inverters
   (co-advisor with Dr. John Shen)

4. Christopher Hamilton, Fall 2010
   Control Strategy For Maximizing Power Conversion Efficiency And Effectiveness of Three Port Solar Charging Station For Electric Vehicles

5. Souhib Harb, Summer 2010
   Analysis and Design of Inverter Topologies for Photovoltaic Application

6. Michael Islas, Fall 2009
   Efficiency Improvement Techniques for High Voltage Capacitor Charging

7. Gustavo Gamboa, Summer 2009
   Realization of Power Factor Correction and Maximum Power Point Tracking for Low Power Wind Turbines

8. Michael Pepper, Spring 2009
   Bi-Directional Dc-Dc Converter for Hybrid Electric Vehicles

9. David Bills, Fall 2007
   Analysis and Design of Forward Resonant Converters

10. Keith Mansfield, Fall 2007
    Grid-Connected PV Inverters

11. John Elms, M.S. Summer, 2007
    Maximum Energy Harvesting for Oscillating Energy Harvesting Systems

12. Justin Reese, Summer 2007
    Design, Modeling, and Control of Three-Port Converters for Solar Power Applications

13. Majd Batarseh, Fall 2006
    A Non-Isolated Half Bridge Buck- Based Converter for VRM Application and Small Signal Modeling of a Non-Conventional Two Phase Buck

14. Wissam Al-Hoor, Spring 2006
    Unified Computer Aided Steady State Model for Soft-Switching Cell

15. Osamah Abdel Rahman, Spring 2006
    High Frequency Two-stage DC-DC Conversion

16. Ehab Shoubaki, Summer 2005
    Small Signal Modeling of Power Electronic Converters

17. Liangbin Yao, Summer 2005
Digital Control of Half-Bridge DC-DC Converters with Current Doubler Rectification

18. Husam Al-Atrash, Spring 2005
Multi-channel Solar Inputs with DSP Control Analysis and Design of a Modular Solar-Fed Fault-Tolerant Power System with Maximum Power Point Tracking

19. Feng Tian, Spring 2005
Solar-Based Single-Stage High-Efficiency Grid-Connected Inverter

20. Yangyang Wen, Fall 2004
Design and Implementation of A Digital Controller with DSP for Half-Bridge DC-DC Converters

21. Todd Edward Persen, Fall 2004
FPGA-based Design of a Maximum-Power-Point Tracking System for Space Applications (co-advisor).

22. Shilpa R. Kaluvala, Fall 2003
High Frequency Link Inverters for Fuel Cell-Based Systems

23. Khalid Rustom, Spring 2002
Maximum Tracking Control in Photo-Voltaic Based Systems

24. Abel Halim Al-Sharaqawi, Spring 2002
Small-Signal Modeling of Megamp Converters

25. Joy Mazumdar, Summer 2002
Design and Analysis of High-Frequency Inverters for Solar System Applications

26. Mansi Soundalgekar, Summer 2001
Dynamic Modeling of Low-Voltage Converters for New Generation of Computer Systems

27. Basset Yacoub, Spring 2001
Analysis and Design of High-Order Parallel Resonant Converters

28. Syed Raihan, Spring 2001
Evaluation and Improvement of an Internet Based Circuit Design Package

29. Smitha Ridy, Fall 2000
Internet Based Circuit Design Package

30. Jaber Abu Qahouq, Spring 2000
Generalized Analysis of Soft-Switching DC-DC Converter Families

31. Qiong Zhang, Spring 2000
Design and Evaluation of an Internet-Based Circuit Design Package used in an Undergraduate Engineering Circuit Course

32. Chris Iannello, Summer 1999
Dynamic Modeling of Power Converters Using A Unified Approach

33. Robert Eriksson, Fall 1999

The Development of a Circuit Markup Language using XML and a Corresponding editor/browser in Java (co-advisor)

34. Faouzi El Filali, Summer 1998
    Analysis and Design of Soft-Switching DC-to-DC Converters

35. Hsiao-Ping Lin, Summer 1998
    Soft-Switching Resonant Converters

36. Loutfella Elkaldi, *Fall 1997*
    A Study of Power Factor Correction and Total Harmonic Distortion in Power Electronic Systems

37. Allam Hatoum, Spring 1996
    Steady-state Analysis and Small-Signal Modeling of Switch Mode Power Converters

38. John Evans, Spring 1995
    Harmonics Analysis of three-phase systems

39. Jinrong Qian, Summer 1994
    Classification and Generalization of ZVS and ZCS of Resonant Power Factor Correction Circuits

40. Aslam Khan, Summer 1994
    Analysis and Design of Resonant Power Factor Correction Techniques

41. Audry Bonsall, Summer 1994
    Design and Simulation of Parallel-Series Resonant Converters

42. Zaki Moussaoui, Spring 1994
    Steady State Analysis and Control Characteristic Curves for Resonant Converters

43. Christos Megalemos, Summer 1993
    Small Signal Modeling of the LCC-Type Parallel Resonant Converters

PH.D. DISSERTATION SUPERVISED:

1. Gustavo Gamboa, Expected to graduate, Spring 2017
   Working on Advanced Machine Analysis

2. Xi Chenm, Expected to graduate, Summer 2017.
   Working on Solar Chargers with high efficiency and improved functionality.

3. Seyed-Milda Tayebi, Expected to graduate Spring 2017.
   Working on Three-phase microinveters for advanced control techniques.

4. Ahmadreza Amirahmadi, Spring 2014
   Control Based Soft Switching Three Phase Micro Inverter: Efficiency and Power Density Optimization

5. Lin Chen, Spring 2014
   Investigation of Dual-Stage High Efficiency & Density Module Integrated Converter for Solar Application

6. Qian Zhang, Spring 2013
   A high efficiency module solar system architecture

7. Xiang Fang, Spring 2012
   Analysis and Design Optimization of Resonant DC-DC Converters

8. Ala Al Haj Hussein, Summer 2011
   Design and Operation of Stationary Distributed Battery Micro- Storage Systems

9. Zhijun Qian, Spring 2010
   Design and implementation of the multi-port dc-dc converters with Solar Input

10. John Elms, Summer 2010
    Design of High Power-Density Bidirectional Converters for Electric Vehicles

11. Majd Batarseh, Spring 2010
    Digital Pulse Width Modulation Techniques for DC–DC Converters
    Co-Advisor: Dr. John Shen

12. Wisam Al-Hoor, Summer 2009
    Adaptive Efficiency Optimization for Digitally Controlled Power Converters.

13. Ehab Shoubaki, Summer 2009
    Unified Large And Small Signal State-Space Based Modeling And Symbolic Simulation For PWM Converters

14. Feng Tian, Spring 2009
    Pulse Frequency Modulation ZCS Flyback Converter in Inverter Applications

15. Khalid Rustom, Fall 2007
    Steady State and Dynamic Analysis and Optimization of Single Stage Power Factor Correction Converters

16. Liangbin Yao, Fall 2007
    Topology and Control of High Frequency DC-DC Converters

17. Osama Al-Rahaman, Fall 2007
    Soft-Switching High Frequency DC-DC Converters

18. Hua Zhou, Summer 2007
    Integrated Magnetics on DC-DC Converters (co-advised with Dr. Tom Wu)

19. Yangyang Wen, Summer 2007
    Digital Control of Switching Power Supply

20. Husam Al-Atrash, Fall 2007
    Integrated Topologies and Digital Control for Satellite Power Management and Distribution Systems

21. Xiangcheng Wang, Summer 2006
    Active Transient Voltage Compensator for VRMs Applications

22. Songquian Deng, Fall 2005
    High Frequency DC-DC Converters

23. Hong Mao, Spring 2004
    Topology and Control of Low-Voltage High-Current Isolated DC-DC Converters

24. JiaLuo, Spring 2004
Novel Voltage Regulator Controllers and Transient Compensators for Powering Microprocessors

25. Jaber Abu Qahouq, Fall 2003
High-Density High Current Fast-Transient Low-Voltage DC-DC Converters

26. WeihongQiu, Summer 2003
A Novel Energy Direct Transfer Concept in AC-DC Converter with Power Factor Correction

27. Wenkai Wu, Spring 2003
Control methods for a new topology in Single-Stage PFC

28. Zaki Moussaoui, Spring 2003
New Designs of High Frequency Resonant Ballasts

29. Wei Gu, Fall 2001
Hysteretic Control in the design of Low Voltage Converters for new Generation of Microprocessors

30. Christopher Iannello, Summer 2001
Dynamic Modeling of Power Converters Using A Unified Approach

31. Shiguo Luo, Summer 2001
Front-End Converter Design And System Integration Techniques In Distributed Power Systems

32. Guangyong Zhu, Fall 1999
Dynamic Modeling of Power Factor Correction Circuits

33. Wei Huai, Fall 1999
Single-Stage Single-Switch Power Factor Correction Circuits: Analysis, Design and Implementation

34. Aslam Khan, Spring 1999
Analysis and Design of Resonant Power Factor Correction Techniques

HONOR UNDERGRADUATE THESES COMPLETED:

1. Ross A. Kerley, Fall 2011
Small-Scale Hybrid Alternative Energy Maximizer for Wind Turbines and Photovoltaic Panels

2. Jonathan Baker, Summer 2009
An Optimal, Low-Cost Design for Small Wind Turbine Converters Applied to Charging Batteries

3. Christopher Hamilton, Summer 2009
Digital Control Algorithms: Low Power Wind Turbine Energy Maximizer for Charging Lead Acid Batteries

4. Roberto Miguez, Spring 2009
Introduction to the Grand Solar Belt of America: Combinatorial Optimization Using Genetic Algorithms

5. Venceslav Gaydarzhiev, Fall 2007
Energy Extraction using Maximum Energy Harvesting Control as a refinement over Maximum Power Point Tracking on an Energy Harvesting Backpack,

6. Najlae Yazghi, Fall 2006
Interactive Learning System for Electrical Engineering Circuits

7. Justin Reese, Fall 2006
   Averaged Model of a Three-Port Solar Power Converter

8. Matt Hicks, Spring 2006
   *High Frequency DC-DC converter*s

9. Adje Mensah, Fall 2004
   Modeling and Analysis of Solar Arrays for Grid Connected Systems with Maximum Power Tracking

10. Rebecca Hayman, Fall 2004
    DSP-Based Design of Solar-Based Inverter Systems

11. Loni Gibson, Fall 2000
    Steady State Analysis and Simulation of an Inverter Circuit for NASA Applications

12. Enrique Tenicela, Summer 2000
    Steady State Analysis for a New Power Static Inverter Topology for Aerospace Applications

13. Danny Tawil, Spring 1995
    Analysis of PWM Converters Including Transistor and Inductor Losses

14. Debra-Ann Kemnitz, Spring 1994
    Simulation of Family of DC-to-DC Resonant Converters

15. Henry Nguyen, Spring 1993
    Steady State Analysis and Design of Parallel Resonant Converters

COURSES TAUGHT:

Taught various courses at the undergraduate and graduate levels in the following areas: *Engineering Freshman Experience, Undergraduate Research Experience, Fundamentals of Electrical Engineering, Electronics, Advanced Electronics, Energy and Power Systems, Machines, Power Electronics, Advanced Power electronics, Senior Design.*

Average Student Evaluation over the year approximately: 4.5/5.0.

BOOKS AND BOOK CHAPTERS:

1. *Power Electronic Circuits*, by Issa Batarseh, John Wiley Publisher. 2004. *(576 pages).*

2. *The Power MOSFETs, Power Electronics Handbook,* Edited by Dr. M. H. Rashid, Academic Press, Chapter 6 – pp. 75-100, 2001.

3. *The Power MOSFETs, Power Electronics Handbook: Devices, Circuits, and Applications, 2nd Edition,* Edited by Dr. M. H. Rashid, Elsevier, Academic Press, Chapter 4 – pp. 41-70, 2007.

4. *Power Factor Correction Circuits, Power Electronics Handbook:- Devices, Circuits, and Applications, 2nd Edition,* Edited by Dr. M. H. Rashid, Elsevier, Academic Press, Chapter 19 – pp. 517-542, 2007.

5. *E*lectric Circuit:- Technical Electronic Book (Tech-e-book) in progress.

CURRICULUM RELATED ACTIVITIES:

Course Improvement: Over the last 20 years, Dr. Batarseh was instrumental in building the power

electronics and energy curricula at UCF. He has introducing several new courses and modifying the contents of several courses including: Engineering Freshman Experience, Fundamentals of Electrical Engineering, Electronics, Energy and Power Systems, Power Electronics, Advanced Power electronics.

Laboratory Development: Developed several Electrical Engineering Laboratory manuals with colleagues in the School of EECS.

Faculty Mentor: Helped mentor several student including 14 Undergraduate Thesis, Senior Design Projects, NASA Undergraduate Scholarship Program, and students from local High Schools.

PUBLICATIONS IN EDUCATION:

Dr. Batarseh with his students have published the following refereed educational conference and journal papers that were mostly presented at various national and international conferences. All remaining publications are research based and are listed under the Referred Publications section below.

1. Ruba A. Amarin, Ozlem Garibay, and Issa Batarseh, 'A Topic-Driven Modular Approach to Engineering Education Delivery', Interactive Mobile and Computer Aided Learning (IMCL), Jordan, November 2012.

2. Ruba Amarin, Ehab Shoubaki and Issa Batarseh, 'Java Based Symbolic Circuit Solver For Electrical Engineering Curriculum', International Journal of Online Engineering (iJOE), Vol 8, Issue 4, 2012.

3. Ruba A. Amarin, Ehab Shoubaki, and Issa Batarseh, 'Java Based Symbolic Circuit Solver For Electrical Engineering Curriculum', IEEE EDUCON Education Engineering, April 17-20, 2012, Morocco.

4. Ruba Amarin and Issa Batarseh, 'eTutor – An Interactive Module for Electrical Engineering Curriculum', ASEE, October 28-29, 2011, Philadelphia.

5. Ruba A. Amarin, Kalpathy B. Sundaram, and Arthur Weeks, 'Importance of Practical Relevance and Design Modules in Electrical Circuits Education' International Journal of Online Engineering (iJOE), Vol 7, No 2, pp. 10-14, 2011.
   http://www.online-journals.org/index.php/i-joe/article/view/1646

6. R. A. Amarin, , K.B. Sundaram, A. Weeks, I. Batarseh, "Importance of Practical Relevance and Design modules in electrical circuits education" IEEE Global Engineering Education Conference, pp. 792-796, 2011.

7. Ruba A. Amarin, Feras Batarseh and Issa Batarseh, "Adaptive Electronic Quizzing Method for Introductory Electrical Circuit Course", International Journal of Online Engineering (iJOE), Vol 5, No 3, PP 4-7, 2009.
   http://www.online-journals.org/index.php/i-joe/article/view/930

8. F. Batarseh, I. Batarseh, Michael Haralambous, "QuizMe – An Interactive Learning Tool with Application to Electrical Circuits" Proceedings of the 8th ASEE Global Colloquium on Engineering Education, Budapest-Hungary, Oct 2009. GC 2009-73.

9. I. Batarseh, "Interactive Power Electronics Applets for Educational Delivery," 49th IWK Conference, Technische Universität Ilmenau, Germany, September 2004. (*Invited.*)

10. S. Harb, I. Batarseh, "Teaching Electrical Circuit Analysis Using Web-Based Simulation," 49th IWK Conference, Technische Universität Ilmenau, Germany, September 2004. (*Invited.*)

11. Z. Qu, I. Batarseh, "Web-Based Simulation Architecture for Engineering Education Using Java/XML,"

ASEE Annual Conference, June 18-21, 2000, St. Louis, Mo, 2000.

12. I. Batarseh, Q. Zhang, R. Eaglin, Z. Qu, P. Wahid, "Multi-Media Enhancement of the Electrical Engineering Core Course," ASEE Annual Conference, June 18-21, 2000, St. Louis, Mo, 2000.

13. I. Batarseh, "Review Of Emerging Technologies In Power Electronics And Power Quality," Science and Technology Transfer, University of Alsharjah, United Arab Emirates, April 2000.

14. R. Eaglin, I. Batarseh, R. Miller, "Distance Learning at the University of Central Florida: Meeting the Educational Demands of the Working Professional," NASA 2nd Annual Education Conference, October, 1999.

15. A. Aguilar, R. Eaglin, A. Mehdi, I. Batarseh, "Distributed Engineering Courses with Online Components," IEEE Southeastcon'98, April 24-26, pp. 212-215, April 1998.

16. A. Aguilar, R. Eaglin, I. Batarseh, N. Bakir, "Distance Learning and the use of the Internet and WWW in Education," IEEE Southeastcon'97, April 11-12, pp. 202-206, April 1997.

17. A. Gonzalez, I. Batarseh, Z. Qu, "Current Efforts in Revitalizing Electric Power Engineering at the University of Central Florida," IEEE-Southcon Record, pp. 238-242, Jun 1996.

18. Z. Moussaoui, I. Batarseh, C.Q. Lee, C. Kennedy, "An Overview of the Control Scheme for Distributed Power Systems," IEEE-Southcon Record, pp. 584 –591, June 1996.

19. K. Shenai, C.Q. Lee, I. Batarseh, "An Integrated Power Electronics Curriculum," NSF Workshop Proceeding, Orlando, pp. 21-26, March 24-26, 1996.

20. I. Batarseh, A. Gonzalez, Z. Qu, A. Khan, "Proposed Power Electronics Curriculum," IEEE-Southcon'96, pp. 251-262, March 1996.

21. A. Gonzalez, I. Batarseh, Z. Qu, "Proposed Power Electronics Curriculum," IEEE-Southcon'96, pp. 238-242, March 1996.

22. D. Kemnitz, A. Khan, I. Batarseh, "Power Electronics Education: Courses and Laboratory," IEEE Southcon'95, Ft. Lauderdale, FL., pp. 240-245, March 1995.

23. I. Batarseh "Course and Laboratory Instructions in Power Electronics," IEEE-Power Electronics Specialists Conference (PESC'94), June , Taipei, Taiwan, Vol. 2, pp. 1359-1368, June 1994.

24. I. Batarseh, D. Kemnitz "Undergraduate Education in Power Electronics," IEEE Southcon'94, Orlando, FL., pp. 207-213, March 1994.

RESEARCH

Dr. Batarseh's research has resulted in the publication of 81+ journal articles and nearly 235+ presentations to international and national refereed conferences. He supervised 31 Ph.D. Dissertations, 42 MS Theses, and 15 Undergraduate Honor Theses. More than twenty four U.S. patents were produced and licenses were granted to commercialize products, resulting in co-founding two private companies.. Dr. Batarseh worked on securing nearly $15 million for UCF's research in energy conversion and integration technologies. . Through funding from DoE, Dr. Batarseh's team is working on developing innovative power electronic systems to enable the conversion of energy collected in solar panels into domestic electricity grids.

Citation Indices as of November 23, 2014:

Google Citations: 6,150+
h-index: 40
i10-index: 150

RESEARCH HONORS & AWARDS

- National Academy Inventors (NAI), 2015.
- Research Incentive Award, 2011.
- AAAS Fellow, 2009.
- IEEE Fellow, 2005.
- Best Paper Award, 5th IEEE Vehicle Power and Propulsion Conference (VPPC'09), entitled "Modular Bidirectional DC-DC Converter for Hybrid/Electric Vehicles with Variable-Frequency Interleaved Soft-Switching", September 10, 2009.
- IEEE International Future Energy Challenge Overall First Prize for *Wind Turbine Energy Maximizer,* hosted by IEEE and the IEEE Power Electronics Society, 2009.
- IEEE Power Electronics Society, *IEEE Transactions on Power Electronics* Prize Paper Award: "Flyboost Power Factor Correction Cell and a New Family of Single Stage AC/DC Converters," Vol. 20, No. 1, pp. 25-34, January 2005.
- Davis Productivity Award for Best Invention, given by the State of Florida, 2004.
- IEE Fellow, 2003.
- University Research Incentive Award, March 2002.
- IEEE International Future Energy Challenge Award, 3rdPlace, Department of Energy, 2001.
- College Distinguished Researcher Award, UCF, 2001.
- Distinguished Researcher Award, School of EECS, 2000.
- International Travel Award, $2000, College of Engineering, 1996, 1997.
- Distinguished Researcher Award, ECE Dept., 1995.
- NSF Travel Award, Taiwan, June 22, 1994.
- International Scholarship Award, Instrument and Control Engineering Society, Japan, '92, '93.

U.S. PATENTS ISSUED

1. *US 9,071,150: Variable Frequency Iteration MPPT for Resonant Power Converters:* Issued June 30, 2015.
2. *US 8,577,664: Symbolic switch/linear circuit simulator systems and methods;* Issued: Nov 5, 2013.
3. *US 8,552,286: Method of Adapting Solar Tracking Using Variable Step Size*; Issued: October 8, 2013.
4. *US 8,352,876: Interactive electronic book operating systems and methods;* Issued: January 8, 2013.
5. *US 8338695: Iterative adaptive solar tracking having variable step size,* Issued; December 25, 2012.
6. *US8,219,374: Symbolic Switch/Linear Circuit simulator (SymCir) Systems and Methods;* Issued: July 10, 2012.
7. *US 7,583,128: Combination of Linear and Adaptive Non-Linear Control for Fast Transient Response*, Issued: September 1, 2009.
8. *US 7,471,524: Isolated DC-DC Converters with High Current Capability*, Issued: December 30, 2008.
9. *US 7,388,761: High Efficiency Parallel Post Regulator for Wide Range Input DC/DC Converter*, Issued: June 17, 2008.
10. *US 7,251,113: Active Transient Voltage Compensator for Improving Converter Fast Transient Response*, Issued: July 31, 2007.
11. *US 7,196,916: Alternated duty cycle control method for half-bridge DC-DC*, Issued: Mar 27, 2007.
12. *US 7,149,096, Power converter with interleaved topology, Issued: December 12, 2006.*
13. *US 6,982,887: DC-DC Converter with Coupled-Inductors Current-Doubler;* Issued: January 3, 2006
14. *US 6,970,364: Low Cost AC/DC Converter with Power Factor Correction;* Issued: November 29, 2005
15. *US 6,906,931: Zero-Voltage-Switching Half-Bridge DC-DC Converter Topology by Utilizing the Transformer Leakage Inductance Trapped Energy;* Issued: June 14, 2005
16. *US 6,836,414: PWM Half Bridge Converter with Dual-Equally Adjustable Control Signal Dead-Time*;

Issued: Dec. 28, 2004.

17. *US 6,819,575: AC/DC Switch Mode Power Supply with Power Factor Correction using Direct Energy Transfer Concept*; Issued: Nov. 16, 2004.
18. *US 6,636,430: Energy Transfer Concept in AC/DC Switch Mode Power Supply with Power Factor Correction*; Issued: October 21, 2003.
19. *US 6,628,106: Control Method and Circuit to Provide Voltage and Current Regulation For Multiphase Dc-Dc Converters*; Issued: September 30, 2003.
20. *US 6,594,158*: *AC/DC Converters with Power Factor Correction Circuits (PFC)*; Issued: July 15, 2003.
21. *US 6,273,248: Coin Disks;* Issued: Aug. 14, 2001.
22. *US 6,081,410: Coin Disks;* Issued: June 27, 2000.
23. *US 5,959,849: Single-Switch DC Power Supply with Power Factor Correction*; Issued: Sept. 28, 1999.
24. *US 5,636,106:Variable Frequency Controlled Zero-Voltage-Switching Single-Ended Current-Fed DC-to-AC Converter with Output Isolation*; Issued: June 3, 1997.
25. *US 5,434,767: Power Converter Processing Zero-Voltage Switching and Output Isolation*; Issued: July 18, 1995.

INTERNATIONALPATENTS ISSUED

26. WO/2006/009576): *DYNAMIC OPTIMIZATION OF EFFICIENCY USING DEAD TIME AND FET DRIVE CONTROL; Issued:* January 26, 2006.

PATENTS PENDING:

Patent/Application No.	Title
14/471,961	*Hybrid Zero-Voltage Switching (ZVS) Control for Power Inverters*
14/271,949 *PCT/US14/37116*	*Power Inverter Implementing Phase Skipping Control*
PCT/US14/37116	*Power Inverter Implementing Phase Skipping Control*
14/272,030	*Photovoltaic (PV)-Based AC Module and Solar Systems Therefrom*
PCT/US14/37132	*Photovoltaic (PV)-Based AC Module and Solar Systems Therefrom*
13/979,474	*Modular Grid-Tied Multi-Pulse Inverter for a Distributed PV System*
CHINA-NAT 33165	*Modular Grid-Tied Multi-Pulse Inverter for a Distributed PV System*
2013284381 (AU) *NAT 33164*	*Modular Grid-Tied Multi-Pulse Inverter for a Distributed PV System*
13 808 682.2 (EU) *NAT 33166*	*Modular Grid-Tied Multi-Pulse Inverter for a Distributed PV System*
UCF 33253/4/5/	*Computing Device Providing Collaborative Learning Features And Related Methods*

LICENSES GRANTED

- Maxwell Harvesting, LLC, Miami, Florida, Active.
- Petra Systems, Inc, South Plainfield, New Jersey, Active.
- Tech-e-book.com, Orlando , Florida, Active.
- Power Supply Concepts, Jupiter, Florida. Expired.

REFEREED PUBLICATIONS

JOURNAL PUBLICATIONS (including 63 Full IEEE Trans.):

1. W.E. Alnaser1, A. Dakhel, M. Othman, I. Batarseh, J. Lee, S. Najmaii, W. Alnasser, *"Dust Accumulation Study on the Bapco 0.5 MWp PV Project at University of Bahrain",* International Journal of Power and Renewable Energy Systems, Vol. 2, pp. 38-54, January 2015.

2. W.E. Alnaser, W. Alnaser, I. Batarseh, *"Bahrain's BAPCO 5MWp PV Grid–Connected Solar Project"*, International Journal of Power and Renewable Energy Systems, Vol. 1, pp. 72-84, October 2014.

3. Issa Batarseh, "*Reflections – A Personal Perspective on Jordanian Higher Education,"* Leadership and Governance in Higher Education, Volume No. 4, pp. 1-16, 2014

   https://www.dropbox.com/home/Jordan%20HE?preview=ABout+Jordan's+Higher+Education.pdf

4. L. Chen, A. Amirahmadi, Q. Zhang, N. Kutkut, I. Batarseh "Design and Implementation of Three-phase Two-stage Grid-connected Module Integrated Converter" IEEE Transactions on Power Electronics, vol. 29, no. 8, pp. 3881-3892, March 2014

5. A. Amirahmadi, L. Chen, U. Somani, N. Kutkut, I. Batarseh "High Efficiency Dual Mode Current Modulation Method for Low Power DC/AC Inverters" IEEE Transactions on Power Electronics, vol. 29, no. 6, pp. 2638-2642, June 2014.

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PUBLISHED WORKSHOP PROCEEDINGS:

As workshop technical organizer, served as an editor of the following five NSF workshop proceedings:

1) *Energy Education and Research Activities*, NSF Workshop, Texas A&M University, Qatar Campus, December 13-16, 2009.

2) *Power Electronics and Drives*, NSF Workshop, American University of Sharjah, United Arab Emirates, December 13-16, 2005.

3) *Modern Power Electronics Curriculum: Teaching and Research*, NSF Workshop, Amman-Jordan, December 15-17, 2002.

4) *Multi-Media Delivery of Power Electronics*, NSF Workshop Proceedings, Edited by Issa Batarseh, November 9-11, 2000. *(110 pages).*

5) *Power Electronics Research and Teaching Activities*, NSF Workshop Proceedings, Edited by Issa Batarseh, May 9-11, 1999. *(65 Pages).*

6) *Develop Power Electronics Curriculum and Laboratory*, Proceedings, Edited by Issa Batarseh, Orlando, FL, March 24-26, 1996.

RESEARCH GRANTS *(All as Principal Investigator)*

1. ***US-Navy Phase II SBIR:*** *High Density Soft-Switching Multi-Port Photovoltaic Power Manager,* $1,000,000 (UCF portion $150,000 and $50,000 Match FHTC), October 2015 – October 2017.

2. **Office of Technology Transfer (OTT)-UCF***: Interactive Technical Electronic Book Operating System,* $15000, June 2013 - April 1, 2014.

3. **NSF -** *US-Jordan Cooperative Science: Chaos Theory on Micro-Inverters for Photovoltaic (PV) Systems*, **NSF- ECCS-1156633**, $180,000, October 1, 2012 – Sept. 30, 2016.

4. *Department of Energy (**DoE**):* Photovoltaic Power Electronics Research Initiative (PERI) for developing low cost, ultra-compact, three-phase micro inverters or "AC bricks", **DoE Award (DE-EE0003176.000),** $1.4 M, Jan. 1, 2011 – December 31, 2013. (including 50% match)

5. **NSF -** *US-UAE Workshop: Energy Developments, Addressing the need of the energy industry,* NSF - **Office of International Science and Engineering,** $48,000, January 1, 2011 – December 31, 2012

6. **NSF** – *CCLI: Development of Modular Interactive Learning and Assessing Tools for Electrical 1. Circuit Core Course for Engineering Students,* **NSF-CCLI Phase I,** $199,000, June 1, 2009 – May 30, 2012.

7. **State of Florida Energy Program** - Florida Solar Energy Consortium (FESC), **$1.9M**, January 1, 2009 – December 31, 2013. Co-PIs: John Shen, Wasfy Mikhael, Zhihua Qu, Louis Chow, Thomas Wu, Peter Yuan.

8. **NSF -** *US-Qatar Workshop: Recent Research and Educational Activities in Power Electronics and Drives,* NSF - **Office of International Science and Engineering,** $49,370, December 2009.

9. **US Army Phase III SBIR** – *High Power High Density Bi-directional DC-DC Converter*, **US Army TACOM**, $200,000 (Including $100k Match by I-4 Program), February, 2009 – February, 2010.

10. **Intel Corporation** "Dynamic Digital Power Techniques to improve Efficiency and Performance" **$100,000**, Jan 2007 – Jan 2009.

11. **Intel Corporation -** Dynamic Modeling of Portable Dc-dc Converters, $150,000, Jan. 1, 2006 – December 31, 2009.

12. **NASA Phase II SBIR** – Integrated Three-Port Converters for Compact and Efficient Power Management, $400,000 December, 2007 – December, 2009.

13. **US Navy Phase I SBIR** – Low-Cost, High-Efficiency, High-Density, DC-DC Converter, $70,000 January, 2007 – July, 2007.

14. **NSF - International Research Experience for Student (IRES):** US-Jordan- In Photovoltaic Based Power Electronics Conversion Systems,$137033, April 2007 – April 2010.

15. **NASA Phase I SBIR** – Integrated Three-Port Converters for Compact and Efficient Power Management, $100,000 January, 2007 – July, 2007.

16. **US Navy Phase I STTR** – Energy Harvesting from Backpack, $100,000, July 1, 2006 – January 2007.

17. **Intel Corporation** – *Design, Simulation, and Development of Voltage Regulators with Improved Efficiency at Light Load*, $55,880, January 2006 – December 31, 2006.

18. **US Army Phase II SBIR** – *High Power High Density Bi-directional DC-DC Converter*, **US Army TACOM**, $750,000, February, 2006 – February, 2008.

19. **US Army Phase I SBIR** – *High Power High Density Bi-directional DC-DC Converter*, **US Army TACOM**, $120,000, February 23, 2005 – January 22, 2006.

20. **APECOR, Corp. –** *Developing Interactive Applets for the Design of High-Frequency DC-DC Converters for Communication*, $31,000**,** February 2004 – January 2005

21. **I-4 Match –** *Developing Interactive Applets for the Design of High-Frequency DC-DC Converters for Communication,*$15,000, **UCF-OSR**, February 2004 – January 2005.

22. **Intel Corp** – *Dynamic Modeling of Voltage Regulator Modules (VRMs)*, $200,000, October 1. 2003 – September 30, 2005.

23. **NSF – US – United Arab Emirates - Workshop** – *Power Electronics and Drives*, $22,000, **National Science Foundation – International Program,** Dec. 13-15, 2005

24. **NSF** – *Innovative Maximum Power Tracking Control*, **NSF International Program**, $35,000, February 22, 2003 – February 21, 2005.

25. **US Air Force, Phase II: SBIR** – *Maximum Power Point Tracking for Solar Array Systems,*$741,000, February 7, 2003 – February 6, 2005.

26. **Emerson Corp.** – *High-Efficiency DC-DC Converter Designs,*$1,500,000**,** November 15, 2002 – November 15, 2004.

27. **NSF** – *Hybrid Design of AC-DC Converters with PFC*, $180,000,**National Science Foundation- Division of Electrical and Communication Systems (ECS)-ECS-01-32965,** May 1, 2002 – May 1, 2004 (Including $30,000 as International Supplement).

28. **Presidential Equipment Grant,**$35,000,**UCF**, February 25, 2003 – February 26, 2004.

29. **APECOR, Corp. –** *Electronic Ballast Design,*$38,200**,** January 1, 2003-December 31, 2003.

30. **I-4 Match –** *Electronic Ballast Design,*$38,200,**UCF-OSR,** Research Park, UCF, January 1, 2003-December 31, 2003.

31. **APECOR, Corp. –** *AC-DC Power Factor Correction,*$32,600, November 1, 2002 - October 31, 2003.

32. **I-4 Match –** *AC-DC Power Factor Correction,*$32,600,**UCF-OSR,** Research Park, UCF, November 1, 2002 – October 31, 2003.

33. **US Air Force, Phase I: SBIR** –*Maximum Power Point Tracking for Solar Array Systems,*$96,400, April 1, 2002 – March 30, 2003.

34. **NSF Workshop** – *Modern Power Electronics Curricula and Research Activities*, $19,500, **NSF-International Program,** October 1, 2001 – September 30, 2002.

35. **NSF**– *Bifurcation Analysis of Power Electronics Circuits,***NSF-International Program**, $36,000, January 25, 2002 – December 31, 2003.

36. **NSF** – **REU-Supplement** – *Dynamic Modeling and Design of High Frequency DC-DC Converters In Distributed Power Systems,* $12,000, **NSF-EECS Division**, June 1, 2000 to May 30, 2002.

37. **NSF – REU-Supplement** – *High Frequency AC Distribution Systems, $12,000,**National Science Foundation***- **Division of Electrical and Communication Systems (ECS)-ECS-99-79797,** September 1, 1999 – August 31, 2002.

38. **NSF** – *Dynamic Modeling and Design of High Frequency DC-DC Converters In Distributed Power Systems,*$54,000, **NSF-EECS Division**, June 1, 2000 to May 30, 2002.

39. **NSF – Jordan Joint Project** – *Experimental and Simulation studies of Power Factor*

Corrections, **NSF International Program**, $12,000, June 1, 2000 to May 30, 2001.

40. **NASA-STTR, Phase II** – *Soft-switching Converters with Unity Power Factor Correction,* **NASA-Science and Technology Transfer Research (NASA_STTR)**, $500,000,April 21, 2000 – April 22, 2002.

41. **NASA-STTR, Phase II** – *Soft-Switching Power Factor Correction Circuits,***UCF Match**$156,271, April 21, 2000 – April 22, 2002.

42. **I-4 Match** –*Low Voltage Converters for New Generation of Computer Systems,* **UCF-OSR**,$30,000: PI: Issa Batarseh, January 1, 2000 to December 31, 2000.

43. **NSF** – *High Frequency AC Distribution Systems,* $130,000,**National Science Foundation - Division of Electrical and Communication Systems (ECS)-ECS-99-79797,** September 1, 1999 – August 31, 2002.

44. **NSF-Workshop** – *Development of Multi-Media Based Power Electronics Curriculum*, $16,000, **NSF-Division of Electrical and Communication Systems (ECS-9985605),** September 1, 1999 – August 31, 2001.

45. **NSF-STTR** –*Low Voltage Converters for New Generation of Computer Systems*, $100,000, **NSF**, January 1, 2000 – December 31, 1999.

46. **NSF**– *High Frequency AC Power Distribution Systems,* **UCF Match,**$32,000, September 1, 1999 – August 31, 2001.

47. **I-4 Match**: *Soft-Switching Unity Power Factor Correction Circuits,* **UCF-OSR**,$60,000: October 22, 1998 to October 21, 1999.

48. **NSF – US-Jordan NSF-Workshop** – *Power Electronics Curricula and Applications*, $18,000, **National Science Foundation – International Program and the Division of Electrical and Communication Systems (ECS),** May 18-24, 1998.

49. **NASA** – *Soft-Switching Unity Power Factor Correction Circuits,* **NASA-Science and Technology Transfer Research *(NASA-STTR* –NAS10-98064*);*** $99,600, October 22, 1998 to October 21, 1999.

50. **Florida Space Grant Consortium-NASA** – *Power Factor Correction Circuits,* $20,000; P.I.: Issa Batarseh, Co-PI Chester Kennedy, Martin Marietta**,** May 1, 1998 to June 1, 1999.

51. **Florida Space Grant Consortium-NASA** – *Design of Parallel Connected DC-to-DC Power Converters for Distributed Power Systems to Be Used in the Space Station*, $ 4,500; May 1, 1998 to May 31, 1999.

52. **Small-Business Initiative Program (SBIR)** – *Brushless DC Machines*, $25,000; **Electrodynamics Co,** Orlando, FL, June 1, 1997 to December 31, 1998.

53. **Strategic Initiative Program** – *Developing Power Engineering Curriculum*, $40,000; **UCF**; P.I. Issa Batarseh; Co-P.I.: Qu, Yuan, Mosley, Liou, January 31, 1996 – July 31, 1997.

54. **NSF – Research Equipment Grant:** *Experimental Investigation of High Frequency Power Converters*, $42,565; **National Science Foundation - Division of Electrical and Communication Systems (ECS),** ECS-9500465, September 30, 1995 - August 31, 1996.

55. **NSF – Developing Power Electronics Curricula:** *Courses, Hardware, and Software Laboratory (workshop)*, $21,000, **National Science Foundation - Division of Electrical and Communication Systems (ECS),** ECS-9523167, March 24-26, 1996.

56. **Florida Space Grant Consortium-NASA** – *Control Design for Distributed Power Systems for Space Applications*, $20,000; P.I.: Batarseh, Co-PI Chester Kennedy, Martin Marietta**,** May 1, 995 - June 1, 1996.

57. **Incandescent Disposal Systems (IDS)** – *Design of a 9kW, 100kHz ZVS Flyback PWM Converter for Incandescent Disposal Systems Applications*, $22,500;, Altamonte Springs, FL, June 1, 1995 - June 1, 1996.

58. **Florida Space Grant Consortium-NASA** – *Simulation of High Frequency Power Converters For Space Applications*, $4,500; August 24, 1995 - May 29, 1996.

59. **Florida Space Grant Consortium-NASA** – *Design of Parallel Connected DC-to-DC Power Converters for Distributed Power Systems to be used in the Space Station*, $4,500; August 24, 1995 - May 29, 1996.

60. **Division of Sponsored Research** – *Distributed Power Systems for Space Station*, $7,500; **UCF**; June 1, 1995 - June 30, 1996.

61. **Florida Space Grant Consortium-NASA** – *Simulation of High Frequency Power Converters For Space Applications*, $4,000; May 25, 1995 - October 31, 1995.

62. **Division of Sponsored Research** – *Modeling and Design of Distributed Power Systems for Space Station,*$5,249; **UCF**; June 1, 1994 - June 30, 1995.

63. **Myron Zucker Research Award** –*Analysis and Design of Resonant Power Factor Correction Circuits*, $27,949; **IEEE Industrial Application Society;** January 1, 1994 - December 31, 1994.

64. **Allied Signal Inc**. –*Magnetic for the Boost-Derived ZVS Power Factor Correction Circuit,*$8,972; March 31, 1994-March 30, 1996.

65. **Florida Space Grant Consortium-NASA** – *Modified Power Electronics Course to Include Distributed Power Systems for Space Applications*, $4,000; June 1, 1994 to May 1, 1995.

66. **Florida Space Grant Consortium-NASA** – *Simulation of High Frequency Power Converters*, $5,000; May 25, 1993 to October 31, 1994.

67. **NASA-College of Engineering** – Minority Engineering Program-Mentor, $1000/year, 1993-1997.

68. **Florida Space Grant Consortium-NASA** – *Simulation of Family of DC-to-DC Resonant Converters,*$4,273; May 7, 1993 to October 15, 1993.

69. **EIES** – *Generalized Small-Signal Analysis of Resonant Converters,* $6,976; **UCF,** Orlando, Florida, August 23, 1992 - May 7, 1993.

70. **Division of Sponsored Research** – *Generalized Analysis of Resonant Converter Topologies,*$5,000;, **UCF**, May 7, 1992 - August 8, 1993.

RESEARCH GRANTS *(as a Co-Principal Investigator)*

71. **DNA Sports Training LLC** - *Advanced Golf Stroke Training System*, $117,333; October 2013 – December 2016, (PI: Thomas Wu, Co-PI: Louis Chow and Issa Batarseh). In addition, FHTC match of $46,733.

72. **US Department of Energy – ARRA-SEGIS Phase I and II,** "Development , Demonstration and Commercialization of Smart-Grid Inverters for Wider PV Technology Utilization", $2.3M, June 2008 – February 2011. (P.I. Robert Reedy, Co-P.Is. Gobind Atmaram, Issa Batarseh).

73. **Petra Sola, Inc**, "Research and Development Activities on Grid Tied Inverters", $900,000 December 2007 – December 2011. (P.I. John Shen, Co-P.I.: Issa Batarseh).

74. **NASA – SRI** – Radiation Hard Power System-on-Chip for Space Applications, NASA-UCF-UF joint Project, $160,000, June 2006 – June 2007. P.I. John Shen (Batarseh's Share $40k).

75. **Orange County Express Way Authority; Orlando**– *West African Graduate Engineering Exchange Program,* **,** $81,250/year for four years, June 2000-June 2004.

76. **Florida Dept. of Energy** – Project funded through Solar Energy Center, $20,000, Co-PIs: Zhihua Qu and Issa Batarseh, 1997-1998.

77. **Lockheed Martin** – *Miniature Heat Pump Design and Cooling Analysis for MOSFET Devices,* $35,000**;** PI: Louis Chow, Co-PI: Issa Batarseh, Kalpathy Sundaram, UCF, Nov. 1, 1998 – Nov. 1, 1999.

INVITED PRESENTATIONS/SEMINARS:

Dr. Batarseh made more than 40 national and international invited talks, conference presentation, seminars and keynote speeches.

SERVICE

SERVICE HONORS & AWARDS:

- Recognition by the Institute of International Education (IIE) on behalf of PSUT for the excellent work in the Rescue Funds Program, New York, 2012.
- IEEE Outstanding Service Award, Florida Council, February, 2004.
- IEEE Outstanding Service Award, Orlando Section, March, 2003.
- College Professional Service Award, January 2001.
- IEEE Millennium Medal, March 25, 2000.
- Outstanding Faculty Advisor Award, College of Engineering, February 1998.
- Outstanding IEEE Power Engineering Orlando Chapter, 1997.
- IEEE Outstanding Chapter Award, IEEE Orlando Section, June, 1995.
- IEEE Outstanding Service Award, IEEE Orlando Section, June 12, 1994.
- Certificate of Appreciation, Chairman, Power Engineering Society, IEEE Orlando Section, 1994.
- Certificate of Appreciation as Conference Chairman, IEEE Orlando Section, June 1994.
- Outstanding Chapter Award, 1991-1992, *Eta Kappa Nu* Honor Society.

AFFILIATIONS

- NAI – Fellow.
- IEEE – Fellow Member.
- IEEE – Power Electronics Society, Aerospace and Electronics Systems, Member.

- IEE, Fellow Member.
- *Eta Kappa Nu,* Faculty Initiate.
- *Tau Beta Pi*, Member.

PROFESSIONAL SERVICE

ELECTRICAL AND COMPTER ENGINEERING DEPARTMENT HEADS ASSOCIATION (ECEDHA)

- ECEDHA President, 2009 – October 2010.
- ECEDHA Vice President, 2008-2009.
- ECEDHA Secretary/Treasurer, 2007-2008.

SECEDHA BOARD MEMBER (South Eastern region of ECEDHA)

- President, 2009 – 2010.
- Vice President, 2008-2009.
- Secretary, 2007-2008.

BOARD MEMBER

- **ECEDHA**, Chicago, ILL 2007-2009.
- **Fulbright Commission,** Amman, Jordan 2011 – 2014.
- **NASA Electrical Power TDT,** Member, 2009-Present
- **Petra System, Inc., Plainfield**, New Jersey, 2012-Present
- **APECOR,** 2011- Present.

IEEE

Powel Electronics Society (PLES)

- Education Chair, August 2015 – Present

Associate Editor

- Associate Editor, *IEEE Transaction on Circuits and Systems*, November 1, 2001 – 2005.
- Associate Editor, *IEEE Transaction on Aerospace Electronics and Systems*, June 1989 – 2003.

IEEE Society Committees

- IEEE-PELS Education Chair, September 2015- Present.
- AdCom Member, IEEE Power Electronics Society, Jan. 2003 – 2009.
- Section Chair, IEEE Orlando Section, August 1999 – 2001.
- Executive Board, IEEE Orlando Section, 1994 – 1997.
- Power Engineering Society, *Chairman*, IEEE Orlando Section, 1993 – 1995
- Chapters Chair, *Chairman*, IEEE Orlando Section, 1995 – 1997.
- Conference Committee, *Chairman*, IEEE Orlando Section, 1993 – 1999.
- Education Committee, *Chairman*, IEEE Orlando Section, 1992 – 1993.

REVIEWER:

- Fulbright Program, Jordan.
- California Energy Commission.
- Canadian Research Council.
- U.S. Department of Education.
- NSF – *Panel and Site Reviewer (*CAREER, IGERT, SBIR, Education, International Programs)
- IEEE – Transactions (Power Electronics, Aerospace and Electronics Systems, Industry Application, Circuits and Systems, and Industrial Electronics)
- IEEE - International Conferences.
- Orlando Science Center.

- Florida Space Grant Consortium (FSGC).
- City University of Hong Kong-Science Council.
- Florida Foundation for Future Scientists, Captain.
- Textbooks on Power Electronics, Microelectronics, Energy Power Systems.

ADVISOR

- IEEE Student Chapter at UCF, 1995 – 1997.
- Honor's Program, Theses Advisor, 1992 – 2002.
- Youth Motivator, Oviedo High School, FL, 1993 – 1994.
- Eta Kappa Nu, Advisor, 1991 – 1993.
- Volley Ball Club, Advisor, 1991 – 1992.

CONTINUING EDUCATION

- Organize and teaches the Professional Engineering (PE) Review Course for engineers interested in obtaining Florida's PE license. UCF, 1994 – 2008.
- Organize and teaches part if the Engineering Fundamentals (EF) Review Course for engineers interested in obtaining Florida's PE license. UCF, 1994 – 2008.

CONFERENCE & WORKSHOP COMMITTEES

WORKSHOPS ORGANIZATION

- NSF Workshop, Chairman, "**NSF -** *US-UAE Workshop: Energy Developments, Addressing the need of the energy industry*", Abu Dhabi, November 2012.
- NSF Workshop, Co-Chairman, "Recent Research and Educational Activities in Power Electronics and Drives", Qatar, December 2009.
- **C**hairman, "Delivery of Modern Power Electronics" University of Salerno, Italy, September 2-5, 2003.
- NSF Workshop, Chairman, "Modern Power Electronics Curriculum: Teaching and Research", Amman-Jordan, December 11-14, 2002.
- NSF Workshop, Chairman, "Multi-media Delivery of Power Electronics", November 11-13, 2000.
- NSF Workshop, Chairman, "Teaching and Research in Power Electronics," Amman, Jordan, May 1999.
- IEEE Student Chapters Leadership Workshop, Orlando, FL, 1996, 1997, 1998.
- NSF Workshop to develop Power Electronics Curriculum, Orlando, FL, 1996.

CONFERENCE AND SESSION CHAIRING

- IEEE Power Electronics Specialist Conference 2007 (PESC), General Chair, 2007.
- NSF Workshop on Multimedia Delivery of Power Electronics Education, Chairman, 2000.
- IEEE ISCAS 1999 Local Arrangement Chairman, May 1999.
- NSF Workshop on Power Electronics Education, Chairman, March 24-26, 1996.
- IEEE Southcon 1995, and 1994.
- Conference Co-Chairman for UNESCO sponsored conference.
- Invited Session Chair for several IEEE-PESC, APEC, ISCAS, IECON, SoutheastCon, and other conferences.
- Served as Technical Committee Chairman and/or member for numerous IEEE sponsored and other international conferences.

UNIVERSITY COMMITTEES

School and Department Committees:

- ECE Executive Committee, Member 2010-Present

- EECS Executive Committee, Chair, 2005 – 2010.
- EECS Academic Coordinators Committee, 2006 – 2008.
- ECE Fellowship Committee, Chairman, January, 2000 – 2002.
- Undergraduate Affairs Committee, Chairman, 1997 – 2001.
- Administrative Committee, Chairman, 1996 – 1997.
- Tenure and Promotion Committee, Member, 1996 – 2002.
- Graduate Affairs Committee, member, 1995 – 2010.
- Electronics Committee, *Chairman*, August 1994 – July 1995.
- Space Management Committee, 1994 –1996.

College Committees:

- Dean's Graduate Recruitment Committee, 2014-Present.
- Deans and Chairs Committee, 2003 – 2010.
- Search Committee Chair, Chairman for the MMAE, 2001 – 2002.
- Awards and Scholarship Committee, Chairman, August 1989 – 1995.
- COE Honor's Committee, 1995 – 2002.
- COE Teaching Incentive Program (TIP), 1995 – 1996.
- COE Diversity Team, and Minority Faculty Advisory Committee, 1993 – 1998.
- International Affairs Committee, Chair and Member
- Dean Faculty and Staff Advisory Committee, member, 1992 – 1993.
- United Way, coordinator for several years.

University Committees

- Research Incentive Awards Committee, 2014-2014
- Sabbatical Committee, 2000 – 2002.
- Interdisciplinary Council, 1998 – 2000.
- University Freshman Experience, 1998 – 1999.
- International Affairs Committee – Curriculum Subcommittee, 1997 – 2001.
- University Graduate Affairs Committee, 1998 – 2003.
- International Outreach Subcommittee, 1998 – 2001.
- Distance Learning Committee, Member, 1995 – 2000.
- University Senate, 1994 – 1996.
- Undergraduate Policy and Curriculum Committee, 1994 – 1995.
- Graduate Policy and Curriculum Committee, 1995 – 1996.

Dr. Batarseh has served on many other department, college and university search committees since joining UCF.

PERSONAL

Dr. Batarseh enjoys reading, traveling, and interactive educational delivery. References available upon request.