



Hietpas has served as the advisor to the Electrical and Computer Engineering student honors society (Eta Kappa Nu HKN) since 1998, helping to strengthen their involvement in promotion of electrical engineering and outreach to local schools. Regionally and nationally, Hietpas has served on various committees, including IEEE Siouxland Section, South Dakota Electrical Council, and the IEEE Rural Electrical Power Conference. Hietpas was invited to conduct a workshop CoEV (Watertown, SD), give a presentation (ONR/NSF Faculty Workshop), and serve on panels (NSF Restructuring Power and Energy Curriculum). Dr. Hietpas became an ABET Program Evaluator in 2010 and has successfully completed four accreditation visits.

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international students (who are working hard in dealing with the natural language), he has been recording his in-class lectures and posting online for over 10 years. Since 1994, Dr. Hietpas has taught at both the undergraduate and graduate levels, covering topics in circuits, electronics,

help narrow this to about 20-25 papers for the conference. Furthermore, I help in selecting 2-4 papers for submission to the IEEE-IAS Transactions on Industry Applications. In 1998 I assumed the role of Advisor to the departments Gamma Rho Chapter of the Electrical and Computer Engineering Honor Society, Eta Kappa Nu (HKN). Through my work with the Eta Kappa Nu (HKN) honor society, the students designed and developed a Faraday Flashlight that can be assembled by 6th grade students, which meets one of South Dakota State 6th Grade Curriculum requirements dealing with magnetism and energy conversion. For the last three years we have worked with the Sioux Valley Middle School Science Teacher, Amy Schlimmer, wherein each student (at a low cost of \$12 per student) constructs a Faraday Flashlight. This has been a very popular activity for the students and Ms. Schlimmer has asked for our continued participation in this activity.

PROFESSIONAL IMPROVEMENT

Selected to attend ABET Program Evaluator Training (July 2010) y.ŷ.[OEqÝL@24@SNÁeqD
SDSU TLC Course

Coordinator for the Center for Power Systems Studies (1997 – present)

11 Members (Utilities in SD, ND, MN, IA, NE, MT)

19 Associate Members

Established the Bi-Annual South Dakota Regional Power Conference

Increase funding support

Increase student internships

Developed an on-
graduates

COURSES TAUGHT

Circuits I/II

Electronics I/II/III

Control Systems

Electromechanical Systems

Completely redesigned labs to include power electronic and electric drive components

Senior Design I and II

Organized and chaired first two Senior Design Conferences, 1995/1996

Engineering Economics

Power Systems Analysis

Power Electronics

Advanced Digital Control Systems (Graduate)

Advanced Power Systems (Graduate)

INVITED PRESENTATIONS/PANELS/WORKSHOPS

ONR/NSF Workshops on Education and Workforce

(Power/Energy/Machines/Drives)

Power Electronics Workshop, CoEV (Watertown, SD)

SERVICE

Member of IEEE-CEAA (2017 – Present)

Provost Leadership Task Force (2011-Present)

IEEE PES Scholarship Initiative Region Board Member (2010-2016)

Intercollegiate Athletic Board (officer, 2008-2011)

Alternative Power Technology (APT-SDSU) Search Committee (member)

Assessment Coordinator for Electrical Engineering (2002-2010)

CPSS/EE/COE Scholarship Committee (chair, 1998-2010)

EE Program Curriculum Review Committee

IEEE Paper Review Committees (Rural Electric Power Conference, Transactions on Industrial Applications, Transactions on Education, 1998 – 2010)

IET-PES Journal (Institution of Engineering and Technology – Power Electronics) Paper Review Committee (2005-present)

ASEE Campus Representative (2007-2011)

Advisor to the Eta Kappa Nu (HKN, 1998 - 2016)

Initiated the SDSU Robotics Program (2009-2010)

Research Advisory Council (1997-1999)

Faculty Search Committees, EE and SE

Academic Affairs Committee (1996-1998)
NSF-CCLI Review Panel (1999)

RECOGNITIONS

Outstanding Chapter, Gamma Rho/Eta Kappa Nu, Electrical and Computer Engineering Honor Society, Faculty Advisor (2008-2014, a national recognition)

Udaya Kumar Tejwani, 1996, *Modified PWM Technique for Reduction of Voltage Harmonic Distortion*

PUBLICATIONS

- [1] Sun, Wei; Chambers, Reece; Kleinjan, Ryan; Nelson, Jeremy; Hietpas, Steven; Johnson, Rick; Johnson, Toby; Strube, Todd, "Design and implementation of IEC 61850 in communication-assisted protection strategy," *T&D Conference and Exposition, 2014 IEEE PES* , vol., no., pp.1,5, 14-17 April 2014
- [2] M. Paudel and S. Hietpas, "A Fault Location Algorithm Based on Distributed Neutral-to-Ground Current Sensor Measurements", accepted to *IEEE-PES General Meeting*, Minneapolis, MN, July 25-29, 2010.
- [3] Laborat *Proceedings of the 2007 ASEE Annual Conference & Exposition*, Honolulu, HI, June 24-27, 2007.
- [4] K. Meah, S. Hietpas and S. Ula, *IEEE Applied Power Electronics Conference (APEC)* , February 2007.
- [5] -of-the-Art Energy and Electric Drives Laboratory Designed and Implemented by *Proceedings of the 2004 ASEE Annual Conference & Exposition*, Salt Lake City, UT, June 20-23, 2004.
- [6] Tempe, AZ, Jan. 5-7, 2003.
- [7] *Proceedings of the 2002 American Society for Engineering Education Annual Conference & Exposition*, Montreal, Quebec, Canada (June 2002).
- [8] *Proceedings of the 2001 American Society for Engineering Education Annual Conference & Exposition*, Albuquerque, NM (June 2001).
- [9] *IEEE Trans. on Industry Applications*, Vol. 36, No. 1, January/February 2000, pp. 33-38.
- [10] *National Science Foundation Workshop, Multimedia Delivery of Power Electronics Education*, Orlando, FL. S. M. Hietpas *The Proc. of the IEEE 1999 Rural Electric Power Conference*, May 1999.
- [11] S. M. Hietpas and R. Pecan, "Simulation of a Three-Phase AC-AC Boost Converter to Compensate for Voltage Sags," *The Proc. of the IEEE 1998 Rural Electric Power Conference*, April 1998.
- [12] U. K. Tejwani and S. M. Hietpas, "Modified PWM Technique for Reduction of Voltage Harmonic Distortion Using AC-AC Converter," *The Proc. of the 29th Annual Frontiers of Power Conference*, Oct. 1996.
- [13]

- [17] B. J. Bujanowski, J. W. Pierre, S. M. Hietpas, T. L. Sharpe, and D. A. Pierre, "A comparison of several system ident