

THERESA ODUN-AYO

Assistant Teaching Professor
Missouri S&T/ MSU Cooperative Engineering Program
Missouri State University
901 S. National Avenue/ PCTR 2001B
Springfield, MO 65897
Phone: (417)-837-2312
taohy8@mst.edu
todunayo@missouristate.edu

DEGREES

Ph.D. Electrical Engineering, 2011,
Missouri University of Science and Technology (Missouri S&T), Rolla

M.ENG. Electronics and Telecommunication, 1998
University of Benin, Benin-City, Nigeria

B.ENG. Electrical/Electronics Engineering, 1994
Abubakar Tafawa Balewa University, Bauchi, Nigeria

EMPLOYMENT HISTORY

- 08/2011– Present *Assistant Teaching Professor*
Missouri University of Science and Technology, Rolla, MO
Department of Electrical and Computer Engineering
- 08/2006 – 08/2011 *Graduate Research Assistant*
Missouri University of Science and Technology, Rolla, MO
Department of Electrical and Computer Engineering
- 02/2002 – 08/2006 *Principal Electrical Engineer*
Navigational Aids Department
Nigerian Airspace Management Agency, Lagos, Nigeria
- 08/1999 – 03/2001 *Lecturer II*
Nigerian Defence University, Kaduna, Nigeria
Department of Electrical and Electronic Engineering
- 08/1992 – 10/1992 *Engineer in Training*
Nigerian Telecommunications, Bauchi, Nigeria
- 04/1994 – 10/1994 *Engineer in Training*
Defence Industries Corporation, Kaduna, Nigeria

RESEARCH INTERESTS

Engineering Education
Hybrid systems, Smart grid
Voltage stability
Renewable energy sources

PROJECTS

National Science Foundation (NSF) Future Energy Delivery and Management Systems
– Intelligent Energy Management Test Bed

NSF Emerging Frontiers in Research and innovation (EFRI) Resilient and Sustainable Infrastructure (RESIN) project – Multi Scale design and control framework for dynamically coupled sustainable and resilient infrastructures with application to vehicle-to-grid integration

PUBLICATIONS

T. Odun-Ayo, M. Crow, “An Analysis of the Impact of Plug-in-Hybrid Electric Vehicle on Power System Stability,” in *Conference Proceedings: North American Power Symposium, Starkville, MS*, 4-6 October 2009

T. Odun-Ayo, M. Crow, “An Analysis of the Impact of Plug-in-Hybrid Electric Vehicle on Power System Stability,” in *Conference Proceedings: Future Renewable Electric Energy Delivery and Management, Raleigh, NC*, 18-21 May 2009

Odun-Ayo, T. Crow, M. L., ‘Structure-Preserved Power System Transient Stability Using Stochastic Energy Functions’, *IEEE Transactions on Power Systems*, Volume: PP , [Issue: 99](#), 2012

Odun-Ayo, T. Crow, M. L., ‘An Analysis of Power System Transient Stability Using Stochastic Energy Functions’ ,*European Transactions on Electrical Power*, DOI: 10.1002/etep.646, October 2011.

COURSES TAUGHT

Electrical Circuits I (EE151)	FS2007, SP2008, FS2011, SP2012, FS2012, SP2013, FS2013, SP2014
Electrical Circuit 2 (EE153)	FS2011, SS2012
Electrical Circuit Laboratory(EE153)	FS2011, SP2012, FS2012, SP2013, FS2013, SP2014
Electronic 1(EE253)	FS2012, SP2013, SS2013, FS2013, SP2014
Electronic 1 Laboratory(EE255)	FS2012, SP2013, SS2013, FS2013, SP2014
Power System Design and Analysis (EE207)	SP2013
Power System Design and Analysis Laboratory (EE209)	SP2013
Discrete Linear Systems Laboratory (EE216)	FS2011, SP2012, FS2012
Electronic Devices Laboratory (EE122)	FS2012

PROFESSIONAL ACTIVITIES

Institute of Electrical and Electronics Engineers (IEEE)

American Society for Engineering Education (ASEE)

Society of Women Engineers (SWE)

Nigerian Society of Engineers (NSE)

Council of Registered Engineers of Nigeria (COREN)

Women In Aviation (WAI)

SERVICE ACTIVITIES

Treasurer, IEEE South-West Missouri Section, from 2012-Present

Faculty Advisor, Missouri State University Society of Women Engineers Collegiate Interest Group, from 2013 – Date

Member, Faculty Advisory Committee, College of Natural and Applied Sciences, Missouri State University 2011 - 2013

Reviewer, International Transactions on Electrical Energy Systems

Reviewer, International Transactions on Power Systems

Member, IEEE PES Scholarship Regional Committee

PROFESSIONAL DEVELOPMENT ACTIVITIES

Member of the inaugural class of the University of Missouri Faculty Scholars Program. 2012 - 2013

Master Advisor workshop, Missouri State University, January 2011