

Name: Badrul H. Chowdhury

Academic Rank: Professor

2. Degrees:

B.S.E.E.	Bangladesh Univ. of Engineering & Technology, Bangladesh	1981
M.S.E.E.	Virginia Tech, Blacksburg, VA	1983
Ph.D.E.E.	Virginia Tech, Blacksburg, VA	1987

3. UNC Charlotte (number of years = 3)

- Professor: 2012 – present
- Research Coordinator: 2014 - present

Missouri University of Science & Technology (number of years = 14)

- Professor and Power Area Coordinator: 2000-2012
- Associate Professor: 1998 - 2000

University of Wyoming (number of years = 11)

- Associate Professor: 1993-1998
- Assistant Professor: 1987 - 1993

4. Other related experience:

- Faculty Fellow at Johnson Space Center, NASA, Houston, TX: 2004
- Faculty Fellow at Naval Surface Warfare Center, Philadelphia, PA: 2001
- Research Staff Engineer (on sabbatical): 1995-1996

5. Certifications or professional registrations: None

6. Current membership in professional organizations

- IEEE (Senior Member) (1983 – present), IEEE Power & Energy Society (1985 – present)

7. Honors and awards:

- 2007 Faculty Excellence Award, Missouri University of Science & Technology.
- 2007 Outstanding Faculty Advisor – awarded by MST-UMR-MSM Alumni Association.
- 2003 Outstanding Section Member, IEEE St. Louis Section

8. Institutional and professional service in the last five years:

- Research Coordinator, ECE, 2014-present
- Member, Department Review Committee, ECE, 2013-14
- Member, College Review Committee, College of Engineering, 2014-present
- Chair, Power Systems Technical Thrust Group, 2012 – 2014
- Member, ECE Chair Search Committee, 2014-15
- Member, SEEM Chair Search Committee, 2014-15
- Chair, EPIC Faculty Search Committee, 2015-present
- Member, ECE Undergraduate Committee, 2014-15
- Student Branch Counselor, IEEE PES Student Branch, Missouri S&T, 2003 – 2012.
- Member (PES representative), Advisory Board for IEEE Transactions on Cloud Computing, 2012-2015.

9. Principal publications of last five years (selected from 40 papers):

- S. Raghavan, B. Chowdhury, "State Diagram-Based Life Cycle Management Plans for Power Plant Components," IEEE Trans. on Smart Grid, 6(2), 965-972, 2015.
- M.M. Baggu, B.H. Chowdhury, and J.W. Kimball, "Comparison of Advanced Control Techniques for Grid Side Converter of Doubly-Fed Induction Generator Back-to-Back

Converters to Improve Power Quality Performance during Unbalanced Voltage Dips," IEEE Journal of Emerging and Selected Topics in Power Elect., 3(2), 516-524, 2015.

- M.A. Shuvra, B.H. Chowdhury, Integration of Solar Energy in Distribution System through Smart Inverter Functionality," Proc. 47th North. Am. Power Sym. (NAPS), Charlotte, NC, October 2015.
- Md. S. Hossan, B.H. Chowdhury, Exponential factor dependent ZIP coefficients extraction and impacts of CVR in a utility feeder," Proc. 47th North. Am. Power Sym. (NAPS), Charlotte, NC, October 2015.
- Md. Rasheduzzaman, B. H. Chowdhury, S. Bhaskara, "Converting an Old Machines Lab into a Functioning Power Network with a Microgrid for Education," IEEE Transactions on Power Systems, Vol. 29, Issue 4, 1952-1962, July 2014.
- M. Chamana, F. Jahanbakhsh, B. H. Chowdhury, B. Parkhideh, "Dynamic Ramp Rate Control for Voltage Regulation in Distribution Systems with High Penetration Photovoltaic Power Generations," (to be published), Proc. 2014 IEEE Power & Energy Society General Meeting, Washington, DC, July 25-31, 2014.
- M. Chamana, I. Mazhari, B. Parkhideh, B. H. Chowdhury, "Integration and Evaluation of Two Different PV/BESS Architectures in a Microgrid Test System," IEEE PES T&D Conf. & Expo, Chicago, IL, April 2014.
- F. Meng, B. H. Chowdhury, M. L. Crow, D. Haughton, G. T. Heydt, "Distributed Generation and Storage Optimal Control with State Estimation," IEEE Trans. on Smart Grid, Vol. 4, No. 4, 2266 - 2273, December 2013.
- M. Chamana, B. H. Chowdhury, "Droop-based Control in a Photovoltaic-Centric Microgrid with Battery Energy Storage, Proc. 45th North. Am. Power Sym. (NAPS), Manhattan, Kansas, September 2013.
- B. Chowdhury, B. Parkhideh, A. Martin, Z. Salami, J. Enslin, V. Cecchi, S. Kamalasadani, "Enhancing Power and Energy Systems Concepts with Laboratory Experience," IEEE PES General Meeting, Vancouver, BC, Canada, July 2013.
- G. T. Heydt, B. H. Chowdhury, M. L. Crow, D. Haughton, B. D. Kiefer, F. Meng, B. R. Sathyanarayana, "Pricing and Control in the Next Generation Power Distribution System," IEEE Trans. on Smart Grid, Vol. 3, No. 2, 907 – 914, June 2012.
- M. Vaiman, K. Bell, Y. Chen, B. Chowdhury, I. Dobson, P. Hines, M. Papic, S. Miller, P. Zhang, "Risk Assessment of Cascading Outages: Methodologies and Challenges," IEEE Trans. on Power Systems, Vol. 27, No. 2, pp. 631-641, May 2011.

10. Professional development activities in the last five years:

- Editor, International Transactions on Electrical Energy Systems, 2014 – present
- Editor, IEEE Transactions on Sustainable Energy, 2012 – present
- Editor, IEEE Power and Energy Society Letters, 2013-present
- Technical Program Committee Chair, 47th North American Power Symposium, Charlotte, NC, 2015
- Member, Advisory Board, 12th IEEE High Capacity Optical Networks and Enabling/Emerging Technologies (HONET'15) Conf., Islamabad, Pakistan, December 2015.
- Member, Technical Program Committee, 11th IEEE High Capacity Optical Networks and Enabling/Emerging Technologies (HONET'14) Conf., Charlotte, NC, December 2014.
- Chair, IEEE Photovoltaics Working Group: 2011 - present