CV of Dr. Madhu Singh

1. Affiliation
   Assistant Professor, Electrical Engineering
   Professor in charge Power Electronics Laboratory
   Department of Electrical Engineering
   National Institute of Technology, Jamshedpur
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2. Education
   PhD(Power Electronics and Drives), NIT Rourkela, Orissa, May 2014
   Master of Science (Power Electronics and Drives), Regional Institute of Technology
   (presently National Institute of Technology, NIT), Jamshedpur, 2007
   Bachelor of Science (Engineering), NIT Patna, 1990

3. Position
   Assistant Professor, Electrical Engineering Department, NIT Jamshedpur
   Lecturer, Electrical Engineering Department, NIT Jamshedpur, 30th November, 1999
   Lecturer, Electrical Engineering Department, Patna Institute of Technology, Patna, May 1999 to April 1999.

4. Research Activity (Power Electronics and Drives)
   Power electronics converters
   Induction motor drive control
   Fuzzy logic controller
   Nonlinear controllers

5. Subject Taught/ Teaching

   Basic Electrical Engineering
   Network theory
   Electrical Machine
   Power Electronics
   Advance Power Electronics

6. Professional Activity

Warden, Ambedkar Hall of residence
Program Cordinator, NSS

7. Reviewer of International Journals:
   IEEE Transactions on Systems Man & Cybernetics

8. List of Research Publications:

A. Referred Journals:

1. K. B. Mohanty, Madhu Singh, "RTDS implementation of Lyapunov controller in feedback linearized induction motor drive," International Review of Electrical Engineering (IREE), vol. 8, no. 4, Aug. 2013, pp.1199-1210.

2. K. B. Mohanty, Madhu Singh, "RTDS implementation and induction motor drive performance comparison with P-I, sliding Mode and iterative learning controller," International Review of Electrical Engineering (IREE), vol. 8, no. 1, Feb. 2013, pp.144-156.

3. K. B. Mohanty, Madhu Singh, "Performance improvement of induction motor drive using feedback linearization and fuzzy torque compensator with RTDS implementation," International Review of Electrical Engineering (IREE), vol. 7, no. 3, June 2012, pp.4374-4382.

4. K. B. Mohanty, Madhu Singh, "Feedback linearizing control of induction motor drive by P-I controllers in RTDS environment," Journal of Automation and Control Engineering, vol. 1, no. 4, 2013, pp.306-311.

5. K. B. Mohanty, Swagat Pati, Madhu Singh, "Comparative analysis of P-I, self tuned fuzzy and a hybrid controller for indirect vector controlled induction generator for wind energy application," International Review of Automatic Control, vol. 5, no. 3, May 2012, pp. 421-431.

6. B. N. Kar, Madhu Singh, K. B. Mohanty, "Adaptive fuzzy sliding mode controller for indirect vector control of induction motor drive," Canadian Journal on Electrical and Electronics Engineering, vol. 3, no. 4, April 2012, pp. 155-161.

7. K. B. Mohanty, Madhu Singh, "RTDS implementation of feedback linearized induction motor drive with fuzzy torque compensator," Canadian Journal on Electrical and Electronics Engineering, vol. 3, no. 4, April 2012, pp. 167-174.

8. Madhu Singh, K. B. Mohanty, "A feedback linearized induction motor drive with sliding mode based adaptive iterative learning controller," Canadian Journal on Electrical and Electronics Engineering, vol. 3, no. 4, April 2012, pp. 183-189.

9. K. B. Mohanty, Madhu Singh, "Input current waveform shaping of an induction motor drive using three level front-end converter and passive filter," Canadian Journal on Electrical and Electronics Engineering, vol. 2, no. 9, September 2011, pp. 415-420.

B. Conferences: (Outside India)

1. B. N. Kar, K. B. Mohanty, M. Singh, and S. Choudhury, "Indirect vector control of induction motor using fuzzy sliding mode controller," Procc. of IEEE 11th EEEIC (Int. Conf. on Environment and Electrical Engg.), Rome, May 2012, pp. 595-599.

2. Madhu Singh, K. B. Mohanty, and B. Subudhi, "Sliding mode control of a feedback linearized induction motor using TS fuzzy based adaptive iterative learning controller," Procc. of 9th IEEE Int. Conf. on Power Electronics and Drive Systems, Singapore, Dec., 2011, pp. 625-630.

3. B. N. Kar, K. B. Mohanty, Madhu Singh, "Indirect vector control of induction motor using fuzzy logic controller," Procc. IEEE 10th EEEIC (Int. Conf. on Environment and Electrical Engg.), Rome, May 2011, pp.1-4.

C. Conferences: (Inside India)

1. K. B. Mohanty, Madhu Singh, "Feedback linearizing control of induction motor drive by P-I controllers in RTDS environment," Procc. of IEEE 4th Int. Conf. on Electronics Computer Technology (ICECT 2012), Apr. 2012, Kanyakumari, pp. 1-6.

2. K. B. Mohanty, Madhu Singh, "Input Power Conditioning of a Linearized Induction Motor Drive using Three Level Front-End Converter and Passive Filter," Procc. of IEEE INDICON, Dec. 2011, Hyderabad, pp. 1-6.

3. B. N. Kar, S. Choudhury, K. B. Mohanty, Madhu Singh, "Indirect Vector Control of Induction Motor Using Sliding-Mode Controller," Procc. of Int. Conf. on Sustainable Energy and Intelligent System (IET SEISCON) 2011, Chennai, July 2011, pp. 1-5.

4. K. B. Mohanty, Madhu Singh, "Robust control of a feedback linearized induction motor through sliding mode," Procc. of IEEE PEDES 2010 and Power India Joint Conf., New Delhi, Dec. 2010, pp. 1-7.

5. K. B. Mohanty, Madhu Singh, "Performance improvement of an induction motor drive using feedback linearization and fuzzy torque compensator," Procc. of IEEE PEDES 2010 and Power India Joint Conf., New Delhi, Dec. 2010, pp. 1-7.