




DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT
22 Mile, B.M Kaval, Udayapura, Kanakapura Road, Bangalore-560082.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS

Faculty Name	Dr.Rupam Bhaduri	
Designation	HOD and Professor	
Educational Qualification	B.E, M.Tech, Ph.D	
Experience in Years	16	
Area of Interest	Maglev systems, control systems, power converters, optimisation techniques, ai/ann etc.	
Email ID	bhaduri-eee@dayanandasagar.edu	

Educational Details

- Ph.D -N.I.T., Durgapur
- M.Tech-Control Systems, Manipal University
- B.E-Electrical Engineering, University of Burdwan

Personal Details

- Hobbies: Reading Books
- Languages Known: English, Hindi, Bengali

Professional Experience

- Worked in different capacity in both Academic and Industrial (Private and Govt) sectors for last 14 years

Publications

International Journals:

- (1) **I.E.T. Electrical Power Applications, U.K.:** “Two actuator based DC attraction type levitation system for the suspension of a cylindrical rod”, by S.Banerjee, **R. Bhaduri**, Vol.5, Iss.9, 2011, pp.721 – 730.
- (2) **SPRINGER-VERLAG Pub. Journal of The Institution of Engineers, India:** “Performance of Classical Controllers for an Electromagnetic Levitation System: A Comparative Study”, by S.Banerjee, **R.Bhaduri**, Volume 93, Issue 2, pp.91-99, June 2012.
- (3) **INDERSCIENCE Publishers - International Journal of Automation and Control (IJAAC), Switzerland:** “Optimization of controller parameters by Genetic Algorithm for an electromagnetic levitation system”, by **R. Bhaduri** and S. Banerjee, Vol. 5, No. 3, 2011, pp.219–244.
- (4) **INDERSCIENCE Pub.- International Journal of Power Electronics, Switzerland:** “Some aspects of switching power amplifier used in electromagnetic levitation system” by S.Banerjee, **R.Bhaduri**, D.Prasad, Vol.1, No.1, 2008, pp.33-48.
- (5) **AMSE Periodicals (Advances in Modelling - Automatic Control (Theory & Applications)), Ref. Modeling, Measurement and Control, France:** “An

experimental study towards the selection of operating point for a DC attraction type levitation system” by S.Banerjee, **R.Bhaduri**, Vol.64, No.1-2, Issue 1, 2009.

(6) **ADVANCED MATERIALS RESEARCH**, Trans Tech Publications, Switzerland: **“Genetic Algorithm Based Optimization of Controller Parameters for an Electromagnetic Levitation System”**, by **R.Bhaduri**,S.Banerjee, Vols.403-408, 2012, pp.3900-3908.

(7) **I.E.T.E. Technical Review, India**: **“A Review Note on Different Components of Simple Electromagnetic Levitation Systems”**, S. Banerjee, M. K. Sarkar, P.K. Biswas, **R. Bhaduri** and P. Sarkar, Vol.28, Issue 3, pp.256- 264, (May-June) 2011.

(8) **International Journal of Engineering and Technology (IJET)**: **“PSO optimization of the controller parameters for an inherently Magnetic Levitation System”**, by **R.Bhaduri**, S. Bagchi, S. Banerjee, Vol 9, No 2, **Apr-May 2017**, ISSN (Print) : 2319-8613, ISSN (Online) : 0975-4024, pp.1218-1230.

(9) **SPRINGER Journal: Transactions on EEM, Germany**: **“Demand Aware Voltage Control of Hybrid Renewable Energy Tied Uneven Multi-Level Smart Inverter”**, by **R. Bhaduri**, S. Bagchi, Renukaprasad G., **Jan’ 2019**, ISSN (Print): 1229-7607, ISSN (Online): 2092-7592, DOI: 10.1007/s42341-018-00095-2, pp.1-12.

National Journals:

- I.E.T.E. Technical Review, India: **“A Review Note on Different Components of Simple Electromagnetic Levitation Systems”**, S. Banerjee, M. K. Sarkar, P.K. Biswas, R. Bhaduri and P. Sarkar, Vol.28, Issue 3, pp.256- 264, (May-June) 2011.

International Conferences:

- IEEE ICPEICES–2016: (IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems, DTU, New Delhi): **Small Signal Stability Analysis and Comparison with DFIG Incorporated System Using FACTS Devices**, S Bagchi, R Bhaduri, S Goswami et. al. (Selected to present on July 04 – 06, 2016).
- IEEE ICAIS–2015: (IEEE Conference: Third International Symposium on Control, Automation, Industrial Informatics and Smart Grid, Aug’2015, Kerala): **“Analysis of Power Transfer Capability of a Long Transmission Line using FACTS Devices”**, S Bagchi, R Bhaduri, P N Das & S Banerjee, pp.601-606.
- IEEE CATCON-2013 (6-8-Dec’2013, IEEE-DEIS Kolkata Chapter): **“A Comparative Study between Dynamic Responses of Switch Mode Power Amplifiers (under parametric variation) used in DC Electromagnetic Levitation System Utilizing PSPICE”**, S.Banerjee, R. Bhaduri, A. Ghosh.
- IEEE ISIE-2011 (20th IEEE International Symposium on Industrial Electronics, June 2011, Gdansk, Poland) Paper: **“Practical Demonstration of an Electromagnetic Levitation for a Cylindrical Rod”**, by S.Banerjee, R.Bhaduri, P.Biswas
- IEEE ICCRC-2011 (International Conf. sponsored by IEEE, IACSIT and Singapore Institute of Electronics, on Control, Robotics and Cybernetics, March 2011, New Delhi, India), Paper: **“Genetic Algorithm Based Optimization of Controller Parameters for an Electromagnetic Levitation System”** by R.Bhaduri, S.Banerjee and M.K.Sarkar.
- IEEE ESARS-2010 (International Conf. on Electrical Systems for Aircraft, Railway and Ship Propulsion, October 2010, Bologna, Italy) Paper: **“Some Aspects of Rail and Actuator Used in Electromagnetic Levitation Systems- an Ansys Based Simulation Study”** by S.Banerjee, P.Biswas, R.Bhaduri.
- IEEE EPSCICON-2010 (IEEE Kerala chapter’s International conference on Power, Signals, Control and Computations, January 3-6, 2010, Trichur, Kerala, India), Paper:

“Dynamic Responses of Switch Mode Power Amplifiers used in DC EMLS under Parametric Variation – a Comparative Study” by R.Bhaduri,S.Banerjee, p.93.

- IET & IEEE PEMD-2010 (The 5th IET & IEEE International Conference on Power Electronics, Machines and Drives,19-21 April 2010, Brighton, United Kingdom (UK)), Paper: “Frequency Response Based Dynamic Performance Analysis Of Switched Mode Power Amplifiers Used In Electromagnetic Levitation Systems” by S.Banerjee, R. Bhaduri, P.Biswas.
- IET & IEEE PEMD-2010 (The 5th IET & IEEE International Conference on Power Electronics, Machines and Drives,19-21 April 2010, Brighton, United Kingdom (UK)), Paper: “A Comparative Study Between Different Structures Of Rail And Actuator Used In Electromagnetic Levitation Systems” by S.Banerjee, P.Biswas, R.Bhaduri.
- IEEE PECON-2008 (2ndIEEE International Conference on Power & Energy Conference-1-3-Dec’08, Malaysia & Singapore), Paper: “A practical study on the dynamic performance of a controller for an EMLS” by S.Banerjee, R. Bhaduri, pp.1055-1059.

National Conferences:

- ELCON-2008 (3rd National Conference on Recent Trends & Emerging Technologies in Electrical systems-13-14 March’08, Tamilnadu), Paper: “Selection of operating point in electromagnetic levitation - a practical concept” by S.Banerjee, R.Bhaduri, S.Mondal, pp.86-91.
- CISCON-2008 (5th NationalConference on Control Instrumentation System Conference-07-08-Nov’08, Manipal, Karnataka), Paper: “A comparative study between different classical controllers for an EMLS” by S.Banerjee, R.Bhaduri, pp.89-94.
- CISCON-2008 (5th NationalConference on Control Instrumentation System Conference-07-08-Nov’08, Manipal, Karnataka), Paper: “Modelling and simulation of Smith-predictor with I-PD controller for system with longer dead time” by R.Bhaduri, pp.83-88.

Awards

- TATA-RAO AWARD WINNER in 28th Indian Engineering Congress, BEST PAPER Award from IEST.
- Grants received DST-FIST in 2010-13 Rs.45 Lakhs, IE(I) in 2008-11 Rs.5 Lakhs

Sponsored Research Projects

(i) Worked as “Co Principal Investigator” for R&D project sponsored by The Institute of Engineers (India), (No.SCK/T-R&D/04/2008-09) entitled “Design, Development, Fabrication and Testing of an Electromagnetically Levitated System”.

(ii) Worked as “Co Principal Investigator” for R&D project sponsored by D.S.T., Govt. of India, (No.SR/S3/EECE/0008/2010) entitled “Design, fabrication and testing of DC electromagnetic levitation systems – suitable for specific industrial applications”.

Review And Editorial Works

- i) Reviewer for prestigious **Journal of Electric Power Applications (indexed by SCI, SCOPUS etc.)**, published by **The Institution of Engineering & Technology – IET of United Kingdom (UK)** (publishing location is Hertford, England).

ii)

(ii) Dr. R. Bhaduri, is statistically selected as a “**Surveyor cum Reviewer**” for “**Academic Reputation Survey**” by the prestigious “**The TIMES HIGHER EDUCATION**” & “**ELSEVIER**”

Societies of England, UK.

(iii) Paper Reviewer for the prestigious IEEE 2nd International Conference on Recent Developments in Control Automation and Power Engineering (RDCAPE-2017), Amity University Uttar Pradesh, Noida, India.

(iv) Editorial Board Member for International Digital Library (IDL), India.

(v) Paper Reviewer for the prestigious IEEE IECON-2016 Conf. (Oct' 2016) at Florence, ITALY which is one of the flagship yearly conferences of the IEEE Industrial Electronics Society.

(vi) Paper Reviewer for the prestigious IEEE ICIT-2015 Conf. (March' 2015) at Seville, SPAIN which is one of the flagship yearly conferences of the IEEE Industrial Electronics Society.

(vii) Reviewed one WBUT-Control System book for the reputed McGraw Hill Publishing Co. for the published in the year 2009.

(viii) Paper Reviewer for the prestigious IEEE International Conference on Electronic Devices, Systems & Applications (ICEDSA 2011) organized by IEEE Malaysia Section, IEEE Malaysia Power Electronics, Industrial Electronics & Industrial Applications.

Academic Activity

- Reviewed one WBUT-Control System book for the reputed McGraw Hill Publishing Co. for the published in the year 2009.
- Paper Reviewer for the prestigious IEEE International Conference on Electronic Devices, Systems & Applications (ICEDSA 2011) organized by IEEE Malaysia Section, IEEE Malaysia Power Electronics, Industrial Electronics & Industrial Applications.
- Paper Reviewer for the prestigious IEEE ICIT-2015 Conf. (March' 2015) at Seville, SPAIN which is one of the flagship yearly conferences of the IEEE Industrial Electronics Society.
- Paper Reviewer for the prestigious IEEE IECON-2016 Conf. (Oct' 2016) at Florence, ITALY which is one of the flagship yearly conferences of the IEEE Industrial Electronics Society.
- Editorial Board Member for International Digital Library (IDL)
- Paper Reviewer for the prestigious IEEE 2nd International Conference on Recent Developments in Control Automation and Power Engineering (RDCAPE-2017), Amity University Uttar Pradesh, Noida, INDIA.

Faculty Development Activity

- Worked as “Co PI” for R&D project sponsored by The Institute of Engineers (India), (No.SCK/T- R&D/04/2008-09) entitled “Design, Development, Fabrication and Testing of an Electromagnetically Levitated System”.
- Worked as “Co PI” for R&D project sponsored by D.S.T., Govt. of India, (No.SR/S3/EECE/0008/2010) entitled “Development of DC Electromagnetic Levitation Systems –Suitable for Specific Industrial Applications”.
- Participated in various International and National Arenas of Conferences, Symposiums etc.
- Visited Kuala Lumpur, Malaysia and Singapore to attend Most Reputed International Consortiums

Administrative Activity

- Served as Paper Setter and Moderator in DSI(Campus 1),IETE(India)
- Served as DCS in VTU Examination
- Served as Officer In Charge (OIC) for Semester Examination of WBUT
- Served as a member of special team of University Station Supervisors (USS) for WBUT semester exam in
- June-July-2010.
- Worked as Convener of Examination committee.
- Worked as Convener of Routine committee.
- Worked as member of Purchase committee.

Professional Membership

- MIE(India)
- MIEEE(USA)

Contact Details

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Dayananda Sagar Institutions(Campus 2-DSATM)
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Bengaluru-560082
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My Vision

- To grow the department as well as own-self simultaneously in terms of academic superiority, Research and Development