

Research Publications of Tapan Saha

Condition Monitoring of Electrical Plants

1. Saha, T.K., Purkait, P., Muller, F., "Deriving an Equivalent Circuit of Transformer Insulation for Understanding the Dielectric response Measurements", IEEE Transactions on Power Delivery, Vol. 20, No.1, pp. 149-157.
2. Mardira, K. P., Saha, T.K., Sutton, R. A., "Investigation of modern diagnostic techniques for metal oxide surge arresters", IEEE Transactions on Dielectrics and Electrical Insulation, Vol.12, No.1, February 2005, pp. 50-59.
3. Saha, T.K., Mardira, K. P., "Modelling a Metal Oxide Surge Arrester for the Modern Polarization Based Diagnostics" paper accepted for publication in IEEE Transactions on Dielectrics and Electrical Insulation (26 January 2005).
4. Saha, T. K., Purkait, P., "Investigation of polarization and depolarization current measurements for the assessment of oil-paper insulation of aged transformers", IEEE Transactions on Dielectrics and Electrical Insulation, Volume: 11, Issue: 1, Feb. 2004, Pages: 144 – 154.
5. Thomas, A., Saha, T. K., "The analysis of DC and AC conductivity in the detection of water tree degradation in XLPE cables", Paper accepted for the IEEE Power Engineering Society General Meeting, 12-16 June, 2005, San Francisco, USA
6. Saha, T.K., Purkait, P., "Investigation of an Expert System for Condition Assessment of transformer insulation Based on Dielectric response measurements", IEEE Transactions on Power Delivery, Vol. 19, No. 3, July 2004, pp. 1127-1134.
7. Saha, T.K., Purkait, R., "Impact of the Condition of Oil on the Polarisation based Diagnostics for Assessing the Condition of Transformers Insulation", Paper accepted for the IEEE Power Engineering Society General Meeting, 12-16 June, 2005, San Francisco, USA.
8. Saha, T. K., Purkait, P., "Effects of temperature on time-domain dielectric diagnostics of transformers", Australian Journal of Electrical & Electronics Engineering, Vol 1, No.3, pp 157-162, Institution of Engineers, Australia 2004.
9. Saha, T.K., "Review of modern diagnostic techniques for assessing insulation condition in aged transformers", IEEE Transactions on Dielectrics and Electrical Insulation Vol. 10, No. 5; October 2003, pp. 903-917.
10. Saha, T. K., "Review of Time-Domain Polarisation Measurements for Assessing Insulation Condition in Aged Transformers", IEEE Transactions on Power Delivery, Vol. 18, No. 4, October 2003, pp. 1293-1301.
11. Saha, T.K., Yao, Z. T., "Experience with Return Voltage Measurements for Assessing Insulation Conditions in Service Aged Transformers", IEEE Transactions on Power Delivery, Vol. 18, No.1, January 2003, pp. 128 -135.
12. Darveniza, M., Saha, T. K., Wright, S., "Studies of In-Service and Laboratory Failures of Metal-Oxide Distribution Surge Arresters", Journal of Electrical & Electronics Engineering Australia, Vol. 22, No.2, Institution of Engineers Australia, pp. 129-140, 2003.
13. Wichmann, D., Saha, T.K., "Diagnostic Testing for the Determination of Quality of Live-Line Ropes", Proceedings of the Sixth International Power Engineering Conference (IPEC2003), Singapore, November 27-29, 2003. Vol. 1, pp. 375-380.
14. Saha, T. K., Darveniza, M., Hill, D. J. T., Yao, Z. T., Yeung, G., "Investigating the Effects of Oxidation and Thermal Degradation on Electrical and Chemical Properties of Power Transformers Insulation", IEEE Transactions on Power Delivery, Vol. 14, No. 4, October 1999, pp. 1359-1367.
15. Darveniza, M., Saha, T. K., Hill, D. J. T., Le, T. T. "Investigations Into Effective Methods For Assessing The Condition of Insulation In Aged Power Transformers", , IEEE Transactions on Power Delivery, Vol. 13, No. 4, October 1998, pp. 1214-1223.
16. Saha, T.K., Darveniza, M., Hill, D.J.T., Le, T.T. "Electrical and Chemical Diagnostics of Transformers Insulation-Part A: Aged Transformer Samples", IEEE Transactions on Power Delivery, Vol. 12, No. 4, October 1997, pp. 1547-54.

17. Saha, T.K., Darveniza, M., Hill, D.J.T., Le, T.T. "Electrical and Chemical Diagnostics of Transformers Insulation-Part B: Accelerated Aged Insulation Samples", IEEE Transactions on Power Delivery, Vol. 12, No. 4, October 1997, pp. 1555-61.
18. Hill, D. J. T., Le, T. T, Darveniza, M., Saha, T.K. "A Study of Degradation of Cellulosic Insulation Materials in a Power Transformer-Part 1: Molecular Weight Study of Cellulose Insulation Paper", Polymer Degradation and Stability, Vol. 48, No. 1, pp. 79-87, 1995.
19. Hill, D.J.T., Le, T. T, Darveniza, M., Saha, T.K. "A Study of Degradation of Cellulosic Insulation Materials in a Power Transformer-Part 2: Tensile strength of Cellulose Insulation Paper", Polymer Degradation and Stability, Vol. 49, No. 3, pp. 429-435, 1995.
20. Hill, D. J. T., Le, T. T, Darveniza, M., Saha, T.K. "A Study of Degradation in a Power Transformer-Part 3: Degradation Products of Cellulose Paper Insulation", Polymer Degradation and Stability, Vol. 51, pp. 211-218, 1996
21. Saha, T.K., Purkait, P., "An Attempt to Correlate Time & Frequency Domain Polarisation Measurements for the Insulation Diagnosis of Power Transformer" , Proceedings of the IEEE Power Engineering Society General Meeting, Denver, Colorado, USA , June 6-10 2004.
22. Saha, T.K., Thomas, A., Middleton, R., "Correlation between time and frequency domain polarisation measurements for transformer moisture assessment Proceedings of the Australasian Universities Power Engineering Conference- AUPEC 2004, in Brisbane, 26-29 September 2004
23. Birtwhistle, D., Lyall, J. S., Footit, F., Wickramasuriya , P., Gilbert, R., Powell, L, Saha, T.K, "An Accelerated Wet Ageing Test on Medium Voltage XLPE Cables", Proceedings of the Australasian Universities Power Engineering Conference- AUPEC 2004, in Brisbane, 26-29 September 2004
24. Saha, T.K., Purkait, P., "Investigating Some Important Parameters of the PDC Measurement Technique for the Insulation Condition Assessment of Power Transformer", Proceedings of the Sixth International Power Engineering Conference (IPEC2003), Singapore, November 27-29, 2003.Vol. 1, pp. 381-386.
25. Saha, T.K., Purkait, P., "Some Precautions for the Field Users of PDC Measurement for Transformer Insulation Condition Assessment", Proceedings of the 2003 IEEE Power Engineering Society General meeting, Toronto, Ontario, Canada, 13-17July 2003.
26. Saha, T.K., Purkait, P., "Investigating the impacts of ageing and moisture on dielectric response of oil/paper insulation systems", Paper accepted for the Proceedings of the International Symposium on High Voltage Engineering, to be held in Delft, The Netherlands, from 25 – 29 August 2003.
27. Saha, T.K., Yew, J. H., Purkait, P., "Experience with dielectric response measurements on oil-paper insulated cables", Paper accepted for the Proceedings of the International Symposium on High Voltage Engineering, to be held in Delft, The Netherlands, from 25 – 29 August 2003.
28. Saha, T.K., Purkait, P., "Effects of temperature on time-domain dielectric diagnostics of transformers", Proceedings of the 2003 Australasian Universities Power Engineering Conference (AUPEC'2003), Christchurch, New Zealand, 28 September- 1 October 2003.
29. Edwards, J., Saha, T.K., "Establishment of Current in Conductors", Proceedings of the 2003 Australasian Universities Power Engineering Conference (AUPEC'2003), Christchurch, New Zealand, 28 September- 1 October 2003.
30. Edwards, J., Saha, T.K., "Establishment of Flux in Magnetic Cores", Proceedings of the 2003 Australasian Universities Power Engineering Conference (AUPEC'2003), Christchurch, New Zealand, 28 September- 1 October 2003.
31. Darveniza, M., Saha, T. K., "The Reliability and Power Quality Performance of Overhead Lines –with reference to the Electrical Properties of Wood and Covered Conductors", Proceedings of the 7th International Transmission and Distribution Conference and Exhibition, 16-19 November 2003, Adelaide, SA, Australia, pp. 1-8.
32. Williamson, C., Saha, T.K., "Wet-Test Performance Of Insulating Fibreglass Sticks Used For Live Working", Journal of Electrical and Electronic Engineering in Australia (JEEEA), Institution of Engineers Australia, Vol. 21, No.3, pp. 189-198, 2002.
33. Yao, Z. T., Saha T.K., "Separation Of Ageing And Moisture Impacts On Transformer Insulation Degradation By Polarisation Measurements", Proceedings of the CIGRE 2002 Paris

- Session, Paper No. 15-304, Paris, France, 26-30 August 2002.
34. Yao, Z. T., Saha T.K., "Voltage Response Measurements for Power Transformer Moisture and Ageing Condition Assessment", Proceedings of the IEEE/PES Transmission and Distribution Conference and exhibition 2002: Asia Pacific, October 6-10, 2002, Yokohama, Japan.
 35. Yao, Z. T., Saha T.K., "Analysis and Modelling of Dielectric Responses of Power Transformer Insulation", Proceedings of the IEEE Power Engineering Society Summer Meeting, July 2002, Chicago, USA.
 36. Mardira, K, Saha, T.K., "Modern Electrical Diagnostics for Metal Oxide Surge Arresters", Proceedings of the IEEE/PES Transmission and Distribution Conference and exhibition 2002: Asia Pacific, October 6-10, 2002, Yokohama, Japan.
 37. Mardira, K, Saha, T.K., "A Simplified Lightning Model for Metal oxide Surge Arrester", Proceedings of the Australasian Universities Power Engineering Conference, Melbourne, Australia-29 Spetember-3 October 2002.
 38. Saha, T.K., Purkait, P., Yao, Z. T., "Condition Monitoring Of Transformer Insulation By Polarisation And Depolarisation Current Measurements", Proceedings of the Australasian Universities Power Engineering Conference, Melbourne, Australia-29 Spetember-3 October 2002.
 39. Mardira, K., Saha, T.K., Sutton, B., "The Effects of Electrical Degradation on the Microstructure of Metal Oxide Varistor", 2001 IEEE/PED Transmission and Distribution Conference Proceedings, October 28-November 2, 2001, Atlanta, USA. pp 1-6.
 40. Darveniza, M., Saha, T.K, et al, "A Research Project to Investigate the Impact of Electricity System Requirements On the Design and Optimal Application of the Powerformer™", 2001 IEEE/PED Transmission and Distribution Conference Proceedings, October 28-November 2, 2001, Atlanta, USA. pp 1-6.
 41. Wong, K. O., Saha, T. K., "Expert System for the Fault Diagnosis of Oil-Filled Power Transformer Using Dissolved Gas Analysis" International Symposium on High Voltage Engineering, Bangalore, India, August 19-25, 2001, Paper 8-1.
 42. Saha, T. K., Prasad, A., Yao, Z. T., "Voltage Response Measurements for the Diagnosis of Insulation Condition in Power Transformer", International Symposium on High Voltage Engineering, Bangalore, India, August 19-25, 2001, Paper 6-8.
 43. Saha, T. K., "Review Of Polarisation Measurements For Assessing Insulation Condition In Aged Transformers", Australasian Universities Power Engineering Conference, Perth, Australia, 23-26 September 2001. pp 537-542.
 44. Edwards, J., Saha, T. K., "Diffusion of Current into Conductors", Australasian Universities Power Engineering Conference, Perth, Australia, 23-26 September 2001. pp. 401-406.
 45. Darveniza, M., Saha, T.K., Wright, S., Leijon, M.A., " Effects of deposited charge on Impulse Test Techniques for Polymer Insulators", CIGRE Symposium on Behaviour of Electrical Equipment and Components in Tropical Environments, Cairns, Australia, 3-5 September 2001.
 46. Yao, Z. T., Saha, T. K., Darveniza, M., "A New Approach to Interpret the results of return Voltage Measurements on Aged power transformers", Journal of Electrical and Electronics Engineering Australia, Published by the IEAust College of Electrical Engineers, Vol. 20, No. 1, 2000, pp. 29-34.
 47. Saha, T.K., Mardira, K. P., Darveniza, "Search For New Diagnostics for Metal Oxide Surge Arrester", Proceedings of the 6th International Conference on properties and Applications of Dielectric Materials", June 21-26, 2000, Xian, China, pp. 947-950.
 48. Saha, T.K., Yao, Z. T., Le, T. T., Darveniza, M., Hill, D.J.T., "Investigation Of Interfacial Polarization Parameters For Accelerated Aged Oil-Paper Insulation Samples And Its Correlation With Molecular Weights And Furan Compounds", Proceedings of the CIGRE 2000 Paris Session, Paper No. 15-201, Paris, France, 27 August-2 September 2000.
 49. Edwards, J., Saha, T.K., "Power Flow in Transformers Via the Poynting Vector", Proceedings of the 2000 Australasian Universities Power Engineering Conference, 24-27 September, Brisbane, Australia, pp. 86-91.
 50. Edwards, J., Saha, T.K., "Physical Principles of Magnetism", Proceedings of the 2000 Australasian Universities Power Engineering Conference, 24-27 September, Brisbane, Australia, pp. 313-318. Proceedings of the 2000 Australasian Universities Power Engineering

- Conference, 24-27 September, Brisbane, Australia.
51. McDonald, J. D. F., Darveniza, M., Saha, T. K., "The Diagnostic testing of High Voltage Silicon Carbide Surge Arresters". Proceedings of the 2000 Australasian Universities Power Engineering Conference, 24-27 September, Brisbane, Australia, pp. 319-324.
 52. Darveniza, M., Saha T.K., Wright, S., "Comparison of in-service and Laboratory Failure Modes of Metal-Oxide Distribution Surge Arresters", Proceedings of the IEEE Power Engineering Society Winter Meeting, January 23-27, 2000, Singapore.
 53. Yao, Z. T., Saha T.K., Darveniza, M., "A New Approach to Interpret the Results of Return Voltage Measurements on Aged Power Transformers", Proceedings of Australasian University Power Engineering Conference (AUPEC'99), Darwin, pp. 59 - 64, September 1999.
 54. Saha, T. K., Darveniza, M., Yao, Z. T., "Field Experience With Return Voltage Measurements For Assessing Insulation Condition In Transformers And Its Comparison With Accelerated Aged Insulation Samples", Proceedings of the International Symposium in High Voltage Engineering, 23-27 August 1999, London, UK, Vol. 2, pp. 313-316.
 55. Saha, T. K., Dinh, T., "Return Voltage Measurements On Metal Oxide Surge Arresters", Proceedings of the International Symposium in High Voltage Engineering, 23-27 August 1999, London, UK, Vol. 5, pp. 140-143.
 56. Yao, Z. T., Saha T.K., Darveniza, M., "Effects of Moisture on the Return Voltage Measurement for Aged Transformer", Proceeding of International Power Engineering Conference (IPEC'99), Singapore, pp. 349 -353, volume 1, May 1999.
 57. Saha, T.K., Darveniza, M., Hill, D.J.T., et. al., "The Application of Interfacial Polarisation Spectra For Assessing Insulation Condition in Aged Power Transformers", Proceedings of the CIGRE 1998 Paris Session, Paper No. 12-202, Paris, France, 30 August-5 September 1998.
 58. Yao, Z. T., Saha, T. K., Darveniza, M., "Investigation of Interfacial polarization Spectra measurements for the Condition Assessment of Aged Transformers", 1998 Australasian Power Engineering Conference (AUPEC 98), Hobart, Tasmania, Australia, pp. 1-7.
 59. Darveniza, M., Saha, T. K., "Surface Flashover on Metal Oxide Varistor Blocks", Proceedings of the 1998 IEEE 6th international Conference on Conduction and Breakdown in Solid dielectrics, Vasteras, Sweden, 22-25 June 1998.
 60. Edwards, J., Saha, T.K., "Establishment of Current in Electric Cables by Electromagnetic Energies and the Poynting Vector", Proceedings of the 1998 Australasian Universities Power Engineering Conference (AUPEC 1998), September, Hobart, Tasmania, Vol. 2, pp. 385-388, Australia.
 61. Saha, T. K., Darveniza, M., "Characterization of Thermally Accelerated Aged Oilpaper Transformer Insulation by Interfacial Polarization Spectra Measurements", Proceedings of the 5th International Conference on Properties and Application of Dielectric Materials, IEEE Publication Number: 0-7803-2651-2 (c) 1997 IEEE, May 25-30, 1997, Seoul, Korea, 129 pp.463-466.
 62. Saha, T.K., Darveniza, M., "Ageing of Transformers Insulation: A Study by Interfacial Polarisation Spectra Measurements", Proceedings of the Australasian Universities Power Engineering Conference, and the Institution of Engineers Australia: Electric Energy Conference, Sydney, Australia, 29 September-1October, 1997, pp.61-66.
 63. Darveniza, M., Saha, T.K., "Electrical Over-Stress Protection of Electrical and Electronic Equipment- A New Subject at the University of Queensland", Proceedings of the 1997 IEEE Frontiers in Education Conference (FIE'97), Pittsburgh, USA, November 6-8, 1997, pp. 1037-1040, IEEE Catalogue no. 97CH36099.
 64. Darveniza, M., Saha, T.K., Coy, L.A., "An Integrated and Modular Masters Degree Course in High Voltage and Insulation Engineering for the South East Asia Pacific Region", Proceedings of the 11th Conference of the Electricity Power Supply Industry (CEPSI), Kuala Lumpur, Malaysia, October 1996, pp. 37-46
 65. Darveniza, M., Saha, T.K., Hill, D.J.T., Le, T. T. "Studies of the Condition of Thermally Aged Transformer board Insulation By Electrical and Chemical Techniques", Proceedings of the 4th International conference on Properties and Applications of Dielectric Materials, Brisbane, Vol.2, pp. 748-751, July 3-7, 1994, IEEE Publ. No. 94-CH3311-8.
 66. Darveniza, M., Saha, T.K., Hill, D.J.T., Le, T. T. "Condition Monitoring of the Bulk

- Insulation of Distribution Transformers By Electrical and Chemical Techniques”, Proceedings of the 4th International conference on Properties and Applications of Dielectric Materials, Brisbane, Vol.2, pp. 744-747, July 3-7, 1994, IEEE Publ. No. 94-CH3311-8.
67. Darveniza, M., Hill, D.J.T, Le, T. T, Saha, T.K. and Williams, B. “Chemical Degradation of Cellulosic Insulation Paper for Power Transformers”, Proceedings of the 4th International conference on Properties and Applications of Dielectric Materials, Brisbane, July 3-7, 1994, IEEE Publ. No. 94-CH3311-8.
 68. Saha, T.K., Darveniza, M. “A Review of the Importance of Condition Monitoring of Aged Power Transformer and Its Different Diagnostic Techniques for the Reliable Operation of Power Systems”, Proceedings of the Eighth National Power Systems Conference, IIT, New-Delhi, India, 14-17th December 1994, Vol.2, pp. 626-631.
 69. Hill, D.J.T., Le, T. T, Darveniza, M., Saha, T.K. and Williams, B., "Lifetime of Cellulose Insulation Paper in a Power Transformer", Polymer Preprint, 34, 223-223, 1993.
 70. Darveniza, M., T. K. Saha, D. J. T. Hill and T. T. Le, "Condition Monitoring of Transformer Insulation by Electrical Diagnostic Methods and Comparison with Chemical Methods", CIGRE Sym., “Diagnostic and Maintenance Techniques”, Berlin, April 1993, paper 110-22, 6pp.
 71. Darveniza, M., D. J. T. Hill, T. T. Le, T. K. Saha and B. Williams, "Lifetime of Cellulose Insulation Paper in a Power Transformer", 206th National Meeting American Chemical Society, Chicago, August 1993.
 72. Hill, D.J.T., Le, T. T, Darveniza, M., Saha, T.K. and Williams, B., "Gel Permeation Chromatography of Thermal Degradation of Cellulose Insulation Paper in an Aged Power Transformer", Materials Forum, 16, 141-146, 1992.
 73. Darveniza, M., T. K. Saha, D. J. T. Hill, and T. T. Le, "Assessment of Insulation of Aged Power Transformers by Interfacial Polarization Spectrum and its Correlation with Chemical Properties", IEE 6th International Conference on Dielectric Materials, Measurements and Applications (DMMA6), Manchester, UK, Sept 1992, Publ. No 363, pp 233-236.
 74. Darveniza, M., Saha, T. K., D. J. T. Hill and T. T. Le, "Study of Degradation of Cellulose Insulation Materials in Aged Power Transformers by Electrical and Chemical Techniques", IEAust, Electric Energy Conference, Brisbane, Oct 1992, pp 299-305.
 75. M. Darveniza, T. K. Saha, D. J. T. Hill and T. T. Le, "Assessment of Insulation in Aged Power Transformers and the Correlation Between the Electrical and Chemical Properties", Electrical Insulation and Dielectric Phenomena - 92, CEIDP, Victoria, Canada, Publ. No 92 CH3123-7, paper 9-2, pp 671-678, 1992.
 76. M. Darveniza, D. J. T. Hill, T. T. Le and T. K. Saha, "Studies of the Condition of Insulation in Age Power Transformers Part 2-Fundamental Electrical and Chemical Considerations", Proc. of the third Int. Conf. Prop. And Application of Dielectric Materials. (ICPADM-91), Tokyo, July 1991, IEEE Publ. 91 CH 2937-1, Vol. 2 paper 110, pp. 1120-1123.

Research Higher Degree Thesis supervised

1. Zheng Tong Yao, "Condition assessment of power transformers by IPS measurement", -- M. Eng. Sc Thesis, School of Computer Science and Electrical Engineering, University of Queensland. St. Lucia, Qld-4072, Australia.
2. John Edwards, "Magnetic Flux Based Transformer Model", PhD thesis, School of Information Technology & Electrical Engineering, University of Queensland, St. Lucia, Qld-4072, Australia, 2003.
3. Zheng Tong Yao, "Analysis and Modelling of Dielectric Response in Power Transformer Insulation", PhD awarded in November 2003, School of Computer Science and Electrical Engineering, University of Queensland. St. Lucia, Qld-4072.
4. Karl P Mardira, "Investigation of Modern Diagnostic Techniques for the Assessment of Degradation of Metal Oxide Surge Arresters" PhD awarded in November 2003. School of Information Technology & Electrical Engineering, University of Queensland, St. Lucia, Qld-4072,

Papers in Power System Analysis

1. Aumuller, C.A., Saha, T.K., "Investigating the Impact of Powerformer™ on Large Scale System Voltage Stability", Paper accepted for the IEEE Power Engineering Society General Meeting, 12-16 June, 2005, San Francisco, USA.
2. Limbu, T. R., Saha, T. K., "Investigations of the Impact of Powerformer™ on Composite Power System Reliability", Paper accepted for the IEEE Power Engineering Society General Meeting, 12-16 June, 2005, San Francisco, USA.
3. Goh, S. H., Xu, Z., Dong, Z. Y., Saha, T.K., "Economic Constrained Transfer Capability Assessment", Paper accepted for the IEEE Power Engineering Society General Meeting, 12-16 June, 2005, San Francisco, USA
4. Ha, L. T., Saha, T. K., "Investigation of Power Loss and Voltage Stability Limits for Large Wind Farm Connections to a Subtransmission Network", Proceedings of the IEEE Power Engineering Society General Meeting, Denver, Colorado, USA , June 6-10 2004.
5. Sansom, D.C., Saha, T.K., "Energy Constrained Generation Dispatch based on Price Forecasts Including Expected Values and Risk", IEEE Power Engineering Society General Meeting, Denver, Colorado, USA, June 6-10 2004
6. Nguyen, P. T., Saha, T. K., "Dynamic Voltage Restorer Against Balanced and Unbalanced Voltage Sags: Modelling and Simulation", Proceedings of the IEEE Power Engineering Society General Meeting Denver, Colorado, USA , June 6-10 2004
7. Thapar, A, Saha, T.K., Dong, Z. Y., Investigation of Power Quality Categorisation and Simulating It's Impact on Sensitive Electronic Equipment", Paper accepted (25 January 2004), for the Proceedings of the IEEE Power Engineering Society General Meeting, to be held at Denver, Colorado, USA , June 6-10 2004.
8. Lim, V., Saha, T. K., "Loss Allocation based on Network Reduction in Deregulated Electricity Market", Proceedings of the Australasian Universities Power Engineering Conference- AUPEC 2004, in Brisbane, 26-29 September 2004
9. Jaganathan, R. K. Saha, T.K., "Voltage Stability Analysis of Grid Connected Embedded Generators", Proceedings of the Australasian Universities Power Engineering Conference- AUPEC 2004, in Brisbane, 26-29 September 2004.
10. Hemetsberger, F. A., Saha, T. K., "An Investigation of Power Quality Problems in a Remote Mine Site in Papua New Guinea", Proceedings of the Australasian Universities Power Engineering Conference- AUPEC 2004, in Brisbane, 26-29 September 2004

11. Sansom, D. C., Saha, T.K., Downs, T., "Multiple model forecasting of Australian regional wholesale electricity prices", Proceedings of the Australasian Universities Power Engineering Conference- AUPEC 2004, in Brisbane, 26-29 September 2004
12. Aumuller, C. A., Saha, T. K., " Load Capability and Collapse Margin Analysis of the Large Scale Queensland Power System", Proceedings of the Australasian Universities Power Engineering Conference- AUPEC 2004, in Brisbane, 26-29 September 2004
13. Sansom, D.C., Saha, T.K., "Optimizing Generator Dispatch by Quadratic Programming Using the Minimum Energy State of System Method", Proceedings of the Australasian Universities Power Engineering Conference- AUPEC 2004, in Brisbane, 26-29 September 2004
14. Aumuller, C., Saha, T.K., "Investigating the Impact of Powerformer™ on Voltage Stability by Dynamic Simulation", IEEE Transactions on Power Systems, Volume: 18 Issues: 3, Aug. 2003, Page(s): 1142 -1148.
15. Aumuller, C., Saha, T.K., "Determination of Power System Coherent Bus Groups by Novel Sensitivity Based Method for Voltage Stability Assessment", IEEE Transactions on Power Systems, Volume: 18, Issue: 3, Aug. 2003, Page(s): 1157 -1164.
16. Jiang, H. L., Tang, X. J., Dong, Z. Y., Saha, T. K., "An Advanced Method for Eliminating Impacts from Frequency Deviations in Power System Signal Processing", Electric Power Systems Research, Volume 67, Issue 3, December 2003, Pages 177-184.
17. Sansom, D.C., Downs, T., Saha, T.K., "Evaluation Of Support Vector Machine Based Forecasting Tool In Electricity Price Forecasting For Australian National Electricity Market Participants", Journal of Electrical and Electronics Engineering Australia, Vol.22, No. 3, pp. 227-234, Published by Engineers Australia College of Electrical Engineers.
18. McDonald, J. D. F., Saha, T.K., "Selection of Generator Fault Impedances for Enhancement of Network-Wide Fault Behaviour", Journal of Electrical and Electronics Engineering Australia, Vol.22, No. 3, pp. 235-242, Published by Engineers Australia College of Electrical Engineers.
19. Durgaprasad, G., Hanmandlu, M., Saha, T.K. "Real-Time Decoupled Equivalent Models for Static Security Analysis", IEEE Transactions on Power Systems, Vol. PWRS-1, No. 3, pp. 18-24, August 1986.
20. James, J, Saha, T.K., "An Investigation of Harmonic Content in a Remote Mine Site", Proceedings of the Sixth International Power Engineering Conference (IPEC2003), Singapore, November 27-29, 2003.Vol. 1, pp.169-174
21. Sansom, D. C., Downs, T., and Saha, T. K., "Support Vector Machine Based Electricity Price Forecasting For Electricity Markets utilising Projected Assessment of System Adequacy Data", Proceedings of the Sixth International Power Engineering Conference (IPEC2003), Singapore, November 27-29, 2003.Vol. 2, pp. 783-788.
22. Aumuller, C., Saha, T.K., "Investigating Voltage Collapse and Subsequent Transient Instability in a large Power System", Proceedings of the 2003 IEEE Power Engineering Society General meeting, Toronto, Ontario, Canada, 13-17July 2003.
23. McDonald, J., Saha, T.K., "Investigations into the Influence of generator Design on Rating of Circuit Breakers in a High Voltage Transmission Network", Proceedings of the 2003 IEEE Power Engineering Society General meeting, Toronto, Ontario, Canada, 13-17July 2003.
24. Goh, S. H., Dong, Z. Y., Saha, T. K., "Security constrained transfer capability assessment", Edwards, J., Saha, T.K., "Establishment of Current in Conductors", Proceedings of the 2003 Australasian Universities Power Engineering Conference (AUPEC'2003), Christchurch, New Zealand, 28 September- 1 October 2003.
25. Thapar, A., Saha, T. K., Dong, Z. Y., "A fuzzy logic based recognition technique for power quality categorization", Proceedings of the 2003 Australasian Universities Power Engineering Conference (AUPEC'2003), Christchurch, New Zealand, 28 September- 1 October 2003.
26. Lim, V., Saha, T. K., Downs, T., "Preliminary findings on usage allocation and loss allocation of electricity in a deregulated market", Proceedings of the 2003 Australasian

- Universities Power Engineering Conference (AUPEC'2003), Christchurch, New Zealand, 28 September- 1 October 2003.
27. Aumuller, C., Saha, T. K., "Investigating the Influence of the Generator Step-Up Transformer on Power System Voltage Stability and Loadability". Journal of Institution of Engineers, Singapore, Vol 42, No. 1, pp. 20-24, 2002.
 28. Aumuller, C. A., Saha, T.K., "Analysis and Assessment of Large Scale Power System Voltage Stability by a Novel Sensitivity Based Method", Proceedings of the IEEE Power Engineering Society Summer Meeting, July 2002, Chicago, USA.
 29. McDonald, J., Saha, T.K., "Impact of Directly-Connected Generator Design on Power System Balanced Fault Behaviour" Proceedings of the Power and Energy Systems 2002 conference, May 13-15, Marina Del Rey, California, USA.
 30. McDonald, J., Saha, T.K., "A Sensitivity Method for Assessing the Impact of Generator/Transformer Impedance upon Power System Fault Behaviour", Proceedings of the IEEE/PES Transmission and Distribution Conference and exhibition 2002: Asia Pacific, October 6-10, 2002, Yokohama, Japan.
 31. McDonald, J., Saha, "Development of a Technique for Calculation of the Influence of generator design on Power System Balance fault Behaviour", Proceedings of the IEEE Power Engineering Society Summer Meeting, July 2002, Chicago, USA.
 32. Liang, W. C., Saha, T.K., Dong, Z. Y., "Power Quality Investigation with Wavelet Techniques", Proceedings of the Australasian Universities Power Engineering Conference, Melbourne, Australia-29 September-3 October 2002.
 33. McDonald, J. D. F., Saha, T.K., "Selection of Generator Fault Impedances for Enhancement of Network-Wide Fault Behaviour", Proceedings of the Australasian Universities Power Engineering Conference, Melbourne, Australia-29 September-3 October 2002.
 34. Peard, A. S., and Saha, T.K., and Sansom, D. C., "Forecasting Inter and Intra Regional Transmission Line Power Flows In both Radial and Meshed Electrical Networks", Proceedings of the Australasian Universities Power Engineering Conference, Melbourne, Australia-29 September-3 October 2002.
 35. Sansom, D.C., Downs, T., Saha, T.K., "Evaluation Of Support Vector Machine Based Forecasting Tool In Electricity Price Forecasting For Australian National Electricity Market Participants", Proceedings of the Australasian Universities Power Engineering Conference, Melbourne, Australia-29 September-3 October 2002.
 36. Aumuller, C., Saha, T.K., "Determination of Power System Coherent Bus Groups by Novel Sensitivity Based Method for Voltage Stability Assessment", Won 3rd best students paper in 2001 IEEE/PES Transmission and Distribution Conference, October 28-November 2, 2001, Atlanta, USA, pp 1-6.
 37. McDonald, J., Saha, T. K., "Preliminary Investigations into the Influence of Generator and Transformer Impedance on Power System Fault Behaviour", Australasian Universities Power Engineering Conference, Perth, Australia, 23-26 September 2001. pp 591-595.
 38. Aumuller, C., Saha, T. K., "Investigating the Influence of the Generator Step-Up Transformer on Power System Voltage Stability and Loadability". Proceedings of the International Power Engineering Conference, Singapore, 17-19 May 2001. pp. 548-553.
 39. Jun, W., Saha, T.K., "Simulation of Power Quality on a University Distribution System", Proceedings of the IEEE 2000 Power Engineering Society Summer Meeting, 16-20 July 2000, Seattle, USA, pp 2326-2331. \Neimanis, R., Saha, T.K., Eriksson, R., "Determination of Moisture Content in Mass Impregnated Cable Insulation Using Low Frequency Dielectric Spectroscopy", Proceedings of the IEEE 2000 Power Engineering Society Summer Meeting, 16-20 July 2000, Seattle, USA, pp. 463-468.
 40. Sansom, D.C., Saha, T.K., "Neural Networks For Forecasting Electricity Pool price in Deregulated Electricity Supply Industry", Proceedings of The Australasian Universities Power Engineering Conference, Darwin, Australia, October 1999, pp. 214-219.
 41. Saha, T.K., Senini, N., "Short Term Load Forecasting Using an Artificial neural Network," Proceedings of The Australasian Universities Power Engineering Conference, Melbourne, October 1996, Vol. 3 pp. 661-666.

Research Higher Degree Thesis supervised

1. Damien Sansom, "Evaluation of the Suitability of Neural Networks for Forecasting Electricity Pool Prices in Deregulated Electricity Supply Industries", M. Eng. Sc thesis, School of Computer Science and Electrical Engineering, University of
2. Craig Aumuller, "Investigation into the impact of Powerformer™ Design on Power System Operational Security". PhD thesis, School of Information Technology & Electrical Engineering, University of Queensland, St. Lucia, Qld-4072, Australia, 2003.
3. Alok Thapar, "Investigation of Power Quality categorisation and simulating its impact on sensitive electronic equipment", M. Phil thesis submitted in August 2004, School of Information Technology & Electrical Engineering, University of Queensland, St. Lucia, Qld-4072, Australia,
4. John McDonald, "Investigations Into The Design Of Powerformer Tm For Optimal Generator And System Performance Under Fault Conditions", PhD December 2004, School of Information Technology & Electrical Engineering, University of Queensland, St. Lucia, Qld-4072, Australia,