

## CURRICULAM VITAE

### 1. PERSONAL :

- a) Name : **SUBRATA KUMAR ADITYA**
- b) Father's Name : Joy Gopal Aditya
- c) Mailing Address : Dept. of Applied Physics, Electronics & Communication Engineering,  
Dhaka University, Dhaka – 1000, Bangladesh.
- d) Present Address : 56/J, North Fuler Road, Dhaka University R/A,  
Dhaka – 1000.
- e) Date of Birth : 31<sup>st</sup> January, 1962.
- f) Nationality : Bangladeshi
- g) Sex : Male

### 2. ACADEMIC HISTORY :

Examination	Board/University	Year of Passing	Class/Div.
S.S.C	Jessore Board	1976	1 <sup>st</sup> Div
H.S.C	Jessore Board	1978	1 <sup>st</sup> Div
B.Sc.(Hons) Applied Physics & Electronics.	Dhaka University	1981 (Held in 1983)	1 <sup>st</sup> Class
M.Sc. Applied Physics & Electronics.	Dhaka University	1982 (Held in 1986)	1 <sup>st</sup> Class
Ph.D. Electical Engineering	Indian Institute of Technology, Kharagpur, India	2001	

### 3. JOB EXPERIENCE :

- a) Working as a **Professor** in the Department of Applied Physics, Electronics & Communication Engineering, University of Dhaka since 2<sup>nd</sup> November, 2004.
- b) Worked as an **Associate Professor** in the Department of Applied & Electronics, University of Dhaka since 8<sup>th</sup> April, 2001 to 1<sup>st</sup> November 2004.
- c) Worked as an **Assistant Professor** in the Department of Applied & Electronics, University of Dhaka from 12<sup>th</sup> March, 1992 to 7<sup>th</sup> April, 2001.

- d) Worked as a **Lecturer** in the Department of Applied & Electronics, University of Dhaka from 15<sup>th</sup> July, 1987 to 11<sup>th</sup> March, 1992.
- e) Working as a **part time teacher** in the Department of Microbiology, University of Dhaka since 1<sup>st</sup> May, 2002.

#### 4. ADVANCE RESEARCH AND TRAINING :

- a) Attending in **advance training on Wind Analysis and Assessment Programme(WAsP)** at Tata Energy Research Institute(TERI), Bangalore, India and Sponsored by United Nation Environment Program(UNEP), conducted by Riso National Laboratory, Denmark from 30<sup>th</sup> September, 2002 to 4<sup>th</sup> October, 2002.
- b) Attending in **advance research and training programme on Solar Energy Utilization** at Anna University, Chennai, India and Sponsored by United Nation University, Japan & Dept. of Science & Technology, Govt. of India from 15 – 9 – 1995 to 24 – 6 – 1996.

#### 5. LIST OF PUBLICATIONS

##### PUBLICATIONS IN JOURNAL

1. M. Shamim Kaiser, A. Anwar, **S. K. Aditya** and R. K. Mazumder, “Financial Feasibility & Sensitivity Analysis of a 1.5kW roof-top grid connected PV system in Bangladesh”, **International Journal of Solar Energy**(Accepted for publication).
2. **S. K. Aditya** and D. Das, “Load Frequency Control of an Interconnected Hydrothermal Power System Considering Battery Energy Storage Facility”, **International Journal of Power & Energy System**, Vol. 24, No. 1, January 2004, pp. 38 – 45.
3. **S. K. Aditya** and D. Das, “Design of Load Frequency Controllers Using Genetic Algorithm for Two Area Interconnected Hydro Power System”, **International Journal of Electric Power Components and Systems**, Vol. 31, No. 1, January 2003, pp. 81 – 94.
4. **S. K. Aditya** and D. Das, “Application of a genetic algorithm for load frequency controller design of an interconnected hydro-thermal power system”, **International Journal of Engineering Intelligent Systems**, Vol. 10, No. 2. June 2002, pp. 75 – 84.
5. **S. K. Aditya** and D. Das, “Battery energy storage for load frequency control of an interconnected power system”. **International Journal of Electric Power System Research**, Vol. 58, No. 3, July 2001, pp. 179 – 185.
6. **S. K. Aditya** and D. Das, “Load-frequency control of an interconnected hydro-thermal power system with new area control error considering battery energy storage facility”. **International Journal of Energy Research**, Vo. 24, May 2000, pp.525 – 538.

7. D. Das, **S. K. Aditya** and D. P. Kothari, "Dynamics of diesel and wind turbine generators on an isolated power system". **International Journal of Electrical Power and Energy Systems**, Vol. 21, March 1999, pp. 183 – 189.
8. **S. K. Aditya** and D. Das, "Application of battery energy storage system to load frequency control of an isolated power system". **International Journal of Energy Research**, Vol. 23, March 1999, pp. 247 – 258.
9. D. Das, **S. K. Aditya** and S. Ghosh, "Interconnected operation of small-hydroelectric and diesel power systems". **International Journal of Energy Research**, Vol. 22, October 1998, pp. 1039 – 1047.
10. Mir Zayed Hasan, **S. K. Aditya**, A. H. M. Asadul Huq and Farruk Ahmed, "Comparison of the Effects of the Optimization of Different Parameters on the Performance of a Noise Canceller System", **The Journal of Bangladesh Electronics Society**, Vol. 5, No. 1, June 2005, pp. 21 – 30.
11. M. Shamim Kaiser, **S. K. Aditya** and R. K. Mazumder, "Low Power Lighting System for Rural House-Hold and its Cost Analysis", **The Journal of Bangladesh Electronics Society**, Vol. 5, No. 1, June 2005, pp. 71 – 75.
12. M. S. Ali, **S. K. Aditya**, A. H. Howlader and R. K. Mazumder, "Performances of Statistical Models for Measuring Solar Radiation from Satellite Data", **The Journal of Bangladesh Electronics Society**, Vol. 5, No. 1, June 2005, pp. 101 - 106.
13. Mohammed Nurunnabi, **Subrata Kumar Aditya** and Shahida Rafique, "Simulation, Design and Development of an Artificial Neural System(ANS) for spatio-temporal pattern recognition", **The Journal of Bangladesh Electronics Society**, Vol. 5, No. 1, June 2005, pp. 107 - 112.
14. M. Shamim Kaiser, Suraiya Pervin, **S. K. Aditya** and R. K. Mazumder, "A Predictive Digital Filter Based Zero-Crossing Detection Technique for PV Inverters", **The Journal of Bangladesh Electronics Society**, Vol. 5, No. 1, June 2005, pp. 125 - 128.
15. **S. K. Aditya**, D. Das and S. Pervin, "Load Frequency Controllers Design of Multi-Turbine Generator System Using Genetic Algorithm", **The Journal of the Bangladesh Electronics Society**, Vol. 4, No. 2, June 2004, pp. 34 – 39.
16. Suraiya Pervin and **Subrata Kumar Aditya**, "A real Time Architecture for KLT Based Adaptive Equalizer", **The Dhaka University Journal of Science**, Vol. 52, No. 2, January 2004, pp. 207 – 213.
17. Suraiya Pervin and **Subrata Kumar Aditya**, "A Very High Throughput Architecture for the Trigonometric LMS Based Adaptive Equalizer", **The Dhaka University Journal of Science**, Vol. 51, No. 2, July 2003, pp. 221 – 226.
18. Suraiya Pervin and **S. K. Aditya**, "A Pipelined Architecture for Updating Normalized Covariance Matrix in Real Time Signal Processing ", **The Dhaka University Journal of Science**, Vol. 51, No. 1, January 2003, pp. 109 - 115.

19. Suraiya Pervin and **Subrata Kumar Aditya**, “A Hardware Efficient Systolic Architecture for Adaptive Decision Feedback Equalizer”, **The Dhaka University Journal of Science**, Vol. 51, No. 1, January 2003, pp. 117 - 125.
20. Suraiya Pervin and **Subrata K. Aditya**, “A Latency Free Pipelined Architecture of VSLMS Based Equalizer”, **The Dhaka University Journal of Science**, Vol. 52, No.3, July 2004, pp. 309 – 316.
21. Suraiya Pervin and **Subrata Kr. Aditya**, “ A Cordic Realization of the Complex LMS Based Adaptive Equalizer”, **The Dhaka University Journal of Science**, Vol. 53, No.2, July 2005, pp. 25-32..
22. Suraiya Pervin and **Subrata Kumar Aditya**, “A Cordic Realization of the Karhunen-Loeve Transform Based Adaptive Equalizer”, **The Dhaka University Journal of Science**, (Accepted for publication, Paper no. – DUJ Sci MS No. 878/03).
23. **S. K. Aditya**, R. Chowdhury, N. C. Bhowmik, R. K. Mazumder and J. Rahman, “Design and performance studies of an intermittently tracked cylindrical parabolic solar concentrator”. **The Dhaka University Journal of Science**, Vol. 42, No.1, January 1994, pp. 161 – 166.
24. R. K. Mazumder, **S. K. Aditya**, S. Haider and M. Hussain, “Fabrication of a photovoltaic module in Dhaka and evaluation of its performances”. **The Dhaka University Studies(Part-B)**, Vol. 41, No.1, January 1993, pp.77 – 81.
25. Motahar Hossain, R. K. Mazumder, **S. K. Aditya** and S. Haider, “Design of an Electronic automatic sun tracker”. **The Dhaka University Studies(Part-B)**, Vol.40, No. 2, July 1992, pp. 163 – 167.
26. Sajjad Haider, Rezaul Karim Mazumder, **Subrata Kumar Aditya** and Farruk Ahmed, “A simple maximum power point tracker for photovoltaic systems”. **The Dhaka University Studies(Part-B)**, Vol. 39, No.2, July 1991, pp. 165 – 170.
27. Zahid Hasan Mahmood, Jalalur Rahman, N. C. Bhowmik, R. K. Mazumder and **S. K. Aditya**, “Performance of a seasonally adjusted linear solar concentrator using a selective surface coated absorber”. **The Dhaka University Studies(Part-B)**, Vol.37, No.2, July 1989, pp. 165 – 172.
28. Mir Zayed Hasan and **S. K. Aditya**, “Optimization of the Length of Adaptive filters using Genetic Algorithm”, **The Dhaka University Journal of Science**.(Accepted for Publication)
29. Asif Anwar, M. Shamim Kaiser, **S. K. Aditya** and R. K. Mazumder, “A Supercapacitive multilayer voltage source inverter for Photovoltaic System”, **The Dhaka University Journal of Science**.(Accepted for Publication)
30. M. Shamim Kaiser, Asif Anwar, **S. K. Aditya** and R. K. Mazumder, “Financial Feasibility of a Roof-top grid-connected PV system in Dhaka”, **The Dhaka University Journal of Science**.(Accepted for Publication)

31. S. K. Khadem, H. R. Ghosh, **S. K. Aditya** and M. Hussain, “Wind Resource Assessment over Kutubdia Island, Bangladesh”, **The Dhaka University Journal of Science**. (Accepted for Publication).
32. S. K. Khadem, H. R. Ghosh, **S. K. Aditya**, N. C. Bhowmik and M. Hussain, “Wind Energy Assessment for the Coastal Part of Bangladesh”, **The Dhaka University Journal of Science**. (Accepted for Publication).

#### **PUBLICATIONS IN CONFERENCE PROCEEDINGS**

33. Suraiya Pervin and **Subrata K. Aditya**, “An Area-Efficient Adaptive Equalizer Based on the Complex TLMS”, **The Proceedings of International Conference on Computer and Information Technology (ICCIT 2005)**, 28 – 30 December, Dhaka, pp. 331 – 336.
34. Mir Zayed Hasan, **Subrata K. Aditya** and Farruk Ahmed, “Filter Length Optimization Using Genetic Algorithm”, **The Proceedings of International Conference on Computer and Information Technology (ICCIT 2005)**, 28 – 30 December, Dhaka, pp. 353 – 356.
35. Suraiya Pervin and **Subrata K. Aditya** and Farruk Ahmed, “A Pipelined Architecture for Computing Eigenvectors”, **The Proceedings of International Conference on Computer and Information Technology (ICCIT 2005)**, 28 – 30 December, Dhaka, pp. 940 – 945.
36. M Shamim Kaiser, S. A. Sharna, Asif Anwar, **S. K. Aditya** and R. K. Mazumder, “Artificial Neural Network Based Maximum Power Point Tracker (MPPT) for Solar Electric Vehicle”, **The Proceedings of International Conference on Computer and Information Technology (ICCIT 2005)**, 28 – 30 December, Dhaka, pp. 956 – 960.
37. Mohammad Nurunnabi, **Subrata Kumar Aditya** and Shahida Rafique, “Discrete Structure of an Artificial Neural System (ANS) for Spatio-temporal Pattern Recognition”, **The Proceedings of International Conference on Computer and Information Technology (ICCIT 2005)**, 28 – 30 December, Dhaka, pp. 1021 - 1024.
38. M. Shamim Kaiser, A. Anwar, **S. K. Aditya** and R. K. Mazumder, “Financial Feasibility and Sensitivity Analysis of a Roof-top Grid-connected PV System in Bangladesh”, **Proceedings of International Congress on Renewable Energy (ICORE) – 2005**, 20 – 22 January 2005, Pune, India, pp. 100 – 105.
39. Mir Zayed Hasan, **Subrata K. Aditya** and Farruk Ahmed, “Step Size Optimization of the LMS Algorithm for Adaptive Filters using Genetic Algorithm”, **The Proceedings of International Conference on Computer and Information Technology (ICCIT 2004)**, 26 – 28 December, Dhaka.
40. Asif Anwar, M. Shamim Kaiser, **S. K. Aditya** and R.K. Mazumder, “A Supercapacitive Multilevel Voltage Source Inverter for Photovoltaic System”, **Proceedings of International Conference on Computer, Communication and Information Technology (ICCIT) – 2004**, 26 – 28 December, 2004, BRAC University, Dhaka, pp. 359 – 364.

41. M. Shamim Kaiser, A. Anwar, **S. K. Aditya** and R. K. Mazumder, "Research and Utilization of Renewable Energy Resources in Bangladesh", **Proceedings of International Conference on Environmentally Sustainable Development**, 26 – 28 June, 2005, COMSTATS Institute of Information, Abbotabad, Pakistan.
42. S. K. Khadem, H. R. Ghosh, M. S. Kaiser, **S. K. Aditya** and M. Hussain, "Wind Energy Assessment for the Coastal part of Bangladesh", **Proceedings of International Conference on Environmentally Sustainable Development**, 26 – 28 June, 2005, COMSTATS Institute of Information, Abbotabad, Pakistan.
43. S. K. Khadem, H. R. Ghosh, M. S. Kaiser, **S. K. Aditya**, "Energy Efficient System for Saint Martins Island of Bangladesh", **Proceedings of International Conference on Environmentally Sustainable Development**, 26 – 28 June, 2005, COMSTATS Institute of Information, Abbotabad, Pakistan.
44. Suraiya Pervin and **Subrata Kr. Aditya**, "A High Speed Architecture to Compute Eigenvalues of Data Covariance Matrix", **Proceedings of 6<sup>th</sup> International Conference on Computer & Information Technology (ICIT - 2003)**, 19 – 21 December, 2003, Jahangirnagar University, Dhaka.
45. S. K. Khadem, J. Badger, S. M. Ullah, **S. K. Aditya**, H. R. Ghosh and M. Hussain, "The Effect of Obstacles Close to the Anemometer Mast Located on a Building on Wind Flow in the WasP Model", **Proceedings of International Conference on Renewable Energy Technology for Rural Development (RETRUD – 03)**, 12 – 14 October 2003, Kathmandu, Nepal, pp. 323 – 326.
46. S. K. Khadem, **S. K. Aditya**, S. M. Ullah, H. R. Ghosh and M. Hussain, "WASP Analysis of Wind Energy over Kutubdia and Selection of Sites for Wind Generators", **Proceedings of 3<sup>rd</sup> International Conference on Renewable Energy for Sustainable Development (ICRES D – 2003)**, 2 – 4 October 2003, Dhaka, pp. 271 – 275.
47. M. M. Bhuiyan, M. Ali Asgar, R. K. Mazumder and **S. K. Aditya**, "Design of a Stand-Alone Residential Photovoltaic Power System at Dhaka". **Proceedings of 2<sup>nd</sup> International Seminar on Renewable Energy for Poverty Alleviation**, IEB, Dhaka, Bangladesh, November 26 – 27, 1999, pp. 231 – 238.
48. **S. K. Aditya**, A. Subrahmanyam and A. N. Rao, "Design and development of low power photovoltaic multiutility power pack". **Proceedings of National Solar Energy Convention-1996**, Calcutta, India, 27 – 29 December, 1996, pp. 228 – 231.
49. S. Haque, **S. K. Aditya** and R. K. Mazumder, "Design and ray trace evaluation of second-stage concentrator for PV systems". **Proceedings of National Solar Energy Convention-1996**, Calcutta, India, 27 – 29 December, 1996, pp. 212 – 215.
50. S. Haider, R. K. Mazumder, Zahid Hasan Mahmood and **S. K. Aditya**, "A PV power driven small water pump controlled by a maximum power point tracker". **Proceedings of 6<sup>th</sup> International Photovoltaic Science and Engineering Conference (PVSEC – 6)**, New Delhi, India, 10 – 14 February, 1992, pp. 609 – 611.

51. M. Hussain, **S. K. Aditya**, N. C. Bhowmik, K. C. Das, S. Islam, F. A. Khan, R. K. Mazumder, A. Rahim and M. G. Rasul, "A study of solar radiation in Dhaka, Bangladesh", **Proceedings of National Solar Energy Convention – 1990**, Calcutta, India, 19 – 21 December, 1990, pp. 103 – 106.
52. **S. K. Aditya**, R. Chowdhury, N. C. Bhowmik, R. K. Mazumder and J. Rahman, "Performance studies of an intermittently tracked cylindrical parabolic trough". **Proceedings of National Solar Energy Convention – 1990**, Calcutta, India, 19 – 21 December, 1990, pp. 84 – 87.
53. M. Hussain, **S. K. Aditya** and D. Siddique, "Sunshine duration maps for Bangladesh". **Proceedings of National Solar Energy Convention – 1990**, Calcutta, India, 19 – 21 December, 1990, pp. 107 – 110.
54. M. Hussain, G. Ali and **S. K. Aditya**, "On estimation of sunshine duration from precipitation amount". **Proceedings of World Renewable Energy Congress, Reading, United Kingdom, 23 – 28 September, 1990**, pp. 3087 – 3090.