CV of Dr. Khosru Mohammad Salim

PERSONAL DETAILS

1. Name : Khosru Mohammad Salim
2. Gender : Male
3. Date of birth : 24th September 1968
4. National ID No. :2699501930618
5. Nationality : Bangladeshi
6. Marital Status : Married with two children
7. Address : Department of Electrical Engineering, Independent University, Bangladesh. Plot-16, Block-B, Aftabuddin Road, Bashundhara R/A, Dhaka-1229.
8. Telephone : +88-02---8401645
9. Mobile : +88-01711188617
10. Fax : +88-02-8401991
11. E-mail : khosru@iub.edu.bd, khosrumdsalim@yahoo.com
12. Website : http://eee.iub.edu.bd/sort_cv_khosru.php

ACEDEMIC QUALIFICATIONS

1. BSc (Electrical & Electronic Engineering), Bangladesh University of Engineering & Technology (BUET), 1993.
2. MSc (Electrical Engineering), Universiti Teknologi Malaysia (UTM), Johor Bahru. 1999.
3. PhD (Electrical Engineering), Kyoto University, Japan, 2004.

AWARDS

1. COE (Center of Excellent) Fellowship for pursuing doctoral study in Kyoto University, Japan (2000-2004).
2. ERPA (Emission Reduction Purchase Agreement) funded fellowship for pursuing master degree in UTM, Malaysia (1997-1999)

EXPERTISE

Power electronics, Photovoltaic systems, Renewable energy, Power system and embedded system.

PROFESSIONAL EXPERIENCES

1. Associate professor, Dept. of EEE, IUB (January, 2011 to present)
2. Assistant professor, Dept of EEE, IUB (April, 2004 to December, 2010)
3. Special research student, Superconducting lab, Kyoto university, Japan (April, 2000 to March, 2001)
4. Design engineer, SIRIM Malaysia Berhad, Kuala Lumpur, Malaysia (December, 1999 to March, 2000)
5. Instrument Engineer, Institute of scientific instrumentation, UGC, Dhaka (January, 1995 to August, 1997)
6. Assistant Engineer, Hey Electrical Industries Ltd, Dhaka (December, 1993 to December,1994)

MAJOR ADMINISTRATIVE APPOINTMENTS

1. Head, Department of Electrical & Electronic Engineering, IUB (February 2013---December 2015)
2. Member of Academic Council, IUB (February 2013--- December 2015)
3. Member of Selection committee, IUB (January 2012 – present)

CONTRIBUTIONS IN COURSE CURRICULUM DEVELOPMENT

Undergraduate Program

1. Computer Engineering
2. Electrical Engineering
3. Electronic and Telecommunication Engineering

Graduate Program

1. Telecommunication Engineering
2. Electrical and Electronic Engineering

TEACHING

Postgraduate (Masters by Coursework)

Power Electronics and Drives, Renewable Energy systems, Embedded Systems and Real time Interface.

Undergraduate Teaching

Industrial Electronics**,** Electrical Energy, Embedded Systems,

POSTGRADUATE THESIS SUPERVISION (2006 to 2014)

1. Zibran Islam**:** Technologies and its Integration with cellular Network
2. Gazi Mohammad Sharif : Implementation of microcontroller based remote monitoring and controlling system using cellular network
3. Faizun Nahar Nila : Remote Operation of a solar power plant through cellular network
4. Shegufta Naureen Akhter : Intelligent cooling system for reducing the operational cost in base transceiver station (BTS) room.
5. Saima Zinat : Development of security system using sensor devices
6. Jawad Hasan : Design and Optimization of a Small Wind Turbine Blade Considering the Low Wind Speed in the Coastal Area of Bangladesh

POSTGRADUATE PROJECT SUPERVISION (2006 to 2014)

1. Abdullah-al-Mamun “Development of Customer Service Management Operation for a new generation Mobile Operator”
2. Mahfuz Alam Hemen “Wi-Fi VoIP and Cellular Network Integration

THESIS EXAMINATION

Masters—as External Examiner

1. Khalid A. Ahmed (BUET—2013)

MAJOR RESEARCH PROJECTS FUNDED BY IUB (2006 to 2014)

1. Design and fabrication of PWM Sine wave inverter for photovoltaic application
2. Design and fabrication of 3-phase PWM sine wave inverter for photovoltaic application
3. 3 phase Induction motor controller using sine weighted PWM technique
4. 3 phase induction motor controller using space vector modulation technique
5. Solar powered irrigation pump controller development
6. Brushless DC motor controller development using PIC18f4431 microcontroller
7. Electric vehicle development using BLDC motor
8. Design and fabrication High efficient battery charger for electric easy bike
9. Solar powered industrial sewing machine development
10. Design and fabrication of single phase grid tie photovoltaic inverter
11. MPPT charge controller development for thin-film solar panel.

EXTERNAL FUNDED PROJECT

Principal Investigator: Green Energy Research Center, funded by 'Shaheed Khalek and Major Salek Bir Uttam Trust'

PROJECTS RECIEVED NATIONAL AWARD

1. Solar powered irrigation pump, 3rd position, National Electricity Week 2014
2. Solar powered induction cooker, 2nd position, National Electricity Week, 2015

INTELLECTUAL PROPERTY

1. DC rectifier type superconducting fault current limiter; Application number 2001-94520 (2001.3.29), publication number 2002-291150 (2002.10.4)
2. DC shield type superconducting fault current limiter; Application number 2003-61321 (2003.3.7)

CHAPTER IN BOOK

Zainal Salam**,** Khosru Mohammad Salim, "Design of a Three-phase Inverter Using Single-chip Microcontroller", in *Recent Advances in Power Inverters*, Penerbit UTM Press, 2008, pp. 134-150, ISBN 978-983-52-0647-4.

PUBLICATIONS: JOURNAL

[1] K.M. Salim, T. Hoshino, M. Nishikawa, T. Muta, T. Nakamura: "Preliminary Experiments on Saturated DC Reactor Type Fault Current Limiter'', IEEE Transactions on Applied Superconductivity, Vol. 12, No. 1, pp. 872 -- 875 (2002.3).

[2] K.M. Salim, T. Hoshino, A. Kawasaki, T. Muta, T. Nakamura: "Waveform Analysis of the Bridge Type SFCL during Load Changing and Fault Time'',IEEE Transactions on Applied Superconductivity, Vol. 13, No. 2, pp. 1992 -- 1995 (2003.6)

[3] Khosru Mohammad Salim, Itsuya Muta, Tsutomu Hoshino, Taketsune Nakamura, Masato: "Proposal of Rectifier Type Superconducting Fault Current Limiter with Non-Inductive Reactor (SFCL)'', Cryogenics, Vol. 44, No. 3, pp. 171 -- 176 (2004.3) ISSN 0011-2275.

[4] T. Hoshino, K.M. Salim, A. Kawasaki, T. Muta, T. Nakamura, M. Yamada: "Design of 6.6kV, 100 A saturated DC reactor type superconducting fault current limiter'', IEEE Transactions on Applied Superconductivity, Vol. 13, No. 2, pp. 2012 -- 2015 (2003.6).

[5] T. Hoshino, K.M. Salim, M. Nishikawa, I. Muta, T. Nakamura: "DC Reactor Effect on Bridge Type Superconducting Fault Current Limiter during Load Increasing'', IEEE Transactions on Applied Superconductivity, Vol. 11, No. 1, pp. 1944 -- 1947 (2001.3).

[6] T. Hoshino, K.M. Salim, M. Nishikawa, I. Muta, T. Nakamura: "Proposal of saturated DC reactor type superconducting fault current limiter (SFCL)'', Cryogenics, Vol. 41, No. 7, pp. 469 -- 474 (2001.7).

[7] T. Hoshino, K.M. Salim, M. Nishikawa, I. Muta, T. Nakamura: "Proposal of saturated DC reactor type superconducting fault current limiter (SFCL)'', Cryogenics, Vol. 41, No. 7, pp. 469 -- 474 (2001.7).

[8] T. Hoshino, M. Nishikawa, K.M. Salim, T. Nakamura, I. Muta: "Preliminary studies on characteristics of series-connected resistive type superconducting fault current limiter for system design'', Physica C, Vol. 354, No. 1 -- 4, pp. 120 -- 124 (2001.5).

[9] T. Hoshino, K.M. Salim, T. Nakamura, I. Muta, M. Yamada: "Experiment using Variable Reactor of Rectifier Type Superconducting Fault Current Limiter with a Short-Circuited Trigger Coil'', IEEE Transactions on Applied Superconductivity Vol. 14, No. 2, pp. 626 – 629, June, 2004

[10] T. Hoshino, I. Muta, T Nakamura, K. M. Salim, and M. Yamada"Non-Inductive variable reactor design and computer simulation of rectifier type superconducting fault current limiter**,"** IEEE Transactions on Applied Superconductivity, Vol. 15, No. 2, pp. 2063 – 2066, June, 2005.

[11] Zainal Salam, Khosru Mohammad Salim: "Generation of Pulse Width Modulation (PWM) Signals for Three-phase Inverter Using a Single-chip Micro controller, Jurnal Teknologi, No. 34(D), June 2001, pp. 1-12

[12] Zainal Salam, Khosru Mohammad Salim, Faridah Taha: "Design and Development of a Three-phase, 5kW Power Conditioning Unit for Fuel Cell System", Journal the Institution of Engineers, Malaysia (Jurnal IEM), Vol. 61, No. 2, June 2000, pp 71-77.

[13] Fatima Binte Zia, Khosru M Salim "Design and Implementation of a smart energy meter with data sending ability" Journal of Bangladesh Electronic Society (BES), issue, 2011, Vol.2, pp 73-79.

[14] Wahidul Hasan, Hafiz Ahmed and Khosru M Salim, “Generation of electricity using cow urine” International journal of innovation and applied studies, Vol. 9, No. 4, Dec. 2014, pp. 1465-1471.

[15] M. Ishtiaque Rahman and Khosru M. Salim “Comparison of conventional induction motor pump system with one containing a variable frequency drive: a quantitative performance analysis in low-voltage conditions”, International journal of electrical energy, Vol. 3 No. 2, June 2015.

[16] Jawad Hasan and Khosru M Salim, “Design and optimization of a small wind turbine blade considering the annual average wind speed in coastal areas of Bangladesh” Accepted for publishing in International journal of electrical energy, Vol. 4 No. 2, June 2015.

[17] Wahidul Hasan, Sajib Chakraborty, S. M. Salim Reza, Khosru M Salim and M. A. Razzak, “Improvement of system response of a PID controller in underdamped condition”, International journal of innovation and applied studies, Vol. 12, No. 4, Sept. 2015, pp. 864-873.

[18] Gazi Mohammad Sharif and Khosru Mohammad Salim, “Microcontroller based remote sensing and controlling using cellular network” Journal of telecommunications, Vo. 31, No. 2, August 2015, pp 8-14.

RECENT CONFERENCE PROCEEDINGS

[1] Khosru M. Salim, Md. Jasim Uddin, M. Ishtiaque Rahman and Mohammad Rejwan Uddin, “Design, construction and Implementation of a highly efficient lightweight and cost effective battery charger for electric easy bikes” 4th international conference on the developments in the renewable energy technologies [ICDRET’16], January 7-9, 2016, Dhaka, Bangladesh.

[2] Khosru M. Salim, Md. Jasim Uddin, Mohammad Rejwan Uddin, Saila Ishrat Annie and Zaima Tasneem, “Testing and performance analysis of 1kw locally made grid-tie photovoltaic inverter using thin-film solar panel ” 4th international conference on the developments in the renewable energy technologies [ICDRET’16], January 7-9, 2016, Dhaka, Bangladesh.

[3] Mohammad Rejwan Uddin, Mohammad Robiul Hossen and Khosru M Salim, “Design implementation and cost analysis of a solar powered water pump for multistoried building” 3rd international conference on green energy & technology [ICGET’15) September 11-12, 2015, Dhaka, Bangladesh.

[4] Zaima Tasneem, Saila Ishrat Annie and Khosru M Salim “Economic analysis of a 3kw solar based irrigation system and comparison with its diesel based counterpart” IEEE international WIE conference on electrical and computer engineering [Wiecon-ECE] Dec. 19-20, 2015. Dhaka, Bangladesh.

[5] Khosru M Salim, Shougat Nazbin Khan, Kazi Kayanat “Performance analysis of a remotely installed 3kw solar irrigation pump” 5th international conference on sustainable built environment [ICSBE 14], Dec. 12-15, 2014, Kendy, Srilanka.

[6] Saurav Das, Khosru M. Salim, "Design and implementation of one kilowatt capacity single phase grid tie photovoltaic inverter" International conference on electrical engineering and information technology [ICEEICT 2014], May 21-23, 2014, Dhaka, Bangladesh.

[7] Rubayat Hosen, Khosru M Salim, "Design, implementation and testing of a three phase BLDC motor controller", 2nd International conference on advances in electrical engineering [ICAEE 2013] December 19-21, 2013, Dhaka, Bangladesh

[8] Tahsina Hossain Loba, Khosru M. Salim, " Design and implementation of a micro inverter for single PV panel based solar home system". 2nd International conference on informatics, electronics & vision [ICIEV 13], May 17-18, 2013, Dhaka Bangladesh.

[9] SarwarShahidi, Khosru M Salim, "Design and implementation of energy meter with data sending capability using GSM network", 2nd International conference on advances in electrical engineering [ICAEE 2013] December 19-21, 2013, Dhaka, Bangladesh.

[10] Fatima Binte Zia, Khosru M Salim, Nafisa Binte Yousuf, Rafid Haider, " Design and implementation of a single phase grid tie photovoltaic inverter" 2nd international conference on the developments in the renewable energy technologies [ICDRET'12], January 5-7, 2012, Dhaka, Bangladesh.

References:

1. **Prof. Tsutomu Hoshino**
   School of Science and Engineering, Meisei University
   Tel: +81-42-591-5793 Fax: +81-42-591-9973
   E-mail: *hoshino@asl.ee.meisei-u.ac.jp*

2. **Prof. Taketsune Nakamura**
   Graduate school of Engineering, Department of Electrical Engg.
   Kyoto University
   Tel TEL +81-75-383-2221 / FAX +81-75-383-2224
   E-mail: tk_naka@kuee.kyoto-u.ac.jp

Dr. Khosru Mohammad Salim,

Associate professor, EEE, SECS, IUB