

Riza Muhida, Ph.D

Previous Work:

Associate Professor, Department of Mechatronics Engineering, International Islamic University Malaysia (2004-2011)
President of Indonesian Lecturers and Researchers Association in Malaysia (ILRAM) (2007-2010)
Managing Editor of International Journal of Science Engineering and Technology (IJSET) (2007-2010)
Vice Chair, IEEE Measurement and Instrumentation Society, Malaysia Chapter (2009-2010)
Chair, IEEE, Education Society, Malaysia Chapter (2007-2009)

ACADEMIC/EDUCATION

University	Year From	Year Till	Type of Degree/Field	Date Awarded
Institute of Technology Bandung, Indonesia	1989	1995	B.Eng/ Engineering Physics	21st Oct. 1995
Kokusai Kotoba Gakuin, Japanese School, Japan	1996	1998	Dipl./Japanese	31st March 1998
Osaka University, Japan	1999	2001	M.Sc./Electrical Engineering	23th March 2001
Osaka University, Japan	2001	2004	Dr. Eng./ Physical Science/ Semiconductor and optical electronics	23th March 2004

AREAS OF EXPERTIES
.Physics of Semiconductor
.Robotics and Embedded System Design
.Control and Intelligent Systems
.Technology for Education
.Renewable Energy and Power Electronics
.Thin Film Solar Cells

Publications

Journal Paper

1. Riza Muhida, Aman Mostavan, Wahyu Sujatmiko, Minwon Park and Kenji Matsuura, "The 10 years operation of a PV-micro-hydro hybrid system in Taratak, Indonesia", Solar Energy Materials and Solar Cells, Volume 67, Issues 1-4, March 2001, Pages 621-627, IF: 2.7
2. Takuya Matsui, Riza Muhida, Tomohiro Kawamura, Toshihiko Toyama, Hiroaki Okamoto, Tsutomu Yamazaki, Shinya Honda, Hideyuki Takakura, and Yoshihiro Hamakawa, "Microstructural Dependence of Electron and Hole Transport in Low-Temperature-Grown Polycrystalline-Silicon Thin-Film Solar Cells", Appl. Phys. Lett. 81, (2002)4751-4753. IF: 4.0
3. Riza Muhida, Tomohiro Kawamura, Tomokazu Harano, Masaya Okajima, Takuya Matsui, Toshihiko Toyama, Hiroaki Okamoto, Shinya Honda, Hideyuki Takakura, and Yoshihiro Hamakawa, "Carrier Transport in Polycrystalline Silicon Photovoltaic Layer on Highly Textured Substrate" Jpn. J. Appl. Phys J 42 6753-6758 (2003). IF: 1.2
4. R. Muhida, T. Matsui, T. Kawamura, T. Harano, T. Toyama, H. Okamoto, S. Honda, H. Takakura and Y. Hamakawa, "Correlation between microstructure and electronic property of solar-grade poly-Si thin film deposited on textured substrate", Solid State Phenomena, 93 (Trans Tech Publications, Uetikon-Zurich, 2003) pp.115-120. IF: 0.493
5. Toshihiko Toyama, Riza Muhida, Tomokazu Harano, Tsuyoshi Sugano, Masaya Okajima, and Hiroaki Okamoto,"Solid Phase Crystallization in Initial Growth Region of Polycrystalline Silicon Layer during Deposition at 180 C by Plasma Chemical Vapor Deposition",Jpn. J. Appl. Phys. 42, L1347-L1349 (2003). IF: 1.2
6. M. Dakkak, A. Hirata, R. Muhida and Z. Kawasaki, "Operation strategy of residential centralized photovoltaic system in remote areas", Renewable Energy 28, (2003) 997. IF: 1.9
7. Riza Muhida, Minwon Park, Mohammad Dakkak, Kenji Matsuura, Masakazu Michihira, Akira. Tsuyoshi, "A maximum power point tracking for photovoltaic-SPE using maximum current controller", Solar Energy Material and So1ar Ce1ls 75 (2003) 697. IF: 2.7
8. R. Muhida, T. Kawamura, T. Harano, M. Okajima, T. Toyama, H. Okamoto, S. Honda, H. Takakura and Y. Hamakawa, "Crystal Growth of Polycrystalline Silicon Thin Films for Solar Cells Evaluated by Scanning Probe Microscopy", Journal of Non-Crystalline Solids, J. Non-Cryst. Solids 338-340, 682-685 (2004). IF: 1.65
9. Shinya Honda, Hideyuki Takakura, Yoshihiro Hamakawa, Riza Muhida, Tomohiro Kawamura, Tomokazu Harano, Toshihiko Toyama, and Hiroaki Okamoto, " Carrier Transport in Polycrystalline Silicon Thin Film Solar Cells Grown on a Highly Textured Structure", Jpn. J. Appl. Phys. 43, 5955-5959 (2004) IF: 1.2
10. Abdulgani Albagul, Wahyudi Martono, Riza Muhida, "Dynamic Modeling and Adaptive Traction Control for Mobile robots", in Book: Cutting Edge Robotics, International Journal of Advanced Robotic Systems, 3-16, (2005).
11. Wahyudi, Riza Muhida, Momoh J.E. Salami, "Fuzzy Anti-windup Scheme for NCTF Control of Point-to-point (PTP) Positioning System", American Journal of Applied Sciences, 4(4): (2007) 220-228,
12. Wahyudi, TariG F. Ibrahim, Riza Muhida, Momoh J.E. Salami, "Robust Fuzzy-based NCTF Controller for Point-to-point (PTP) Positioning Systems", International Journal of System Simulation, Vol. 1, No. 1, (2007) 11-29.
13 Riza Muhida, Wahyudi, Rifki Muhida, Ahmad Unggul Priantoro, "A Control Strategy for Photovoltaic-Solid Polymer Electrolysis System Based on Surface Temperature of PV Panel", American Journal of Applied Sciences, No. 5 (7): 805-810, 2008
14 Afzeri, R. Muhida, Darmawan and A. N. Berahim, "Pin type Clamping Attachment for Remote Setup of Machining Process", International Journal of Computer, Information and System Science and Engineering, Vol. 2 Number 1 (2008) 7-12.
15 Rifki Muhida, Melanie David, Wilson A. Diño, Riza Muhida, Hiroshi Nakanishi, Freddy P. Zen, Hirose Akinaga, Hideaki Kasai, "First principle calculations-based cluster model for the reactive ion etching (RIE) of interaction between FeNi4 cluster and CO gases", International Journal of Science Engineering and Technology (Accepted for Publication).
16. Riza Muhida, Suhaimi B Mohd Zaid, Wahyudi, Rifki Muhida, Afzeri, Akhmad Unggul Priantoro, "Development of Mobile Photovoltaic Robot for Exploring Disaster Area", International Journal of Science Engineering and Technology (Vol. 1, No. 3 2008). Pp, 77.
17 Jufriadi, A.G.E Sutjipto, R. Muhida, "Discharge, microstructural and mechanical properties of ZrO2 addition on MgO for plasma display panel materials", Materials Research Innovation (MRI), (Vol. 13 No. 3, pp. 149-152). IF: 1.06
18 Riza Muhida, Agus Geter Sutjipto, Rifki Muhida, Toshihiko Toyama, Hiroaki Okamoto, "Relationship Between Average Slope of Textured Substrate and Solar Cells Performance", Materials Research Innovation (MRI), (Vol. 13 No. 3, pp. 246-248). IF: 1.06
19 Raihan Othman, Hens Saputra, Agus Sutjipto, and Riza Muhida, Zinc-Air Cell Employing Hexagonal Nanoporous Inorganic MCM-41 Membrane, Journal of Electrochemical Society (Accepted).
20 Md. Mahmudur Rahman, Rifki Muhida, Riza Muhida, Hideaki Kasai, Effect of magnetization of platinum by

nickel on the dissociative adsorption of oxygen: A density-functional study, Physical Review B (Submitted)
21 A.G.E. Sutjipto, Jufriadi, R. Muhida, Afzeri, E.Y. Adesta, Modeling Electric Field Distribution on Insulator under Electron Bombardment in vacuum, Proceeding of World Academy of Science, Engineering and Technology, Vol. 41, (2009), 8-11.
22 Afzeri, A.G.E Sujtipto, R. Muhida, M. Konneh, Darmawan, Remote Operation of CNC Milling Through Virtual Simulation and Remote Desktop Interface, Proceeding of World Academy of Science, Engineering and Technology, Vol. 41, (2009), 64-67.
23 Riza Muhida, Maisarah Ali, Puteri Shireen Jahn Kassim, Muhammad Abu Eusuf, Agus G.E. Sutjipto, Afzeri, A Simulation Method to Find the Optimal Design of Photovoltaic Home System in Malaysia, Case Study: A Building Integrated Photovoltaic in Putra Jaya, Proceeding of World Academy of Science, Engineering and Technology, Vol. 41, (2009), 694-698.
24. Hens Saputra, Raihan Othman, A.G.E. Sutjipto and R. Muhida, MCM-41 as a new separator material for electrochemical cell: Application in zinc air system, Journal of Membrane Science, Volume 367, Issues 1-2, 1 February 2011, Pages 152-157

Proceedings of Conferences
1. A. Mostavan, R. Muhida, M Furqan A, "The experience on compound parabolic concentrator for photovoltaic", 9th Intern. Photovoltaic Science and Engineering Conference, Miyazaki, Japan, November,11-15, 1996; Tech. Digest of the Intern. PVSEC-9, 1996.
2. Riza Muhida, Minwon Park, Mohammad Dakkak, Kenji Matsuura, Masakazu Michihira, Akira. Tsuyoshi, "A novel photovoltaic generation system for solid polymer electrolyte water electrolysis using standard voltage control", 11th Intern. Photovoltaic Science and Engineering Conference, Sapporo, Japan, Sept. 20-24, 1999; Tech. Digest of the Intern. PVSEC-11, 1999.
3. Riza Muhida, Minwon Park, Mohammad Dakkak, Kenji Matsuura, "A maximum power point tracking for photovoltaic-SPE using maximum current controller", 12th Intern. Photovoltaic Science and Engineering Conf. (PVSEC-12), Jeju Island, Korea, June 11-15, 2001.
4. Riza Muhida, Takuya Matsui, Tomohiro Kawamura, Hiroyuki Saika, Toshihiko Toyama, and Hiroaki Okamoto,"Electronic Properties of Poly-Si Thin Film for 9% Efficiency Solar Cells",5th SANKEN (ISIR) International Symposium - Frontier Material Science towards Energy Conversion and EcoDesign -, Osaka, Japan, March 14 -15, 2001
5. Riza Muhida, Takuya Matsui, Tomohiro Kawamura, Tomokazu Harano, Toshihiko Toyama, Hiroaki Okamoto, Shinya Honda, Hideyuki Takakura and Yoshihiro Hamakawa, " Correlation between Microstructure and Electronic Property of Solar-Grade Poly-Si Thin Film Deposited on Textured Substrate",Intern. Conf. on Polycrystalline Semiconductors 2002 - Bulk Materials, Thin Films, and Devices -, Nara, Japan, Sept. 10-13, 2002.
6. Riza Muhida, Tomohiro Kawamura, Tomokazu Harano, Masaya Okajima, Toshihiko Toyama, Hiroaki Okamoto, Shinya Honda, Hiroyuki Takakura, and Yoshihiro Hamakawa,
" Crystal Growth of Polycrystalline Silicon Thin Films for Solar Cells Evaluated by Scanning Probe Microscopy",20th Intern. Conf. on Amorphous and Microcrystalline Semiconductors - Science and Technology, Campos do Jordao, SP, Brazil, August 25-29, 2003.
7. Riza Muhida, Tomohiro Kawamura, Tomokazu Harano, Masaya Okajima, Toshihiko Toyama and Hiroaki Okamoto,"Electrical Property Evaluation of Polycrystalline Silicon Thin Film on Textured Substrate",3rd World Conference on Photovoltaic Energy Conversion, Osaka, Japan, May 11-18, 2003, Proc. of 3rd WCPEC, 1096-1099, (2003).
8. Toshihiko Toyama, Riza Muhida, Tomokazu Harano, Tsuyoshi Sugano, Chitose Sada, and Hiroaki Okamoto,"Solid Phase Structural Transitions in Poly-Si Photovoltaic Layers Deposited at 180 C by VHF (100 MHz) Plasma CVD",14th Intern. Photovoltaic Science and Engineering Conference (PVSEC14), Bangkok, Thailand, Jan. 26-30, 2004, Tech. Digest of the Intern. PVSEC-14, 1011-1012 (2004).
9. Riza Muhida, Tomokazu Harano, Tsuyoshi Sugano, Toshihiko Toyama, Hiroaki Okamoto, Shoji Izumi, Hiroyuki Takakura, and Yoshihiro Hamakawa,
" Crystal Growth of Polycrystalline Silicon Thin Film on High Substrate Texture Evaluated by Scanning Probe Microscopy", 14th Intern. Photovoltaic Science and Engineering Conference (PVSEC14), Bangkok, Thailand, Jan. 26-30, 2004, Tech. Digest of the Intern. PVSEC-14, 309-310 (2004).
10. AGE Sutjipto,I. Sopyan, Afzeri, R. Muhida, Flashover Treeing of Insulator Under Electron Bombardment, 13th Scientific Conference and 14th Annual General Meeting Electron Microscopy Society of Malaysia, Putra Jaya, 13-15 Dec. 2004
11. R. Muhida, AGE Sutjipto, Afzeri, I. Sopyan, Microscopic Study of Electrical Transport of Polycrystalline Silicon Thin Film for Solar Cells by Transmittance Electron Microscopy and Scanning Probe Microscopy, 13th Scientific Conference and 14th Annual General Meeting Electron Microscopy Society of Malaysia, Putra Jaya, 13-15 Dec. 2004
12. I. Sopyan, AGE Sutjipto, Afzeri, R. Muhida, Highly Active TiO2 Thin Film PhotoCatalists and Their PhotoCatalists Characteristics on Gaseous Acetaldehyde and Hydrogen Sulfide Degradation, 13th Scientific Conference and 14th Annual General Meeting Electron Microscopy Society of Malaysia, Putra Jaya, 13-15 Dec. 2004
13. Wahyudi, Jamaluddin Jalani, Riza Muhida, "Mechatronic Design of an Automatic Gantry Crane System", The 1st International Conference on Product Design and Development (ICPDD 2004), Kota Kinabalu, Sabah, Malaysia, 20-22 Dec., 2004.
14. Wahyudi, A. Albagul, R. Muhida, Enhancement of Control System Education with Hardware-in-the-loop

Simulation (HILS) Enviroments, the AEESEAP International Conference 2005, Kuala Lumpur, Malaysia, June 7-8, 2005
15. AGE Sutjipto, R. Muhida, I. Sopyan, E. Haruman, Afzeri, H. Malik, The Effect of CaO Addition on the Microstructural, mechanical and dielectric properties of high purity MgO, the International Conference on Recent Advances in Mechanical & Materials Engineering, Kuala Lumpur, Malaysia, May 30-31, 2005
16. I. Sopyan, R. Muhida, E. Haruman, Afzeri, Porous Bioactive Ceramics For Biomedical Applications Via Polymetric-Sponge Method, the International Conference on Recent Advances in Mechanical & Materials Engineering, Kuala Lumpur, Malaysia, May 30-31, 2005
17. Wahyudi, M. Jalaluddin, R. Muhida, Modeling and parameters identification of a gantry Crane System, the International Conference on Recent Advances in Mechanical & Materials Engineering, Kuala Lumpur, Malaysia, May 30-31, 2005
18. Wahyudi, M. Jalaluddin, R. Muhida, Design and Implementation of Classical PID Controller for an Automatic Gantry Crane System, the International Conference on Recent Advances in Mechanical & Materials Engineering
Kuala Lumpur, Malaysia, May 30-31, 2005
19. R. Muhida, W. Martono, AGE Sutjipto, Afzeri, E. Haruman, AU Priantoro, Corresponding Between Local Current and Photovoltaic Performance of Polycrystalline Thin Film Solar Cells Deposited in High Texture evaluated by Scanning Probe Microscopy, the International Conference on Recent Advances in Mechanical & Materials Engineering, Kuala Lumpur, Malaysia, May 30-31, 2005
20 Afzeri, AGE Sutjipto, R. Muhida, Atiah A.S. , Web based Remote Machining with Virtual 3D Monitoring using auto Setup CNC Milling, The 2nd International on Mechatronics, ICOM'05, Kuala Lumpur, May 10-12, 2005
21. Afzeri, AGE Sutjipto, I. Sopyan, R. Muhida, E. Haruman, Pin type reconfigurable Clamping ability evaluation for Setup-Free Technology, The 2nd International on Mechatronics, ICOM'05, Kuala Lumpur, May 10-12, 2005
22. AGE Sutjipto, Afzeri, R. Muhida. I. Sopyan, E. Haruman, The Use of Scanning Electron Microscope in Evaluating Insulation Property, The 2nd International on Mechatronics, ICOM'05, Kuala Lumpur, May 10-12, 2005
23. I. Sopyan, E. Haruman, AGE Sutjipto and R. Muhida, Selection of Materials and Design Specification for Hip Joint Prothesis, The 2nd International on Mechatronics, ICOM'05, Kuala Lumpur, May 10-12, 2005
24. R. Muhida, W. Martono, A. Albagul, AGE Sutjipto, Afzeri, E. Haruman, I. Sopyan, A Maximum Power Point Tracking for Photovoltaic System Using Temperature Compensator Method, The 2nd International Conference on Mechatronics, ICOM'05, Kuala Lumpur, May 10-12, 2005
25. R. Muhida, Wahyudi Martono, Agus Geter Edy Sutjipto, Afzeri, Esa Haruman, Iis Sopyan, Ahmad Unggul Priantoro, A Control Strategy for Photovoltaic Hydrogen Energy System using Reference Voltage Control, National Conference on Advances in Mechanical Engineering, Kuala Lumpur, May 18-20, 2005
26. R. Muhida, W. Martono, A. Albagul, AU Priantoro, MF Mohamad, A DC-DC Converter Controller Scheme For Photovoltaic-Solid Polymer Electrolysis System, The International Conference on Robotics, Vision, Information, and Signal Processing, Penang, 20-22 July 2005
27. R. Muhida, AGE Sutjipto, T. Toyama, H. Okamoto, Local Current Measurement of Polycrystalline Silicon Thin Film Solar Cells, International Conference on Instrumentation, Communication and Information Technology (ICICI 2005), Bandung, Indonesia, 3-5, August 2005
28. AGE Sutjipto, Afzeri, E. Haruman, R. Muhida, Novel Dielectric Characterization Using SEM, International Conference on Mechanical Engineering 2005, Dhaka, Bangladesh, 28-30 December 2005.
29. R. Muhida, AGE Sutjipto, T. Toyama, and H. Okamoto, Electrical Conductivities of Poly-Si Thin Film Solar Cells Deposited on Textured Substrate, International Conference on Computer & Communication Engineering, (ICCCE '06), Prince Hotel and Residence Kuala Lumpur, Malaysia, 9-11 May 2006
30 AGE Sutjipto, Riza Muhida, Afzeri, Nanofabrication of Oxide Patterns, International Conference on MEMS and Nanotechnology (ICMN '06), Hotel Pan Pacific, Kuala Lumpur, Malaysia - 14-15th March 2006
31 AGE Sutjipto, Riza Muhida, Nanoscale Current Density Producing a Flashover Treeing as a Method for Insulator Characterization, International Conference on MEMS and Nanotechnology (ICMN '06), Hotel Pan Pacific, Kuala Lumpur, Malaysia - 14-15th March 2006
32 AGE Sutjipto, Riza Muhida, M. Takata, An SEM Flashover Technique to Characterize Wide Gap Insulators, 8th International Conference on Properties and Application of Dielectric Materials (ICPADM), Grand Bali Beach Hotel, Bali, Indonesia, June 26-30, 2006
33 R. Muhida, AGE Sutjipto, T. Matsui, T. Toyama, and H. Okamoto, Measuring the Electronic Properties of Poly-Si Thin Film Solar Cells Deposited on Textured Substrate, 8th International Conference on Properties and Application of Dielectric Materials (ICPADM), Grand Bali Beach Hotel, Bali, Indonesia, June 26-30, 2006
34 Riza Muhida, Maisarah Ali, Puteri Shireen Jahn Kassim, Muhammad Abu Eusuf, Mohd. Shariffuddin Ibrahim, Ahmad Faris Ismail, Yousif A. Abakr , Optimal Design of Photovoltaic Home System in Malaysia, Case Study: A Building Integrated Photovoltaic in Putra Jaya , The IET Building Electrical Technology Professional Network (BETNET) Conference, the 31st October - 2nd November 2006 at Pan Pacific Hotel, Kuala Lumpur, Malaysia
35 H. Antong , R. Muhida, A. K. H. A Zohdi, The Design of Portable Thermoelectric-based Vaccine Cooler, International Conference on Biotechnology Engineering (ICBioE '07), May 8-10, 2007, Kuala Lumpur, Malaysia
36. A.G.E. Sutjipto, R. Muhida, Afzeri, S. Mridha, Green Nanotechnology using SEM and AFM, International Seminar on Green Technology and Engineering, 25-26 July 2007, Malahayati University Lampung
37. H. Antong , R. Muhida, A. K. H. A Zohdi, The Design of Portable Thermoelectric-based Vaccine Cooler, International Conference on Biotechnology Engineering (ICBioE '07), May 8-10, 2007, Kuala Lumpur, Malaysia
38. Riza Muhida, Suhaimi B Mohd Zaid, Rifki Muhida, Wahyudi, Ari Legowo, Development of Mobile Robot for

Exploring of Disaster Area in Tropical Climate Condition; International Conference on Intelligent Unmanned Systems, Oct 24-25, 2007 Bali, Indonesia
39. Riza Muhida, Agus Geter Edy Sutjipto, Toshihiko Toyama, Hiroaki Okamoto, Nanoscopic Characterization of Textured Substrate For Thin Film Solar Cells, the 5th International Conference on Physical and Numerical Simulation of Materials Processing(ICPNS'2007) Zhengzhou, China, October 23-27, 2007
40. AGE Sutjipto, R. Muhida, Afzeri, Modeling the Electric Field Distribution on Insulator under Electron Bombardment in Vacuum, the 5th International Conference on Physical and Numerical Simulation of Materials Processing(ICPNS'2007) Zhengzhou, China, October 23-27, 2007
41. R. Muhida, AGE Sutjipto, T. Toyama, and H. Okamoto, Developing of textured substrate ZnO/Ag/SnO2/glass for poly-Si thin film solar cells, International Conference on MEMS and Nanotechnology (ICMN '08), Hotel Istana, Kuala Lumpur, Malaysia - 13-15th May 2008
42. M.A.S. Kamal, Md. Raisuddin Khand, Wahyudi, R. Muhida, Comprehensive Driving Behavior Model for Intelligent Transportation Systems, International Conference on Computer & Communication Engineering (ICCCE'08) in Kuala Lumpur, Malaysia, on 13-15 May 2008.
43 A.G.E Sutjipto, N. Hafizah, R. Muhida, W. F. Faris, " An Optimum Fabrication of Centilever from Tungsten Wire for Better Quality Image Captured by Nanoeducator", 2nd International Conference on Functional Materials and Device 2008, June 16th to 19th , 2008 in Kuala Lumpur, Malaysia
44 A.G.E Sutjipto, S. Meskom, R. Muhida, "Effect of Current Density on ZnO Crystal Growth", 2nd International Conference on Functional Materials and Device 2008, June 16th to 19th , 2008 in Kuala Lumpur, Malaysia
45 Jufriadi, A.G.E Sutjipto, R. Muhida, " Discharge Properties of Nano Ceramics ZrO2 Added MgO for Protecting Layer in Plasma Display Panel", 2nd International Conference on Functional Materials and Device 2008, June 16th to 19th , 2008 in Kuala Lumpur, Malaysia
46 Riza Muhida, Agus Geter Sutjipto, Rifki Muhida, Toshihiko Toyama, Hiroaki Okamoto, "Developing of Textured Substrate ZnO/Ag/SnO2/Glass for Poly-Si Thin Film, Solar Cells" , 2nd International Conference on Functional Materials and Device 2008, June 16th to 19th , 2008 in Kuala Lumpur, Malaysia
47 Riza Muhida, Agus Geter Sutjipto, Rifki Muhida, Toshihiko Toyama, Hiroaki Okamoto, "Relationship Between Average Slope of Textured Substrate and Solar Cells Performance", 2nd International Conference on Functional Materials and Device 2008, June 16th to 19th , 2008 in Kuala Lumpur, Malaysia
48 R. Muhida, AGE Sutjipto, T. Toyama, and H. Okamoto, Local Electrical Transports Characteristics of Polycrystalline Silicon Thin Film Deposited by Plasma-Enhanced Vapour Deposition, The 14th Asian Conference on Electrical Discharge (ACED2008) will be held at the Bumi Sangkuriang, Bandung, Indonesia, on November 23-25, 2008. (Accepted for Presentation)
49 Riza Muhida, Suhaimi B Mohd Zaid, Rifki Muhida, Wahyudi, Ari Legowo, Development of Mobile Robot for Exploring of Disaster Area ; International Conference on Mechatronics, December 18-20, 2008, Kuala Lumpur, Malaysia
50 Riza Muhida, Maisarah Ali, Puteri Shireen Jahn Kassim, Muhammad Abu Eusuf, Agus G.E. Sutjipto and Afzeri, A Simulation Method to Find the Optimal Design of Photovoltaic Home System in Malaysia, Case Study: A Building Integrated Photovoltaic in Putra Jaya, ICMS 2009: International Conference on Modeling and Simulation, 26 - 29 May 2009, in Tokyo, Japan.
51 Riza Muhida, Eklas Hossain, Faris B Dzulkipli, Khairul Azizi Abdul Rahman and Ahad Ali, A Vision Based Sun Tracking System to Increase Performance of Solar Cell, The International Conference on Instrumentation, Control and Automation (ICA), Bandung, Indonesia, 20-22 October 2009.
52 A.Z. Ahmad Firdaus, Ahmed M. Tahir & Riza Muhida, A.M.A. Zaidi, Development of DC-AC Link Converter for Wind Generator, the International Conference Electrical Energy and Industrial Electronic Systems, (EEIES 2009), 7-8 December 2009 at Parkroyal Penang, Malaysia.

Talk

KEYNOTE or INVITED SPEAKER
1. Riza Muhida, "Brain gain Circulation Network", 1st Scientific Conference Indonesia Students association, Universiti Kebangsaan Malaysia (UKM), 24 September 2005.
2. Riza Muhida, "Thin Film Solar Cells: Prospect and Challenges", International Seminar on Green Technology and Engineering, 25-26 July 2007, Malahayati University Lampung
3. Riza Muhida, "Microcontroller Programming for Robot Application", Technical Tutorial of IEEE Indonesia Section, Bandung, 21 August 2008.
4. Riza Muhida, "Techniques to Build a Robot", Workhop on Robotics, Universitas Malahayati, Lampung, Indonesia, 28-29 August 2008.
5. Riza Muhida, "An Experience of International Accreditation", Universitas Diponegoro, Semarang, 3 December 2008.
6. Riza Muhida, "Prospect of Thin Film Solar cells", Seminar nasional kluster riset teknik mesin, Universitas Sebelas Maret, 13-14 October 2009.
7. Riza Muhida, "Electronic and Micro-structural properties of Thin Film Solar Cell", Workshop INSPIRE (Indonesian Nano-Satellite Platform Initiative for Research & Education), ITS, Surabaya, 19-20 October 2009.

Professional Service

1. Chair, Institute of Electrical and Electronics Engineers (IEEE) Education Society, Malaysia Chapter (2006-2008)
2. Executive Committee, Institute of Electrical and Electronics Engineers (IEEE) Malaysia Section (2006-2008)
3. Managing Editor, International Journal of Science Engineering and Technology.
4. President, Indonesian Lecturers and Researchers Association in Malaysia (ILRAM), (2007-2010)
5. Vice Chair, Institute of Electrical and Electronics Engineers (IEEE) Instrumentation and Measurement Society, Malaysia Chapter 2006-2010)
6. Vice Chair, Ikatan Ilmuwan Internasional Indonesia (International Indonesian Scholar association) (2010-present).
7. Member, Institute of Electrical and Electronics Engineers (IEEE) Electron Device Society and Power Electronics Society since 2000.
8. Member, Institute of Electrical Engineers of Japan, since 2000.
9. International Energy Foundation, as International Advisor Committee members since 1998.
10. Member of Organizing Committee of International Conference on Mechatronics 2005 (ICOM'05), 10-12 May, 2005.
11. Member of Organizing Committee of International Conference on MEMS and Nanotechnology (ICMN'06), 14-15 March, 2006.
12. Member of Organizing Committee of International Conference on Biotechnology Engineering 2007 (ICBIOE'07), 8-10 May 2007

Award and Recognition

AWARDS

1. Winner of Gold Medal for invention: A portable Thermoelectric-Based Vaccine Cooler, at Kulliyyah of Engineering Research and Innovation Exhibition (KERIE'06), 5-6 Dec. 2006
2. Winner of Silver Medal for invention: Mobile Robot for Exploring Disaster Area in Tropical Climate Situation, at Kulliyyah of Engineering Research and Innovation Exhibition (KERIE'06), 5-6 Dec. 2006
3. Winner of Bronze Medal for invention: Educational Kit of Electronics Controller of Hybrid Car, at Kulliyyah of Engineering Research and Innovation Exhibition (KERIE'06), 5-6 Dec. 2006
4. Winner of Bronze Medal for invention: Charging System of Multitasking Mobile Robot for Disaster Monitoring and Supporting Powered by Photovoltaic, at Kulliyyah of Engineering Research and Innovation Exhibition (KERIE'07), 12-13 Dec. 2007
5. Winner of Bronze Medal for invention: A New Device for Measuring Thermal Diffusivity of Food Substrate, at Kulliyyah of Engineering Research and Innovation Exhibition (KERIE'07), 21st January 2009.
6. Gold Medal: Novel AZO Thin Film for Display and Photovoltaic Application, Agus Geter Edy Sutjipto, Jufriadi, Riza Muhida, Raihan Othman, 21st International Invention, Innovation and Technology Exhibition, 14-16 May 2010, Kuala Lumpur malaysia.
7. Gold Medal: Novel Nuclear Technology for Controlled Production of n-type Semiconductor, Agus Geter Edy Sutjipto, Ruslan Yahya, Riza Muhida, 21st International Invention, Innovation and Technology Exhibition, 14-16 May 2010, Kuala Lumpur malaysia.
8. Silver Medal: Green Technology of Energy-Efficient Materials up to 70% for Plasma Display Panel, Agus Geter Edy Sutjipto, Jufriadi, Riza Muhida, Raihan Othman, 21st International Invention, Innovation and Technology Exhibition, 14-16 May 2010, Kuala Lumpur Malaysia.
9. Silver Medal: First Principles Study on Influence of Magnetic Materials on the Dissociative Adsorption of Oxygen, Md. Mahmudur Rahman, Rifki Muhida, Riza Muhida, Md. Sazzad Hossein Chowdhury, Hideaki Kasai, IIUM Research, Invention and Innovation Exhibition 2010
10. Bronze Medal: A Breathing Microbattery: Zn/MCM-41/O2 System, Hens Saputra, Assayidatul Laila Nor Hairin, Agus Geter E. Sutjipto, Riza Muhida, Mohd Hanafi Ani, Raihan Othman, IIUM Research, Invention and Innovation Exhibition 2010
11. Bronze Medal: Applying Computational Materials Design (CMD) toward Efficient Hydrogen Production from Water, Rifki Muhida, Md. Mahmudur Rahman, Riza Muhida, Hideaki Kasai, IIUM Research, Invention and Innovation Exhibition 2010
12. Bronze Medal, Electronic Blind Support System, Md. Raisuddin Khan, Sk. Eklas Hossain, Riza Muhida, IIUM Research, Invention and Innovation Exhibition 2010
13. Bronze Medal: DC-AC Link Converter for Wind Generator, Riza Muhida, Rini Akmeliawati, A.Z. Ahmad Firdaus, Ahmed M. Tahir, IIUM Research, Invention and Innovation Exhibition 2010

14. Consolation prize winner for Commercialization and research: Electronic Blind Support System, Md. Raisuddin Khan, Sk. Eklas Hossain, Riza Muhida, IIUM Research, Invention and Innovation Exhibition 2010

RECOGNITION:

1. Distinguish contributions toward the advancement of IEEE and the Engineering Professions, From IEEE Vice President.
2. Academic Partnership, From Microchip Inc.
3. Judge for International Robot Olympiad, in 2008, From IROC.
4. Assessor for Academic Program Dept. of Mechatronics, University Technical Malaysia Melaka.
5. Assessor for Research Grant, University Kebangsaan Malaysia.
6. Examiner for Ph.D and MSc. For UKM, UiTM, IIUM.
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