Curriculum Vita

Ahmed Mohamed Mahmoud Kassem (Ahmed M. Kassem)
Professor of Electrical Engineering and dean of
Faculty of Engineering Sohag University, Egypt.

I. General :

Name	**Ahmed Mohamed Mahmoud Kassem**	
Date of birth	**November, 22,1967**	
Place of birth	**Sohag, Egypt**	
Nationality	**Egyptian**	
Sex	**Male**	
Office	Department of Electrical Engineering, Faculty of Engineering, Sohag University, Sohag, Egypt. E-mail: kassem_ahmed53@hotmail.com Phone : (0020) 1284623151 (mobile) (0020) 1028636152 (mobile)	
Present Occupation	Dean of the faculty of engineering, Sohag University, Egypt.	
Home Address	Johinah – Sohag - Egypt Phone : (+20) 1284623151 (mobile) : (+20) 1028636152 (mobile)	
Academic Qualification	B.Sc.	Electrical Engineering, Assiut University, May-1991, very good.
	M. Sc.	Electrical Engineering, Eindhoven Technical University, Netherlands <u>Title of M.Sc.</u> : “Robot end effector position control using tip velocity measurements”, 1999
	PhD	Electrical Engineering (electrical power), El-Minia University, Egypt, August 2006. <u>Title of PhD</u>: “Advanced Control Techniques for Regulating the Voltage and Frequency of a Wind Driven Induction Generator”.

II. Research Interests

- Renewable Energy technology, control and applications
- Modern control techniques and their applications on power system and electric machines.
- Applications of artificial intelligence and recent optimization techniques

- Electric machines control and intelligent control applications.

III. Employment History and Experiences:

Maintenance Engineering	Egyptian Electricity Authority, From 1993 to 1996
Demonstrator	Electrical Department, Beni-Sueif University, from 1996 to 2000.
Lecturer	Electrical Department, Beni-Sueif University, from 2000 to 2007.
Assistant Professor	Electrical Department, Beni-Sueif University, from 2007 until 2012.
Associate Professor	Electrical Department, Beni-Sueif University, from 2012 until 2014.
Associate Professor	Associate Professor at the Faculty of Engineering, Sohag University, Egypt, from 2014 until 2017.
Professor	Professor of Power System at Electrical Dep., Faculty of Engineering, Sohag University, Egypt, from 2017 until now.

IV. University Activities

- Top 2% of researcher based on Stanford University 2020-2024.
- Member of the Council of Sohag University.
- Member of the Council of Graduate Studies, Sohag University until April 2019.
- Member of the Council of Community Service and Environmental Affairs, Sohag University until March 2017.
- Member of the facilities committee at Sohag University.
- Member of the Committee of Engineering Education Sector at the Supreme Council of Egyptian Universities, Egypt.
- Member of The EU Tempus project BIMIDE3 which include universities of Faculty of Engineering-Sohag University (Egypt), Faculty of Engineering-Chalmers University of Technology (Sweden), Faculty of Engineering-Twente University (Netherlands), Cairo University (Egypt).
- Vice president of the Consultative Center at Sohag University.
- Vice president of the Production Unit of the Faculty of Engineering, Sohag University.

V. CERTIFICATES:

2	Take part of IEEE, Shebin EL-Kom, , 9th international Middel-East Power Systems Conference (MEPCON'2003).
3	Take part of 3rd Saudi Technical Conference and Exhibition (STCEX-2004).

4	Take part of 4^{rd} Saudi Technical Conference and Exhibition (STCEX-2006).
5	Take part of 5^{rd} Saudi Technical Conference and Exhibition (STCEX-2008).
6	Take part of 5^{th} International Conference on Electrical Engineering, (CEE'08), Batna, Algeria, 27-29 October 2008.
7	Take part of Al-Azhar Engineering. 10^{th} international conference (AEIC 2008), Dec. 24-26, 2008 Cairo, Egypt.
8	Take part of IEEE, Assuit, , 13^{th} international Middle-East Power Systems Conference (MEPCON'2009).
9	Take part of International Conference on Electrical, Computer and Communication Engineering, Amsterdam, Netherlands, September 28-30, 2010.
10	Take part of 2011 IEEE PES Power Systems Conference & Exposition, 20-23 March 2011, Phoenix, Arizona, USA.
11	Take part of IEEE, Ain Shams, , 16^{th} international Middle-East Power Systems Conference (MEPCON'2014).
12	Take part of IEEE, Menoufia University, , 19^{th} international Middle-East Power Systems Conference (MEPCON'2017).

VI. ACTIVITIES

- Lecturer : Electric Circuits.
- Lecturer : Electronic circuits and elements.
- Lecturer : Power electronics and their applications.
- Lecturer : Electric machines.
- Lecturer : Renewable energy and their applications
- Lecturer : Power systems analysis, stability and control.
- Lecturer : Dynamic systems modeling and control
- Lecturer : High voltage Engineering.
- Lecturer : Protection.
- Lecturer : Electric Traction Machines.
- Lecturer : Control systems.
- Reviewer to IEEE Transactions on Energy Conversion.
- Reviewer to IEEE Transactions on Sustainable Energy.
- Reviewer to IEEE Transactions on power system..
- Reviewer to Electric Power Components and Systems (Taylor and Francis).
- Reviewer to European Transactions on Electrical Power (Wiley).
- Reviewer for Electric Power Components and Systems Journal.
- Reviewer for 2011 IEEE PES Power Systems Conference & Exposition.
- Supervising many of MA and Ph.D.

VII. LIST of PUBLICATIONS:

A) List of Research Publications in Refereed International Journals:

Ahmed M. Kassem

[1]Asaad, A., Kassem, A.M., Ali, A., ... Jurado, F., Ebeed, M.Optimal planning of

multi-type renewable energy resources and electric vehicle charging stations under resilient charging tariff using Gorilla Troops optimizer. Journal of Energy Storage, 2024, 98,

[2]Ebeed, M., Ali, S., Kassem, A.M., ... Jurado, F., Mohamed, E.A. Solving stochastic optimal reactive power dispatch using an Adaptive Beluga Whale optimization considering uncertainties of renewable energy resources and the load growth. Ain Shams Engineering Journal, 2024, 15(7), 102762

[3]Alatwi, A.M., Bakeer, A., Zaid, S.A., ... Albalawi, H., Kassem, A.M. ntelligent Fractional-Order Controller for SMES Systems in Renewable Energy-Based Microgrid. CMES - Computer Modeling in Engineering and Sciences, 2024, 140(2), pp. 1807–1830

[4]Zaid, S.A., Bakeer, A., Albalawi, H., ... AbdelMeguid, H., Kassem, A.M.Optimal Fractional-Order Controller for the Voltage Stability of a DC Microgrid Feeding an Electric Vehicle Charging Station. Fractal and Fractional, 2023, 7(9), 677

[5]A Asaad, A Ali, K Mahmoud, MF Shaaban, M Lehtonen, AM Kassem, ..., "Multi-objective optimal planning of EV charging stations and renewable energy resources for smart microgrids". Energy Science & Engineering 11 (3), 1202-1218, 2023.

[6]H Albalawi, SA Zaid, ME El-Shimy, AM Kassem, " Ant Colony Optimized Controller for Fast Direct Torque Control of Induction Motor". Sustainability 15 (4), 3740, 2023.

[7]SA Zaid, A Bakeer, G Magdy, H Albalawi, AM Kassem, ME El-Shimy, ..., " A new intelligent fractional-order load frequency control for interconnected modern power systems with virtual inertia control". Fractal and Fractional 7 (1), 62, 2023.

[8]SA Zaid, AM Kassem, AM Alatwi, H Albalawi, H AbdelMeguid, A Elemary, "Optimal Control of an Autonomous Microgrid Integrated with Super Magnetic Energy Storage Using an Artificial Bee Colony Algorithm". Sustainability 15 (11), 8827, 2023.

[9]SS Elfiky, M Zahran, A Kassem, A Farghal, "A Study on the Impact of PN-Junction Doping Concentration on the Efficiency of Monocrystalline Silicon Solar Cells" Sohag Engineering Journal, 2023.

[10]Fathy, A., Kassem, A., Zaki, Z.A." A Robust Artificial Bee Colony-Based Load Frequency Control for Hydro-Thermal Interconnected Power System". Sustainability (Switzerland)this link is disabled, 2022, 14(20), 13569

[11]Abdalla, S.A., Abdullah, S.S., Kassem, A.M., "Performance enhancement and power management strategy of an autonomous hybrid fuel cell/wind power system based on adaptive neuro fuzzy inference system". Ain Shams Engineering Journal, Vol. 13, issue. 4, pp. 1-17, 2022, https://doi.org/10.1016/j.asej.2021.101655

[12]Albalawi, H., El-Shimy, M.E., Abdelmeguid, H., Kassem, A.M., Zaid, S.A.

"Analysis of a Hybrid Wind/Photovoltaic Energy System Controlled by Brain Emotional Learning-Based Intelligent Controller". Sustainability (Switzerland), 2022, 14(8), 4775

[13]H Albalawi, AM Kassem, SA Zaid, A Lakhouit, MA Arshad, " Energy Management of an Isolated Wind/Photovoltaic Microgrid Using Cuckoo Search Algorithm". Intelligent Automation & Soft Computing 34 (3), 2023.

[14]Zaid, S.A., Mohamed, I.S., Bakeer, A., ...Tawfiq, M.E., Kassem, A.M. "From MPC-Based to End-to-End (E2E) Learning-Based Control Policy for Grid-Tied 3L-NPC Transformerless Inverter". IEEE Access, 2022, 10, pp. 57309–57326

[15]Zaid, S.A., Albalawi, H., Alatawi, K.S., ...Alhmiedat, T.A., Kassem, A.M., "Novel fuzzy controller for a standalone electric vehicle charging station supplied by photovoltaic energy". Applied System Innovation, 2021, 4(3), 63.

[16]Ali, H.H., Fathy, A., Al-Shaalan, A.M. Kassem, ...Al-Shamma'a, A.A., Gabbar, H.A.," A novel sooty terns algorithm for deregulated MPC-LFC installed in multi-interconnected system with renewable energy plants". Energies, 2021, 14(17), 5393.

[17]K Sayed, AM Kassem, " Sensorless Vector Controlled Three-Phase PWM Inverter-Fed Induction Motor Drive System With Auto-Tuning Estimation Of Machine Parameter Approach". Sohag Engineering Journal 1 (1), 34-48, 2021.

[18]Sayed, K., Kassem, A., Saleeb, H., Alghamdi, A.S., Abo-Khalil, A.G., "Energy-saving of battery electric vehicle powertrain and efficiency improvement during different standard driving cycles". Sustainability (Switzerland), 2020, 12(24), pp. 1–26, 10466.

[19]Ali, H.H., Fathy, A., Kassem, A.M., "Optimal model predictive control for LFC of multi-interconnected plants comprising renewable energy sources based on recent sooty terns approach". Sustainable Energy Technologies and Assessments, 2020, 42, 100844.

[20]Kassem, R., Sayed, K., Kassem, A., Mostafa, R., "Power optimisation scheme of induction motor using FLC for electric vehicle". IET Electrical Systems in Transportation, 2020, 10(3), pp. 275–284.

[21]Fathy, A., Ahmed M., Kassem,, Abdelaziz, A.Y., Optimal design of fuzzy PID controller for deregulated LFC of multi-area power system via mine blast algorithm". Neural Computing and Applications, 2020, 32(9), pp. 4531–4551.

[22]Saleeb, H., Sayed, K., Kassem, A., Mostafa, R., " Control and analysis of bidirectional interleaved hybrid converter with coupled inductors for electric vehicle applications". Electrical Engineering, 2020, 102(1), pp. 195–222

[23]Fekry, H.M., Eldesouky, A.A., Kassem, A.M., Abdelaziz, A.Y., " Power management strategy based on adaptive neuro fuzzy inference system for AC microgrid". IEEE Access, 2020, 8, pp. 192087–192100, A19193.

[24]Ali, H.H., Kassem, A.M., Al-Dhaifallah, M., Fathy, A. Multi-Verse Optimizer for Model Predictive Load Frequency Control of Hybrid Multi-Interconnected Plants Comprising Renewable Energy". IEEE Access, 8, pp. 114623-114642

2020.
[25]Ali, M.E.M., Kassem, A.M., Hamed, H.F.A. HAMED, " Modeling and Control of a Mini Hybrid Hydro Matrix / Wind in Micro Grid Applications". IEEE Access, 2020, 8, pp. 170843–170852
[26]Shiref A. Abdalla*, Hasmah Mansor, Nurul F. Hasbullah and Ahmad M. Kassem, "Modeling and Control Design of an Autonomous Hybrid Wind/Energy Storage Generation Unit". International Journal of Psychosocial Rehabilitation, Volume 24 - Issue 2, pp. 2441-2451, 2020.
[27]R Kassem, K Sayed, A Kassem, R Mostafa, "Power optimisation scheme of induction motor using FLC for electric vehicle". IET Electrical Systems in Transportation, Vol. 10 (3), pp. 301-309, 2020.
[28]Fathy, A., Ahmed M.Kassem, "Antlion optimizer-ANFIS load frequency control for multi-interconnected plants comprising photovoltaic and wind turbine". ISA Transactions, Vol. 87, pp. 282-296, 2019.
[29]Ibrahem E. Atawi, Ahmed M. Kassem and Sherif A. Zaid, " Modeling, Management, and Control of an Autonomous Wind/Fuel Cell Micro-Grid System". Processes 2019, 7, 85; doi:10.3390/pr7020085
[30]Hedra Saleeb, Khairy Sayed, Ahmed Kassem, Ramadan Mostafa, " Power Management Strategy for Battery Electric Vehicles". IET Electrical Systems in Transportation, Vol. 9, Issue 2, pp. 65-74, 2019.
[31]Hedra Saleeb, Khairy Sayed, Ahmed M. Kassem, Ramadan Mostafa, "Control and analysis of bidirectional interleaved hybrid converter with coupled inductors for electric vehicle applications", Electrical Engineering, pp. 1-28, 2019. https://doi.org/10.1007/s00202-019-00860-3
[32]K Sayed, AM Kassem, I Aboelhassan, AM Aly, AG Abo-Khalil, " Role of supercapacitor energy storage in DC microgrid". 1ST international conference on electronic engineering Iceem, 2019.
[33]AM Aly, AM Kassem, K Sayed, I Aboelhassan, " Design of microgrid with flywheel energy storage system using HOMER software for case study". IEEE 2019 International Conference on Innovative Trends in Computer Engineering (ITCE), 2019.
[34]SA Abdalla, AM Kassem, H Mansor, NF Hasbullah, " modeling, analysis and control of a stand-alone hybrid wind/battery chargeable power system". Journal of Electrical Engineering 18 (1), 9-9, 2018.
[35]Ibrahem E. Atawi, Ahmed M. Kassem, " Optimal Control based on MPPT of an Autonomous Hybrid PV/Storage System in Micro Grid Applications”. Energies 2017, 10(5), 643; doi:10.3390/en10050643.
[36]S. A. Zaid, Ahmed M. Kassem, "Review, analysis and improving the utilization factor of a PV-grid connected system via HERIC transformerless approach ", Renewable and Sustainable Energy Reviews, Vol. 73C, pp. 1061-1069, 2017.
[37]Ahmed. M. Kassem, Almoataz Y. Abdelaziz, "Firefly Optimization Algorithm

for the Reactive Power Control of an Isolated Wind Diesel System”. Accepted in Electric power components and systems Vol. 45, 2017, Issue 13, 2017, (Taylor & Francis).

[38]Ahmed M. Kassem, Emad H. El-Zohri, Khairy Sayed, Hossam H. Ali, “Automatic Voltage Regulation Based on Optimal Fuzzy PID Controller for Enhancement of Excitation System”, ERJ– Faculty of Engineering at Shoubra. Accepted 14 May 2017.

[39]Ahmed M. Kassem, Khairy Sayed, Emad H. El-Zohri, Hossam H. Ali, “An integral square error-based model predictive controller for two area load frequency control”, ADVANCES IN ENERGY RESEARCH 5, no. 1 (2017): 79-90

[40]Ahmed M. Kassem, Khaled M. Hassanen, "Optimal Fuzzy PID Controller for Stand-Alone Fuel Cell Generation System Via Artificial Cuckoo Search Algorithm". ERJ– Faculty of Engineering at Shoubra. Accepted on May 2017.

[41]Ahmed. M. Kassem “Modeling and Robust Control Design of a Standalone Wind-Based Energy Storage Generation Unit Powering an Induction Motor variable-displacement pressure compensated pump”. IET Renewable Power Generation, Vol. 10, No. 3, pp. 275-286, 2016.

[42]Sayed, K., Ahmed M. Kassem, El-Zohri, E., Abdel-Hamed, A.M. “Sizing of hybrid PV/battery power system in Sohag city “. Journal of Electrical Engineering, 2016.

[43]Ahmed M. Kassem, EH El-Zohri, K Sayed, A Abdelsamee, “A New Three Level ZCS Soft Switching Boost DC-DC Converter for Solar PV System”. International Journal of Engineering Science and Computing, Vol. 6, No. 7, pp. 1836-1843, 2016.

[44]Hesham F. A. Hamed, Ahmed M. Kassem, Medhat E. M. Ali, " Hydro Matrix Power Wheels Generate More than 5 GW/h from Main Branch Canals (River Nile) in Egypt". Journal of Power and Energy Engineering, 4, pp. 71-78, 2016.

[45]Ahmed M. Kassem, AH Besheer, AY Abdelaziz, "A linear quadratic gaussian approach for power transfer maximization of a point absorber wave energy converter". Electric Power Components and Systems, Vol. 43, No. (8-10), pp. 1173-1181, 2015.

[46]Ahmed M. Kassem, AY Abdelaziz, "BFA optimization for voltage and frequency control of a stand-alone wind generation unit". Electrical Engineering, Vol. 97, No. 4, pp. 313-325, 2015.

[47]Ahmed. M. Kassem, Almoataz Y. Abdelaziz, "Optimal Control of an Autonomous Variable Speed Wind Generation System based on Bacteria Foraging Optimization Technique”. Electric power components and systems, 43 (8-10), pp. 1006-1017, 2015, (Taylor & Francis).

[48]Ahmed. M. Kassem, Ahmad H. Besheer, Ibrahem E. Atawi, “Kalmen Estimator as a Robust Solution for Output Power Maximization of Wave Energy Converter”. IEEJ Transactions on Electrical and Electronic Engineering, 10 (4),

pp. 390-395, 2015. (IEE Japan).
[49]Ahmed. M. Kassem, Almoataz Y. Abdelaziz, "Reactive power control for voltage stability of standalone hybrid wind-diesel power system based on functional model predictive control". IET Renewable Power Generation, 8 (8), pp. 887-899, 2014.
[50]Ahmed M. Kassem, S.A. Zaid, "Load parameter waveforms improvement of a standalone wind-based energy storage system and Takagi–Sugeno fuzzy logic algorithm". IET Renewable Power Generation, 8 (7), pp. 775-785, 2014.
[51]Ahmad H. Besheer, Ahmed. M. Kassem, Almoataz Y. Abdelaziz, " Single-diode model based photovoltaic module: Analysis and comparison approach". Electric power components and systems, 42 (12), pp. 1289-1300, 2014. (Taylor & Francis)
[52]Ahmed. M. Kassem, Almoataz Y. Abdelaziz, "Functional predictive control for voltage stability improvements of autonomous hybrid wind–diesel power system". Electric power components and systems, 42 (8), pp. 831-8, 2014. (Taylor & Francis) (ISI Journal).
[53]Ahmed. M. Kassem, Ali M. Yousef, "Voltage and frequency control of an autonomous hybrid generation system based on linear model predictive control". Sustainable Energy Technologies and Assessments, Vol. 4, PP. 52 – 61, 2013. (Elsevier).
[54]Ahmed. M. Kassem, Khaled M. Hasaneen and Ali M. Yousef, "Dynamic Modeling and Robust Power Control of DFIG Driven by Wind Turbine at Infinte Grid", International Journal of Electrical Power and Energy Systems, Vol. 44, Issue 1, pp. 375-382, 2013. (Elsevier).
[55]A. A. Hassan and Ahmed M. Kassem, "Modeling, Simulation and Performance Improvements of a PMSM Based on Functional Model Predictive Control". The Arabian Journal for Science and Engineering, in press, (Springer), 2013.
[56]Ahmed M. Kassem, AA Hassan, AY Abdelaziz, "Adaptive voltage control of an autonomous wind-generation unit based on radial basic functional neural network and programmable logic controller". Journal of Bioinformatics and Intelligent Control 2 (2), 92-99, 2013., 2013
[57]Ahmed M. Kassem, "MPPT Control Design and Performance Improvements of a PV Generator Powered DC Motor-Pump System Based on Artificial Neural Networks". International Journal of Electrical Power and Energy Systems, Vol. 43, Issue 1, pp. 90-98, 2012. (Elsevier).
[58]Ahmed M. Kassem, "Robust Voltage control of a Stand Alone Wind Energy Conversion System Based on Functional Model Predictive Approach". International Journal of Electrical Power and Energy Systems, Vol. 41, Issue 1, pp. 124-132, 2012. (Elsevier).
[59]Ahmed. M. Kassem, "Neural Control Design for Isolated Wind Generation System Based on SVC and Nonlinear Autoregressive Moving Average Approach". WSEAS Transactions on Systems, Vol. 11, Issue 2, pp. 39-49, 2012.

(WSEAS Transactions).
[60]Ahmed M. Kassem, "Maximum power point tracker control design of a photovoltaic-generator powered DC motor-pump system based on artificial neural networks". Australian Journal of Electrical & Electronics Engineering, Vol 9 No 2, 2012.
[61]Ali M. Yousef and Ahmed M. Kassem, "Power System Stabilizer Based on Robust H∞ Controller for Low Frequency Operating Range ". Research journal of applied science, Engineering and technology, Vol. 4, Issue 10, pp. 1376-1385, 2012.
[62]Ahmed M. Kassem, "Modeling and control design of a stand alone wind energy conversion system based on functional model predictive control". Energy Systems, Vol. 3, No. 3, pp. 303-323, 2012.
[63]Ahmed. M. Kassem and Ali M. Yousef, " Experimental Set up and robust Servo DC Motor Position Control Based on Integral Sliding Mode controller". Research journal of applied science, Engineering and Technology, Vol. 4, Issue 10, pp. 1320-1327, 2012
[64]Ali M. Yousef and Ahmed M. Kassem, "Optimal Power System Stabilizer Based Enhancement of Synchronizing And Damping Torque Coefficients". WSEAS Transactions On Power Systems, Vol 2, Issue 7, pp 70-97, 2012. (WSEAS Transactions)
[65]Ahmed. M. Kassem, AA Hassan "Performance improvements of a permanent magnet synchronous machine via functional model predictive control". Journal of Control Science and Engineering, Vol. 2012, pp. 1-7, 2012.
[66]Ahmed. M. Kassem, "Functional predictive control design for an isolated wind generation system". UPB Scientific Bulletin, Series C: Electrical Engineering, Vol. 74, No. 4, pp. 255-272, 2012.
[67]Ahmed. M. Kassem and Ali M. Yousef "Fuzzy-logic Based Self-tuning PI Controller for High-Performance Vector Controlled Induction Motor Fed by PV-Generator". WSEAS Trans. Syst., Vol. 12, No. 1, pp. 22-31, 2012.
[68]Ahmed. M. Kassem, "Predictive voltage control of stand alone wind energy conversion system". WSEAS Trans Syst Control, Vol. 7, No. 3, pp. 97-107, 2012.
[69]Ahmed. M. Kassem and Ali M. Yousef, " Robust Control of an Isolated Hybrid Wind-Diesel Power System Using Linear Quadratic Gaussian Approach". International Journal of Electrical Power and Energy Systems, Vol. 33, Issue 4, pp 1092-1100, 2011 (Elsevier).
[70]Ali M. Yousef and Ahmed M. Kassem, "Optimal Pole Shifting Controller For Interconnected Power System". Energy Conversion and Management, Vol. 52, Issue 5, pp. 2227-2234, 2011.
[71]Ahmed. M. Kassem, "Modeling, Analysis and Neural MPPT Control Design of a PV-Generator Powered DC Motor-Pump System". WSEAS TRANSACTIONS on SYSTEMS, Vol 12, Issue 10, pp. 399-412, December 2011. (WSEAS

Transactions)
[72]Ahmed. M. Kassem, "Neural Predictive Controller of a Two-Area Load Frequency Control for Interconnected Power System", Ain Shams engineering Journal, (Elsevier), Vol 1, Issue 1, pp. 49-58, 2010.
[73]A. A. Hassan and Ahmed M. Kassem, " Model Predictive Control of a Wind Driven Induction Generator Connected to the Utility Grid". Alexandria Engineering Journal , Alexandria University, Egypt, Vol. 49, No 1, pp 1-9, 2010.
[74]Hossam Hassan Ali, Ahmed M. Kassem, Ahmed Fathy, " Multi-Verse Optimizer for Model Predictive Load Frequency Control of Hybrid Multi-Interconnected Plants Comprising Renewable Energy". Submitted to IET renewable power generation, 2019.
[75]Hossam Hassan Ali, Ahmed M. Kassem, Ahmed Fathy, " Recent Approach Based Multi-Verse Optimizer for Model Predictive Load Frequency Control of Multi-Interconnected Plants Comprising Photovoltaic System". Submitted to Neural Computing and Applications, 2019.

B) List of Research Publications in Local Refereed Journals, local and International Conferences:

[76]Khairy Sayed ; Ahmed M. Kassem ; Ismail Aboelhassan ; Abdelmaged M. Aly ; Ahmed G. Abo-Khalil, "Energy Management and Control Strategy of DC Microgrid Including Multiple Energy Storage Systems". 2019 21st International Middle East Power Systems Conference (MEPCON), 17-19 Dec., Cairo, Egypt 2019. DOI: 10.1109/MEPCON47431.2019.9008076

[77]Abdelmaged M. Aly, Ahmed M. Kassem, Khairy Sayed, Ismail Aboelhassan, " Design of Microgrid with Flywheel Energy Storage System Using HOMER Software for Case Study". IEEE International Conference on Innovative Trends in Computer Engineering (ITCE), 21 February 2019, DOI: 10.1109/ITCE.2019.8646441

[78]Khairy Sayed, Ahmed M. Kassem, Ismail Aboelhassan, Abdelmaged M. Aly, and Ahmed G. Abo-Khalil, "Role of Supercapacitor Energy Storage in DC Microgrid ", 1ST INTERNATIONAL CONFERENCE ON ELECTRONIC ENGINEERING ICEEM2019, EGYPT, 7-8 December 2019.
[79]Khairy Sayed, Ahmed M. Kassem, Ismail Aboelhassan, Abdelmaged M. Aly, "Energy Management and Control Strategy of DC Microgrid Including Multiple Energy Storage Systems", 21st International Middle East Power Systems Conference (MEPCON), Tanta University, Egypt, 2019.

[80]Rasha Kassem, Khairy Sayed, Ahmed Kassem, Ramadan Mostafa, "Energy Efficient Control Scheme of Induction Motor Based EV", 21st International Middle East Power Systems Conference (MEPCON), Tanta University, Egypt, 2019.

[81]Hedra Saleeb, Khairy Sayed, Ahmed Kassem, Ramadan Mostafa, " Analysis and Design of Multi-phase Bidirectional-Interleaved Hybrid Converter with Coupled- Inductors for Battery Electric Vehicles", 21st International Middle East Power Systems Conference (MEPCON), Tanta University, Egypt, 2019.

[82]Ahmed M. Kassem, S. A. Zaid, " Optimal Control of a Hybrid Renewable Wind/ Fuel Cell Energy in Micro Grid Application". 2017 Nineteenth International Middle East Power Systems Conference (MEPCON), Menoufia University, Egypt, 19-21 December 2017.

[83]Hesham. F. A. Hamed, **Ahmed. M. Kassem**, Medhat. E. M. Ali, "Design and Modeling of Hydro Matrix Power Wheels Contain Nine Wheels by Using Matlab Simulink". 2017 Nineteenth International Middle East Power Systems Conference (MEPCON), Menoufia University, Egypt, 19-21 December 2017.

[84]Shiref A Abdalla, Hasmah Mansor, Nurul F Hasbullah, **Ahmad MM Qasem**, "Fuzzy Logic Based Self-Tuning PID Controller for an Autonomous Hybrid Wind/Battery Chargeable Power System". IEEE International Conference on Computer and Communication Engineering (ICCCE), pp. 208-212, July 2016.

[85]**Ahmed. M. Kassem**, Ali M. Yousef, “Two-Area Load Frequency Controller Based on Fuzzy Approach with the Effect of Governor Deadzone and GRC Non-Linearity”. The 16thInternational Middle East Power Systems Conference, MEPCON’14, Ain Shams University, Cairo, EGYPT, December 23-25, 2014.

[86]Ayman MM Brisha, Ali M Yousef, **Ahmed M Kassem,** "Two Layered Fuzzy Logic Control For Dc Motor Speed Control And Performance Improvements". Minia Journal of Engineering and Technology, (MJET) Vol. 33, No 2, July 2014.

[87]**Ahmed. M. Kassem**, "Nonlinear Autoregressive Moving Average Controller for Isolated Wind Generation System Control", 2011 IEEE PES Power Systems Conference & Exposition, 20-23 March 2011, Phoenix, AZ USA, pp 1-9, 2011.

[88]**Ahmed. M. Kassem**, "New Robust Power Control of DFIG Driven by Wind Turbine at Constant Grid Based on Gain-Scheduling Sliding Mode Technique",

International Conference on Electrical, Computer and Communication Engineering, Amsterdam, Netherlands, September 28-30, 2010.

[89]**Ahmed. M. Kassem** and Ali M. Yousef, " Servo DC Motor Position Control Based on Sliding Mode Approach". The 5th Saudi Tech. Conf. and Exhib., (STCEX09), January., Riyadh, 2009.

[90]G. Al-Saady, **Ahmed. M. Kassem** and Ali M. Yousef, " Robust Stabilizer Based On Mixed H-Infinity And PID Controller For Interconnected Power System". IEEE, Assuit, , 13th international Middel-East Power Systems Conference, MEPCON'2009, Egypt, pp 723-729, Dec. 2009.

[91]Ali M. Yousef and **Ahmed M. Kassem,** "Variable Frequency Vector Controlled of an Induction Motor Fed by PWM". 5th International Conference on Electrical Engineering, (CEE'08), Batna, Algeria, 27 - 29 October 2008, p 384-368, 2008

[92]Ali M. Yousef and **Ahmed M. Kassem** , "Multi-Area Transient Stability Enhancement Using Different Types Of Robust Power System Stabilizers". Al-Azhar Eng. 10th international conference, Dec. 24-26, Cairo, Egypt, 2008.

[93]A. A. Hassan, Yehia S. Mohamed and **Ahmed M. Kassem**, "Voltage and Frequency Control of An Isolated Wind Driven Induction Generator Based On H_∞ Approach", The 4th Saudi Tech. Conf. and Exhib., (STCEX06), December 2006.

[94]A. A. Hassan, Yehia S. Mohamed and **Ahmed M. Kassem**, " Robust Control of A Stand Alone Wind Energy Conversion System Using Linear Quadratic Gaussian Approach". The 4th Saudi Tech. Conf. and Exhib., (STCEX06), Dec. 2006, Riyadh, 2006.

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