# **CURRICULUM VITAE**

## **Personal Data:**

Name : Amr Refky Abd El-Whab

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## **Educational Qualification:**

Degree Year		University/Department	
<b>Ph.D.</b> in Electric Drives	March 2012	Department of Electric Drives and Equipments, Electrical Power Institute, Tomsk Polytechnic University, Tomsk, Russian Federation.	
M.Sc. in Electric Drives, Excellent with Honor	June 2009	Department of Electric Drives and Equipments, Electromechanical Institute, Tomsk Polytechnic University, Tomsk, Russian Federation.	
<b>B.Sc.</b> in Electrical Engineering, Excellent with Honor	May 1999	Electrical Engineering Department, Faculty of Engineering, Al-Azhar University, Cairo, Egypt.	

## **Professional Experience:**

Associate Professor at Electrical Engineering Department, Faculty of Engineering, Al-Azhar University, Cairo, Egypt.	July 2022 to Present	
<b>Lecturer</b> at Electrical Engineering Department, Faculty of Engineering, Al-Azhar University, Cairo, Egypt.	September 2020 to July 2022	
General Manager at HTCO (Hany Tawfik Consulting Office - Doha Branch)	October 2015 to August 2020	
Executive Manager at HTCO (Hany Tawfik Consulting Office - Cairo Branch)	January 2015 to October 2015	
<b>Seconded Lecturer</b> at Electrical Engineering Department, Faculty of Engineering, Misr University for Science and Technology (MUST), 6 <sup>th</sup> of October city.	September 2013 to January 2015	
<b>Lecturer</b> at Electrical Engineering Department, Faculty of Engineering, Al-Azhar University, Cairo, Egypt.	October 2012 to October 2015	
<b>Seconded Lecturer</b> at Computer and Electrical Engineering Department, Higher Technological Institute (HTI), 10 <sup>th</sup> of Ramadan city.	October 2012 to June 2013	
<b>Researcher</b> at Electric Drives and equipmets department, Electromechanical Institute, Tomsk Polytechical Uinversity, Tomsk, Russia. For master and PhD. Programs.	October 2007 to March 2012	
<b>Demonstrator</b> at Electrical Engineering Department, Faculty of Engineering, Al-Azhar Uinversity, Cairo Egypt.	March 2001 to December 2006	

#### **Publications:**

- 1- Hamdy Abd El-Halim and **Amr Refky**, "Performance Analysis of a Single-Phase Source Feeding Low Power Three-Phase Induction Motors", in International Review of Electrical Engineering (IREE), Vol.: 17, No.: 03, June 2022, pp. 295-304, DOI: https://doi.org/10.15866/iree.v17i3.21856.
- 2- Mohamed Ezzat, Hamdy Abd El-Halim, **Amr Refky**, and Ibrahim Nassar, "Potential of Waste to Energy Conversion in EGYPT", May 2022 in Journal of Electrical and Computer Engineering, DOI: <a href="https://doi.org/10.1155/2022/7265553">https://doi.org/10.1155/2022/7265553</a>.
- 3- Hamdy Abd El-Halim, El Sayed Soliman, and **Amr Refky** "Performance of MOSFET Driven Via Bootstrap Capacitor for Dynamic Load Continuity Enhancement" Accepted May 2022 in Journal of Engineering, DOI: <a href="https://doi.org/10.1155/2022/2273819">https://doi.org/10.1155/2022/2273819</a>.
- 4- Sally El-Tawab, Hassan S. Mohamed, Amr Refky, and A. M. Abdel-Aziz "Self-Healing of Active Distribution Networks Classification, by Accurate Fault Detection, and Location" March 2022 in Journal of Electrical and Computer Engineering, DOI: https://doi.org/10.1155/2022/4593108.
- 5- El Sayed Soliman, Hamdy Abd El-Halim, and **Amr Refky** "A Proposed An Interactive Reliable Aggregated Photovoltaic Cell For A Longer Time Solar Energy Extraction" Mar 2022 in International Journal of Power Electronics and Drive Systems (IJPEDS), DOI: https://doi.org/10.11591/IJPEDS.V13.I1.PP537-546.
- 6- M. Agamy, Fathi Ellyth, Adel Nada, and **Amr Refky** "Performance of Doubly Fed Induction Generator Driven by Wind Energy at Constant Stator Power and Current" Oct 2021 in Journal of Al-Azhar University Engineering Sector, DOI: https://doi.org/10.21608/AUEJ.2021.207667.
- 7- Amr Refky, YN Dementyev, GI Odnokopylov, IG Odnokopylov, and YV Krochta "Microcontroller Carrying Capacity Limiter of the Electric Crane" in Current Science International, Vol. 05, No. 02, April-June 2016, pp. 199-204.
- 8- Amr Refky, Dementiev Y. N., Susdorf V.I. and Maragin K.A. "Modeling of a Direct Frequency Inverter in a Machine-Valve Power Source of Stable Frequency" in Middle East Journal of Applied Sciences, Vol. 06, No. 02, April-June 2016, pp. 367-373.
- 9- Mahmoud Haseeb, **Amr Refky**, and Hamdy Abd El-Halim "Torque Ripple Reduction in Direct Torque Control of Induction Motor Using Double Fuzzy Logic Control" in Journal of Multidisciplinary Engineering Science and Technology (JMEST), Vol. 3 Issue 3, March 2016, pp. 4329-4334.
- 10- Hanaa Elsherbiny, Hamdy Abd El-Halim, Amr Refky "Efficiency Improvement for A Hybrid PV-Wind Energy System" in Current Science International, Vol. 05, No. 03, July- Sept. 2016, pp. 256-265.
- 11-Mohamed Hussein, Mahfooz E. Shalaby, Hamdy Abd El-Halim, and **Amr Refky** "Speed Control of a Three Phase Induction Motor Using Field Oriented Control" in Journal of Multidisciplinary Engineering Science and Technology (JMEST), Vol. 2, No. 11, November 2015, pp. 3212-3220.
- 12- Ahmed Hassan, Salama Abo-Zaid, and **Amr Refky** "Improvement of Direct Torque Control of Induction Motor Drives Using Neuro-Fuzzy Controller" in Journal of Multidisciplinary Engineering Science and Technology (JMEST), Vol. 2 Issue 10, October 2015, pp. 2913- 2918.
- 13- Ahmed Hassan, **Amr Refky**, Salama Abo-Zaid, and Mahmoud Elwany "Torque Ripple Reduction in Direct Torque Control of Induction Motor Drives by Improvement of the Switching Table" in Journal of Multidisciplinary Engineering Science and Technology (JMEST), Vol. 1, No. 5, December 2014, pp. 238- 243.
- 14-Schmidt, I., Veszprémi, K., Dementiev, Yu.N., and **Amr Refky** "Control Methods of the Inverter-Fed Permanent Magnet Synchronous Machines" in Journal of Applied Sciences Research, Vol. 9, No. 8, pp. 5019-5024, 2013.

- 15-Zavyalov V.M., and **Amr Refky** "Effect of Sampling Time on The Value of Ripple in Direct Torque Control" Modern problems of science and education. 2012. № 1. URL: <u>www.science-education.ru/101-5405</u> (Russian Language).
- 16-Amr Refky, Karakulov A.C., Dementiev, Yu.N., and Kladiev C.N. "Microprocessor Based Direct Torque Control System for Permanent Magnets Synchronous Motor Drives" Proceedings of the Higher Educational Institutions "Electromechanics" Scientific, Technical and Educational Journal. 2011. № 6. P. 62 67, (Russian Language).
- 17-Amr Refky "Mathematical Model of The Direct Torque Control Based on a Permanent Magnets Synchronous Motor Drive" IV International Scientific and Practical Conference "Science Initiative foreign students and postgraduates' Russian universities." Tomsk, Russia, May 24 26. 2011, (Russian Language).
- 18-**Amr Refky** "Modeling and Study of Direct Torque Control Based on Permanent Magnets Synchronous Motor Drives" International Scientific-Practical Conference "Modern problems and their solutions in science, transportation, manufacturing and education in 2011." Odessa: Black Sea, Russia, 2011 Vol. 4. No. 9. P. 71 79, (Russian Language).
- 19-Amr Refky, Karakulov A.C., Dementiev, Yu.N., and Kladiev C.N. "Comparative Analysis of Vector and Direct Torque Control for Permanent Magnets Synchronous Motor Drives" Proceedings of the Higher Educational Institutions "Tomsk Polytechnic University-Energy", 2011. Vol. 319. No. 4, pp. 93-99, (Russian Language).
- 20-Karakulov A. C. and **Amr Refky** "Implementation of Digital Electric Drive Systems for Direct Torque Control of Permanent Magnet Synchronous Motor" V annual International Scientific and Technical Conference "Electromechanical energy converters", TPU, Tomsk, Russia, 12 14 October 2011, (Russian Language).
- 21-Gusev N.V., Karakulov A.C., and **Amr Refky** "Mechatronic Gears" International Conference of Students, Postgraduates, and Young Scientists "Electronics, Electrical Engineering and Energy" TPU, Tomsk, Russia, 6 8 October 2011, (Russian Language).
- 22-Amr Refky and Dementiev Yu.N. "Mathematical Model of Direct Torque Control Based on Permanent Magnets Synchronous Motor Drives" IV International Scientific and Practical Conference "Science Initiative for Foreign Undergraduate and Postgraduate Students at Russian Universities", TPU, Tomsk, Russia, 24-26 May 2011(Russian Language).
- 23-Amr Refky and Dementiev Yu.N. "Study of Direct Torque Control of Induction Motor Supplied from ABB Inverter" XV International Scientific and Practical Conference of Students and Young Scientists "Modern equipment and technology", CTT, TPU, Tomsk, Russia, 4-8 May 2009, (Russian Language).
- 24-Amr Refky, Nechayev M.A., and Dementiev Yu.N. "Automated Laboratory Bench to Study AC Drives" XIV International Scientific and Practical Conference of Students and Young Scientists "Modern equipment and technology", CTT, TPU, Tomsk, Russia, 24-28 March 2008, (Russian Language).
- 25-Halas, S., **Amr Refky**, and Dementiev Yu.N. "A Simulation Model of Induction Motor Drive with Direct Torque Control" International Scientific and Technical Conference "Electromechanical Energy Converters", IPE, TPU, Tomsk, Russia, 17-19 October 2007, (Russian Language).

#### **Lectured Courses:**

- 1- Electromagnetic fields,
- 2- Electric circuits,
- 3- Energy conversion,

- 4- AC Machines (Transformer, Induction machines, Synchronous, Permanent Magnet Synchronous Machines)
- 5- DC Machines,
- 6- AC and DC drive Systems,
- 7- Analog Control Systems (Theory and Applications),
- 8- Digital Control Systems (Theory and Applications),
- 9- Power Electronics,
- 10- Modulation and Simulation of Electric Machines and Drives using MathCAD, MatLab, ANSYS.

#### **Postgraduation Supervision:**

№.	Degree	Title	Start	Status
1.	MSc.	Space Vector Control of Permanent Magnets Synchronous Generators for Wind Energy	March 2020	Running
2.	MSc.	Stability of Public Network for Wind Energy Systems	October 2020	Running
3.	MSc.	Induction Motors condition monitoring using Artificial Intelligence	October 2020	Running
4.	MSc.	Compression of Wind Energy Generation Systems	March 2021	Running
5.	MSc.	Study of MAGLEV Trains Systems	March 2021	Running
6.	MSc.	Artificial Intelligent Speed Control of Permanent Magnets Synchronous Motors for Hybrid Electrical Vehicles	March 2021	Running
7.	PhD.	Electric Power System from Bulk Grid to Smart Grid	March 2022	Running
8.	MSc.	Advanced Multi-Level Inverter Applications for Solar Power Systems	March 2022	Running
9.	PhD.	Micro-Controller Controlled Wind Driven Double Output Induction Generator Connected to The Public Network	2017	Completed February 2022
10.	MSc.	Torque Ripple Reduction for DTC using Inelegant Techniques	2013	Completed 2016