## Menoufia University **Faculty of Electronic Engineering Dept. of Electrical Communications Engineering** Menouf, Egypt **CURRICULUM VITAE**

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### Academic Qualifications:

1-B. Sc. (May 1979) in Electronic Eng. From Dept. of Electrical communications, Faculty of Electronic Engineering, Menouf, Egypt.

2- M. Sc. (1985) in Electronic and communications Eng. From Dept. of Electrical communications Faculty of Electronic Engineering , Menouf, Egypt.

3- (D.E.A.) (1989) Diplome D'Etudes Approfondies, INPT, Toulouse.

4-Ph. D. (1991) in communication. From Dept. of Electrical communications, Faculty of Electronic Engineering, Menouf, Egypt in collaboration with INP, ENSEEIHT, Toulouse, FRANCE.

### **Professional Background:**

1-Demonstrator in Dept. of Electrical communications, Faculty of Electronic Engineering, Menouf, Egypt. From 12-9-1981 till 1985

2-Assistant Lecture in Dept. of Electrical communications, Faculty of Electronic Engineering, Menouf, Egypt. From 1-10-1985 till 22-9-1991.

3-Lecture in Dept. of Electrical communications, Faculty of Electronic Engineering, Menouf, Egypt. From 22-9-1981 till 30-3-1998.

4-Associate professor in Dept. of Electrical communications, Faculty of Electronic Engineering, Menouf, Egypt. From 30-3-1998 till 27-3-2005.

5-Professor in Dept. of Electronics and Electrical communications, Faculty of Electronic Engineering, Menouf, Egypt. From 27-3-2005 till now.

# **Supervision of a Thesis**

1-Supervision of a Ph.D. thesis titled, Some investigations on microstrip lines for microwave integrated circuit using Green function.

2- Supervision of a Ph.D. Thesis titled, Interaction of Surface Acoustic Waves with Superconductors and its Applications in Communications Systems

3-Supervision of a M. Sc. Thesis titled, Analysis and Design of Coupled Microstrip Lines 4-Supervision of a M. Sc. Thesis titled, "Environmental effects on Photovoltaic cells of energy Source of satellite systems"

5-Supervision of a M. Sc. Thesis titled " Quality Enhancement of Ultrasonic Images" 6-Supervision of a M. Sc. Thesis titled "Wireless Ultrasonic Position Determination"

7- Supervision of a M. Sc. Thesis titled " Detection of Buried Objects Using Ultrasonic Waves " **Post-graduate Missions:** 

1-Attending a post-graduate mission in INP, ENSEEIHT, Toulouse, France, From 15-4-1998 till 17-7-1998.

2-Attending a post-graduate mission in INP, ENSEEIHT, Toulouse, France, From 29-8-2005 till 28-11-2005.

Activity in international conferences:

**1-Session chairman, in 3<sup>rd</sup> International symposium on communication and Information** Technologies (ISCIT 2003), Songkhia, Thailand, 3-5 Sept. 2003

2- Review two papers, in International Sixteenth Asia Pacific Microwave Conference (APMC'04), New Delhi, India, 15-18 December 2004.

**3-** Review one paper, in 7-th International Symposium on Signals, Circuits and Systems, (ISSCS 2005), Iasi, Romania, July 14-15, 2005.

4- A member of Technical Program Committee of Fourth Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials, JAPMED'4 Cairo-Egypt, September 17-20, 2005

**Teaching Courses for Undergraduate Students:** 

1-Electrical and Electronics Circuits.

2-Switching Circuits

3-Electronics Exchange

4- Acoustics Engineering

5-Communication systems

6-Electrical Circuits Drawing

7-Basic Electrical and Electronics Lab.

8-History of Engineering Sciences

9-Electronics Workshop

10-Electronics principles

11-Semiconductor technology

12- Supervision of B.Sc. graduation projects in topics of

a- Digital filter analysis and Design

b- Analysis and design of microstrip transmission line for microwave integrated circuits

# **Teaching Courses for Post-graduate Students:**

1- Specialized course on interaction of SAW with semiconductor

2- Wave Generation

3-Specialized course on application of microstrip line in microwave integrated circuit 4-Communication circuits: Application of SAW filter in mobile transreceiver

# List of publications:

[1]Ahmed A.Abou El-Fadl and **M. El-Kordy**, Dispersion and coupling characteristics of asymmetric silica optical waveguide directional coupler by using the transverse operator method, Proc. of 9<sup>th</sup> NRSC, B7, Cairo, EGYPT, 18-20 Feb. 1992.

[2] **M. El-Kordy** ,Ahmed A.Abou El-Fadl, and A. O. Attia, Propagation characteristics of slowwave Schottky contact microstrip line using Green function, Proc. of 10<sup>th</sup> NRSC, B6, 16-18 Feb. 1992

[3] Ahmed A.Abou El-Fadl and **M. El-Kordy**, and A. O. Attia, Transverse operator method for the analysis of the dierctly connected image guide couplers, IEEE antennas and Propagation Society International symposium 1993, Vol. 1 June 28-July 2, 1993, pp.436-439, Ann Arbor, Michigan, USA.

#### Also:

[3] Ahmed A.Abou El-Fadl and **M. El-Kordy**, and A. O. Attia, Transverse operator method for the analysis of the dierctly connected image guide couplers, in the proc. of 10<sup>th</sup> NRSC, B2, Feb. 1993, Cairo, AGYPT

[4] **M. El-Kordy**, A. Elmahdy and M. Yassin, Dispersion Characteristics of coplanar transmission lines, Electronics Engineering Bulletin, No.6, July 1993, pp.64-69 Faculty of Electronic Engineering Menoufia University EGYPT.

[5] **M. El-Kordy** and Ahmed A.Abou El-Fadl, Study of Schottky-contact coupled microstrip directional coupler, IEEE instrumentation and measurement technology conference, WEAM 2-2 May10-12, 1994, pp. 280-282, Hamamatsu, Shizuoka, Japan.

## <u>Also</u>:

[5] **M. El-Kordy** and Ahmed A.Abou El-Fadl, Study of Schottky-contact coupled microstrip directional coupler, in the book of abstracts of the International Symposium on Electromagnetics Environments and Consequences (EUROEM94), Bordeaux, France, May 30-June4

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# <u>Also</u>:

[5] **M. El-Kordy** and Ahmed A.Abou El-Fadl and, Study of Schottky-contact coupled microstrip directional coupler, in Electronics Engineering Bulletin, No.7, January 1994, pp.67-73 Faculty of Electronic Engineering Menoufia University EGYPT

[6] **M. El-Kordy,** and H. Baudrand, Study of acoustoelectric memory for spread spectrum communication by using Green function, IEEE instrumentation and measurement technology conference, WEAM 2-2 May10-12, 1994, pp. 280-282, Hamamatsu, Shizuoka, Japan,

[7] **M. El-Kordy**, Simplified study for P\_N diode acoustoelectric memory correlator in the parametric mode, Proceeding of the first IEEE International Conference on Electronics, Circuits and systems (ICECS97), Vol.2 Dec.19- 20,1994 ,pp.1052-1055, Cairo, Egypt.

### <u>Also</u>:

[7] **M. El-Kordy**, Simplified study for P\_N diode acoustoelectric memory correlator in the parametric mode, in Electronics Engineering Bulletin, No.10, July 1995, pp.59-62, Faculty of Electronic Engineering Menoufia University, EGYPT

[8] **M. El-Kordy** and T. E. Taha, Analysis of the monolithic SAW memory by using Green function, Modelling, Measurements & control A. AMSE Press. Vol. 65 no. 2 1995. pp. 31-35 **Also:** 

[8] **M. El-Kordy** and T. E. Taha, Analysis of the monolithic SAW memory by using Green function, Proc. of international symposium on test and measurement, Aug. 10-14, 1995, Taiyuan, CHINA

[9] **M. El-Kordy**, A Simplified Analysis of Coplanar Waveguide Coupler by using Conformal Mapping Transformation, In proc. of international Symposium on Antenna Technology and Applied Electromagnetics (ANTEM2000), pp.(433-436), Winnipeg, Manitoba, Canada, July 30th-August 2nd, 2000

### <u>Also:</u>

[9] **M. El-Kordy**, A Simplified Analysis of Coplanar Waveguide Coupler by using Conformal Mapping Transformation, has been accepted to published in international Symposium on Electromagnetics environment and consequences (EUROEM 2000), Edinburgh, Scotland, UK, 30 May-2 June 2000.

#### Also:

[9] **M. El-Kordy**, A Simplified Analysis of Coplanar Waveguide Coupler by using Conformal Mapping Transformation, has been accepted to published in the IEEE Vehicular Technology Conference Fall 2000 (VTC2000), Boston, Massachusetts, USA, Sept. 24-28, 2000.

[10] **M. El-Kordy,** Analysis of Coupled Microstrip Lines Using Integral Method, In proc. of international Symposium on Antenna Technology and Applied Electromagnetics (ANTEM2000), pp.(271-275), Winnipeg, Manitoba, Canada, July 30th-August 2nd, 2000

### Also:

[10] **M. El-Kordy,** Analysis of Coupled Microstrip Lines Using Integral Method, has been accepted to published in international Symposium on Electromagnetics environment and consequences (EUROEM 2000), Edinburgh, Scotland, UK, 30 May-2 June 2000.

[11] **M. El-Kordy,** A Study of Coplanar Waveguide on Semiconductor Substrate, In proc. of international Symposium on Antenna Technology and Applied Electromagnetics (ANTEM2000),pp.(497-501) Winnipeg, Manitoba, Canada, July 30th-August 2nd, 2000.

### <u>Also:</u>

[11] **M. El-Kordy,** A Study of Coplanar Waveguide on Semiconductor Substrate, has been accepted to published in the IEEE Vehicular Technology Conference Fall 2000 (VTC2000), Boston, Massachusetts, USA, Sept. 24-28, 2000.

[12] T.E. Taha, A.M. Gomaa and **M. El-Kordy**, Characterization of the surface impedance of a superconducting thin film with application to propagation characteristics of surface acoustic waves, Proc. of the Eighteenth National Radio Science Conference, Mansoura , Egypt, , pp 567-575, March 27-29, 2001.

### Also: This paper has been published as two parts in MSMW 2001

[12] T.E. Taha, A.M. Gomaa and **M. El-Kordy**, Characterization of the surface impedance of a superconducting thin film, Proc. of 4<sup>th</sup> international Kharkov symposium of Physics and engineering of millimeter and Sub-Millimeter Waves (MSMW 2001), pp.(373-376) Kharkov Ukraine, 2001.

[12] T.E. Taha, A.M. Gomaa and **M. El-Kordy**, Propagation characteristics of surface acoustic waves induced by a high-Tc superconducting thin film, Proc. of 4<sup>th</sup> international Kharkov symposium of Physics and engineering of millimeter and Sub-Millimeter Waves (MSMW 2001), pp.(377-379) Kharkov Ukraine, 2001.

[13] **M. El-Kordy**, T.E. Taha, and A.M. Gomaa, Analysis of superconductor thin film using an approximate model of the current distribution, Proc. of the 8<sup>th</sup> IEEE International conference on Electronics, Circuits and System, pp.(1441-1444), Malta, September 2-5, 2001.

# Also:

[13] **M. El-Kordy**, T.E. Taha, and A.M. Gomaa, Analysis of superconductor thin film using an approximate model of the current distribution, has been accepted to published in international Conference ( $16^{th}$  ICECOM 2001) Zagreb, Croatia, 2001

# Also:

[13] **M. El-Kordy**, T.E. Taha, and A.M. Gomaa, Analysis of superconductor thin film using an approximate model of the current distribution, An abstract of this paper has been accepted and published in the book of abstract of the XXII Conference on solid state science, 18-23 March. 2001.

[14] M. El-Kordy , T.E. Taha, and A.M. Gomaa, A moment method analysis of SAW

interaction in periodic metal semiconductor structure, Proc. of the 8<sup>th</sup> IEEE International conference on Electronics, Circuits and System, pp.(1583-1586), Malta, September 2-5, 2001

### <u>Also:</u>

[14] **M. El-Kordy**, T.E. Taha, and A.M. Gomaa, A moment method analysis of SAW interaction in periodic metal semiconductor structure, Proc. of 4<sup>th</sup> international Kharkov symposium, Physics and engineering of millimeter and Sub-Millimeter Waves, (MSMW 2001), pp. (308-310) Kharkov Ukraine, 2001.

[15] T. E. Taha, **M. Elkordy** and A. M. Gomaa, A computer simulation of the switching effect in superconducting SAW delay lines, Proc. of the nineteenth national radio science conference, Alexandria Univ., Egypt, pp. (567-575), 2002.

[16] **M. Elkordy**, Study of high temperature superconducting thin film with application in microwave circuits, Proc. of the IEEE Int. Symp. on Signals & System (SCS 2003), pp(357-360), Iasi, Romania, July 10-11, 2003.

### <u>Also:</u>

[16] **M. Elkordy**, Study of high temperature superconducting thin film with application in microwave circuits, Proc. of the 3<sup>rd</sup> IEEE Int. symp. on communication and information tech. (ISCIT 2003), pp. (307-310), Songkhla Thailand, Sept. 3-5, 2003.

### Also:

[16] **M. Elkordy**, Study of high temperature superconducting thin film with application in microwave circuits, Proc. of the 6<sup>th</sup> IEEE Int. symp. on Antennas, Propagation and EM Theory (ISAPE03), pp.(742-745), Beijing China, Oct. 28- Nov. 1, 2003

[17] **M. El-Kordy,** Study of voltage tunable SAW hybrid devices, Proc. of the 3<sup>rd</sup> IEEE Int. symp. on communication and information tech. (ISCIT 2003), pp. (311-314), Songkhla Thailand, Sept. 3-5, 2003. **Also:** 

[17] **M. El-Kordy,** Study of voltage tunable SAW hybrid devices, Proc. of the 6<sup>th</sup> IEEE Int. symp. on Antennas, Propagation and EM Theory (ISAPE03), pp. (750-753), Beijing China, Oct. 28- Nov. 1, 2003 **Also:** 

[17] **M. El-Kordy**, Study of voltage tunable SAW hybrid devices, Accepted to published in the 10<sup>th</sup> IEEE Int. conference on electronics, circuit and systems (ICECS 2003), University of Sharjah, December 14-17, 2003.

[18] **M. El-Kordy**, Study of superconducting microstrip line using transverse resonance technique, Proc. of the IEEE 2004 international conference on electrical, electronics and computer engineering (ICEEC04), pp. (581-584), Cairo, Egypt, Sept. 5-7, 2004.

### <u>Also</u>:

[18] **M. El-Kordy**, Study of superconducting microstrip line using transverse resonance technique, has been accepted to published in international Symposium on Antenna Technology and Applied Electromagnetics (ANTEM2004/URSI), Ottawa, Canada, July 20-23, 2004.

[19] **M. El-Kordy**, and T.E. Taha, A Space harmonics analysis of semiconductor coupled SAW convolver, Proc. of the IEEE international Symposium on communication and information tech. 2004 (ISCIT 2004), pp. (1074-1077), Sapporo, Japan, October 27-29, 2004.

### <u>Also</u>:

[19] **M. El-Kordy,** and T.E. Taha, A Space harmonics analysis of semiconductor coupled SAW convolver, Proc. of the international china-japan joint meeting on microwave (CJMW2004). pp.(182-185), Harbin, Heilongjiang, China, August 5-6, 2004.

### <u>Also</u>:

[19] **M. El-Kordy**, and T.E. Taha, A Space harmonics analysis of semiconductor coupled SAW convolver, has been accepted to published in the International IEEE Conference (TENCON 2004), pp.(550-553), Chiangmai, Thailand, 21-24 November 2004.

[20] T.E. Taha, and **M. El-Kordy**, A Computerized contactless semiconductor surface characterization using surface acoustic wave, Proc. of the 6<sup>th</sup> International Symposium on Test and Measurements (ISTM/2005) Dalian, China, June 1-4, 2005

# <u>ALSO</u>

[20] T.E. Taha, and **M. El-Kordy**, A Computerized contactless semiconductor surface characterization using surface acoustic wave, proc. of "Fourth Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials", (JAPMED'4), Cairo - Egypt. September 17-20, 2005.

[21] T.E. Taha, and **M. El-Kordy**, Study of biasing effects on coupled microstrip lines characteristics, Proc. of 7-th International Symposium on Signals, Circuits and Systems, (ISSCS 2005), Iasi, Romania, pp. (729-732), July 14-15, 2005.

# ALSO

[21] T.E. Taha, and **M. El-Kordy**, Study of biasing effects on coupled microstrip lines characteristics, proc. of "Fourth Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials", (JAPMED'4), Cairo - Egypt. September 17-20, 2005. <u>ALSO</u>

[21] T.E. Taha, and **M. El-Kordy**, Study of biasing effects on coupled microstrip lines characteristics, proc. of the 6<sup>th</sup> International Symposium on Test and Measurements (ISTM/2005) Dalian, China, June 1-4, 2005

[22] T.E. Taha , and **M. El-Kordy**, The Applications of Superconductor and Semiconductor in SAW Devices, Proc. of the 6<sup>th</sup> International Symposium on Test and Measurements (ISTM/2005) Dalian, China, June 1-4, 2005

[23] **M. El-Kordy**, Analysis of conductor-backed coplanar waveguide using integral method, proc. of the International Symposium on Communications and Information Technologies (ISCIT 2006), Bangkok, Thailand, pp(T4e4(1-4)) October 18-20, 2006

[24] H. El-Madany, F. Fahmy, **M. Elkordy** and O Oraby, Temperature and Irradiance for Si and GaAs Photovoltaic cells characteristics in LEO, in Electronics Engineering Bulletin, January 2007 Faculty of Electronic Engineering Menoufia University EGYPT

## <u>ALSO</u>

[24] H. El-Madany, F. Fahmy, **M. Elkordy** and O Oraby, Temperature and Irradiance for Si and GaAs Photovoltaic cells characteristics in LEO, acc. to published in Int. Symp. &Exhibition on Sustainable Energy & Environment, (ISESEE2006), Kuala Lumpur Dec. 3-6, 2006.

[25] H. El-Madany, F. Fahmy, **M. Elkordy** and O Oraby, UASat Solar Array Design and Performance Characteristics, 4<sup>th</sup> Conference on Scientific Research Outlook & Technology (SRO4), Damascus, Syria Dec. 11-14, 2006,

[26] H. El-Madany, F. Fahmy, **M. Elkordy** and O Oraby, Study the Effect of Proton Irradiation for Photovoltaic cells characteristics in LEO orbit, Int. 21<sup>th</sup> European Photovoltaic Solar Energy conference and Exhibition, Dresden.,Sept 4-8 2006.

[27] F. Fahmy, H. El-Madany, and M. Elkordy, Development of Space Photovoltaic characteristics and parameters for LEO orbit in space, Int. conference on Energy and Power Systems (EPS 2006), Chiang Mai Thailand, March 29-31 2006.