***Curriculum Vitae***

 ***Edward M . Sader***

Name : Edward Mady Sader

Date of Birth : 13th of May, 1951.

Place of Birth : Jish village, Upper Galilee , Palestine.

Status : Married with four children.

Rank : Full Professor.

Health Problems : None.

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***High Education***

1976-1981 : Ph.D Experimental Solid State physics : Hebrew University:

Thesis : " Investigation of the Interaction of Surface Acoustic waves with charge carriers in ultra-thin metal films".

1974-1975 : M.Sc Applied Physics - Microelectronics : Hebrew University.

Thesis: " Excitation & Detection of Surface Acoustic Waves on the Ferroelectric TGS".

1970-1973 : B.Sc Physics & Mathematics :Hebrew University Jerusalem

***Subjects of Interest:***

1- Surface Acoustic Waves Devices*.*

2- Nanotechnology.

3- Electrical and mechanical properties of thin films.

4- Thin film solar cells.

5- Technology and Applications of Renewable Energy.

**EXPERIENCE:**

**2011-2012/2012-2013 :Chairman of Physics department, and head of MSc program.**

**2010-2011 : (Sabatical year) Researcher at Beer Sabea’ –Opto-Electronic Department.**

1974- now: Lecturer at the Physics Department of Birzeit University- West Bank Palestine.

1995-now: Lecturer of physics at Arabic Institute for Training Teachers- Beitberl College.

2004/2005-2005/2006: Science Teaching Department. . Hebrew University of Jerusalem (Translation of the book “Light and Theory of Vision”, from Hebrew to Arabic).

2003/2004: (sabbatical year) Racah Institute of Physics. Hebrew University of Jerusalem. Research on Superconductors.

2001-2002: **Chairman of Physics department**

Jul 94- August 95 : Scientific Consultant for the Palestinian Energy research Center (PEC).

1990-1991 : Alexander von Humboldt Stiftung fellowship: Working on R & D Department- Siemens AG- Munchen - Germany.

1987-1990 : Chairman of Physics Department- Birzeit University.

1988-1990 : R & D Department , Thin Films Division, Intel Electronics Ltd., Jerusalem

1977- 1980 Research Assistant : Racah Institute of Physics : Hebrew University of Jerusalem- Israel.

***Activities***

(1) teaching all undergraduate courses in physics.

(2) teaching all undergraduate laboratories in physics

(3) Preparing new laboratories and laboratory manuals.

Sep./82-Dec./82 : Working on a joint project between Namur University and Bell Telephone Manuf.-Gent Belgium," Adhesion of gold films to quartz substrates".

Jun.89/Jul. 89 : Working on preparation and characterization of YBCO high Tc superconducting films by sputtering. Cambridge University-Material science department.

Sep.90/aug.91: Alexander von Humboldt fellowship-Siemens Research and Development-Munchen Germany.

Subject: " Buffer Layers for High Tc Superconducting Films on Si".

***Workshops ,Colleges and Conferences attended:***

Sep.-Oct 2003 Alexander von Humboldt award- Max Planck Institute,

Stutgart, Germany.

Research: Pulsed-Laser ablation of Ru-1212 thin films.

Supervisor: Prof. U. Habermeier, Technical Dept.

Aug-Oct 2002 Alexander von Humboldt award- Max Planck Institute,

Stutgart, Germany.

Research: Pulsed-Laser Ablation of Ru-1212 thin films.

Supervisor: Prof. U. Habermeier, Technical Dept.

29-Jun-5-Jul 2002 World Renewable Energy Congress VII, Cologne,

Germany.

23-25 March 2001 Fifth International Conference on Water Technology

and Desalination, Alexandria, Egypt.

1-2 Sep. 2000 Seminar on “Advanced Seawater Desalination

Technologies Using Renewable Energy Resources, from identification to implementation”,

Limassol, Cyprus.

21-23 June 2000 Conference on Santorini-Greece on “Advanced

Seawater Desalination Technologies Using Renewable

Energy Resources”.

April 18-22-2000 International Conference on Physics of Condensed Mat.

Amman, Jordan.

Jan. 15-2000 Workshop on water demand, supply and shortage

analysis, Unesco, Paris.

Summer 97 Doing research on “CdTe/CdS Solar cells; Ecole

Superieur de Chemie de Paris; Paris

March 1995 Workshop on Physics and Technology of Thin Films,

ICTP, Triste, ITALY.

Dec 1994 Workshop on Renewable Energies and Energy Efficiency, ICE, France.

Oct. 1987 : Fourth college on microprocessors, ICTP, Trieste, ITALY.

Aug. 1985 : Workshop on non-conventional energy sources, ICTP , Trieste, ITALY.

July 1983 : Workshop on non-conventional energy sources, ICTP , Trieste, ITALY.

July 1981 : Worshop on Condensed matter, ICTP, Trieste, ITALY.

Sep.1981 : Fifth International Conference on Thin Films, Herzlia, ` Israel.

***PUBLICATIONS:***

1-E. Sader and A. Sayyed-Ahmad; “Design of an Optical Water pollution Sensor using a Single Guided Mode Resonance Filter “; Photonic sensors, 3, p224-230 (2013).

2- E. Sader, A.T. Matveev, H. U. Habermeier, Superconductor Science and Technology, 19 (2006) L29-L32.

3- P. Ben-Ishai, E. Sader, Yu. Feldman, I. Felner and M. Weger; Journal of Superconductivity 18 (4) 2005 p545-549.

4-- A.T. Matveev, G. Cristiani, E. Sader, V. Damljanovic, H. U. Habermeier, Physica C 417 (2004) 50-57.

5- A.T. Matveev, E. Sader, V. Duppel, A. kulakov, A. Maljuk, C. T. Lin, H. U. Habermeier, Physica C 403 (2004) 231`-239. .

6- E. Sader and H. Hallak, Sizing a medium-size Desalination Plant Powered by Photovoltaics in the Gaza Strip of Palestine, Proceedings of the World Renewable Energy Cogress VII (WREC 2002), Cologne, Germany, July 2002.

7- E. Sader and H. Hallak, Market Potential for Desalination of Seawater by renewable Energy in the Gaza Strip of Palestine, Proceedings of the Fifth International Conference on Water Technology and Desalination, Alexandria, Egypt, March 2001.

8- E.Sader; Solar Cells; El-Risalah, 1998.

9- E. Sader; Electromagnetic Hazards of the Mobile Phones; El-Risalah (arabic), 1999.

10- E.Sader; Superconductors; Science and Life, April 98.

11- E.Sader; An over look on energy situation in the on the world, Scientific News (French-Arabic); Damascus, March 1998.

12- E. Sader, Energy Efficiency for the Public, El-Risallah,(arabic), 1997.

13- F. Edelman, R. Brener, M. Eisenberg, E. Sader and Y. Dafne, Stress and Anisotropy Effects in the Interfacial Rections of Al and TiNx, Thin Solid Films, 228 (242-246),1993.

14- E. Sader, Improvement of the crystallinity of RF-magnetron sputtered LaA103 layers on silicon (100), Superconductor Science and Technology, 6, 547 (1993).

15- E. Sader, H. Schmidt, K. Hradil and W. Wersing: RF-magnetron sputtered lanthanum aluminate buffer layers on silicon, Superconductor Science and Technology 4, 371 (1991).

16- Laboratory manuals for introductory courses in physics in arabic and English..

17- E. Sader, A simple inexpensive method for thickness measurement of thin metal films, Vacuum 38, 97 (1988).

18- E. Sader and E. Harnik, Interaction of surface acoustic waves with current carries in discontinuous metal films, J. Appl. phys. 52, 3705 91981).

19- E. Sader, E. Harnik and S. Kovnovich, Acoustic electric measurement of electron mobility and diffusion in ultathin evaporated gold films, Appl. Lett. 36, 430 (1980).

20- E. Harnik and E. Sader, Attenuation and phase velocity of surface acoustic waves interacting with charge carriers in thin metal films, Appl. phys. lett. 33, 979 (1979).

21- E. Sader and E. Harnik, Electromechanical coupling of surface acoustic waves in the vicinity of the phase transition in TGS, J. Appl. phys. 48, 4581 (1977).

22- E. Sader and E. Harnik, Surface-Acoustic-Waves phase velocities in the b plane of TGS, J. Appl. Physics, 48, 3607, (1977).

23- E. Sader and E. Harnik, Surface-Acoustic-Waves near the Curie temperature of the ferroelectric TGS, Physics, Lett, 58A, 199 (1976).

***NAMES OF REFEREES:***

Prof. H. Jaqaman, Professor of Physics, Birzeit University.

Prof. I. Galili, Science Teaching, Hebrew University of Jerusalem, Giva’at Ram, Jerusalem, Israel.

Prof. Ibrahim Abed\_Halim; Beer Sabea’ University, Faculty of Engineering; Electroptic Department.

Mr. Ramzi Rihan; Birzeit University.