



Curriculum Vitae

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Personal Data:

Nationality : Egyptian:

- Birth of date: 20-5-1944
- High School: Orman Ideal School, Dokki, Cairo, Egypt.
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Scientific Background:

- B.Sc in Physics with first honor, Faculty of Science, Ain Shams University (1964).
- M.Sc. in Biophysics, Faculty of Science, Ain Shams University.(1967).
- Ph.D in Biophysics, Leningrad (Sanbetersburg) State Un. Rassia (1974)

Occupation:

- Demonstrator in physics Department, Faculty of science, Cairo University. (1964).

- Demonstrator in physics Department, Faculty of science, Ain Shams University. (1965).
- Assistant Lecturer in physics Department, Faculty of science, Ain Shams University.(1972).
- Lecturer in physics Department, Faculty of science, Ain Shams University.(1974).
- Associate Professor in physics Department, Faculty of science, Ain Shams University.(1981).
- Associate Professor in physics Department, Faculty of science, King Abdelaziz University, Geddah, Saudi Arabia (1979- 1983).
- Professor in Physics Department, Faculty of science, Ain Shams University.(1986).
- Professor in Physics Department, Faculty of science, King Saud University, Riyadh, Saudi Arabia (1999-2004).
- Professor Emeritus in Physics Department, Faculty of science, Ain Shams University. (2004 till now).

Scientific Activities:

- Scientific Fields of Interest:
 - Bioelectrical Properties of nervous system and modeling.
 - Radiation Biophysics.
 - Biomaterial
 - Radiotherapy.
- **Member in the editorial Scintfic board of :**
 - The Egyptian Journal of Biophysics and biomedical engineering.
 - Middle East Biophysical Journal.
 - Egyptian biophysical journal.
- Member of the national committee of pure and applied Biophysics.
- Associate Professor at the international center of theoritcal physics ICTP, Trieste, Italy (1986 – 1993).
- Supervising more than 50 PhD and MSc theses and an external examiner for more than 30 others

- Attendance of many national and international conferences.
 - Preparing and presenting several television programs about some physical simplified phenomena and their practical applications.
 - Supervisor of workshops about physics and technology, Ministry of Culture.
 - Member of higher Egyptian cultural Congress
 - Peer reviewer of many international scientific journals
 - Writing many articles in the local daily news papers about the safety measures when using both noionizing and ionizing radiation in all our fields of life
 - Member of the permanat scientific committee for promotion to assistant professor in Physics
 - Supervisor of the seminar projects in the Physics department
 - Peer reviewer of the biophysics courses in the Egyptian Universities
 - Peer reviewer of the biophysics electronic books issued by the high supream education congress.
- Writting and Publishing eight books in Biophysics:**
1. Biophysics and its medical applications (in arabic)
El-Heregy Publishers Riyadh, Saudi Arabia (2004).
 2. Biophysics, Concepts and medical applications El-Sallam Press, Cairo, Egypt (2007).
 3. Introduction to Biophysics Maktabet Al-Dar Al-Arabia Le-Ketab, Cairo ,Egypt (2011)
 4. New Principles of physics in physical medicine Slaheldin press Cairo Egypt 2013
 5. Environmental Physics (in arabic) Slaheldin Press Cairo Egypt ,2013.
 6. Medical physics, Electronic learing, Ain shams University Cairo Egypt 2013
 7. Biophysical Techniques in Medical Diagnosis
 8. Miriceles in Hearing and Vision Senses

Apreciation Award

Ain Shams University Appreciation Award in Basic Sinces 2015.

Member of the culture Committee Supreme Council of Egypt since 2015.

Publications:

1. S.A. Sallaam, A.M. Sallam and E.M. El-Sayed "An improved instrument for the production of glass microelectrode". Ain Shams Sc. Bull. No.II, 1967.
2. S.A. Sallam , E.M. El –Sayed and A.M. Sallam "Some Physical properties of glass microelectrodes for electrophysiological measurements". Ain Shams Sc. Bull. No.II, 1967.
3. S.A. Sallam, A.H. Girgis, A.H. Sallam and E.M. El – sayed "Membrane potential of the sartorius muscle of the Egyptian toad". Proc. Egypt. Acad. Of Sc. 20, 1966/1967.
4. S.A. Sallam, A.H. Kashef , E.M. El – Sayed and A.M. Sallam and "Membrane potential of the flexor tibialis muscle of the migratory" locust. Proc. Egypt. Acad. Of Sc. 20, 1966/1967.
5. E.M. El – Sayed, M.I. Sologoub "Change of resting potential, membrane resistance and the excitability of molluscan neurones *Coretus corneus*. Vec. LGY No.15, 1972 (USSR).
6. E.M. El – Sayed, M.I. Sologoub "Effect of potassium ions on the electrical characteristics of the spontaneous rhythmical activity of the identified neurones of molluscan *Coretus corneus*. . LGY. No.21, 1972 (USSR)
7. E.M. El – Sayed, M.I. Sologoub "Physical – Chemical and metabolic components of the resting potential in identified A and B neurons of *Coretus corenus* under the influence of potassium ions. *Physiol. J. USSR*, 60, 1180-1185 (1974).
8. E.M. El – Sayed, M.I. Sologoub "Bioelectric characterisitcs of neurones A and B of molluscan *Coretus corneus* at different content of Ca^{++} and Na^{+} . *Physiol. J., USSR*, 61, 690 – 698 (1975).
9. E.M. El – Sayed, M.I. Sologoub Action of acetylcholine chloride and chlor-choline chloride on the resting potential and membrane resistance of the molluscan identified neurones A and B. *Biophysika* 22, 461-464 (1977) USSR.
10. E.M El-Sayed. Effect of Ca^{++} , Na^{+} , & K^{+} ions on the bioelectrical properties of the identified neurones of molluscan *Coretus corneus*. Ain Shams Sc. Bull. 21, 107, 1976.
11. A.M. Sallam and E.M. El – Sayed "Effect of asphyxia on the spreading depression of the rat cerebral cortex". Ain Shams Sc. Bull. 21, 95-106, 1976.

12. E.M. El-Sayed. Excitability measurements of the identified neurons of molluscan *Coretus coretus*. Proc. Math. & Phys. Society of Egypt. 45, 185-189, 1978.
13. E.M. El – sayed and A.M. Sallm."Spreading depression phenomenon in birds' retina". First symposium of biophysics Aca. Sc. Cairo 1977.
14. A.M. Sallm and E.M. El-Sayed "Effect of Ca^{++} and Mg^{++} ions on the spreading depression phenomenon of chicken retina". First symposium of biophysics Acad. Sc. Cairo 1977.
15. A.M. Sallam, E.M. El-Sayed and M..S. Talaat "Characteristics of slow potential change evoked by calcium ions in chicken retina".Proc. Egypt. Acad. Sc. 23, 117-120, 1979.
16. A.M. Sallam, E.M. El-Sayed and M..S. Talaat "Estimation of the diffusion coefficient of potassium ions and mass factor in retinal spreading depression". Proc. Egypt. Acad. Sc. 33, 1980.
17. E.M. El-Sayed , A.M. Sallam and F. Ouf."An improved electronic circuit for recording the bioelectrical characteristics of the frog sartorius muscle Egyptian toad".Proc. Egypt. Acad. Sc. 33, 1980.
18. E.M.El-Sayed. A model for the Na-K pump behavior Bull.Fac.Sci.K.A.U.,Jeddah,5,215-221,1981.
19. E.M.El-Sayed,A.M.Sallam and Wagida Salem Studies on Leao's depression elicited in rat cerebral cortex, Part II-the effect of electrical stimuli, Bull.Fac.Sci.K.A.U.,Jeddah,6,151-158,1982.
20. E.M. El-Sayed, A.M. Sallam and W. Salem "Studies on Leao's spreading depression elicited in rat cerebral cortex. Part I: The effect of chemical stimuli".Ain Shams Sci. Bull. No.24, A, 1982 & 1983 pp. 219-231.
21. E.M. El-Sayed, A.M. Sallam and W. Salem "Part II: The effect of electrical stimuli" Ain Shams Sci. Bull. No.24, A, 1982 & 1983 pp. 233-245.
22. E.M. El-Sayed and M.Gohary. EMG quantitative analysis of Triceps muscle upon stimulation by different magnetic field. Egypt. J. Biomed. Engny, 5, No.I, 13-25, 1984.
23. E.M. El-Sayed Analysis of the spontaneous activity of the identified neurone "A" of molluscan *Planorbis corneus*.Egypt. J. Biomed. Eng., 5, No.I, I-II, 1984.
24. A.M. Sallam, M.I. Elgohary and E.M. El – Sayed "The action of glutamate on the spectral absorbance of retina's fish", Egypt. J. Biomed. Eng., 5, No.I, 39-44, 1984.

25. A.M. Sallam, E.M. El- Sayed and H.M. Abouelizz. "Effect of direct magnet fields on the potential and elasticity of earthworm" Egypt . J.Biomed.Eng.Vol.5 (1) (1984).
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33. E.M. El-Sayed Experimental and theoretical treatments of the sodium-potassium pump mechanism.Proc. 2nd Nat. Conf. On Biophys. And 1st Egypt. British Rad. Protect. Symp., 215-220, Nov. 1985.
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47. E M El-Sayed, A A Abdel Gawaad, M S Talaat, and A.W Makkar “Studies on the effect of some chemical odors on the

- electroantennogram responses of the moths *Spodoptera littoralis* (boised)". Proc. Egypt. Acad. Sci., 42, 203-217, 1992.
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61. الموجات فوق السمعية في الطب , العلوم والتقنية العدد الثالث والستون 18-22 سبتمبر 2002 م .
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67. El-Sayed E. M.,Biophysics, concepts and medical applications, El-Salam Press, Egypt. 2007
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69. M. metwally, A. M. Awaad, El-Sayed and A.M.Sallam "Comparison of intensity-modulated radiotherapy and forward-planning arc therapy techniques for prostate cancer", J.Appli.Med.Phys., 9, No.4, 37-56, 2008.
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transport across glomerular capillary walls.
J.Biophys.Biomed.Sc.,1(1),25-30,2008.

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The open Med. Dev.J,1, 19-28 , 2009.
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