

# ***Curriculum Vitae***

**Name:** Adel Moharam Raafat El Nozahy

**Title:** Ph.D. Laser Engineer, Electronics and Communications Engineer

**Affiliation:** Lecturer, Engineering Applications of Laser (EAL) department, National Institute of Laser Enhanced Sciences "NILES", Cairo University, Egypt.

**Date of Birth:** 25th March, 1950

## **Contact Information:**

**Address:** Cairo University, National Institute of Laser Enhanced Sciences, Engineering Applications of Laser (EAL).

**Tel:** Work: +202 2567 5243, Home +202 2287 4758, +202 2263 8327

**E-mail:** [adelmoharam@gmail.com](mailto:adelmoharam@gmail.com)

## **Biography:**

- B.Sc. in Electrical Engineering on April 1973 from Military Technical College-Cairo (M.T.C).
- B.Sc. in Military Sciences, on April 1973 from Military Technical College-Cairo (M.T.C).
- M.Sc. in Electrical Engineering on July 1977 from Orsay University, Paris, France.
- Ph.D. in Electronics on June 1981 from Orsay University Paris-France.

## **Educational Activities**

- 1- Teaching assistant at the Military Technical College, department of Optoelectronics & control systems from 1973 to 1976.
- 2- Ph.D. Student at Orsay University, Paris, France from 1976 to 1981.
- 3- Since 1981 to 1991 member of Optoelectronics & control systems department at M.T.C
- 4- From 1991 to 1994 Chief of the department of Optoelectronics and control systems at M.T.C.
- 5- From 1987 to 1997 part time faculty at Suez Canal university.
- 6- From June 1995 to 1997, part time faculty at the tenth of Ramadan higher institute of technology.
- 7- Part time faculty at the Arab Academy of Technology during the academic year 1997 – 1998
- 8- From January 1997 he is a member of staff of the National Institute of Laser Enhanced Sciences (NILES) Cairo University
- 9- From 2002....he is a member of the team of Egypt-SAT project at the National Authority for Remote Sensing Space project.

## **Teaching Activities**

- Quantum Electronics M.T.C from 1981 up to 1995.
- Laser Systems M.T.C from 1981 up to 1995.
- Electrical Circuits. M.T.C & Higher Institute of Technology at tenth of Ramadan City.
- Electromagnetic field theory Higher Institute of Technology at tenth of Ramadan City.
- Geometrical and physical optics M.T.C from 1981 up to 1994.
- Infra-red Systems M.T.C from 1981 up to 1994.
- Applied Mathematics Suez Canal University from 1987 up to 1996.
- Gas detection by lasers NILES from 1997.
- Electronics NILES from 1997.
- Remote sensing NILES from 1997.
- Laser Remote sensing NILES from 1997.
- Optoelectronics, NILES from 1997.
- Laser Measurements, NILES from 1997.

## **Research Area**

- Remote sensing
- Camouflaging paints against night vision systems.
- Electronic circuits design.- Laser Ranging.
- Optoelectronics.
- Laser Applications.
- Environmental and Earth Science Thrust Area.

## **List of Publications and patents:**

1. "Multifunctional Plasmonic Tellurite Photonic Crystal Fiber Polarization Splitter at Telecommunication Wavelengths." 2023 40<sup>th</sup> National Radio Science Conference (NRSC). Vol. 1. IEEE, 2023.
2. "Comparative study of LIBS and mechanically evaluated hardness of graphite/rubber composites." Materials Chemistry and Physics 207 (2018): 30-35.
3. "Ultra compact soft glass liquid photonic crystal polarization splitter with As<sub>2</sub>S<sub>3</sub> core." Optical and Quantum Electronics 49 (2017): 1-12.
4. "The DC electrical properties of polyvinyl alcohol/multi-walled carbon nanotube composites." Journal of Multidisciplinary Engineering Science and Technology 2.5 (2015): 884-889.
5. "Electrical properties of PMMA/Dye composite irradiated with laser." Life Science Journal 11.6 (2014).

6. "Optical properties of PMMA/dye composite irradiated with laser." J. Multidiscip. Eng. Sci. Technol.(JMEST) 1.5 (2014): 483-492.
7. "A Phase II Study of Nd-YAG Laser Therapy in Patients with Non-Operable Malignant Obstructive Endobronchial Lesions after Prior Chemotherapy and/or Radiation Therapy." Journal of American Science 9.12 (2013).
8. "Analysis And Trade-off Study of Signal-To-Noise Ratio Dependent Design Parameters of Satellite Passive Electro-Optical Remote Sensors", 12-th International Conference on Aerospace Sciences & Aviation Technology (ASAT) MTC,29-31 May 2007
9. "Analysis Of The Design Parameters of a Remote Sensing Satellite Optical Sensor"5-th International Conference on Electrical Engineering ICEENG 2006,16-18 May,2006
10. "Design And Optimization of Complex Thin Film Multilayer Optical Interference Filters", ",12-th International Conference on Aerospace Sciences & Aviation Technology (ASAT) MTC,29-31 May (2007).
11. Numerical study of Cr<sup>4+</sup>:YAG passively Q-switching Nd:GdVO<sub>4</sub> laser. Egpt. J. Solids, 29, (2006).
12. Simulation of optical resonators for vertical surface emitting lasers (VCSEL) for calculating threshold current to the gain guided and index guided. 6th Int. Conf. of lasers and Appl. NILES, Cairo Egypt, (2007)
13. Laser land leveling impact on water use efficiency, soil properties and machine performance under agricultural intensification condition; 11th annual conf. Of Misr Soc. Of Agricultural Eng. Kafr Elsheikh, (2003).
14. Biochemical studies of the effect of two laser radiation wavelengths on the Khapra Beetle *Trogoderma granarium* everts(coleoptera: Dermestidae), AIP 2nd Int. Conf. on modern trends in phys. Research (2006).
15. Biological studies on the effect of laser radiation on Khapra Beetle *Trogoderma granarium* (coleoptera: Dermestidae), AIP 2<sup>nd</sup> Int. Conf. on modern trends in phys. Research (2006).
16. "Optical fiber Digital Bus for Avionics Data" 2nd A.S.A.T conf. Cairo M.T.C.21-23 April (1987).
17. "Twin-Image Holography with Spatially Incoherent light" Proc. of 5th national radio science conf. M.T.C.16-18 Feb. (1988).

18. "Color Specification And Comparison By Spectral Reflectance Measurements" Proc. of 3ed ORMA conf. , M.T.C. 28-30Nov. (1989).
19. "Limitations on Laser Range Measurements in the Open Atmosphere" Proc. of 3ed ORMA conf. , M.T.C. 28-30 Nov.(1989).
20. "Using The Analogy Between Optics and Mechanics for Finding The Average Energy of an oscillating Wave Packet"ANE Fourth conf., M.T.C. 5-7 May (1990).
21. "Development of Coherent Light wave Systems" Ain Shams Univ., Eng. Bulletin Vol. 25- No 2, Aug. pp 281. (1990).

### **Referees**

1. Dr. Iftitan M Azzouz. Head of Dept. of Laser Science and Interactions, Cairo Univ., NILES, Egypt.Iftazzouz@niles.edu.eg. (+2012) 3945089.
2. Dr. Samy Montaser. Prof. of Physics. Faculty of Science, Cairo Univ, Egypt.Samymont@intuch.com (+2010) 1000631.
3. -Dr.Farouk Hammouda ; Previously professor of Physics at MTC, presently affiliation Prof. at NILES. (+2012) 7153896.
- 4 - Dr. Farouk M. El Sendiony, Previously professor at Charles Sturt university, Australia; Presently affiliation Prof .at theAmerican University of Cairo Tel: (+202)33753828