# Curriculum Vitae Prof. Dr. Ashraf Shamseldin Yahia



#### **Personal information**

**Date of birth:** 22 / 01 / 1945, Egypt.

Nationality: Egyptian.

Marital status: Married.

**Passport:** No:A19008092EGY, Issued:04/09/2016, Expire:03/09/2023

**Positions:** - Professor, Head of Electronics Sub-Dept., Physics Dept.,

Fac. of Sci., Ain Shams Univ., Cairo, Egypt.

Former Head of Physics Department (2004-2005).
Head of Electronics, Electromagnetics, and IT Unit.
Director of Telecommunications and Information Technology Center (ITTC), Faculty of Science, ASU.

-Educational/Scientific/Technical Advisor, Vocational

College of Telecommunication, Riyadh, Saudi Arabia 1991-

1995.

**Degrees:** - Ph.D. (1975), Electrical & Electronics Engineering,

Institute of Radio Engineering & Electronics, Czech

Academy of Science, Prague, Czech Republic. - M.Sc. (1967), Electronics, Fac. of Sci., Ain Shams

University, Cairo, Egypt.

- B.Sc. (1964), Special Degree in Physics (Distinction With Honor), Fac. of Sci. Ain Shams Univ., Cairo,

Egypt.

# PhD and M.Sc. Students Supervision (A total of 40):

- 6 Ph.Ds.
- 34 M.Scs.
- About 100 Graduation Projects.

#### **Publication** (A total of 74 papers):

- -30 Papers Published in International Peer-Reviewed Journals .
- -41 Papers Published in National Journals, National and International conferences
- 3 papers submitted (under review), 2017

#### **Memberships**

- The IEEE
- Optical Engineering Society of American
- The Egyptian Materials Research Society (Eg-MRS).
- The Egypt Nanotechnology Network (www.egnano.net).
- The Egyptian Mathematical Physical Society.
- The Egyptian Computer Society.

#### **Experiences**

- Demonstrator (1964), Assistant (1967), Assistant Prof. (1975), Associate Prof - Electronics (1983), Professor - Electronics (1989), Physics Department, Faculty of Science, Ain Shams University.
- Research Scholar, Institute of Radio Engineering and Electronics, Prague, Czech Republic (1970-1975)
- Visiting Scientist, Dept. 0f Electrical & Computer Engineering, University of Michigan, USA, 1981.
- Associate Professor-Electronics, Physics Department, Faculty of Science, King Abdulaziz University, Jeddah, Saudi Arabia, (1980-1984).
- Visiting Scholar, ICTP(School of Computational Phys), Terieste, Italy, 1986.
- Visiting Professor (Sabbatical Leave), Solar Energy Research Institute (SERI/NERL), Golden Colorado, USA, 1987-1988.
- Visiting Scientist, Institute of High Frequencies, University of Karlsruhe, Germany, 1990.
- Educational/Scientific/ Technical Advisor, Vocational College of Telecommunication, Riyadh, Saudi Arabia 1991-1995.
- Advisor, Scientific Computing Center, Ain Shams University, Cairo.
- Member of the Higher Consultancy Committee for Information, Ministry of Education, Egypt.
- Member of National Committee of Space Science and Remote Sensing, Egypt.
- Member and Founder of Egypt Nano-tecnology Network 2009.
- Member of National Committee on Industrial Engineering, Egypt.
- Member of The Permanent Promotion Committee for University Professors, Egypt.

#### **Research Interests**

- Modern Communication Techniques
- RF, Microwaves and Antennae Characterization.
- Electromagnetic generation, transmission and detection.
- Electromagnetic Compatibility and Interference (EMC/ EMI).
- Microwave Generation and Amplification.
- Modeling and Simulation of Microwave Semiconductor Devices.
- Nano-Electronic Devices Modeling and Characterization
- Modeling and Simulation of Solid State & Semiconductor Devices / Circuits.
- PV Solar cell Optimization and Characterization.

- Optical Communications.
- Modeling and Simulation Techniques in Electromagntics.
- Management Information Systems.
- Energy Harvesting Devices Modeling and Characterization.
- Digital Design and FPGA
- Passive and active microwave remote sensing.

#### **Project Activities**

- Member of the Joint Research Team between Ain Shams University, Cairo, and University of California at Berkeley (Search for hidden chambers in the Pyramids of Giza), (1967-1970).
- Member of the Joint Research Team between Ain Shams University, Cairo and Stanford Research Institute (SRI Int'l, at Menlo park in California), Applications of Modern Sensing Techniques of Egyptology, 1977.
- Co-Principal Investigator of The Egyptian Nanotechnology Network Project, 2009-2010, (<a href="www.egnano.net">www.egnano.net</a>).
- Consultant for Prince Sultan Advanced Technology Research Center Space Program (PSATRC), Saudi Arabia Through PRIME Engineering Consultants, Cairo, Egypt (Reprehensive: Dr. Samah El Khateeb, email: Samah@Primecairo.com)

#### **Teaching Interests**

- Undergraduate: Most of Electronics Courses Analog and Digital Electronic Circuits, Analog & Digital Telecommunication, Microwave, Electronics, Microwave Engineering / Propagation, Microwave Semiconductor Devices, Antennas, Microprocessors, Solid State Devices, Circuit Analysis.
- Undergraduate: Most of **Engineering Physics** Courses General Physics, Electromagnetics, Electric Circuits, Waves, Semiconductor Physics, Solid State Physics, Electrodynamics, Solid State Electronics, Computational Physics.
- Undergraduate/Graduate :Some Information Technology & Computer Science Courses Introduction to Information Technology, Advanced IT, Introduction to Information Systems (IS), Advanced information systems, Management Information Systems (MIS), Ecommerce, Introduction to Computer Science, Logic Design, Design of Analog and Digital Computer Circuits, Modeling and Simulation Techniques, Scientific Computational Methods, Communication technology Update for Mass Comm.
- Graduate Level: Courses Include Microwave Electronics, Microwave Engineering, Antennas & Wave Propagation, Electromagnetics, Solid Techniques, State/Semiconductor Devices, Photovoltaics, Computational Analogue and Digital Techniques, Microprocessors and Information Systems.
- Graduate Level : **MBA** (MIS, E-Commerce, Computer Science), ESLSCA (Ecole Superier Libre de Science Commercial Applice).
- Graduate Level: Egypt Radiological Board (Zamala), First Part Physics, Medical Imaging Signals and Systems, 2005-2011.

#### Teaching activities (Tasks) for the following institutes

- Faculty of Science, Ain Shams University, Cairo, Egypt.
- Faculty of Science, Suez Canal University, Ismaileia, Egypt.
- Faculty of Science, Al-Azhar University, Cairo, Egypt.
- The American University in Cairo, (AUC) (Phys. Dept), Cairo, Egypt.
- Faculty of Science, King Abdulaziz University, Jeddah, Saudi Arabia
- Military Technical University (Dept. of Radar), Cairo, Egypt.
- Sadat Academy of Management Sciences, Dept. of Computer Sciences. Canadian program (Univ. Of New Brunswik).
- Faculty of Commerce, Ain Shams University, Cairo, Egypt.
- College of Telecommunication, Riyadh, Saudi Arabia.
- The Higher Institute for Management and Info. Tech., Cairo.
- The Higher Institute for Management and Technology, Cairo.
- Faculty of Computers and Information, Helwan Univ., Cairo, Egypt.
- Faculty of Business, The Arab Academy for Science & Technology & Maritime Transportation (AASTMT), Cairo, Egypt.
- ESLSCA (Ecole Superier Libre de Science Commercial Applice')
- Egypt Radiological Board (Zamala), First Part Physics, Medical Imaging Signals and Systems, 2005-2011.
- Faculty of Mass Communication, Arab Academy of Science & Technology, 2017.

#### **Construction Contributions / Experience**

- -1975: Microwave Lab Phys Dept, Fac of Sci, Ain Shams Univ, Cairo, Egypt.
- -1975: Antenna Lab Phys Dept Fac of Sci, Ain Shams Univ, Cairo, Egypt.
- -1980-1984: Microwave Lab Phys Dept Fac of Sci, King Abdulaziz Univ, Jeddah.
- -1980-1984: Semi Conductor Devices Characterization Lab Phys Dept Fac of Sci, King Abdulaziz Univ Jeddah.
- -1980-1984: The First Personal Computer Lab Phys Dept Fac of Sci, King Abdulaziz Univ Jeddah.
- -1987-1988: Modeling and Simulation Lab, Solar Energy Research Institute (SERI/NERL), Golden Colorado, USA.
- -1989: Photovoltaic Solar Cells, Modeling, Simulation and Characterization Lab Phys Dept Fac of Sci, Ain Shams Univ, Cairo, Egypt.
- -1991-1995: Telecom College Lab/Curriculum Development, Riyadh, Saudi Arabia.
- -1998-2002: Electronics Unit, Phys Dept Fac of Sci, Ain Shams Univ, Cairo, Egypt, **Development of The Following Labs:** 
  - Photovoltaic Solar Cells Characterization Lab
  - EMC/EMI Test Lab
  - Electromagnetic Radiation Lab
  - Microwave/Antenna Lab

- Microstrip Antennas Design Lab
- Satellite Training Lab
- Telecom Technique(Analog/Digital) Lab
- Optical Communication Training Lab
- Printed Circuit Board/Surface Mounted Technique Lab
- LAN and Internet Training Lab

**2007**: Radio Frequency Identifications (RFID) Design Lab Electronics Unit, Phys Dept Fac of Sci, Ain Shams Univ, Cairo, Egypt.

2010: Signal Processing Lab

**2010:** Egypt Nanotechnology Network (<u>www.egnano.net</u>)

2012: Design of Circular Polarized Synthetic Aperture Radar Sensors

**2013**: Modeling and Simulation of Energy Harvesting Devices Lab.

2006-2014: Modeling and Simulation Lab for Nano-Electronic Devices

#### **Managerial Experience**

- 1. Directing Ain Shams University scientific computing center (1976/78).
- 2. Responsible for the development of curricula of courses in the Faculty of Science, King Abdulaziz University, Jeddah, Saudi Arabia (1980-1985). Also, managing follow up committee of Assistants missioned for the M.Sc. & Ph.D. to the USA & GB.
- 3. Managing the educational&scientific affairs in the Vocational/Technical College of Telecommunication, Saudi Telecom, Riyadh, Saudi Arabia,1991-1995.
- 4. Director and manager of the Information & Telecommunication Technology (ITTC) center, Faculty of Science, Ain Shams University, from 2000 till now.
- 5. Heading the Department of Physics, Faculty of Science, Ain Shams University, 2004-2005.
- 6. Heading and Managing the Electronics, Electromagnetics & information technology group since 1995 till now.
- 7. Founder and manager of the Electronics specialty and curricula development since 2000 till now.
- 8. The higher consultancy committee for information of the ministry of education, 1995-2005.
- 9. Curriculum development committee for the application of the credit hour system in the Faculty of Science, Ain Shams University 2010-2015.
- 10. Member of the Board of the Faculty of Science for three times, 1999, 2004, 2014.
- 11. Administering the Egyptian Nano-Technology Network since 2009.
- 12. The committee responsible for the accreditation of the Faculty of Science for educational quality & total quality management since 2010 till now where our faculty has been accredited 2016.

# **Telephone**

- Mobile: (+20) 100-123-7878. - Fax: (+02) 2466-5630. - Office: (+02) 2484-2558. - Fax: (+02) 2684-2123.

### **Email**

<u>ayahia@sci.asu.edu.eg</u> <u>ayahia@daad-alumni.de</u> <u>ayahia@egnano.net</u>

## **Mailing Address**

Home: 14 A, Dr. El-Sobky Street, Apt. 18, Dokky. 12311, Giza, Egypt.

Work: Physics Department, Faculty of Science, Ain Shams University, Abbassia,

Cairo 11566, Egypt.