

CURRICULUM VITAE

I. PERSONAL DETAILS

Name: SAV Aidis Stylianos

Date of Birth: 20/06/1967

Address: Technological Education Institute (TEI) of Piraeus
Building Z – Office ZB108,
250 Thivon & Petrou Ralli, GR-12244, Egaleo, Greece

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II. PROFESSIONAL QUALIFICATION

1992 **Electrical and Computer Engineer**, Member of the Hellenic Engineering Society since 1992

III. ACADEMIC QUALIFICATIONS

1997 **PhD**, National Technical University of Athens, Department of Electrical and Computer Engineering

1991 **Diploma** in Electrical and Computer Engineering, National Technical University of Athens, Department of Electrical and Computer Engineering

IV. TEACHING EXPERIENCE

2004- Today **Assistant (2004-2009)-Associate (2009-2013) – Professor (2014)** at the Technical Educational Institute of Piraeus, Department of Electronics Engineering,

Head of Mobile Communications-Telecommunications Networks Lab

Head of Antennas-Radio Communications-Radar Lab.

2004-Today **Undergraduate Teaching Modules (Dept of Electronics)**

- EM fields and EM Wave Propagation
- Antennas-Radio Links-Radar
- Mobile Communications-Telecommunication Networks

2005-Today **Postgraduate Teaching Modules (Dept of Electronics)**

- *MSc Data Communications & Networking*
 - Wireless Communications & Internet Wireless Networks
- *MSc Educational Communication & Information Technologies*
 - Introduction to Computer Networks and Data Communications
- *MSc Internetworked Electronics Systems*

- Wireless and Optical Communications

V. INDUSTRIAL EXPERIENCE

1997 - 2004 **Telecommunication Engineer**, EUROCOM EXPERTISE S.A.-INTRACOM Group

VI. RESEARCH INTERESTS

- Electromagnetic Wave Propagation & Scattering
- High Power Microwave Devices and Applications
- HPM / EMP IEMI Attacks
- EMC/EMI Testing Methodology
- Radio Channel Measurements & Modelling
- Antennas Analysis & Design
- Wave propagation in nonlinear optical waveguides and fibers
- Photonic Devices and Electromagnetic Simulation Models

VII. RESEARCH PROJECTS (2011-Today)

- [R1] “**SAVELEC**: Safe control of non cooperative vehicles through electromagnetic means”, *funding*: EU **FP7-SEC**-2011.1.4-2: Innovative techniques for safe external control of non cooperative vehicles – Capability Project, Role in the Project: **Project leader** for TEI Piraeus.
- [R2] “**NHyOPV**: Novel and highly efficient Hybrid organic photovoltaic cells (HyOPVs)”, *funding*: greek Ministry of Education and E.U, call “Archimedes-III”, Role in the Project: **Project leader**
- [R3] “**NHyOLED**: Novel low power consumption Hybrid OLEDs with improved operational characteristics”, *funding*: greek Ministry of Education and E.U and E.U., call “Archimedes-III”, Role in the Project: **Research Engineer**.
- [R4] “**ANEMOS**: Analytical and Numerical Electromagnetism with Applications in Photonics and Nanodevices”, *funding*: greek Ministry of Education and E.U, call “Thales”, Role in the Project: **Research Engineer**.
- [R5] “**PIMACTex**: Applications of textile products based on smart materials on the monitoring, display and control of physiological parameters”, *funding*: General Secretariat for Research and Technology, greek Ministry of Development and E.U./European Regional Development Fund, Operational Programme «Competitiveness and Entrepreneurship» (OPCE II), call “COOPERATION 2009”, Role in the Project: **Research Engineer**.

VIII. PUBLICATIONS

VII.1. BOOKS / CHAPTERS

- [B1] S.P. Savaidis, A. Skountzos, "Electromagnetism and Transmission of Electromagnetic Waves", "Synchrones Ekdoseis", Athens, 2010.
- [B2] Chapter "RF Measurements and Characterization of Conductive Textile Materials" in "Electronics and Computing in Textiles" book, bookboon.com (Ventus Publishing APS), ISBN 978-87-403-082-0, 2012.

VII.2 PUBLICATIONS IN INTERNATIONAL JOURNALS

- [J1] M.Vasilopoulou, N.A.Stathopoulos, **S.P. Savaidis**, I. Kostis, G. Papadimitropoulos, D. Davazoglou, "Engineering of the energetic structure of the anode of organic photovoltaic devices utilizing hot-wire deposited transition metaloxide layers" Applied Surface Science, Vol. 350, pp. 25-30, September 2015.
- [J2] N.A. Stathopoulos, **S.P. Savaidis**, A. Botsialas, Z.C. Ioannidis, D.G. Georgiadou, M. Vasilopoulou, G. Pagiatakis, "Reflection and transmission calculations in a multilayer structure with coherent, incoherent, and partially coherent interference, using the transmission line method", Applied Optics, Vol. 54, Issue 6, pp. 1492-1504, February 2015.
- [J3] **S. P. Savaidis**, Z. C. Ioannidis, , S. A. Mitilineos and N. A. Stathopoulos, "Design of Waveguide Microwave Pulse Compressors Using Equivalent Circuits," IEEE Transactions on Microwave Theory and Techniques, Vol. 63, No. 1, pp. 125-134, January 2015.
- [J4] Nikolaos Moshonas, Gerasimos K Pagiatakis, Panagiotis Papagiannis, **Stylianos P Savaidis**, Nikolaos A Stathopoulos, "Application of the transmission line method for the study of highly nonlinear multilayer optical structures", Optical Engineering, Vol. 53, No. 11, November, 2014.
- [J5] N.A Stathopoulos, **S.P Savaidis**, H. Simos, M. Rangoussi, P. Kervalishvili, "Simulation and properties of Erbium-Doped Distributed Bragg Reflectors (ED-DBRs) and Fiber Bragg Gratings (ED-FBGs)", Vol. 19, No. 5, October 2013.
- [J6] Mitilineos, S.A., Symeonidis, S.K., Mpatsis, I.B., Iliopoulos, D.K., Kliros, G.S., **Savaidis, S.P.**, and Stathopoulos, N.A., "Conformal patch antenna arrays design for onboard ship deployment using genetic algorithms", Advances in Power Electronics, Vol., pp. 1-5, 2013.
- [J7] M. Vasilopoulou, I. Kostis, A. M. Douva, D. G. Georgiadou, An. Soutati, G. Papadimitropoulos, N. A. Stathopoulos, **S. P. Savaidis**, P. Argitis, D. Davazoglou, "Vapor-deposited hydrogenated and oxygen-deficient molybdenum oxide thin films for application in organic optoelectronics", Surface and Coating Technology, Vol. 230, 15 September 2013.
- [J8] I. Kostis, M. Vasilopoulou, G. Papadimitropoulos, N. Stathopoulos, **S. Savaidis**, D. Davazoglou, "Deposition of undoped and H doped WO_x ($x \leq 3$) films in a hot-wire atomic layer deposition system without the use of tungsten precursors", Journal of Surface Technology, Vol. 230, 15 September 2013.

- [J9] **S.P. Savaidis**, Z.C. Ioannidis, N.A. Stathopoulos, "Hybrid Field/Transmission-Line Model for the Study of Coaxial Corrugated Waveguides" IEEE Microwave Theory and Techniques, Vol. 60, No. 10, October 2012.
- [J10] N. A. Stathopoulos, L. C. Palilis, S. R. Yesayan, **S. P. Savaidis**, M. Vasilopoulou and P. Argitis, "A transmission line model for the optical simulation of multilayer structures and its application for oblique illumination of an organic solar cell with anisotropic extinction coefficient", Journal of Applied Physics, 110, 114506 (2011).
- [J11] **Stylianos P. Savaidis** and Nikolaos I. Miridakis, "Statistical Model of Downlink Power Consumption in Cellular CDMA Networks", Int. J. Wireless & Mobile Networks (IJWMN), vol. 3, no. 4, pp. 46-65, Aug. 2011
- [J12] N.A.Stathopoulos, L.C.Palilis, **S.P.Savaidis**, S.R.Yesayan, M.Vasilopoulou, G.Papadimitro-poulos, D.Davazoglou and P.Argitis 'Optical modeling of hybrid polymer solar cells using a transmission line model and comparison with experimental results' IEEE Journal of Selected Topics in Quantum Electronics, Vol. 16, No. 6, Nov./Dec. 2010.
- [J13] G.D. Tsogkas, J.A. Roumeliotis and **S.P. Savaidis** "Electromagnetic Scattering by an Infinite Elliptic Dielectric Cylinder with Small Eccentricity Using Perturbative Analysis", IEEE Transactions on Antennas and Propagation, Vol. 58, No. 1, January 2010
- [J14] G.D. Tsogkas, J.A. Roumeliotis and **S.P. Savaidis** "Cutoff Wavelengths of Elliptic Metallic Waveguides", IEEE Microwave Theory and Techniques, Vol. 57, No. 10, October 2009.
- [J15] **S. P. Savaidis**, N. A. Stathopoulos, "Simulation of Light Emission from planar multilayer OLEDs, using a transmission line model", IEEE Journal of Quantum Electronics, Vol. 45, No. 9, pp. 1089-1099, September 2009.
- [J16] N.A.Stathopoulos, **S.P.Savaidis**, "Gain calculation and propagation characteristics in single-mode Erbium-Doped Fiber Amplifiers with refractive index nonlinearities", Vol. 281. No 1, pp. 80-89, January 2008.
- [J17] G.D. Tsogkas, J.A. Roumeliotis and **S.P. Savaidis** "Scattering by an infinite metallic elliptic cylinder", Electromagnetics, Vol. 27, No. 4, pp. 159-182, May 2007.
- [J18] **S.P.Savaidis**, N.A.Stathopoulos "Optical confinement in nonlinear low-index nanostructures", Vol 54, No. 18, pp. 2699-2722, December 2007.
- [J19] N.A. Stathopoulos, **S. P. Savaidis** and M. Rangoussi: "Propagation characteristics of nonlinear waveguides with complex refractive index using a transmission line model", Optical and Quantum Electronics, Vol. 38, No. 8, pp. 683-699, June 2006.
- [J20] **S. P. Savaidis**, N. A. Stathopoulos "Propagation characteristics of nonlinear optical fibers with complex refractive index. A transmission line model approach", Optics Communications, Vol. 260, No. 2, pp. 427-433, April 2006.
- [J21] **S. P. Savaidis** and J. A. Roumeliotis: "Scattering by an infinite Circular Dielectric Cylinder Coating Eccentrically an Elliptic Dielectric Cylinder", IEEE Transactions on Antennas and Propagation, Vol. 52, No 5, pp. 1180-1185, May 2004.

- [J22] **S. Savaidis**, P. Frangos, D.L Jaggard, K. Hitzanidis: "Scattering from fractally corrugated surfaces with use of the extended boundary condition method", *Journal of Optical Society of America A*, vol. 14, No. 2, 11 pages, Feb 1997.
- [J23] **S.P. Savaidis** and J.A. Roumeliotis: "Scattering by an infinite Elliptic Dielectric Cylinder Coating Eccentrically a Circular Dielectric or Metallic Cylinder", *IEEE Transactions on Microwave Theory and Techniques*, *IEEE Transactions on Microwave Theory and Techniques*, vol. 45, No. 10, pp. 1792-1800, Oct 1997.
- [J24] J.A. Roumeliotis and **S.P. Savaidis**: "Scattering by an infinite Circular Dielectric Cylinder Coating Eccentrically an Elliptic Metallic One", *IEEE Transactions on Antennas and Propagation*, vol. 44, No. 5, pp. 757-763, May 1996.
- [J25] **S. Savaidis**, P. Frangos, D. L. Jaggard, K. Hitzanidis: "Scattering from fractally corrugated surfaces: an exact approach", *Optics Letters*, vol. 20, No. 23, pp. 2357-2359, Dec 1995.
- [J26] J.A. Roumeliotis and **S.P. Savaidis**: "Cutoff Frequencies of Eccentric Circular-Elliptic Metallic Waveguides", *IEEE Transactions on Microwave Theory and Techniques*, vol. 42, No. 11, pp. 2128-2138, Nov 1994.

VII.3. INTERNATIONAL CONFERENCES

- [C1] **S. P. Savaidis**, S. A. Mitilineos, N. A. Stathopoulos, Z. C. Ioannidis, "Modeling of a Waveguide Microwave Pulse Compression System using Transmission Line Theory and Equivalent Circuits", **2015 IEEE International Conference on Plasma Science**, Belek, Turkey May 24-28, 2015.
- [C2] N.A.Stathopoulos, **S.P.Savaidis**, S.Vasiliadis, E.Voglis "Thickness optimization of a single heterojunction fibre organic photovoltaic using a simulation technique" **47th IFKT Congress**, Izmir/Turkey September 25 - 26, 2014.
- [C3] M. Vasilopoulou, N.A.Stathopoulos, **S.Savaidis**, D.Davazoglou "Study of Intermediate Bands of Amorphous Oxygen-deficient and Hydrogen-Doped Molybdenum and Tungsten Oxide Films and Application in Multicolor Organic Light Emitting Diodes" SATF2014: Science & Applications of Thin Films, Conference & Exhibition, 15-19 September 2014, Izmir, Turkey.
- [C4] Z. C. Ioannidis, **S. P. Savaidis**, S. A. Mitilineos, C. Tsitouri, N. A. Stathopoulos "Equivalent Circuit/Transmission Line Model of Microwave Pulse Compression Cavities", **2014 International Symposium on Electromagnetic Compatibility (EMC Europe)**, Gothenburg, 1-4 September, 2014.
- [C5] M. Vasilopoulou, A. Douvas, D. Georgiadou, N. Stathopoulos, **S. Savaidis**, D. Davazoglou, L. C. Palilis and P. Argitis "Large Work Function Shift of Organic Semiconductors and Enhanced Interfacial Electron Transport in Organic Light Emitting Diodes Enabled by Porphyrin Interfacial Self-Assembly" **ICOE 2014 - 10th International Conference on Organic Electronics**, Modena, Italy, June 11-13, 2014.
- [C6] Nikolaos Moshonas; Gerasimos K. Pagiatakis; Panagiotis Papagiannis; **Stylios P. Savaidis**; Nikolaos A. Stathopoulos: "Simulation and properties of highly nonlinear multilayer optical structures using the transmission line method", **Optical Modelling**

- and Design IBrussels**; Belgium; 15 -17 April 2014 / Proceedings of SPIE - The International Society for Optical Engineering.
- [C7] Rigas, E., Correi, R.b, Stathopoulos, N.A., **Savaidis, S.P.**, James, S.W. , Bhattacharyya, D., Kirby, P.B., Tatam, R.P.: "Evaluation of the optical switching characteristics of erbium-doped fibres for the development of a fibre Bragg grating sensor interrogator", **23rd International Conference on Optical Fibre Sensors**; Santander; Spain; 2 - 6 June 2014 / Proceedings of SPIE - The International Society for Optical Engineering.
- [C8] **S. P. Savaidis**, Z. C. Ioannidis, N. A. Stathopoulos, S. A. Mitilineos, C. Tsitouri, "Transmission line modeling of microwave pulse compression systems", **The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems**, Tel Aviv, 21-23 October 2013.
- [C9] **S.P. Savaidis**, N.A. Stathopoulos and M. Vasilopoulou: "A Transmission Line Model (TLM) for the calculation of the external quantum efficiency of an Organic Photovoltaic (OPV) with partial coherent interference", **39th International Conference on Micro and Nano Engineering**, 17 September 2013, London, UK..
- [C10] N.A. Stathopoulos, **S.P. Savaidis**, A. Botsialas, M. Vasilopoulou: "Thin film thickness measurement technique, using the spectral reflectance and transmittance method, based on a transmission line model", **39th International Conference on Micro and Nano Engineering**, 17 September 2013, London, UK.
- [C11] S. Vasiliadis, N. Stathopoulos, K. Prekas, **S. Savaidis**: "Behaviour of the conductive yarns and fabrics in high frequencies", **ITMC 2011 International Conference**, Casablanca, 2011
- [C12] N.A. Stathopoulos, **S.P. Savaidis**, S. Yesayan, L.C. Palilis, M. Vasilopoulou, P. Argitis, "Simulations of the electric field in Hybrid Organic Photovoltaics using a transmission line model - Comparison with experimental results", **International Commission for Photonics**, Delphi 7-9 October 2009.
- [C13] G. D. Tsogkas, J. A. Roumeliotis **S. P. Savaidis**: "Cutoff Wavelengths of Elliptical Metallic Waveguides", **The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems**, Tel Aviv, 9-11 November 2009.
- [C14] N.A. Stathopoulos, **S.P. Savaidis**, S. Yesayan, L.C. Palilis, M. Vasilopoulou, P. Argitis, "Simulations of the electric field in Hybrid Organic Photovoltaics using a transmission line model - Comparison with experimental results", **International Commission for Photonics**, Delphi 7-9 October 2009.
- [C15] N.A. Stathopoulos, **S.P.Savaidis**, S. Yesayan, L.C. Palilis, M. Vasilopoulou and P.Argitis "Electromagnetic simulation of organic photovoltaic devices using a transmission line model", **2nd IS – Flexible Organic Electronics 2009**, Chalkidiki 8-10 July, 2009.
- [C16] K.Orfanidis, **S. Savaidis**: "Development of an e-learning platform for the instruction of Electromagnetic Theory and Antennae course".**3rd International Scientific Conference e R A**, Aegina, 19-21September 2008.

- [C17] Paraskevas, M. Rangoussi, S. M. Potirakis, and **S. Savaidis**: “Phase spectral processing for improved time-domain soft microphone based noise estimation”, **155th Meeting Acoustical Society of America**, Paris, 26 June-4 July 2008.
- [C18] S. M. Potirakis, M. Rangoussi, **S. Savaidis**, and N. Zafeiropoulos: “Real time evaluation of soft microphones on a local active noise control system”, **155th Meeting Acoustical Society of America**, Paris, 26 June-4 July 2008.
- [C19] G. D. Tsogkas, J. A. Roumeliotis **S. P. Savaidis**: “Scattering by an infinite Circular Dielectric Cylinder Coating Eccentrically an Elliptic Dielectric One”, **8th International Workshop on Mathematical Methods in Scattering Theory and Biomedical Engineering**, Lefkada, 8-11 September 2007.
- [C20] N. Venetas, A. Charitopoulos, **S.P Savaidis**, N.A Stathopoulos, P. Papageorgas: “Radio Measurements and channel modelling for UHF passive RFID applications”. **2nd International Scientific Conference e R A**, Athens, 22-23 September 2007.
- [C21] N. Venetas and **S. P. Savaidis**: “Development of a Numerical Statistical Model for WCDMA Downlink Performance Evaluation”, **1st International Scientific Conference e R A**, Tripoli, 16-17 September 2006.
- [C22] G. D. Tsogkas, J. A. Roumeliotis **S. P. Savaidis**: “Scattering by an infinite Circular Dielectric Cylinder Coating Eccentrically an Elliptic Dielectric One”, **7th International Workshop on Mathematical Methods in Scattering Theory and Biomedical Engineering**, Nymfaio, 8-11 September 2005.
- [C23] **S. P. Savaidis** and J. A. Roumeliotis, “Scattering by an infinite Circular Dielectric Cylinder Coating Eccentrically an Elliptic Dielectric One, **6th International Workshop on Mathematical Methods in Scattering Theory and Biomedical Engineering**, Tsepelovo, 18-21 September 2003.
- [C24] **S.P Savaidis**, J.A. Roumeliotis, “Scattering from an infinite elliptic dielectric cylinder with an off-axis circular metallic or dielectric one”, **PIERS (Progress in Electromagnetics Research Symposium)**, Innsbruck, July 8-12, 1996.
- [C25] **S. Savaidis**, P. Frangos, K. Hitzanidis, D. L. Jaggard, “Scattering from multitone fractally corrugated or almost periodic conducting surfaces using the Extended Boundary Condition Method”, **Trans Black Sea Region Symposium on Applied Electromagnetism-Metsovo**, April 17- 1996.
- [C26] **S.P. Savaidis**, J.A. Roumeliotis, “Electromagnetic scattering from an infinite circular dielectric cylinder with an off-axis elliptic metallic or dielectric one”, **8th ISTET (International Symposium on Theoretical Electrical Engineering)**, Thessaloniki, September 22-23 1995.
- [C27] J.A. Roumeliotis, **S.P. Savaidis**, “Cutoff frequencies of eccentric circular elliptic metallic waveguides”, **PIERS (Progress in Electromagnetics Research Symposium)**, Noordwijk, July 11-15 1994.