

CURRICULUM VITAE

I. PERSONAL DETAILS

Name: STYLIANOS SAV AidIS
Address: University of West Attica,
Department of Electrical and Electronics Engineering,
250 Thivon & Petrou Ralli, GR-12244, Egaleo, Greece
Office: +30-210-5381515-1526, **Email:** ssavaid@uniwa.gr,
Web Site: <http://savaidis.teipir.gr/index.php/en/>

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. PROFESSIONAL EXPERIENCE

2018-Today **Professor**
University of West Attica,
Department of Electrical & Electronics Eng.
2004-2018 **Assistant (2004-2009)-Associate (2009-2014) – Professor (2014-2018)**
Piraeus University of Applied Sciences (TEI of Piraeus)
Department of Electronics Eng.
1997-2004 **Telecommunications Engineer**, Eurocom Expertise S.A.-INTRACOM Group

V. EDUCATIONAL EXPERIENCE

2018-Today **Undergraduate Teaching Modules (Department of Electrical & Electronics Eng.)**

- Electromagnetic fields,
- Wireless Propagation - Radio Communications
- Mobile Communications Networks
- Wireless Data Networks
- Electromagnetic Compatibility

2004-2018 **Undergraduate Teaching Modules (Department of Electronics Engineering)**

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

2005-Today **Postgraduate Teaching Modules**

- ***MSc “Data Communications and Networking”***
 - Wireless Data Networks (2019-Today)
 - Electromagnetic Compatibility (2019-Today)
- ***MSc Information and Communication Technologies in Education***

- Introduction to Computer Networks and Data Communications (2006-Today)
 - **MSc Internetworked Electronics Systems**
 - Wireless and Optical Communications (2016-2019)
 - **MSc Data Communications & Networking**
 - Digital Communications (2005-2007)
 - Wireless Communications (2005-2010)
 - Wireless Networks (2003-2005, 2011-2013)
 - Internet Wireless Networks (2006-2011)
 - Wireless Communications and Networks (2014-2016)
- 2016-Today Hellenic Army School of Telecommunication Electronics**
- Special Topics in Electronics (2016-2018)
- 2004-Today PhD Thesis Co-supervisor**
 Electrical & Computer Engineering School, National Technical University of Athens
Thesis Title: “Propagation and Scattering of Electromagnetic Waves in Elliptical Cylindrical Structures”, Main Supervisor: Prof. J. Roumeliotis (2004)
Thesis Title: “Microwave Communications & Applications”,
Main Supervisor: Prof. N. Uzunoglou (2016)
- 2004-Today** Supervision of more than 30 MSc thesis projects
- 2004-Today** Supervision of more than 30 Graduate thesis projects

VI. RESEARCH INTERESTS

- High Power Microwave Devices and Applications
- Plasma Science and Applications
- EMC/EMI Methodology and Measurements
- Electromagnetic Wave Propagation & Scattering
- Wireless Channels Measurements and Modeling
- Electromagnetic Simulation Models for Microwave and Photonic Applications
- Wave propagation in nonlinear optical waveguides and fibers

VII. SELECTIVE LIST OF RESEARCH PROJECTS (2016-2019)

- [R1] “**ImPACT**: “IMproved L-band Plasma Switch for High-Power MicrowAve Pulse Compression”, funding: GSRT, Budget: 62,961 Euro, Duration: 2017-2019, Role in the Project: **Project leader**
- [R2] “**HEMP**: High Power Experimental Test-Bed for Microwave Pulse Compression and Applications”, funding: Internal, Budget: 30,000 Euro, Duration: 2017-2019, Role in the Project: **Project leader**
- [R3] “**SAVELEC**: Safe control of non cooperative vehicles through electromagnetic means”, funding: EU FP7, Budget: 806,000 Euro for PUAS, Duration: 2012-2016, Role in the Project: **Project leader for PUAS.**

VIII. PUBLICATIONS

IX.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.

IX.2 PUBLICATIONS IN INTERNATIONAL JOURNALS

- [J1] N. A. Stathopoulos, **S.P. Savaidis**, H. Simos, E. Rigas, R. Correia, S.W. James, and R. P. Tatam, “Transmission line method for the simulation of fiber Bragg gratings”, *Applied Optics*, 58 (2), pp. 353-360, 2019.
- [J2] Moshonas, N., Stathopoulos, N. A., O’Connor, B. T, A. Celik Bedeloglu, **Savaidis, S. P.**, Vasiliadis, S., “Optical modeling of fiber organic photovoltaic structures using a transmission line method”, *Applied Optics*, 56 (34), pp. 9351-9358, 2017.
- [J3] Vasilopoulou, M., Georgiadou, D. G., Davazoglou, D., **Savaidis, S. P.**, Stathopoulos, N.A., “Outcoupling efficiency optimization of phosphorescent and fluorescent based hybrid red, green and blue emitting OLED devices”, *Physica Status Solidi (C) Current Topics in Solid State Physics*, 14(1-2),2017.
- [J4] M. Vasilopoulou, N. A.Stathopoulos, **S. P. Savaidis**, I. Kostis, G. Papadimitropoulos, D. Davazoglou, “Engineering of the energetic structure of the anode of organicphotovoltaic devices utilizing hot-wire deposited transition metaloxide layers”, *Applied Surface Science*, Vol. 350, pp. 25-30, September 2015.
- [J5] 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.
- [J6] **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.
- [J7] 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.
- [J8] 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)”, *Optical Fiber Technology*, Vol. 19, No. 5, October 2013.
- [J9] 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*, Volume 2013 (2013), Article ID 960514, 5 pages, 2013.
- [J10] M. Vasilopoulou, I. Kostis, A. M. Douva, D. G. Georgiadou, An. Soultati, 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.
- [J11] 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.
- [J12] **S. P. Savaidis**, Z.C. Ioannidis, N.A. Stathopoulos, “Hybrid Field/Transmission-Line Model for the Study of Coaxial Corrugated Waveguides” *IEEE Transactions on Microwave Theory and Techniques*, Vol. 60, No. 10, October 2012.
- [J13] 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).
- [J14] **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
- [J15] N. A. Stathopoulos, L. C. Palilis, **S. P. Savaidis**, S. R. Yesayan, M. Vasilopoulou, G. Papadimitropoulos, 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.
- [J16] 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
- [J17] G. D. Tsogkas, J. A. Roumeliotis and **S. P. Savaidis** “Cutoff Wavelengths of Elliptic Metallic Waveguides”, *IEEE Transactions on Microwave Theory and Techniques*, Vol. 57, No. 10, October 2009.
- [J18] **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.
- [J19] 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.
- [J20] 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.
- [J21] **S. P. Savaidis**, N. A. Stathopoulos “Optical confinement in nonlinear low-index nanostructures”, *Journal of Modern Optics*, Vol 54, No. 18, pp. 2699-2722, December 2007.
- [J22] 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.
- [J23] **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.
- [J24] **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.
- [J25] **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.

- [J26] **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*, vol. 45, No. 10, pp. 1792-1800, Oct 1997.
- [J27] 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.
- [J28] **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
- [J29] 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.

IX.3. INTERNATIONAL CONFERENCES

- [C1] **S. P. Savaidis**, N. A. Stathopoulos, S. A. Mitilineos, Z. C. Ioannidis, “Microwave Pulse Compression Experiments using RF Breakdown Triggered Switch under Repetitive Operational Conditions”, *2017 IEEE International Conference on Plasma Science*, May 21-25, Atlantic City, New Jersey, USA.
- [C2] **S. P. Savaidis**, S. A. Mitilineos, Z. C. Ioannidis, N. A. Stathopoulos, “Microwave Pulse Compression Experiments in a Waveguide Cavity with RF Discharge Switch” *2016 IEEE International Conference on Plasma Science*, 19-23 June, 2016, Banff, Canada.
- [C3] M. Martínez-Vázquez, W. Simon, **S. P. Savaidis**, “Evaluation of Human Exposure to a HPM Pulsed Plane Wave, *2016 IEEE International Symposium on Antennas and Propagation (APSURSI)*, 26 June – 1 July, 2016, Fajardo, Puerto Rico.
- [C4] M. Martínez-Vázquez, W. Simon, E. Stavrou, **S. P. Savaidis**, “Evaluation of Human Exposure to an HPM Pulsed Signal in the Near Field of a Horn Antenna”, *10th European Conference on Antennas and Propagation, EuCAP 2016*, 10-16 April, Davos, Switzerland.
- [C5] **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.
- [C6] 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.
- [C7] 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.
- [C8] 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.
- [C9] 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.

- [C10] 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.
- [C11] 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.
- [C12] **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.
- [C13] **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..
- [C14] 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.
- [C15] S. Vasiliadis, N. Stathopoulos, K. Prekas, **S. Savaidis**: "Behaviour of the conductive yarns and fabrics in high frequencies", *ITMC 2011 International Conference*, Casablanca, 2011
- [C16] 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.
- [C17] 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.
- [C18] 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.
- [C19] 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.
- [C20] 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, 19-21 September 2008.
- [C21] 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.

- [C22] 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.
- [C23] 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.
- [C24] 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.
- [C25] 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.
- [C26] 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.
- [C27] **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.
- [C28] **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.
- [C29] **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.
- [C30] **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.
- [C31] J. A. Roumeliotis, **S. P. Savaidis**, “Cutoff frequencies of eccentric circularelliptic metallic waveguides”, *PIERS (Progress in Electromagnetics Research Symposium)*, Noordwijk, July 11-15 1994.

IX. POSITIONS

2018-Today	Director of the MSc “Data Communications and Networking” Department of Electrical and Electronics Engineering, University of West Attica
2015-2019	Head of the Electromagnetics Group, Wireless - Optical Devices and Communication Networks Lab – WaveComm, Department of Electrical and Electronics Engineering, University of West Attica
2014-Today	Director of the Division Transmission-Information Processing and Networks Department of Electrical and Electronics Engineering, University of West Attica
2010-2012	Member of Hellenic NARIC Board of Directors