

I. PERSONAL DETAILS

Name: SAV Aidis Stylianos

Date of Birth: 20/06/1967

Address: Technological Education Institute (TEI) of Piraeus

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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) Professor,
Head of Mobile Communications-Telecommunications Networks Lab
Head of Antennas-Radio Communications-Radar Lab

Technical Education Institute of Piraeus, Department of Electronics.

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
- Tele-Education Technologies and Applications

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V. INDUSTRIAL EXPERIENCE

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

VI. RESEARCH INTERESTS

- Electromagnetic Wave Propagation & Scattering
- Radio Channel Measurements and Modelling
- Antennas Analysis & Design
- Mobile Ad-hoc Networks
- Wave propagation in nonlinear optical waveguides and fibers

- Photonic Devices and Electromagnetic Simulation Models

VII. RESEARCH PROJECTS

VII.1. Current Projects

2012-2014 **Project Title:** “SAVELEC: Safe control of non cooperative vehicles through electromagnetic means”; **Coordinator:** Institute of the Technological Applications through Advanced Communications (ITACA), Polytechnic University of Valencia; **Funding:** EU Seventh Framework Program, SEC-2011.1.4-2: Innovative techniques for safe external control of non cooperative vehicles - Capability Project; **Budget:** 3.395.416 euro; **Role in the Project:** Project leader for TEI Piraeus.

2012-2013 **Project Title:** “NH₂OPV: Novel and highly efficient Hybrid organic photovoltaic cells (HyOPVs)”; **Coordinator:** Dept. of Electronics Eng., TEI Piraeus; **Funding Entity:** Greek Ministry of Education and E.U./European Social Fund, Operational Program “Education and Life-Long Learning (EDULLL)”, call “Archimedes-III” (submitted: Phase 1 (in greek) 9/2009, Phase 1 (in english) 9/2010, Phase 2 (in english) 4/2011). **Budget:** 100,000 euro. **Role in the Project:** Project leader.

2012-2013 **Project Title:** “NH₂OLED: Novel low power consumption Hybrid OLEDs with improved operational characteristics”; **Coordinator:** Dept. of Electronics Eng., TEI Piraeus; **Funding:** Greek Ministry of Education and E.U./European Social Fund, Operational Program “Education and Life-Long Learning (EDULLL)”, call “Archimedes-III”; **Budget:** 100,000 euro; **Role in the Project:** Research Engineer.

2012-2013 **Project Title:** “ANEMOS: Analytical and Numerical Electromagnetism with Applications in Photonics and Nanodevices”; **Coordinator:** Dept. of Electrical and Computer Eng., National Technical University of Athens (NTUA); **Funding:** Greek Ministry of Education and E.U./European Social Fund, Operational Program “Education and Life-Long Learning (EDULLL)”, call “Thales”; **Budget:** 600,000 euro; **Role in the Project:** Research Engineer.

2011 **Project Title:** “PIMACTex: Applications of textile products based on smart materials on the monitoring, display and control of physiological parameters”; **Coordinator:** Dept. of Electronics Eng., TEI Piraeus; **Funding Entity:** GSRT, Min. of Development and E.U./ERDF, O.P. Competitiveness and Entrepreneurship (OPCE II) - submitted 11/2009, selected for funding, to start 6/2011; **Budget:** 600,000 euro; **Role in the Project:** Research Engineer.

VII.2 Completed Projects

2009-2010 **Project Title:** “Electromagnetic Simulation of microcavity phenomena in light detection multilayer structures”, Internal research project TEI Piraeus (PYED 40014) **Role in the Project:** Research Engineer.

- 2005-2007 Project Title: “Mnisiklis: Advanced Integrated Location Based Services in Indoor Environments”, PAVE 282,); Role in the Project: Research Engineer..
- 2004-2006 Project Title: “Reduction of acoustic noise pollution based on active noise control”, Greek Ministry of Education, Operational Programme “Education”-II - Archimedes, Role in the Project: Project leader..
- 1994-1996 Project Title: “Magneto-Electric materials-Nonlinear Dielectrics with fractal properties: Electromagnetic Scattering and Wave Propagation in New Applications”, No. 91ED177 PENED 1991; Role in the Project: Research Engineer.

VIII. PUBLICATIONS

VII.1. BOOKS

S.P. Savaidis, A. Skountzos, Electromagnetism and Transmission of Electromagnetic Waves”, “Synchrones Ekdoseis”, Athens, 2010.

VII.2 INTERNATIONAL JOURNALS

- [J1] 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).
- [J2] **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.
- [J3] 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, pp. 1784-1791, November 2010.
- [J4] G.D. Tsogkas, J.A. Roumeliotis and **S.P. Savaidis** “Scattering by an infinite dielectric elliptic cylinder”, IEEE Transactions on Antennas and Propagation, Vol. 58, No. 1, January 2010
- [J5] 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.
- [J6] **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.
- [J7] 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.
- [J8] **S.P.Savaidis**, N.A.Stathopoulos “Optical confinement in nonlinear low-index nanostructures”, Vol 54, No. 18, pp. 2699-2722, December 2007.
- [J9] 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.
- [J10] 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.

- [J11] **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.
- [J12] **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.
- [J13] **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.
- [J14] **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.
- [J15] 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.
- [J16] **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.
- [J17] 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] 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.
- [C2] 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.
- [C3] 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.
- [C4] K.Orfanidis, **S. Savaidis**: “Development of an e-learning platform for the instruction of Electromagnetic Theory and Antennae course”.**3rdInternational Scientific Conference e R A**, Aegina, 19-21September 2008.
- [C5] 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.
- [C6] 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.
- [C7] 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.
- [C8] 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.

- [C9] 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.
- [C10] 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.
- [C11] **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.
- [C12] **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.
- [C13] **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.
- [C14] **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.
- [C15] 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.