Curriculum Vitae of Ioannis (John) S. Vardakas

Personal Data

Name:	Ioannis (John) Vardakas
Date of Birth:	07-05-1979
Place of Birth:	Alexandria, Greece
Military service:	Greek Navy (Sept. 2010- Sept.2011)
Occupation:	Electrical and Computer Engineer

Education

January 2006 – June 2012:	**PhD**: "Performance Assessment of Multi-Rate Communication Networks with Emphasis on Optical Networks", Wire Communications Laboratory, University of Patras, Greece.
	Supervisor: Prof. Michael D. Logothetis.
October 1998- September 2004:	**Dipl. Eng**. in Electrical and Computer Engineering, Democritus University of Thrace, Greece.
	Diploma Thesis: "Performance analysis of all-optical SOA-assisted Sagnac recirculating shift register with an inverter
	Supervisor: Dr. Kyriakos Zoiros, Assistant Professor.

Teaching Experience

September 2022 – today	Associate Professor, Informatics Dept. University of Western Macedonia.
September 2016- September 2022	Adjunct Assistant Professor, Electrical and Computer Engineering Dept., University of Western Macedonia, Greece: 1) Communication Systems, 2) Teletraffic Theory, 3) Network Optimization, 4) Mobile Computing.
September 2006- June 2011:	Teaching assistant, ECE Dept. University of Patras, Greece: 1) Communication Systems I Lab., 2) Communication Systems II Lab., 3) Control Systems I Lab., 4) Computer Networks Lab, 5) Broadband Networks.
September 2012-June 2014	Instructor at public training institute, Thessaloniki, Greece: 1) Introduction to Computers, 2) Control Systems, 3) introduction to Electrotechnology, 4) Data Structures, 5) Introduction to Communication Networks.

September 2008 – July Instructor at private training institute AKMI, Patras, Greece: 1) Web
2012:   Design, 2) Object-oriented Programming, 3) Multimedia, 4) Control
                      Systems, 5) Introduction to Informatics, 6) Industrial Programming.

TUTORIALS

[T-5] **John S. Vardakas** and Christos Verikoukis, "Evolution of Converged Optical-Wireless Networks Towards 5G Fronthaul Network Architectures", *IEEE WCNC* 2019, Marrakesh, Morocco, 15-19 April 2019.

[T-4] **John S. Vardakas** and Christos Verikoukis, "Converged Optical-Wireless Networks: an Effective Solution for 5G Network Architectures", *MOCAST 2018,* Thessaloniki, Greece, 7-9 May 2018.

[T-3] **John S. Vardakas** and Christos Verikoukis, "Smart Cities Energy Management: A Cooperative Perspective", *IMCL 2017*, Thessaloniki, Greece, 30-Nov. 01 Dec. 2017.

[T-2] **John S. Vardakas** and Christos Verikoukis, "Demand Response in Smart Grids: A Cooperative Perspective", *IEEE ISCC 2017,* Heraklion, Greece, 3-6 Jul. 2017.

[T-1] **John S. Vardakas** and Michael. Logothetis, "Passive Optical Network Configurations - Performance Analysis", *AICT 2012*, May 27-June 1 2012, Stuttgart Germany.

INVITED TALKS

[IT-14] **John Vardakas**, "MAchine learning-based, networking and computing infrastructure ReSource mAnagement of 5G and Beyond inteLligent networks: the MARSAL Vision", Infocom World 2021, 26 November 2021.

[IT-13] **John Vardakas**, "Beyond 5G – where are we heading in open-RAN networks", *Keynote Speech, 5G Made Together conference*, 14th October 2021.

[IT-12] **John Vardakas**, "Evolution of Converged Optical-Wireless Networks Towards 5G Fronthaul Network Architectures", *Winter School on "Emerging Technologies for 5G and IoT*, MSCA-ITN TeamUp5G training school, online, 14-15 December 2020.

[IT-11] **John Vardakas**, Kostas Ramantas, and Christos Verikoukis, "Building cooperation in smart-city environments towards optimal utilization of distributed energy resources", *4th Technology FITCE Forum*, online, 11 December 2020.

[IT-10] **John Vardakas** and Christos Verikoukis, "A cooperative perspective for energy management in smart cities: a study based on Barcelona's Superblock concept" *Keynote Speech at the 2nd International Conference on Energy and Sustainable Futures*, 10-11 Sept. 2020.

[IT-9] **John Vardakas**, "Converged Optical-Wireless Networks: an Effective Solution for 5G Network Architectures", *4rd 5G STEP-FWD School on "Fiber-wireless (FiWi) access networks: Challenges and opportunities"*, Goteborg, Sweden, 15 Feb. 2020.

[IT-8] **John Vardakas**, "Applications of 5G technology in smart-city environments", *IEEE SB*

UoWM lecture series, Kozani, Greece, 17 Jan. 2020.

[IT-7] **John Vardakas** and Christos Verikoukis, "Evolution of converged optical-wireless networks towards 5G network architectures", *IEEE 5G and IoT Thessaloniki Summit* 2018, Thessaloniki, Greece, 25th Oct. 2018.

[IT-6] **John Vardakas** and Christos Verikoukis, "Cooperative Energy Management in Smart Cities", *Training School 2018 on Emerging Technologies for 5G and Internet of Things*, Thessaloniki, Greece, 22nd Oct. 2018.

[IT-5] **John Vardakas**, "An IoT enabled 5G platform for vertical applications" *5th Technology Forum*, Thessaloniki Greece, 16 May 2018.

[IT-4] **John Vardakas** "Evolution of Optical-Wireless Networks Towards 5G Fronthaul Network Architectures", *1st SPOTLIGHT seminar on 5G networks and beyond*, Athens, Greece, 6-9 Mar. 2018.

[IT-3] **John Vardakas**, Christos Verikoukis, "Evolution of Fiber Wireless networks towards 5G network architectures", 11th FITCE Technology Forum, *Advanced technologies, optical, 5G, satellite and their role in future developments,* Thessaloniki, Greece, 15 Dec. 2017.

[IT-2] **John S. Vardakas** and Christos Verikoukis, "Energy Management in Smart Cities: The Cooperative Approach of Barcelona's "Superblock" Smart-City Case", *Winter School 2017, on Internet of Things: Security, Communication & Application Challenges*, Thessaloniki Greece, 15-16 Dec. 2017.

[IT-1] **John Vardakas**, "5G Network Infrastructures based on Fiber-Wireless Convergence Architectures (FiWi), research challenges and application development", *IEEE SB UoWM lecture series*, Kozani, Greece, 13 Dec. 2017.

Research Interests

1. Performance evaluation of 5G/6G networks
2. Protocols' design for Radio-over-Fiber / Fiber-Wireless networks
3. MAC algorithms' development for WLANs and WSNs
4. Algorithms' design for Demand Response in Smart Grid environments

Publications

- 42 peer-reviewed journal papers
- 1 book (editor)
- 4 book chapters
- 73 peer-reviewed conference papers

2591, h-index: 23, source Google Scholar (29/09/2022)

Rewards and Distinctions

1. Standards liaison of the IEEE CSIM Technical Committee.

2. Leader of the Special Interest Group on "Converged Optical Wireless Technologies for 5G Networks: Modeling, Performance Evaluation and Optimization" of the IEEE CSIM Technical Committee.

3. Member committee of the Membership Development Support Grant of the IEEE Communication Society.

4. The paper "*An Analytical Study of an All-Optical Packet Switch with QoS Support*" received the "**Best Paper Award**", at AICT 2010, Barcelona, Spain.

5. The paper "*Bandwidth Reservation in the Erlang Multirate Loss Model for Elastic and Adaptive Traffic*" received the "**Best Paper Award**", at AICT 2013, Rome, Italy.

6. Special Session organizer "Energy to Smart Grids - Advances in Optimization of Smart Grid Networks", IEEE/IET CSNDSP 2014.

7. Special Session organizer "Radio-over-fiber access networks: Technologies and Architectures", IEEE CAMAD 2014.

8. Special Session organizer "Innovative Architectures, Wireless Technologies and Tools for High Capacity and Sustainable 5G Ultra-Dense Cellular Networks", IEEE CAMAD 2016.

9. Special Session organizer "Communications and information processing for the smart grid", IEICE ICTF 2016.

10. Special Session organizer "Communications and information processing for the smart grid", IEEE CAMAD 2017.

11. Special Session organizer "Innovative Smart Components, Modules and Appliances for a Truly Connected, Efficient and Secure Smart Grid", IEEE CAMAD 2018.

12. Special Session organizer, "Towards Machine-Learning Based Secure and Efficient 5G and Beyond Disaggregated Networks", IEEE MEDITCOM 2021.

13. Tutorial Chair in IEEE CAMAD 2016.

14. Publication Chair in IEEE CAMAD 2018.

15. Publicity Chair in SPECTS 2020.

16. Publication Chair in IEEE MEDITCOM 2021.

17. CQRM TPC co-Chair, IEEE GLOBECOM 2022.

18. TPC-co-Chair, IEEE CAMAD 2022.

19. Reviewer in international journals:

IEEE Transactions on Communications, IEEE Communication Letters, IEEE Transactions on Wireless Communications, IEEE Communications Magazine, IEEE Transactions on Smart Grid, IEEE Transactions on Industrial Informatics, IEEE Transactions on Industrial Electronics, IEEE Transactions on Power Electronics, IEEE Transactions on Multi-Scale Computing, IEEE Transactions on Vehicular Technology, IEEE Transactions on Aerospace and Electronic Systems, IEEE Transactions on Cybernetics, IEEE Transactions on Sustainable Energy, IEEE Systems Journal, IEEE Access, IEEE Internet of Things Journal, IEEE/OSA Journal of Optical Communications and Networking, Computer Communications-Elsevier, Computer Networks-Elsevier, Journals of System and Software-Elsevier, Applied Energy – Elsevier, Energy Policy – Elsevier, Energy – Elsevier, Sustainable Cities and Society-Elsevier, International Journal of Electrical Power and Energy Systems – Elsevier, International Journal of Electronics and Communications – Elsevier, Optics Express, Optik, IEICE Transactions on Communications, IET Circuits Devices and Systems, IET Networks, IET Communications, Wireless Personal Communications-Springer, Telecommunication Systems Journal – Springer, Sustainable Energy, Grids and Networks, EURASIP Journal on Wireless Communications and Networking, Mediterranean Journal of Computers and Networks (MEDJCN), COMCOM SPECIAL HET-NETs JOURNAL ISSUE, Communications - Scientific Letters of the University of Zilina, American Journal of Engineering and Applied Sciences, International Journal of Ad Hoc and Ubiquitous Computing, International Journal of Antennas and Propagation, International Transactions on Electrical Energy Systems, International Transactions on Electrical Energy Systems, Electric Power Components and Systems, Energy Technology, Annals of Operations Research, Journal of Ambient Intelligence and Humanized Computing, International Journal of Production Research, Advances in Telecommunications, Frequenz.

20. Reviewer in International Conferences:

CSNDSP 2006, CSNDSP 2008, IMETI 2009, IWCMC 2009, ITA 2009, IEEE ICC 2010, CSNDSP 2010, AICT 2010, IMETI 2010,, AICT 2011., IEEE ISCC 2011, AICT 2012, IEEE/IET CSNDSP 2012, IEEE CAMAD 2012, IEEE ICC 2013, ICCIT 2013, ISWTA 2013, IEEE Healthcom 2013, IEEE RFMC 2013, IEEE ICC 2013, RFM 2013, ICWiSe 2013, ICCVE 2013, IEEE ICC 2014, IEEE MELECON 2014, IEEE/IET CSNDSP 2014, IEEE CAMAD 2014, IEEE ICTON 2014, IEEE TEMU 2014, IEEE ISCAIE 2014, ADVICIT 2014, APACE 2014, APPEIC 2014, ETDS 2014, ICCVE 2014, ICDT 2014, IEEE CAMAD 2015, IEEE GLOBECOM 2015, IEEE ICIT 2015, IEEE VTC 2015, EUCNC 2015, AICT 2015, ICACCI 2015, ICCME 2015, ICDT 2015, ICOCOE 2015, ICTF 2015, TAFGEN 2015, REEGETECH 2015, ICT 2016, IEEE/IET CSNDSP 2016,

ICTF 2016, APCC 2016, TEMU 2016, IEEE ICC 2016, IEEE GLOBECOM 2016, IEEE CAMAD 2016, APCC 2016, ICACCI 2016, ICCVE 2016, IEACon 2016, IEEE ICC 2017, IEEE GLOBECOM 2017, IEEE GCC 2017, ICSigSys2017, ICT 2017, IEEE CAMAD 2017, IEEE ISCC 2017, IEEE COMNETSAT 2017, IEEE PIMRC 2017, IEEE LATINCOM 2017, ICCEREC 2017, GREEN 2017, CENICS 2017 ICTF 2017, MSWIM 2018, IEEE GLOBECOM 2018, IEEE VTC 2018, IEEE CNCC 2018, NICS 2018, IoTaIS 2018, ICON EEI 2018, IMCET 2018, GIIS 2018, AGERS 2018, IEEE CAMAD 2018, MSWiM 2018, IoTaIS 2019, APCC 2019, APWiMob 2019, WPMC 2019, AGERS 2019, ATC 2019, IEEE GLOBECOM 2019, IEEE COMNETSAT 2019, AEIT 2019, WF-5G 2019, MSWiM 2019, IEEE PIMRC 2019, ICSigSys2019, IAICT 2019, IEEE EuCNC 2019, IEEE ISCC 2019, IEEE ICC 2019, IEEE WCNC 2019, ICT 2019, GIIS 2019, IEEE ICC 2020, CSNDSP 2020, IEEE GLOBECOM 2020, 5G-WF 2020, CSNDSP 2020, IAICT 2020, 5G-WF 2021, ATC 2021, CITS 2021, IAICT 2021, IEEE GLOBECOM 2021, IEEE ICC 2021, IEEE MEDITCOM 2021, IEEE PIMRC 2021, IEEE URUCON 2021, SOFTT 2021.

21. Editorial board Member of the <u>Photonics</u>, <u>Frontiers in Communications and Networks Journal</u> and <u>International Journal On Advances in Telecommunications</u>

22. Technical Program Committee member of the conferences,

<u>AICT 2010</u>, <u>AICT 2011</u>, <u>AICT 2012</u>, <u>AICT 2013</u>, <u>IEEE ICC 2013</u>, <u>ICDT 2013</u>, <u>ICCIT 2013</u>, <u>CSP 2013</u>, <u>ICCVE 2013</u>, <u>ICCIT 2013</u>, <u>MIC-Telecom 2013</u>, <u>ICCVE 2014</u>, <u>AICT 2014</u>, <u>ICDT 2014</u>, <u>TEMU 2014</u>, <u>IEEE ICC 2014</u>, <u>IEEE MELECON 2014</u>, <u>IEEE ISCAIE 2014</u>, <u>ISSPIT 2015</u>, <u>ICCME 2015</u>, <u>IEEE ICC 2015</u>, <u>IEEE GLOBECOM GSICT & CQRM 2015</u>, <u>ICSPDM 2015</u>, <u>IEEE CAMAD 2015</u>, <u>GSCIT' 2015</u>, <u>AICT 2015</u>, <u>ICCVE 2015</u>, <u>ICDT 2015</u>, <u>IEEE ICC 2016</u>, <u>ICT 2016</u>, <u>IEICE ICTF 2016</u>, <u>ICACCI 2016</u>, <u>TEMU 2016</u>, <u>GSCIT' 2016</u>, <u>IEEE/IET CSNDSP 2016</u>, <u>IEACon 2016</u>, <u>APCC 2016</u>, <u>ICCVE 2016</u>, <u>AICT 2016</u>, <u>IEEE COMNETSAT 2016</u>, <u>IEEE CAMAD 2016</u>, <u>IEEE GLOBECOM 2016</u>, <u>ICDT 2016</u>, <u>ISWTA 2017</u>, <u>ICACCI 2017</u>, <u>ICCISN 2017</u>, <u>ICCEREC 2017</u>, <u>ICSigSys2017</u>, <u>IEACon 2017</u>, <u>IEEE COMNETSAT 2017</u>, <u>IEEE ISCC 2017</u>, <u>IEEE ICC 2017</u>, <u>IEEE CAMAD 2017</u>, <u>IEEE GLOBECOM 2017</u>, <u>AICT 2017</u>, <u>VEHICULAR 2017</u>, <u>WPMC 2017</u>, <u>NICS 2017</u>, <u>MSWiM 2017</u>, <u>ICT 2018</u>, <u>ICSigSys 2018</u>, <u>WP-5G 2018</u>, <u>AIECon 2018</u>, <u>KSE 2018</u>, <u>IEEE/IET CSNDSP 2018</u>, <u>ICon EEI 2018</u>, <u>NICS 2018</u>, <u>IEEE CAMAD 2018</u>, <u>WF-5G 2018</u>, <u>IEEE GLOBECOM 2018</u>, <u>IEEE COMNETSAT 2018</u>, <u>IMCET 2018</u>, <u>IEEE ISCC 2018</u>, <u>ATC 2018</u>, <u>ICACCI 2018</u>, <u>ICCEREC 2018</u>, <u>MSWiM 2018</u>, <u>IJCDS 2018</u>, <u>IoTaIS 2018</u>, <u>WSCAR 2018</u>, <u>SigTelCom 2019</u> <u>GIIS 2019</u>, <u>COMNETSAT 2019</u>, <u>AIECon 2019</u>, <u>KSE 2019</u>, <u>WPMC 2019</u>, <u>APCC 2019</u>, <u>NICS 2019</u>, <u>WF-5G 2019</u>, <u>APWiMob 2019</u>, <u>IEEE GLOBECOM 2019</u>, <u>IoTaIS 2019</u>, <u>ATC 2019</u>, <u>ICT 2019</u>, <u>AGERS 2019</u>, <u>IEEE COMNESTAT 2019</u>, <u>IEE ICC 2019</u>, <u>IAICT 2019</u>, <u>ICSigSys2019</u>, <u>CITS 2019</u>, <u>MSWiM 2019</u>, <u>IEEE ICC 2020</u>, <u>ICT 2020</u>, <u>CSNDSP 2020</u>, <u>COMNETSAT 2020</u>, <u>SigTelCom 2020</u>, <u>NICS 2020</u>, <u>5G-WF 2020</u>, <u>IEEE GLOBECOM 2020</u>, <u>IAICT 2020</u>, <u>ATC 2020</u>, <u>CITS 2020</u>, <u>APEiMob 2021</u>, <u>IEEE ICC 2021</u>, <u>ICOIN 2021</u>, <u>IEEE ICC 2021</u>, <u>IEEE GLOBECOM 2021</u>, <u>IoTaIS 2021</u>, <u>APWiMob'2021</u>, <u>IEEE MEDITCOM 2021</u>, <u>IAICT 2021</u>, <u>ICT 2021</u>, <u>COMNETSAT 2021</u>, <u>GC 2021</u>, <u>ICOMITEE 2021</u>, <u>AGERS 2021</u>,

5G-WF'21, IC-ICTRuDev 2021, CITS 2021, IMCET'21, SOFTT 2021, IEEE GLOBECOM 2022.

Publications in international journals

[J-42] A. Dalgkitsis, L. Garrido, F. Rezazadeh, H. Chergui, K. Ramantas, J. Vardakas, Ch. Verikoukis, "SCHE2MA: Scalable, Energy-Aware, Multi-Domain Orchestration for Beyond-5G URLLC services", to appear in the Transactions on Intelligent Transportation Systems, 2002.

[J-41] I. Zenginis, **J. Vardakas**, and C. Verikoukis, "Smart Home's Energy Management through a Clustering-based Reinforcement Learning Approach", *IEEE Internet of Things journal*, vol.9, issue 17, pp. 16363-16371, September 2022.

[J-40] M. Maule, **J. Vardakas**, and C. Verikoukis, "A novel 5G-NR resources partitioning framework through real-time user-provider traffic demand analysis," *IEEE Systems Journal*, accepted for publication, 2021.

[J-39] Mohammadreza Mosahebfard, **John S. Vardakas**, and Christos Verikoukis, "Modelling the Admission Ratio in NFV-based Converged Optical-Wireless 5G Networks", *IEEE Transactions on Vehicular Technology*, vol. 70, no. 11, pp. 12024-12038, Nov. 2021.

[J-38] M. Maule, **J. Vardakas,** and C. Verikoukis, "5G RAN Slicing: Dynamic Single Tenant Radio Resource Orchestration for eMBB Traffic within a Multi-Slice Scenario," *IEEE Communications Magazine*, vol. 59, no. 3, pp. 110-116, March 2021.

[J-37] E. Datsika, **J. Vardakas**, K. Ramantas, P. V. Mekikis, I. T. Monroy, L. A. Neto, and C. Verikoukis, "SDN-enabled resource management for converged Fi-Wi 5G Fronthaul" *IEEE Journal on Selected Areas in Communications*, vol. 39, no. 9, pp. 2772-2788, Sept. 2021.

[J-36] T. M. Shami, D. Grace, A., Burr, and **J. S. Vardakas**, "Load balancing and control with interference mitigation in 5G heterogeneous networks", *EURASIP Journal on Wireless Communications and Networking*, vol. 177, July 2019.

[J-35] G. Kalfas, C. Vagionas, A. Antonopoulos, E. Kartsakli, A. Mesodiakaki, S. Papaioannou, P. Maniotis, **J. S. Vardakas**, C. Verikoukis, N. Pleros, "Next Generation Fiber-Wireless Fronthaul for 5G mmWave Networks," *IEEE Communications Magazine*, vol. 57, no. 3, pp. 138-144, March 2019.

[J-34] I. Zenginis, **J. Vardakas**, J. Abadal, C. Echave, M. Morato and C. Verikoukis, "Optimal power equipment sizing and management for cooperative buildings in microgrids," *IEEE Transactions on Industrial Informatics*, vol. 15, no. 1, pp. 158-172, Jan. 2019.

[J-33] **J. S. Vardakas**, I. Zenginis, N. Zorba, C. Echave, M. Morató, and C. V. Verikoukis, "Electricity energy savings through efficient cooperation of urban buildings: the smart community case of 'Superblocks' in Barcelona", *IEEE Communications Magazine,* vol. 56, no. 11, pp. 102-109, Nov. 2018.

[J-32] Ioannis Zenginis, **John S. Vardakas**, Nizar Zorba, and Christos V. Verikoukis, "Performance Evaluation of a Multi-standard Fast Charging Station for Electric Vehicles", *IEEE Transactions on Smart Grid*, vol. 9, no. 5, pp. 4480-4489, Sept. 2018.

[J-31] I. Zenginis, **J. S. Vardakas**, C. Echave, M. Morató, J. Abadal, and C. V. Verikoukis, "Cooperation in microgrids through power exchange: An optimal sizing and operation approach", *Applied Energy*, vol. 203, pp. 972-981, 2017.

[J-30] M. Vincenzi, A. Antonopoulos, E. Kartsakli, **J. Vardakas**, L. Alonso and Ch. Verikoukis "Multitenant Slicing for Spectrum Management on the Road to 5G", *IEEE Wireless Communications,* vol. 24, no. 5, pp. 118-125, October 2017.

[J-29] G. Kalfas, **J. Vardakas**, L. Alonso, C. Verikoukis and N. Pleros "Non-saturation delay analysis of Medium Transparent MAC protocol for 5G 60GHz Fiber-Wireless towards 5G mmWave networks", *IEEE/OSA Journal of Lightwave Technology,* vol. 35, no. 18, pp. 3945-3955, Sept.15, 15 2017.

[J-28] Ioannis Zenginis, **John Vardakas**, Nizar Zorba and Christos Verikoukis, "Analysis and Quality of Service Evaluation of a Fast Charging Station for Electric Vehicles", *Energy*, vol. 112, pp. 669-678, Oct. 2016.

[J-27] **John S. Vardakas**, Nizar Zorba and Christos V. Verikoukis, "Power Demand Control Scenarios for Smart Grid Applications with Finite Number of Appliances", *Applied Energy*, vol. 162, pp. 83–98, 15 Jan. 2016.

[J-26] Ioannis D. Moscholios, Michael D. Logothetis, **John S. Vardakas**, Anthony C. Boucouvalas, Congestion probabilities of elastic and adaptive calls in Erlang-Engset multirate loss models under the threshold and bandwidth reservation policies, *Computer Networks*, vol. 92, Part 1, pp. 1–23, 9 Dec. 2015.

[J-25] **John S. Vardakas**, Nizar Zorba and Christos V. Verikoukis, "Performance Evaluation of Power Demand Scheduling Scenarios in a Smart Grid Environment", *Applied Energy*, Vol. 142, pp. 164–178, Mar. 2015.

[J-24] K. Niotaki, A. Georgiadis, A. Collado, **J. S. Vardakas**, "Dual-Band Resistance Compression Networks for Improved Rectifier Performance," *IEEE Transactions on Microwave Theory and Techniques*, vol.62, no.12, pp.3512-3521, Dec. 2014.

[J-23] Ioannis D. Moscholios, Michael D. Logothetis, **John S. Vardakas**, Anthony C. Boucouvalas, "Performance metrics of a multirate resource sharing teletraffic model with finite

sources under the threshold and bandwidth reservation policies", *IET Networks*, vol. 4, no. 3, pp.195-208, May 2015.

[J-22] **John S. Vardakas**, Nizar Zorba and Christos V. Verikoukis, "A Survey on Demand Response Programs in Smart Grids: Pricing Methods and Optimization Algorithms", *IEEE Communication Surveys and Tutorials*, vol.17, no.1, pp.152-178, First quarter 2015.

[J-21] K. Niotaki, A. Collado, A. Georgiadis, **J. Vardakas**, "5 Watt GaN HEMT Power Amplifier for LTE", *Radioengineering*, vol. 23, no. 1, April 2014.

[J-20] **John S. Vardakas**, Nizar Zorba and Christos V. Verikoukis, "Scheduling Policies for Two-State Smart-Home Appliances in Dynamic Electricity Pricing Environments", *Energy, Elsevier*, vol. 69, pp. 455-469, May 2014.

[J-19] **J. S. Vardakas**, I. D. Moscholios, M. D. Logothetis and V. G. Stylianakis, "Performance Analysis of OCDMA PON Configuration Supporting Multi-Rate Bursty Traffic with Retrials and QoS Differentiation" *Optical Switching and Networking*, vol. 13, pp. 112–123, Jul. 2014.

[J-18] **J. S. Vardakas**, I. D. Moscholios, N. Zorba, M. D. Logothetis and C. V. Verikoukis, "Delay Analysis of Converged Optical-Wireless Networks with QoS Support", *IET Circuits, Devices & Systems* vol. 8, no. 5, pp. 339-348, Sept. 2014.

[J-17] I. Moscholios, V. Vassilakis, M. Logothetis, M., & J. Vardakas, "Erlang-Engset Multirate Retry Loss Models for Elastic and Adaptive Traffic under the Bandwidth Reservation Policy", *International Journal On Advances in Networks and Services*, vol. 7, no. (1 and 2), pp. 12-24, 2014.

[J-16] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis and M. & Koukias, "A Quasi-Random Multirate Loss Model Supporting Elastic and Adaptive Traffic under the Bandwidth Reservation Policy", *International Journal On Advances in Networks and Services*, vol. 6, no. 3 and 4, pp. 163-174, Dec. 2013.

[J-15] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis and A. C. Boucouvalas, "Derivatives of Blocking Probabilities in Multirate Access Tree Networks", *Advances in Electronics and Telecommunications*, vol. 3, no. 5, Dec. 2013.

[J-14] **J. S. Vardakas,** I. D. Moscholios, M. D. Logothetis and V. G. Stylianakis, "Performance Analysis of OCDMA PONs Supporting Multi-Rate Bursty Traffic", *IEEE Transactions on Communications*, vol. 61, no. 8, pp. 3374-3384, Aug. 2013.

[J-13] **J.S. Vardakas**, I.D. Moscholios, M. D. Logothetis and V.G. Stylianakis, "Blocking Performance of Multi-rate OCDMA PONs with QoS Guarantee", *IARIA International Journal On Advances in Telecommunications*, Vol. 5, No. 3 and 4, pp. 120-130, Dec. 2012.

[J-12] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis and A. C. Boucouvalas, "Congestion Probabilities in a Batched Poisson Multirate Loss Model supporting Elastic and Adaptive Traffic", *Annals of Telecommunications, Springer*, Volume 68, Issue 5-6, pp 327-344, , Jun. 2013.

[J-11] I. D. Moscholios, V. G. Vassilakis, **J. S. Vardakas** and M. D. Logothetis, "Retry loss models supporting elastic traffic", *Advances in Electronics and Telecommunications*, Vol.2, No.3, Sept. 2011, pp. 8-13.

[J-10] I. Moscholios, **J. Vardakas**, M. Logothetis, and A. Boucouvalas, "New algorithms for Performance Measures Derivatives in the Erlang Multirate Loss Model including the Bandwidth Reservation Policy", *Mediterranean Journal of Computers and Networks,* Vol. 7, No. 4, 2011, pp.222-234.

[J-9] **John S. Vardakas**, Ioannis D. Moscholios, Michael D. Logothetis, and Vassilios G. Stylianakis, "An Analytical Approach for Dynamic Wavelength Allocation in WDM-TDMA PONs Servicing ON-OFF Traffic", *IEEE/OSA Journal of Optical Communications and Networking*, Vol. 3, No. 4, Apr. 2011, pp.347-358.

[J-8] **John S. Vardakas**, Ioannis D. Moscholios, Michael D. Logothetis, and Vassilios G. Stylianakis, "A Mathematical Framework for the Performance Evaluation of an All-Optical Packet Switch with QoS Differentiation", *International Journal On Advances in Telecommunications*, 2010, vol. 3, no. 3&4, pp.126-138.

[J-7] Kyriakos E. Zoiros, **John S. Vardakas**, and Marios Tsigkas, "Study on the instantaneous frequency deviation of pulses switched from semiconductor optical amplifier "assisted Sagnac interferometer", *Optical Engineering*, Vol. 49, Iss. 7, pp.075003, 2010, ISSN: 00913286.

[J-6] **John S. Vardakas**, Vassilios G. Vassilakis and Michael D. Logothetis, "Call-level analysis of hybrid WDM-OCDMA Passive Optical Networks with finite traffic sources" *Journal on Information Technologies and Communications (JITC) , Special issue on Modeling and Analysis Aspects of NGN networks*, Jul. 2009.

[J-5] **J. S. Vardakas**, V.G. Vassilakis and M.D. Logothetis, "Performance Modelling and Analysis of Passive Optical Networks for Poisson Traffic", *Journal of Communications*, 4/2008, pp. 38 – 44, University of Zilina, Slovakia, 2008.

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