

CURRICULUM VITAE OF PROF. MICHAEL D. LOGOTHETIS

(More details at: <http://www.wcl.ece.upatras.gr/teletraffic/mlogo/>)

Michael D. Logothetis was born in Stenies, Andros, Greece, in 1959. He received his Dipl.-Eng. degree and Doctorate in Electrical Engineering, both from the University of Patras, Patras, Greece, in 1981 and 1990, respectively.

From 1982 to 1990, he was a Teaching and Research Assistant at the Laboratory of Wire Communications, University of Patras, and participated in many national and European Union research programmes (ESPRIT, LRE), dealing with telecommunication networks, as well as with office automation (including natural language processing). From 1991 to 1992, he was Research Associate in NTT's Telecommunication Networks Laboratories, Tokyo, Japan. Afterwards, he was a Lecturer in the Department of Electrical & Computer Engineering (ECE) of the University of Patras, and since 2009 he has been elected (full) Professor in the same Department.

In the ECE Department, he serves many years as a Departmental ERASMUS Coordinator.

He teaches the courses: Broadband Telecom Networks; Computer Networks, Teletraffic Theory, and Communications Systems, in a regular basis, while he has taught several other courses, as: Introduction to Communications, Telecom Systems I, Microwaves and Algorithms & Data Structures. He participates to a postgraduate/master program of studies (called "Green Power") and teaches a computer networking course. Also, he has taught in the Hellenic Open University (in the undergraduate program of studies), while currently he is teaching in the Open University of Cyprus (in the postgraduate program of studies).

His research interests include teletraffic theory and engineering, traffic and network control, simulation and performance optimization of communications networks (Internet, Wireless, Optical NGN). He has published over 220 conference or journal papers, and books (or book chapters) and conference (or seminar) proceedings (he has published more than 21 journal papers during the last seven years) and has over 851 third-party citations (h=15). He has published a teletraffic book in Greek (3rd issue in 2018), while a Teletraffic book in English is under way by Wiley.

He has organized (holding the general chair) the 5th IEEE/IET International Conference on Communications Systems, Networks and Digital Signal Processing, CSNDSP 2006, sponsored mainly by IEEE, IET and OTE (Greek PTT), and the 4th IEICE Information and Communication Technology Forum, ICTF 2016, sponsored by IEICE (Japan). Since 2010, he is a member of the Steering Committee of the CSNDSP. He has reviewed many conference and journal papers. He served/is serving on the Technical Program Committee of several international conferences. Also, he has organized and chaired many technical sessions (in ICC, CSNDSP, PIMRC, ConTel, HET-NETs, EMERGING, AICT, ICTF), and has offered four tutorial lectures in (four) conferences, as well as two keynote speeches.

He has become a Guest Editor in five journals: a) *Mediterranean Journal of Electronics and Communications*, b) *Mediterranean Journal of Computers and Networks*, c) *IET Circuits, Devices & Systems*, d) *IET Networks*, and e) *Ubiquitous Computing and Communication Journal*. He participates in the Editorial Board of the following three international journals: "*IARIA International Journal On Advances in Telecommunications*", "*Advances in Electronics and Telecommunications*" – Poznan University of Technology, and "*Hindawi Communications and Networking*".

He is a member of the IARIA (Fellow Member), IEEE (Senior Member 2008), IEICE (Senior Member 2017), FITCE, and the Technical Chamber of Greece (TEE).

The research achievements of Prof. Logothetis can be classified into the following four categories:

- A) ***Teletraffic Engineering and Network Optimization,***
- B) ***Teletraffic Models,***
- C) ***Call-level Performance Assessment of W-CDMA Networks, and***
- D) ***Performance Evaluation, Traffic Engineering and Optimization of All-Optical Networks.***

A) Teletraffic Engineering and Network Optimization:

Periodical performance evaluation and adaptive resource assignment are proposed as performance-oriented management. Adaptive resource assignment comprises the most suitable strategy for network planning under demand uncertainty (the latter is particularly valid nowadays).

First, a heuristic bandwidth controller has been proposed by taking advantage of the inherent capability of connection-oriented networks, like ATM, to rearrange dynamically the already installed resources.

Then the optimal controller is proposed. A large network optimization problem of non-linear integer programming is formulated and solved by a rigorous, analytical procedure. The optimization criterion is the minimization of the maximum Call Blocking Probability (CBP) in the entire network. The optimization model may comprise specific requirements of the network resources and a bandwidth distribution scheme assuring network reliability. A multi-routing scheme must be considered between the network-node pairs, both for ensuring reliability and efficient network utilization. The controller defines the bandwidth of the end-to-end paths through a suitable teletraffic model, according to the offered traffic-load, so that the worst CBP of all node pairs is minimized, under the constraints posed by the installed bandwidth in the links and the resources of the nodes. The model is flexible enough so that additional optimization constraints could be set. For example, the bandwidth

control scheme combined with performance-oriented management is used for the planning of the extensions of bandwidth capacities of end-to-end paths and transmission links of the network (it was applied in the Metropolitan Area Network of NTT in Tokyo).

In addition, a realistic bandwidth control scheme has been proposed which incorporates either the heuristic or the optimal controller, and satisfies mainly three specifications: a) Optimality during a Medium Term control interval, b) Fast time response so as to absorb the Medium Term traffic fluctuations, and c) Easy implementation. This work mainly points at the impact of direct, on-line traffic measurements on bandwidth control. The controller rearranges the installed bandwidth of the end-to-end paths, according to the offered traffic-load which is measured on-line, so as to minimize the maximum CBP of the whole network. The necessary bandwidth rearrangement time is examined. To improve the network performance and achieve even more traffic savings in the multiple service-classes environment of contemporary connection-oriented networks, a trunk/bandwidth reservation scheme has to be incorporated into the bandwidth control scheme.

Large-scale networks, due to their size, cannot use the optimal bandwidth controller. Especially for large-scale networks, a path bandwidth management model has been proposed, which leads to an almost optimal path bandwidth allocation, under constraints posed by the installed bandwidth in the transmission links of the network. The path bandwidth allocation procedure is driven from a traffic demand matrix and consists of three phases. In the first phase, a suitable decomposition of the whole network takes place, where the large-scale network is split to a set of one-level sub-networks. In the second phase, the optimal controller is applied to each sub-network (of enough small size) in order to define the optimal path bandwidth allocation. In the third phase, composition of the subnetworks takes place in a successive way, which leads to the final path bandwidth allocation of the large-scale network. As the large-scale network is built up from optimized sub-networks, an almost optimal path bandwidth allocation is achieved. Needless to say, the evaluation of the above mentioned bandwidth control necessitates network simulation. Having implemented a purpose built call-level network simulator (was tested well), it was found out that this simulator merits publication. The above are well recognized research achievements, as the following references can prove:

- ▶ Wanru Tao, *State University of New York at Buffalo, Computer Science & Engineering Department, Course: Modern Network Concepts, Topic: Advanced Networking Concepts, Class Schedule for Spring 2000* - http://www.cse.buffalo.edu/~qiao/cse489/cs620/atm_wanru.ppt%20 (last access, December 6, 2012).
- ▶ *Course COMMUNICATION NETWORKS (228A03), Fall 2003, at University of California, Berkeley, CA,* <http://www-inst.eecs.berkeley.edu/~ee228a/fa03/228A03/Presentations03/Dynamic%20Load%20Balance.pdf> (last access December 6, 2012).
- ▶ *United States Patent 6134238. Inventor: Noh; Tai (Manalapan, NJ, USA). Owner: Lucent Technologies (Murray Hill, NJ, USA). Title: "Layered bandwidth management in ATM/SDH (SONET) networks".*
- ▶ *United States Patent 6980553 Assignee: Hitachi, Ltd. (Tokyo, JP).*
- ▶ *United States Patent 7046630. Assignee: Hitachi, Ltd. (Tokyo, JP).*
- ▶ *United States Patent 5684960. Assignee: IBM Corporation, Armonk, NY, USA.*
- ▶ *United States Patent 6690678 and EU Patent 1001574. Assignee: IBM.*
- [A1] **M. Logothetis**, S. Shioda, "Centralized Virtual Path Bandwidth Allocation Scheme for ATM Networks," *IEICE Trans. Commun.*, Vol. E75-B, pp. 1071-1080, No. 10, October **1992**. [my website # 10]
- [A2] **M. Logothetis**, G. Kokkinakis, "Network Planning Based on Virtual Path Bandwidth Management", *International Journal of Communications Systems*, pp. 143-153, No. 8, Aug. **1995**. [my website # 15]
- [A3] **M. Logothetis**, S. Shioda, "Medium-Term Centralized Virtual Path Bandwidth Control Based on Traffic Measurements," *IEEE Transactions on Communications*, pp. 2630-2640, Vol. 43, Oct. **1995**. [my website # 21]
- [A4] I. Papanikos, **M. Logothetis**, G. Kokkinakis, "Virtual Path Bandwidth Control Versus Dynamic Routing Control," *Performance Modelling and Evaluation of ATM Networks*, Chapman and Hall, London, U.K. **1996**. [my website # 22]
- [A5] **M. Logothetis**, G. Kokkinakis, "A Path Bandwidth Allocation Scheme for Hierarchical Telecommunication Networks," *IEEE/IFIP Network Operations & Management Symposium, NOMS'96*, Kyoto, Japan, April 15-19, **1996** (travel-grant award). [my website # 23]
- [A6] **M. Logothetis**, G. Kokkinakis, "Path Bandwidth Management for Large Scale Telecom Networks", *IEICE Trans. Commun.*, Vol. E83-B, pp. 2087-2099, No. 9, Sep. **2000**. [my website # 34]
- [A7] I. Papanikos, **M. Logothetis**, "A Study on Dynamic Load Balance for IEEE 802.11b Wireless LAN," *Proc. 8th Int. Conf. on Advances in Communication & Control, COMCON 8*, Rethymna, Crete/Greece, 25-29 June, **2001** (over **148** citations). [my website #39]
- [A8] **M. Logothetis**, F. Liotopoulos, "A Batch-type, Time-true ATM Network Simulator - Design for Parallel Processing", *Wiley Int. Journal of Communications Systems*, Vol. 15, Issue 8, pp. 713-739, October **2002**. [my website #47]
- [A9] **M. Logothetis** and I. Nikolaou, "New Algorithms for Working and Spare Capacity Assignment in Integrated Self-Healing Networks", *IEICE Trans. Commun.*, Vol. E86-B, pp. 1346-1355, No. 4, April **2003**. [my website #51]
- [A10] I. Moscholios and **M. Logothetis**, "New Algorithm for the Generalized Max-Min Fairness Policy based on Linear Programming", *IEICE Trans. Commun.*, Vol. E88-B, No.2, pp.775-780, Feb. **2005**. [my website #63]

B) Teletraffic Models:

Having being motivated from the fact that the key component of the aforementioned optimization is a teletraffic model, the research activity of Prof. Logothetis was turned to new Teletraffic Models. The accuracy of the network optimization strongly depends on the accuracy of the incorporated teletraffic model which, in turn, depends on the accurate modelling of the service-classes of network traffic. On the other hand, teletraffic models are of great assistance for the access control of different service-classes to network resources and the bandwidth allocation among service-classes. The latter has been widely recognized as a necessary solution for QoS guarantee both in existing and next generation networks. Call-level multi-rate teletraffic loss models aim at assessing the call-level QoS of IP based networks with resource reservation capabilities but also of the emerging and future all-optical core networks.

Apart from its importance, the call-level performance modelling and QoS assessment is a challenge in the highly heterogeneous environment of modern communication networks, due to the presence of elastic traffic, or complicated call arrival processes. The key call-level performance index is the CBP, while the efficient CBP calculation is a sine qua non of a teletraffic model, in order to cope with the high bandwidth capacities of network links. Efficient call-level teletraffic loss models leading to recurrent CBP calculations in multirate systems are the research achievements on the second topic. These models take into account that calls can be distinguished according to:

- i) their arrival process,
- ii) their bandwidth requirements upon arrival, and
- iii) their behavior while in service.

Combining these differentiations many multi-service loss systems have been analyzed. Although the new teletraffic models have been presented in some very good journals (see below) and conferences, they have not met the anticipated applications yet. We have been informed that telecom organizations and telecom service providers still use the Erlang B-formula for network dimensioning producing only approximate results, which are far from being acceptable. In some other cases (e.g. NTT Japan, Nokia-Siemens, Ericsson, France Telecom, Lucent or AT&T), in the multi-service traffic environment of contemporary networks, the Kaufman & Robert's recursion is used, despite the fact that this formula (suitable for multiple service-classes of fixed bandwidth per call) is completely insufficient for elastic service-classes, or for bursty traffic.

- [B1] I. Moscholios, **M. Logothetis**, G. Kokkinakis, "Connection Dependent Threshold Model: A Generalization of the Erlang Multiple Service Loss Model", *Performance Evaluation*, Vol. 48, issue 1-4, pp. 177-200, May **2002**. [my website # 44]
- [B2] I.D. Moscholios, **M.D. Logothetis** and P.I. Nikolaropoulos, "*Engset Multi-Rate State-Dependent Loss Models*", *Performance Evaluation*, Vol. 59, issue 2-3, pp. 247-277, February, **2005**. [my website # 64]
- [B3] I.D. Moscholios, **M.D. Logothetis** and G.K. Kokkinakis, "Call-burst blocking of ON-OFF traffic sources with retrials under the complete sharing policy", *Performance Evaluation*, Vol. 59, issue 4, pp. 279-312, March, **2005**. [my website # 65]
- [B4] I. Moscholios, **M. Logothetis** and M. Koukias, "An ON-OFF Multi-Rate Loss Model with a Mixture of Service-Classes of Finite and Infinite Number of Sources", *Proc. IEEE International Conference on Communications (ICC 2005)*, Seoul, Korea, 16-20 May, **2005**. [my website # 66]
- [B5] I. Moscholios and **M. Logothetis**, "Call level blocking of ON-OFF traffic sources in a shared resource environment with batched Poisson arrival processes", *Proc. International Teletraffic Congress, ITC-19*, Beijing, 29 Aug. - Sep. 2, **2005**. [my website # 70]
- [B6] V. Vasilakis, I. Moscholios and **M. Logothetis**, "Call-level Performance Modelling of Elastic and Adaptive Service-classes", *Proc. IEEE ICC 2007*, Glasgow, Scotland, 24-28 June, **2007**. [my website # 82]
- [B7] I.D. Moscholios and **M.D. Logothetis**, "QoS Guarantee in a Multirate Loss Model of Batched Poisson Arrival Processes", *Computer Communications*, Vol. 33, Supplement 1, pp. S167-S179, Nov. **2010**. [my website # 128]
- [B8] I.D. Moscholios, J.S. Vardakas, **M.D. Logothetis**, and A.C. Boucouvalas, "A Batched Poisson Multirate Loss Model Supporting Elastic Traffic Under The Bandwidth Reservation Policy", *IEEE ICC 2011*, Kyoto, Japan, 5-9 June **2011**. [my website # 132]
- [B9] I.D. Moscholios, J.S. Vardakas, **M. D. Logothetis** and A.C. Boucouvalas, "QoS Guarantee in a Batched Poisson Multirate Loss Model Supporting Elastic and Adaptive Traffic", *IEEE ICC 2012*, Ottawa, Canada, Jun. 10-15, **2012**. [my website # 144]
- [B10] 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", *Springer Annals of Telecommunications*. Vol.68, Issue 5, pp. 327 - 344, June **2013**. [my website # 156]
- [B11] I. D. Moscholios, V. G. Vassilakis, M. D. Logothetis and A. C. Boucouvalas, "A Probabilistic Threshold-based Bandwidth Sharing Policy for Wireless Multirate Loss Networks", *IEEE Wireless Communications Letters*, vol. 5, issue 3, June 2016, pp. 304-307. [my website # 196]
- [B12] V. G. Vassilakis, I. D. Moscholios and M. D. Logothetis, "Uplink Blocking Probabilities in Priority-Based Cellular CDMA Networks with Finite Source Population", *IEICE Transactions on Communications*, vol. E99-B, no. 6, pp. 1302-1309, June 2016. [my website # 197]

C) Call-level Performance Assessment of W-CDMA Networks

It is cheering that the research activity, which aims at proposing new teletraffic models especially for wireless networks, is well accepted from the scientific community, as the publications listed below (either in journals or in conferences) can prove. Performance evaluation of WCDMA networks necessitates the incorporation of the peculiarities of the wireless networks (e.g. the so called local blocking and the handoff traffic, as well as the activity factor of a user) into the teletraffic models, that is tough enough. Besides, the incorporation of multiple service-classes into teletraffic models is a sine qua none in contemporary wireless networks. Nowadays, the use of Erlang B-Formula is far from satisfactory; nevertheless, it is still used in books, as e.g. by Vilay K. Garg, "Wireless Communications and Networking", Morgan Kaufman, 2007.

- [C1] I. Moscholios, **M. Logothetis**, M. Koukias, "A State-Dependent Multi-Rate Loss Model of Finite Sources with QoS Guarantee for Wireless Networks", *Mediterranean Journal of Computers and Networks*, Vol. 2, No. 1, pp. 10-20, Jan. **2006**. [my website # 73]
- [C2] G. A. Kallos, V. G. Vassilakis, I. D. Moscholios and **M. D. Logothetis**, "Performance Modelling of W-CDMA Networks supporting Elastic and Adaptive Traffic", *Proc. 4th International Working Conference on Performance Modelling and Evaluation of Heterogeneous Networks (HET-NETS '06)*, Ilkley, West Yorkshire, U.K., 11-13 September **2006**. [my website # 81]
- [C3] V.G. Vassilakis, G.A. Kallos, I.D. Moscholios and **M.D. Logothetis**, "The Wireless Engset Multi-Rate Loss Model for the Call-level Analysis of W-CDMA Networks", *Proc. 18th IEEE Annual International Symposium on Personal Indoor and Mobile Radio Communications (PIMRC 2007)*, Athens, Greece, 3-6 September **2007**. [my website # 90]
- [C4] V.G. Vassilakis, G.A. Kallos, I.D. Moscholios and **M.D. Logothetis**, "Call-Level Analysis of W-CDMA Networks Supporting Elastic Services of Finite Population", *Proc. IEEE International Conference on Communications (ICC 2008)*, pp. 285-290, Beijing, China, 19-23 May, **2008**. [my website # 98]
- [C5] Vassilios G. Vassilakis and **Michael D. Logothetis**, "The Wireless Engset Multi-rate Loss Model for the Handoff Traffic Analysis in W-CDMA Networks", *Proc. 19th IEEE Annual International Symposium on Personal Indoor and Mobile Radio Communications (PIMRC)*, Cannes, France, 15-18 September, **2008**. [my website # 106]
- [C6] V.G. Vassilakis, G.A. Kallos, I.D. Moscholios and **M.D. Logothetis**, "On Call Admission Control in W-CDMA Networks Supporting Elastic Traffic", *Ubiquitous Computing And Communication Journal (UBICC)*, January **2009**. [my website # 108]

- [C7] **M. Logothetis**, V. Vassilakis and I. Moscholios, "Call-level Performance Modeling and QoS Assessment of W-CDMA Networks", in the book *"Wireless Networks: Research, Technology and Applications"*, Nova Science Publishers, New York, USA, pp. 57-90, **2009**. [my website # 110]
- [C8] Vassilios G. Vassilakis, Georgios A. Kallos, Ioannis D. Moscholios and **Michael D. Logothetis**, "An Analytical Model for Elastic Service-classes in W-CDMA Networks", in the book, *"Heterogenous Networks, Vol. II - Performance Analysis & Applications"* (D.SEA.6.1.6: Part of Final Deliverables of NoE Euro-NGI to EC), River Publishers, pp. 277-299, **2009**. [my website # 112]
- [C9] Kallos GA, Vassilakis VG, Logothetis MD, "Call-Level Performance Analysis of a W-CDMA Cell with Finite Population and Interference Cancellation", *European Transactions on Telecommunications*, Volume 22, pages 25–30, January **2011**. [my website # 129]
- [C10] I. D. Moscholios, G. A. Kallos, V. G. Vassilakis, **M. D. Logothetis** and M. N. Koukias, "Congestion probabilities in W-CDMA networks supporting calls of finites sources", IFIP HET-NETs 2013, Ilkley, West Yorkshire, England, UK, 11-13 November **2013**. [my website # 162]

D) Performance Evaluation, Traffic Engineering and Optimization of All-Optical Networks.

Even more challenging is this last research activity. Prof. Logothetis has envisaged the study of optical network architectures through purpose-built teletraffic models. Having built specialised teletraffic models, these can be used for the performance optimization of optical network architectures, according to the principles and methodology presented in the publications referring to the first topic (A).

As an ultimate goal, we aim at contributing in updating the incorporated teletraffic models of commercial packages/tools for any network configuration, optimization and planning (like, e.g., *"ESG-NetCOP: Network Configuration, Optimization and Planning Tool"*). Basic research results on optical networks, specifically on Passive Optical Networks (PONs) are found in the following publications.

- [D1] J.S. Vardakas, V.G. Vassilakis, **M.D. Logothetis** "Calculating Blocking Probabilities in Single-Hop WDM Traffic Groomed Optical Networks", *Proc. International Conference on Transparent Optical Networks (ICTON 2007)*, Rome, 1-5 July, **2007**. [my website # 83]
- [D2] J.S. Vardakas, V.G. Vassilakis and **M.D. Logothetis**, "Call-level analysis of hybrid WDM-OCDMA PONs", *Proc. ICTON 2008*, Athens, Greece, June 22-26, **2008**. [my website # 102]
- [D3] J.S. Vardakas, V.G. Vassilakis and **M.D. Logothetis**, "Blocking Analysis in Hybrid TDM-WDM Passive Optical Networks", in the book, *"Heterogenous Networks, Vol. II - Performance Analysis & Applications"* (D.SEA.6.1.6: Part of Final Deliverables of NoE Euro-NGI to EC), River Publishers, pp. 441-465, **2009**. [my website # 113]
- [D4] John S. Vardakas and **Michael D. Logothetis**, "Packet delay analysis for Priority-based Passive Optical Networks" in *Proc. of the IARIA First International Conference on Emerging Network Intelligence*, Sliema, Malta, October 11-16, **2009**. [my website # 119]
- [D5] John S. Vardakas, Ioannis D. Moscholios and **Michael D. Logothetis**, "An analytical Study of an All-Optical Packet Switch with QoS Support", *Proc. of the 6th IARIA Advanced International Conference on Telecommunications - AICT 2010*, Barcelona, Spain, May 9-14, **2010** (Best Paper Award). [my website # 120]
- [D6] J.S. Vardakas, I.D. Moscholios, **M.D. Logothetis**, V.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, pp. 347-358, No. 4, April **2011**. [my website # 131]
- [D7] J.S. Vardakas, I.D. Moscholios, **M.D. Logothetis**, V.G. Stylianakis, and F. Röck, "Evaluation of dynamic wavelength allocation scenarios in WDM-TDMA PONs servicing ON-OFF traffic from finite sources", *Proc. of the 11th IEEE International Conference on Telecommunications*, Graz, Austria, June 15-17, **2011**. [my website # 133]
- [D8] J.S. Vardakas, I.L. Anagnostopoulos, I.D. Moscholios, **M.D. Logothetis** and V.G. Stylianakis, "A Multi-Rate Loss Model for OCDMA PONs", *Proc. ICTON 2011*, Stockholm, Sweden, 26-30 June, **2011**. [my website # 134]
- [D9] 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*, Volume 61, issue 8, August **2013**. [my website # 158]
- [D10] J.S. Vardakas, I.D. Moscholios, **M.D. Logothetis**, and V.G. Stylianakis, "Performance analysis of OCDMA PON configuration supporting multirate bursty traffic with retrials and QoS differentiation", *Optical Switching and Networking*, Vol. 13, pp. 112-123, July **2014**. [my website # 165]

SOME IMPORTANT RECENT PUBLICATIONS

- [1] V. G. Vassilakis, I. D. Moscholios and M. D. Logothetis, "Quality of Service Differentiation of Elastic and Adaptive Services in CDMA Networks: A Mathematical Modelling Approach", accepted for publication in *Wireless Networks*, 2017 (doi:10.1007/s11276-016-1411-z, 2016). [my website # 203]
- [2] I. D. Moscholios, V. G. Vassilakis and M. D. Logothetis, "Call Blocking Probabilities for Poisson Traffic under the Multiple Fractional Channel Reservation Policy", *Proc. of IEEE-IET International Symposium on Communication Systems, Networks and Digital Signal Processing – 10th CSNDSP' 2016*, Prague, Czech Republic, 20-22 July 2016. [my website # 201]
- [3] V. G. Vassilakis, L. Wang, L. Carrea, I. D. Moscholios and M. D. Logothetis, "Scalable Bloom-Filter Based Content Dissemination in Community Networks using Information Centric Principles", *Proc. of IEICE Information and Communication Technology Forum (ICTF)*, Patras, Greece, 6-8 July 2016. [my website # 199]
- [4] Vassilios G. Vassilakis, Ioannis D. Moscholios, Bander A. Alzahrani, Michael D. Logothetis, "A Software-Defined Architecture for Next-Generation Cellular Networks", *Proc. of IEEE ICC 2016*, Kuala Lumpur, Malaysia, 23-27 May, 2016. [my website # 194]
- [5] Ioannis Moscholios, Michael Logothetis and Anthony Boucouvalas, "Blocking Probabilities of Elastic and Adaptive Calls in the Erlang Multirate Loss Model under the Threshold Policy", *SPRINGER Telecommunication Systems*, DOI 10.1007/s11235-015-0056-z, 2015. [my website # 193]
- [6] I. D. Moscholios, M. D. Logothetis, J. S. Vardakas and A. C. Boucouvalas, "Congestion Probabilities of Elastic and Adaptive Calls in Erlang-Engset Multirate Loss Models under the Threshold and Bandwidth Reservation Policy", *Computer Networks*, (doi:10.1016/j.comnet.2015.09.010), Volume 92, Part 1, 9 December 2015, Pages 1–23. [my website # 192]
- [7] I. D. Moscholios, M. D. Logothetis, A. C. Boucouvalas and V. G. Vassilakis, "An Erlang Multirate Loss Model Supporting Elastic Traffic under the Threshold Policy", *Proc. of IEEE ICC 2015*, London, U.K., 8-12 June 2015. [my website # 189]
- [8] I. D. Moscholios, M. D. Logothetis, J. S. Vardakas and A. C. Boucouvalas, "Performance metrics of a multirate resource sharing teletraffic model with finite sources under the threshold and bandwidth reservation policies", *IET Networks*, Volume 4, Issue 3, p. 195 – 208, May 2015. [my website # 182]
- [9] M. D. Logothetis, J. S. Vardakas and I. D. Moscholios, "Performance Evaluation of a Dynamic Wavelength Allocation Protocol in WDM-TDM PONs Servicing Pareto ON-OFF Traffic", accepted for publication in 16th Int. Conference on Transparent Optical Networks (ICTON), Graz, Austria, 6-10 July 2014 (*invited*). [my website # 171]
- [10] Michael D. Logothetis and I. D. Moscholios, "Teletraffic Models Beyond Erlang", *Proc. of the 10th International ELEKTRO 2014 – Zilina*, Slovakia, Invited paper (Keynote Speech by the first author), May 19th-20th, 2014. [my website # 166].