

# CURRICULUM VITAE

## ANNA TZANAKAKI

### SHORT BIOGRAPHY

**Dr Anna Tzanakaki** is an Associate Professor at the “Athens Information Technology” (AIT) center where she is leading the Network Design and Services (NDS) research group. She also serves as the program director of the Master in Information and Telecommunications Technologies (MSITT) and is an adjunct faculty member of the Information Networking Institute of Carnegie Mellon University, USA. She has obtained a BSc degree from the University of Crete, Greece, an MSc and a PhD both from the University of Essex, UK.

She was employed by the department of Electronics Systems Engineering at the University of Essex as a Senior Research Officer and also a visiting lecturer. She was a co-founder and a senior engineer of ilotron ltd, a spin-off from the University of Essex, involved in the design of optical systems for WDM networks. Following ilotron, Dr Tzanakaki joined Altamar Networks, a subsidiary of Ditech Communications, as a principal engineer responsible for optical architecture and system design. She is a co-author of over 100 publications in international journals and conferences. She is a co-inventor of 1 granted and 11 published patents. She is a senior member of the IEEE and several Technical Program Committees. She has served as a technical expert of the EU and the EPSRC UK Peer Review College. She is a technical reviewer for various international conferences and scientific journals. Her research interests include optical networking, cross-layer network design and traffic provisioning as well as network convergence in support of telecommunications and IT services.

## PERSONAL DETAILS

**Affiliation:** Athens Information Technology Center  
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## ***PROFESSIONAL EXPERIENCE***

**March 2003-Currently: Athens Information Technology Center of Excellence in Research and Graduate Education**

*Associate Professor*

*Head of the Network Design and Services Group*

*Academic Program Director of the Master in Information and Telecommunications Technology (MSITT)*

*Adjunct faculty member of the Information Networking Institute, Carnegie Mellon University, USA*

*Research work and interests:*

- optical networking
- cross-layer network design and traffic provisioning
- network convergence in support of telecommunications and IT services

**June 2001-March 2003: Altamar Networks UK, Subsidiary of Ditech Communications Ltd**

*Principal Engineer.* Responsible for optical architecture and system design.

**Feb 2000-June 2001: Ilotron Ltd, UK**

*Co-founder and Senior Engineer.* The position involved intellectual property generation and responsibility of the design of the main Ilotron products

**Department of Electronic Systems Engineering, University of Essex, UK**

**Oct 2000-June 2001:**

*Visiting lecturer* teaching the “Optical Fibre Communication Systems” course for the final year BSc in Electronics Engineering.

**1998-2002:**

*Visiting lecturer* teaching several short courses (Broadband Networks, Photonic Networks, IP and The Optical Layer, Terabit Optical Communications, Devices for WDM Transmission) given in the framework of the MSc programmes on “Telecommunication and Information Systems” and “The Physics of Laser Communications”.

**1996-Jan 2000:**

*Senior Research Officer* for the Advanced Communications Technologies and Services (ACTS) project entitled “Horizontal Action in Optical Networking” (HORIZON) funded by the European Commission.

**1995-1996:**

*Senior Research Officer* for the Race R2028 “Multi-wavelength Transport Network” (MWTN) consortium project, funded by the European Commission (EC). The project focused on the design and development of the first Optical Cross-Connect and was awarded the EC prize for “outstanding contribution to technological progress”.

## ***EDUCATION***

**1996-2000: PhD in “Tunable Wavelength Conversion for All-Optical Networks”**

**Department of Electronic Systems Engineering, University of Essex, UK**

The research focused on all-optical fast tunable wavelength conversion employing semiconductor optical amplifiers. This work included detailed theoretical modelling and experimental evaluation of the performance of various wavelength conversion techniques. Their suitability for circuit and packet switched all-optical networks was investigated through a number of system experiments involving optical cross-connects and optical packet switch nodes.

**1993-1994: MSc on "The Physics of Laser Communications"**

**Department of Physics, University of Essex, UK**

**1988-1992: BSc in "Physics"**

**Department of Physics, University of Crete, Greece.**

***PROJECT PARTICIPATION***

- Lamda User Controlled Infrastructure for European Research (PHOSPHORUS), EU project, IST EU Research Networking Test-beds call September 2005, IP. AIT Principal Investigator.
- Transparent Ring Interconnection (TRIUMPH), EU project, 4<sup>th</sup> IST Call, STREP. Technical Co-manager and WP2 leader.
- Broadband e-Services and Access for the Home (BReATH), EU project, 6<sup>th</sup> framework, SSA. WP3 leader since January 2006.
- E-Photon/ONE +, EU project proposal, 4<sup>th</sup> IST Call, NoE. Participation to various JPs.
- “Autonomous optical networks for global grid computing applications”, Greek-UK project, funded by GSRT and the British Council. AIT Principal Investigator.
- COST291, “Towards Digital Optical Networks”. The project is funded by the EU and is focusing on optical processing for digital network performance, novel network architectures as well as a unified control plane, network resilience and service security. Scientific Secretary.
- COST 288, “Nanoscale and Ultrafast Photonics”. This Action will integrate the most promising telecom-and datacom -oriented topics studied under both Actions, and act as a catalyst for research by improved collaboration and networking, and as a proactive collaboration on identified strategic research topics.
- COST 266, “Advanced Infrastructures for Photonic Networks”. The project was funded by the EU and was aiming to propose and evaluate suitable architectures and identify the key technologies for the next generation photonic networks.
- “Wavelength Switched Packet Network” (WASPNET), UK national project funded by the UK Physical Science and Engineering Research Council (EPSRC). The project dealt with the design and implementation of an optical packet switched and its outcome was the demonstration of a fully functional all-optical packet switched node.
- “Horizontal Action in Optical Networking” (HORIZON) funded by the European Commission within the framework of Advanced Communications Technologies and

Services (ACTS). The project provided co-ordination across the photonics domain projects within ACTS and developed a Roadmap on the “Photonics Technologies in Europe”.

- “Multi-wavelength Transport Network” (MWTN) consortium project, funded by the European Commission (EC). The project focused on the design and development of the first Optical Cross-Connect and was awarded the EC prize for “outstanding contribution to technological progress”.

## ***MEMBERSHIPS***

- Member of IEEE.
- Co-chair of the technical Program Committee of the Workshop on All Optical Routing WAOR, co-located with the International Conference on Transparent Optical Networks (ICTON), 2008-2009
- Member of the Technical Program Committee of the Asian Communications and Photonics (ACP) Conference 2009, Subcommittee 4: Network Architectures, Management and Applications
- Member of the Technical Program Committee of the APOC 2008 Conference, Subcommittee 4: Network Architectures, Management and Applications
- Member of the Technical Program Committee for the "Symposium on Optical Networks and Systems", of Globecom 2005-2009
- Member of the Technical Program Committee, NETWORKS 2008, 13th International Telecommunications Network Strategy and Planning Symposium
- Member of the Technical Program Committee for ICC'08 ONS (ICC'08 - Optical Networks and Systems Symposium)
- Member of the Technical Program Committee for the workshop on “High Performance Grid Networks”, co-located with CCGrid 2008, Lyon, France
- Member of the Technical Program Committee for the COST291 workshop held in conjunction with ONDM2007
- Member of the Technical Program Committee of the workshop on “Service Oriented Optical Networks”. The workshop is organised in conjunction with the TNC 2006 conference (<http://www.terena.nl/events/tnc2006/>).

- Member of the Technical Program Committee of the Optical Society of America (OSA) Topical Meeting on Coherent Optical Technologies and Applications, 2006
- Member of the Technical Program Committee of the "Optical Communications Networks and Systems Symposium" of Globecom 2005, 28 November-2 December 2005, St Louis, USA,
- Member of the Technical Program Committee of GridNets 2005 held in conjunction with BroadNets2005
- Member of the Technical Program Committee of the Multiprovider QoS/SLA Internetworking - MPQSI 2005, 5-7 June 2005, Chicago, USA
- Member of the technical Program Committee of the Workshop on All Optical Routing WAOR, co-located with the International Conference on Transparent Optical Networks (ICTON), 2004-2007
- Member of the Scientific Committee of the IADIS Virtual Multi Conference on Computer Science and Information Systems, 2005-2007
- Member of the Technical Program Committee of the "Symposium on Emerging Optical Networks" (SEON) held in Portugal on July 2005
- Member of the Greek E-Business forum working group focusing on "Migration from the digital divide to the electronic work environment: How to enable a productive work environment in less favoured regions"

### ***HONOURS & PROFESSIONAL ACTIVITIES***

- Guest editor of the special issue of the Journal of Optical Communications and Networking, IEEE/OSA, on "Optical Networks for the Future Internet"
- Guest editor of the special issue of the Computer Networks journal, ELSEVIER, on "Challenges and opportunities in advanced optical networking"
- Scientific Secretary of the EU funded project COST291 entitled "Towards Digital Optical Networks"
- Co-organizer and co-chair of the ECOC2007 workshop on "Networks for IT: A new opportunity for optical network technologies"
- Reviewer of the EU IST 004503 Integrated Project EUQoS

- Member of the EPSRC, UK Peer Review College during the period 2006-2009
- Organizing committee of the COST291 GBOU/ONNA workshop “Design of Next Generation Optical Networks: from the physical up to the network level perspective”, Gent, Belgium, February 2006
- Chair of the Technical Program Committee of the COST291 workshop on “Issues and Challenges in Optical Networking” held in conjunction with ICTON 2005, Barcelona, June 2005
- Chair of the “Control and Security” session at the International Conference on Transparent Optical Networks (ICTON2003), July 2003
- Chair of the “WAOR Quality of Service” session at the International Conference on Transparent Optical Networks (ICTON2005), July 2005
- Co-organiser of the workshop on “Optical Networking for Grid Services”, ECOC2004, Stockholm, Sweden, September 2004.
- Co-organiser of the workshop on “High Speed Global Grid Networks”, Globecom 2004, December 2004
- Co-organization of two workshops in collaboration with the European Photonics Industry Consortium (EPIC), the IST OPTIMIST Project Consortium and COST288, June 2004, AIT, Greece
- Technical referee of several IEEE (Journal of Lightwave Technology, Journal of Selected Areas in Communications, Communications Magazine, Photonics Technology Letters etc), IEE, Elsevier (Computer Networks) and other journals (e.g. Journal of Optical Networking published by the Optical Society of America), Optics Express, Journal of Grid Computing etc
- Technical referee of several conferences (Globecom, ICC etc) and workshops
- Co-author of eleven published patent applications

### ***CITATIONS***

Over 400 citations by other people, 740 appear in the “Publish or Perish” search engine. [view samples]

## **TEACHING**

### **1997-2002 Department of Electronic Systems Engineering, University of Essex, UK**

#### *Visiting lecturer teaching:*

- Optical Fibre Communication Systems, BSc Electronics Engineering (2000)
- Wavelength Conversion, MSc “Telecommunications and Information Systems” και “The Physics of Laser Communications” (1997-2002)
- Optical Add-Drop Multiplexers, MSc “Telecommunications and Information Systems” και “The Physics of Laser Communications” (2001-2002)
- Optical Cross-Connects for Real Networks, MSc “Telecommunications and Information Systems” και “The Physics of Laser Communications” (2001-2002)

#### *Co-supervision of a PhD student (2001-2003) with Prof. Dimitra Simeonidou:*

- “Traffic Engineering in Optical Packet Switched Networks”

#### *Co-supervision of 2 MSc theses*

- “Technologies, Systems and Subsystems for Wavelength Switched Optical Networks”
- “IP over WDM Optical Networks”

### **2003- today Athens Information Technology Center**

#### *Instructor and co-instructor of the following courses:*

- Packet Switching and Computer networks MSc in Information Networking AIT-Carnegie Mellon University
- Special Topics in Networking, MSc in Information and Telecommunications Technologies
- Project Management, MSc in Business and Innovation Technologies
- Optical Networks, MSc in Information Networking AIT-Carnegie Mellon University
- Optical and Wireless Communications, MSc in Information and Telecommunications Technologies
- Broadband Networks, MSc in Information and Telecommunications Technologies

#### *PhD Thesis Supervision*

- Delivery of differentiated services in multi-domain, multi-layer optical networks

#### *MSc Theses and Independent Studies supervision*

- Routing and Wavelength Assignment Algorithms for Resilient WDM Networks
- Fairness Issues in Dynamic Path Provisioning in WDM Networks
- “2-R Optical Regeneration utilizing Self-Phase Modulation in non-linear fibers”
- “Mitigation of linear and non-linear impairments in optical transmission by electronic means (FEC)”
- “Impairment Constraint Based Routing”
- “Simulation Analysis of Optical Burst Switched Networks”

- “Impact of QoS assignment in the Performance of Optical Burst Switched Networks”
- “All Optical 2R regeneration in Optical Fibres”
- “Simulation of network elements suitable for use in an Optical Burst Switched Network environment”
- “Impairment and security aware routing scheme for optical networks”
- “Optical Flip-flops for Packet Switching Applications”
- “Physical Impairment Constrained based Routing in Optical Networks”
- “The Impact of Physical Impairments in Optical Burst Switched Networks”

### ***BOOK CHAPTERS***

- D. Careglio, J. Aracil, S. Azodolmolky, J. García-Haro, S. Gunreben, G. Hu, M. Izal, A. Kimsas, M. Klinkowski, M. Köhn, E. Magaña, D. Morató, P. Pavón-Mariño, J. Perelló, J. Scharf, S. Spadaro, I. Tomkos, A. Tzanakaki, J. Veiga-Gontán. “Performance Issues in Optical Burst/Packet Switching”, Chapter 7, Towards Digital Optical Networks, COST Action 291 Final Report, Series: Lecture Notes in Computer Science Subseries: Computer Communication Networks and Telecommunications, Vol. 5412
- Lena Wosinska, Didier Colle, Piet Demeester, Ilse Lievens, Mario Pickavet, Bart Puype, Dimitri Staessens, Ozren Lapcevic, Marko Lackovic, Branko Mikac, Nina Skorin-Kapov, Kostas Katrinis, George Markidis, Anna Tzanakaki, “Network Resilience in Future Optical Networks”, Chapter 9, Towards Digital Optical Networks, COST Action 291 Final Report, Series: Lecture Notes in Computer Science Subseries: Computer Communication Networks and Telecommunications, Vol. 5412
- F. Matera, S. Bauer, V. Eramo, M. Karasek, H. P. Nolting, M. Nord, B. Satorious, M. Settembre, I. Tomkos, A. Tzanakaki and I. Zacharopoulos, “Transmission Systems” Chapter 2 of “Advanced Infrastructure for Photonic Networks” COST 266 Extended Final Report, Published in 2003
- A. Kuchar, I. Tomkos, C. Mas and A. Tzanakaki, “Summary of Results and Future Work” Chapter 8 of “Advanced Infrastructure for Photonic Networks” COST 266 Extended Final Report, Published in 2003

## ***PUBLICATIONS***

### ***Journal Publications***

#### *Published*

1. A. D. Ellis, D. Cotter, S. Ibrahim, R. Weerasuriya, C. W. Chow, J. Leuthold, W. Freude, S. Sygletos, P. Vorreau, R. Bonk, D. Hillerkuss, I. Tomkos, A. Tzanakaki, C. Kouloumentas, D. J. Richardson, P. Petropoulos, F. Parmigiani, G. Zarris, D. Simeonidou, Optical interconnection of core and metro networks, *Journal of Optical Networking*, vol. 7, no.11, pp.928-935 (2008)
2. Bartosz Belter, Artur Binczewski, Gino Carrozzo, Nicolla Ciulli, Eduard Escalona, George Markidis, Reza Nejabati, Dimitra Simeonidou, Maciej Stroiński, Anna Tzanakaki, Georgios Zervas, Between Grids and Networks: Grid-enabled Network Control Planes, Campus-wide information systems, *The international journal of information and learning technology*, vol. 25, no. 5, 2008, pp. 273-286
3. G. Markidis and A. Tzanakaki, “Network Performance Improvement through Differentiated Survivability Services in WDM networks”, *Journal of Optical Networking*, vol. 7, no. 6, May 2008, pp. 564-572
4. Georgios Zervas, Eduard Escalona, Reza Nejabati, Dimitra Simeonidou, Gino Carrozzo, Nicola Ciulli, Bartosz Belter, Artur Binczewski, Maciej Stroiński, Anna Tzanakaki, George Markidis, Athens Information Technology “Phosphorus Grid-enabled GMPLS Control Plane (G2MPLS): Architectures, Services and Interfaces”, *Communications Magazine*, vol. 46, no. 6, June 2008, pp:128 - 137
5. Nicola Ciullia, Gino Carrozza, Giodi Giorgia, Georgios Zervas, Eduard Escalona, Yixuan Qin, Reza Nejabati, Dimitra Simeonidou, Franco Callegati, Aldo Campic, Walter Cerroni, Bartosz Belter, Artur Binczewski, Maciej Stroiński, Anna Tzanakaki, George Markidis, “Architectural approaches for the integration of the service plane and control plane in optical network”, *Optical Switching and Networking Journal*, Elsevier, invited paper, vol. 5, 2008, pp 94-106
6. Carla Raffaelli, Kyriakos Vlachos, Nicola Andriolli, Jakob Buron, Ruth van Caenegem, Grzegorz Danilewicz, Jorge M Finochietto, Joan Garcia-Haro, Dimitrios Klonidis, Mike O'Mahony, Guido Maier, Achille Pattavina, Pablo Pavon-Marino, Sarah Ruepp, Michele Savi, Mirco Scaffardi, Ioannis Tomkos, Anna Tzanakaki, Lena Wosinska, Konstantinos Yannopoulos, Fabio Neri, “Photonics in Switching: architectures, technologies and systems The e-Photon/ONE+ research results - Part I : system aspects”, *COMNET*, vol. 52, no. 10, July 2008, Pages 1873-1890
7. Ch. Kouloumentas, N. Pleros, P. Zakyntinos, D. Petrantonakis, D. Apostolopoulos, O. Zouraraki, A. Tzanakaki, H. Avramopoulos, and I. Tomkos, “Packet Clock Recovery Using a Bismuth Oxide Fiber-based Optical Power Limiter”, *Optics Express*, vol. 15, no.16, July 2007, pp. 9948-9953,
8. P. G. Arbues, C. Mas Machuca, A. Tzanakaki, “Comparative study of existing OADM and OXC architectures and technologies from the failure behavior perspective”, *Journal of Optical Networking*, vol. 6, no 2, January 2007, pp 123-133
9. G. Markidis, S. Sygletos, A. Tzanakaki and I. Tomkos, “Impairment Constraint based Routing in Ultra Long Haul Optical Networks with 2R regeneration”, *IEEE Photonics Technology Letters*, vol. 19, no. 6, March 2007, pp: 420 - 422

10. Ch. Kouloumentas, A. Tzanakaki, and I. Tomkos, "Clock Recovery at 160 Gb/s and beyond, using a Fiber-Based Optical Power Limiter", IEEE Photonics Technology Letters, vol. 18, no. 22, Nov. 2006, pp: 2365 - 2367
11. S. Sygletos, A. Tzanakaki, and I. Tomkos, "Numerical Study of Cascadability Performance of Continuous Spectrum Wavelength Blocker/Selective Switch at 10/40/160 Gb/s", IEEE Photonics Technology Letters, vol. 18, no. 24, Dec. 2006, pp: 2608 - 2610
12. A. Tychopoulos, I. Papagiannakis, D. Klonidis, A. Tzanakaki, O. Koufopavlou, I. Tomkos, "FOCUS: a low-cost inband FEC scheme for STM-64 transparent metro networks", IEEE Photonics Technology Letters, vol. 18, no. 24, Dec. 2006 pp: 2581 - 2583
13. S. Azodolmolky, A. Tzanakaki and I. Tomkos, "A Simulation Study of Adaptive Burst Assembly Algorithms in Optical Burst Switched Networks with Self-Similar Traffic Sources", Annals Journal of Telecommunications, vol. 62, no. 5-6, May-June 2007, pp: 584-603
14. I. Tomkos, A. Tzanakaki, P. Kulkarni, G. Markidis and C. Mas Machuka, "Benefits of the Use of Impairment Constraint Routing in Optical Networks, Annals Journal of Telecommunications, vol. 62, no. 5-6, May-June 2007, pp: 567-583
15. D. Simeonidou, R. Nejabati, G. Zervas, D. Klonidis, A. Tzanakaki, and M. J. O'Mahony, "Dynamic Optical Network Architectures and Technologies for Existing and Emerging Grid Services", (*Invited Paper*), Journal of Lightwave Technology, vol. 23, no. 10, pp 3347-3357, October 2005
16. C. Politi, D. Klonidis, A. Tzanakaki, M. O'Mahony, Ioannis Tomkos, "Demonstration of a Novel Wavelength Routed Optical Packet Switch Architecture", SPIE Optical Engineering" SPIE Opt. Eng. 45, 050504, May 2006
17. S. Zhang, D. Owens, Y. Liu, M. T. Hill, D. Lenstra, A. Tzanakaki, G. D. Khoe, and H.J.S. Dorren, "Multi-state Optical Memory Based on Serially Interconnected Lasers", IEEE Photonics Technology Letters, vol. 17, no. 9, 1962-1963, September 2005.
18. A. Tzanakaki, I. Zacharopoulos, D. Parcharidou and I. Tomkos, "Nonlinear Penalty Suppression through the Use of OADMs", IEEE Photonics Technology Letters, Vol. 17, no. 12, Dec. 2005, pp: 2769 - 2771
19. T. Politi, A. Tzanakaki, D. Klonidis, M. O'Mahony and I. Tomkos, "Optical Cross-Connect Architecture Using Waveband Conversion and a Passive Wavelength Router", Optoelectronics, IEE proceedings, Vol. 152, no. 4, 5 Aug. 2005, pp: 215 - 221
20. I. Zacharopoulos, A. Tzanakaki, D. Parcharidou, and I. Tomkos, "Optimization Study of Advanced Modulation Formats for 10 Gbit/s Metropolitan Networks", Journal of Lightwave Technology, Vol. 23, no. 1, Jan. 2005, pp: 321 - 329
21. I. Tomkos, D. Vogiatzis, C. Mas, I. Zacharopoulos, A. Tzanakaki and E. Varvarigos, "Performance Engineering of Metropolitan Area Optical Networks through Impairment Constraint Routing", IEEE Communications Magazine, vol. 42, no. 8, pp. S40 - S47, Aug. 2004.
22. A. Tzanakaki, I. Zacharopoulos, D. Parcharidou and I. Tomkos, "Advanced Modulation Formats Appropriate for 10 Gbit/s WDM Metropolitan Area Networks", IEEE Photonics Technology Letters, vol. 16, no. 7, pp. 1769 - 1771, July 2004.

23. A. Tzanakaki, I. Zacharopoulos and I. Tomkos, "Broadband Building Blocks", IEEE Circuits and Devices Magazine, vol. 20 , no. 2 , pp. 32-37, March-April 2004.
24. M. J. O'Mahony, D. Simeonidou, D. K. Hunter and A. Tzanakaki, "The Application of Optical Packet Switching in Future Communication Networks", IEEE Comms Magazine, vol. 39, no. 3, March 2001.
25. A. Tzanakaki and M. J. O'Mahony, "Analysis of tunable wavelength converters based on cross gain modulation in semiconductor optical amplifiers operating in the counter propagating mode" IEE Proc.- Optoelectron., vol. 147, no. 1, pp. 49-55, February 2000.
26. A. Tzanakaki, K. M. Guild, D. Simeonidou and M. J. O'Mahony, "Error-Free Transmission through 30 Cascaded Optical Cross-Connects Suitable for Dynamically Routed WDM Networks", Electronics Letters, vol. 35, no. 20, pp. 1755-1756, September 1999.
27. D. K. Hunter, M. H. Nizam, M. C. Chia, I. Andonovic, K.M. Guild, A. Tzanakaki, M.J. O'Mahony, J.D. Bainbridge, M.F.C. Stephens, R.V. Penty and I. H. White, "WASPNET: A Wavelength Switched Packet Network", IEEE Comms. Magazine, March 1999, vol. 37, no. 3, pp. 120-129.
28. J. D. Bainbridge, A.R. Sharafi, I.H. White, M.A. Cowin, M.F.C. Stephens, R.V. Penty, K.M. Guild, A. Tzanakaki, M. J. O. O'Mahony, G.H.B. Thomson, S.J. Clements, C.B. Rogers, D. Melville and F. R. Shepherd, "Negligible penalty all-optical routing using 12x12 InP wavelength selective router", Electronic Letters, vol. 34, no. 22, pp. 2151-2152, November 1998.
29. A. Tzanakaki, A. Yu, M. J. O'Mahony and M. E. Bray, "Penalty-free wavelength conversion using cross-gain modulation in semiconductor laser amplifiers with no output filter", Electronic Letters, vol. 33, no. 18, pp. 1554-1556, August 1997.

### **Conference Publications**

#### *Published*

1. A. Jirattigalachote, L. Wosinska, P. Monti, K. Katrinis, and A. Tzanakaki, "Impairment Constraint Based Routing (ICBR) with Service Differentiation in Survivable WDM Networks", ECOC 2009, September 2009
2. A. Tzanakaki, K. Georgakilas, K. Katrinis, L. Wosinska, A. Jirattigalachote and P. Monti, "Network Performance Improvement in Survivable WDM Networks considering Physical Layer Constraints", (Invited paper), RONEXT, ICTON 2009, Azores, Portugal, June 2009
3. A. Jirattigalachote, K. Katrinis, A. Tzanakaki, L. Wosinska, P. Monti, "Quantifying the Benefit of BER-based Differentiated Path Provisioning in WDM Optical Networks", RONEXT, ICTON 2009, Azores, Portugal, June 2009
4. G. Zarris, F. Parmigiani, E. Hugues-Salas, R. Weerasuriya, D. Hillerkuss, N. Amaya Gonzalez, M. Spyropoulou, P. Vorreau, R. Morais, S.K. Ibrahim, D. Klionidis, P. Petropoulos, A.D. Ellis, P. Monteiro, A. Tzanakaki, D. Richardson, I. Tomkos, R. Bonk, W. Freude, J. Leuthold, and D. Simeonidou, Field Trial of WDM-OTDM Transmultiplexing employing Photonic Switch Fabric-based Buffer-less Bit-interleaved Data Grooming and All-Optical Regeneration, OFC 2009, Post Deadline Paper, San Diego, USA, March 2009

5. K. Katrinis, A. Tzanakaki, G. Markidis, "Impairment Aware Network Design with Optimum Regenerator Placement", NFOEC 2009, March 2009
6. George Markidis and Anna Tzanakaki, "Routing and wavelength assignment algorithms in survivable WDM networks under physical layer constraints", GOMS 2008, Broadnets 2008, September 2008
7. Anna Tzanakaki, George Markidis, Kostas Katrinis, Supporting differentiated survivability services in WDM optical networks, invited paper, ICTON 2008
8. C. Develder, M. De Leenheer, T. Stevens, B. Dhoedt, G. Markidis and A. Tzanakaki, "Scalable Impairment-Aware Anycast Routing in Multi-Domain Optical Grid Networks", invited paper, ICTON 2008
9. J. Leuthold, W. Freude, S. Sygletos, P. Vorreau, R. Bonk, D. Hillerkuss, I. Tomkos, A. Tzanakaki, C. Kouloumentas, D. J. Richardson, P. Petropoulos, F. Parmigiani, A. Ellis, D. Cotter, S. Ibrahim, R. Weerasuriya, "An All-Optical Grooming Switch to Interconnect Access and Metro Ring Networks", invited paper, ICTON 2008
10. Bartosz Belter, Artur Binczewski, Gino Carrozzo, Nicolla Ciulli, Eduard Escalona, George Markidis, Reza Nejabati, Dimitra Simeonidou, Maciej Stroiński, Anna Tzanakaki, Georgios Zervas, Between Grids and Networks: Grid-enabled Network Control Planes, TERENA Networking Conference 2008, May 2008, Bruges, Belgium
11. G. Markidis, A. Tzanakaki, N. Ciulli, G. Garozzo, D. Simeonidou, R. Nejabati, G. Zervas "EU Integrated Project PHOSPHORUS: Grid-GMPLS control plane for the support of Grid Network Services", (Invited paper), ICTON 2007, vol. 3, pp: 26 - 31 Rome, Italy, July 2007
12. G. Markidis, S. Sygletos, A. Tzanakaki and I. Tomkos "Impairment Aware Based Routing and Wavelength Assignment in Transparent Long Haul Optical Networks" ONDM 2007, Athens, Greece
13. I. Tomkos, S. Sygletos, A. Tzanakaki and G. Markidis, "Impairment constraint routing in mesh optical networks", (Invited paper), OFC 2007, OWR1, Anaheim, USA
14. Ch. Kouloumentas, N. Pleros, P. Zakyntinos, D. Petrantonakis, D. Apostolopoulos, O. Zouraraki, A. Tzanakaki, H. Avramopoulos, I. Tomkos, "Packet clock recovery at 40 Gb/s and beyond, using a Fabry-Perot filter and an optical power limiter based on a bismuth oxide fibre", CLEO Europe 2007, June 2007
15. G. Markidis, S. Sygletos, A. Tzanakaki and I. Tomkos, "Impairment Constraint Based Routing in Optical Networks", Broadband Europe Conference, 2006.
16. I. Tomkos, A. Tzanakaki, J. Leuthold, A. D. Ellis, D. Bimberg, P. Petropoulos, D. Simeonidou, S. Tsadka, P. Monteiro, "The EU project TRIUMPH: Transparent Ring Interconnection Using Multiwavelength Photonic Switches" (Invited Paper), Broadband Europe Conference, 2006.
17. G. Zervas, R. Nejabati, D. Simeonidou, A. Tzanakaki, and I. Tomkos, "A Hybrid Optical Burst/Circuit Switched Ingress Edge Router for Grid-enabled Optical Networks", GridNets 2006, BroadNets 2006
18. G. Markidis, S. Sygletos, A. Tzanakaki, and I. Tomkos, "Impairment Constraint Routing in 2R-based Long Haul Optical Networks, ECOC 2006
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