TABLE OF CONTENTS

CAPEX minimization through node degree reduction in a Colorless and Directionless ROADM architecture for flexible optical networks
Sai Kishore B, Prasanna G, Devarajan A, Sandesha K, Nanda Gopal D, Venkataramaniah K (Sri Satya Sai University, IN); Pavan Voruganti (Op-Vista Inc., Milpitas, California, US); Ron Johnson (Cisco Systems Inc., San Jose, California, US)

Auto-detection of misconnected fibers in WSS based multi-degree ROADM
Nitin Manohar and Arvind Kumar (Ciena India, IN)

Free-space Optical Links Using Phase Singularity
Bharat Kumar Yadav and Hem Chandra Kandpal (National Physical Laboratory, New Delhi, IN)

Performance of On-Off Keying Optical Code-Division Multiple Access Using Feedback-Controlled Spreading Sequences
Mihiro Nojima and Masanori Hamamura (Kochi University of Technology, JP)

A new QoS aware predictive scheduling strategy in EPONs
Rajnish Kumar (IIT Delhi, IN), Swades De and Hari Gupta (Indian Institute of Technology, Delhi, IN); Navrati Saxena (Sungkyunkwan University, KR); Abhishek Roy (Samsung Electronics, KR)

10G-EPON Efficiency
Rajesh Roy (University of California, Davis, US); Marek Hajduczenia (ZTE, CN); Glen Kramer (Teknovus, Inc, US); Henrique Silva (University of Coimbra, PT)

Transparent (Fiber to the Premises) Wave Division Multiplexing Passive Optical Network
Colm Connolly and Michael Schukat (National University of Ireland Galway, IE)

Heuristic Algorithms for Designing Minimum Cost FSO Networks
Shanshan Chen, Samuel Cheng, Pramode Verma, and Robert Huck (University of Oklahoma, US)

A New Architecture and MAC Protocol for Flexible Radio over Fiber Home Networks
Goutam Das, Bart Lanno, Daan Pareit (Ghent University, BE); Chigo Okonkwo, Ton Koonen (Eindhoven Univ. of Technology, NL); Didier Colle, Ingrid Moerman, Mario Pickavet, Piet Demeester (Ghent University, BE)

How Much to Pay for Protection in Fiber Access Networks: Cost and Reliability Tradeoff
Lena Wosinska and Jiajia Chen (Royal Institute of Technology KTH, Sweden)

Energy in ICT - Trends and Research Directions
Ward Van Heddeghem, Willem Vereecken, Mario Pickavet, and Piet Demeester (Ghent University, Belgium)

Energy Efficiency and CAPEX Minimization for Backbone Network Planning: Is there a Tradeoff?
Eleni Palkopoulou (Chemnitz University of Technology, DE); Dominic A. Schupke (Nokia Siemens Networks, DE); Thomas Bauschert (Chemnitz University of Technology, DE)
Optimal Segment Size for Fixed-sized Segment Protection in Wavelength-routed Optical Networks
Raghunath Tewari and Byrav Ramamurthy (University of Nebraska-Lincoln, US)

Logical Topology Augmentation for Guaranteed Survivability under Multiple Failures in IP-over-WDM Optical Networks
Krishnaiyan Thulasiraman, Muhammad S Javed, and Tachun Lin (University of Oklahoma, US); Guoliang Larry Xue (Arizona State University, US)

Achieving IP Routing Stability with Optical Bypass
Mohit Chamania, Marcel Caria, and Admela Jukan (Technische Universiti Carolo-Wilhelmina zu Braunschweig, DE)

A Comparison of Optical Time Slotted Networks
Arush G. Gadkar (The George Washington University, US)

Wavelength Selective Devices for WDM Communication Systems
Lech Wosinski, Ning Zhu, and Zhechao Wang (Royal Institute of Technology KTH, Sweden)

Some Schemes for Controlling Gain Dynamics of EDFA chains in Wavelength-Routed Optical Networks
Krishna Chaitanya Puvvada (Schlumberger LTD, FR); Debasish Datta (Indian Institute of Technology, Kharagpur, IN)

Impact of Channel Spacing on the Design of a Mixed-Line-Rate Optical Network
Avishek Nag and Massimo Tornatore (University of California, Davis, US)

System Design and Evaluation of a Large Photonic Switch based on Optical Codes for Optical Burst Switched Networks
Maurizio Casoni and Alessio Sacchi (University of Modena and Reggio Emilia, IT)

Evaluating Buffer-Constrained Routers under Bursty and Shaped Traffic
Arvinderpal S. Wander (Infinera, US); Anujan Varma (University of California, Santa Cruz, US)

How Poisson is TCP Traffic at Short Time-Scales in a Small Buffer Core Network?
Arun Vishwanath, Vijay Sivaraman (University of New South Wales, AU); Diethelm Ostry (CSIRO, AU)

Static Manycast Routing and Wavelength Assignment over Wavelength-Routed Optical WDM Networks
Neal Charbonneau and Vinod Vokkarane (University of Massachusetts Dartmouth, US)

Analytical System Tools for iSCSI Remote Storage Access and Performance Improvement by Optimization with the Tools
Reika Higa (University of Ochanomizu, JP); Kosuke Matsubara (SOFTBANK TELECOM Corp, JP); Takao Okamawari (Softbank Mobile Corp., JP); Saneyasu Yamaguchi (Kogakuin University, JP); Masato Oguchi (Ochanomizu University, JP)

Secured Media Latching in VoIP Networks
Sudhakar Dhanagopal, Lavanya Venkatesan, and Dhanunjai Nagabhyyru (Wipro, IN)

Two Algorithms for Network Size Estimation for Master/Slave Ad Hoc Networks
Redouane Ali, Suksant Sae Lor, and Miguel Rio (University College London, UK)
Impact of Power Control on Capacity of Large Scale Wireless Mesh Networks
Parth Patilak and Rudra Dutta (North Carolina State University, US)

Wireless Backhaul for LTE, Service OAM Considerations
George Varghese and Debajit Ghosh (Wipro Technologies, IN)

Social Networks as Internet Barometers for Optimizing Content Delivery Networks
Sachin Kumar Agarwal (Deutsche Telekom AG, Laboratories, DE); Shruti Agarwal (Humboldt University, DE)

Recursive Secret Sharing for Distributed Storage and Information Hiding
Abhishek Parakh and Subhash Kak (Oklahoma State University, US)

Strong Authentication for Secure Content Access in Converged Networks
Rajarathnam Nallusamy (Infosys Technologies Limited, IN); Sanjoy Paul (Infosys Technologies Limited, US)

POSTER PAPERS

Survivable IP Topology Design with Reuse of Backup Wavelength Capacity
Chaitanya S. K. Vadrevu and Massimo Tornatore (University of California, Davis, US)

Differential Capacity p-Cycles: A p-Cycle Variant with Increased Capacity Efficiency
Prashant Jaikumar (Cisco Systems, US); Rudra Dutta (North Carolina State University, US)

Unfairness in TCP Performance over Lossy Optical Burst-Switched (OBS) Networks
Julie Sullivan, Paul Ramos, and Vinod M. Vokkarane (University of Massachusetts Dartmouth, US)

VPN Topology Abstraction Service using Centralized Core Capacity Sharing Scheme
Ravishankar Ravindran, Changcheng Huang (Carleton University, CA); Krishnaiyan Thulasiraman (University of Oklahoma, US)

Reconsideration of carrier sensing range for wireless ad hoc networks
Mayur M Vegad, Swades De, and Brejesh Lall (Indian Institute of Technology, Delhi, IN)

Joint Optimization of Power Allocation and Relay Selection in Cooperative Wireless Sensor Networks
Hadi Jamali Rad, Bahman Abolhassani (Iran University of Science and Technology, IR); Mohammad Taghi Abdizadeh (Sharif University of Technology, IR)

Channel Aware Routing Metric for IEEE 802.11 Multi-Channel Mesh Networks
Mahmudur Rahman and Anjali Agarwal (Concordia University, CA)

Energy Consumption Analysis in Link Adaptive Cognitive Radio Network
Rajarshi Mahapatra (Meghnad Saha Institute of Technology, IN)

Using Reconfigurable Hardware Devices in WSNs for Accelerating and Reducing the Power Consumption of Header Processing Tasks
Georgios-Grigorios Mplemenos, Panagiotis Christou, and Ioannis Papaefstathiou (Technical University of Crete, GR)
BER Derivation for UWB Communication with a Relay Node in the Presence of Inter-Channel Interference
Zolfa Zeinalpour-Yazdi, Masoumeh Nasiri-Kenari (Sharif University of Technology, IR); Behnaam Aazhang (Rice University, US)

Channel Assignment in Cognitive Wireless Mesh Networks
Ayoub Alsarahn and Anjali Agarwal (Concordia University, CA)

Novel User-Based Packet Classification in 802.16e to Provide Better Performance
Amitkeerti Lagare and Debrata Das (International Institute of Information Technology - Bangalore, IN)

Minimizing Network Cost in All-Optical Networks
Shivashis Saha (University of Nebraska-Lincoln, US); Eric D. Manley (Drake University, US); Jitender Singh Deogun (University of Nebraska-Lincoln, US)

An Efficient Call Admission Control Scheme on Overlay Networks Using Fuzzy Logic
Asish Mukhopadhyay (Dr. B. C. Roy Engineering College, IN); Sunanda Chatterjee (Institute of Engineering and Industrial Technology, IN); Sajal Saha (Narula Institute of Technology, IN); Suranjan Ghose (Jadavpur University, IN); Debasish Saha (Indian Institute of Management Calcutta, IN)

Signaling Performance of UPnP QoS Architecture
Lukasz Brewka, Henrik Wessing, and Lars Dittmann (Technical Univ of Denmark, DK)

QoS Optimized Cross Multi-layer Transmission for SVC Coded Video Stream over IEEE 802.16e Network
Jung-Shyr Wu, Jiun-Yu Tu, Chiung-Fang Hsu (National Central University, TW)

Secure Group Communication Using Binomial Trees
R. Aparna (Siddagang Institute of Technology, IN); B B Amberker, Divya Pola, and Pranjal Bathia (National Institute of Technology, Warangal, IN)

Evaluation of the P2P File Sharing Technique by Indexed-Priority Metric
Toshinori Takabatake and Yoshikazu Komano (Shonan Institute of Technology, JP)

Call Arrival Model for GSM Network Including Handover
Busra Yuksel, Merve Cingoz (Istanbul Technical University, TR); Gunes Karabulut (Turkcell, TR); Sema Oktug (Istanbul Technical University, TR)

Performance Analysis of Beacon-Enabled IEEE 802.15.4 MAC for Emergency Response Applications
Anil Mehta (Southern Illinois University Carbondale, US); Ghulam M. Bhatti (MERL, US); Zafer Sahinoglu (Mitsubishi Electric Research Laboratories, US); Ramanarayanan Viswanathan (Southern Illinois University Carbondale, US); Jinyun Zhang (MERL, US)