

2010 Seventh International Conference on Wireless and Optical Communications Networks

(WOCN 2010)

**Colombo, Sri Lanka
6-8 September 2010**



**IEEE Catalog Number: CFP10604-PRT
ISBN: 978-1-4244-7203-1**

WOCN2010 Conference Program

Colombo, Sri Lanka

Tutorials

6th of September

Entire day Tutorials at: Hilton Colombo Hotel, Colombo, Sri Lanka

Morning Tutorials

9:00 am - 12:00 pm

10:00 am - 10:30 am Coffee Break

Tutorial 1

Optical Communications Networks and Devices

by Professor Dr. Alok Kumar Das

Tutorial 2

Quality of Service Provisioning and Mobility Handling in Wireless Vehicular Networks

by Assistant Professor Dr. Rola Naja

12:00 pm - 2:00 pm limited lunch available only for registered authors

Afternoon Tutorials

2:00 pm - 5:00 pm

3:00 pm - 3:30 pm Coffee Break

Tutorial 3

Coherent Optical Transmission Fundamentals and Implementation Issues

by Dr. Vijitha Herath

Tutorial 4

Cloud Computing: Technology, Applications and Business Cases

by Professor Dr. Asoke K. Talukder

7th of September

Location: Hilton Colombo Hotel, Colombo, Sri Lanka

8:30 am - 9:00 am

Welcoming and Opening remarks

9:00 am - 10:00 am

Keynote Speech:

Keynote Speaker:

Speaker: Gerard M. X. Fernando, PhD

Title: Media delivery - Current State of Development

Invited Talk:

Speaker: Dr. Harendra Fernando

Title: Photonic Integrated Circuits for Quantum Cryptography

10:00 am - 10:30 am Coffee Break

10:30 am – Session 1: Satellite Communications Systems

12:30 pm

Analysis of Short Term Scintillation Effects of Ku Band Satellite Links in Sri Lanka 1
by Uthpala Premarathne, Kithsiri Samarasinghe

Sub Gigahertz Inter Stage Band Pass Filters for Microwave Transceiver Systems 6
by Chanditha Udalgama, Ruchira Yapa

A New Generation of Very Small Aperture Terminal and Satellite Networks Topology Exploiting
Diversity of Multiple Antenna Sites 10
by Geili T. A. El Sanousi

Time Series Prediction of Short Term Scintillations of Ku Band Satellite Links in Sri Lanka 15
by Uthpala Premarathne, Kithsiri Samarasinghe

Session 2: Intelligent Transportation Systems

A Geographic Based Routing Scheme for VANETs 20
by Hamdi Idjmayyel, Bilal R. Qazi, Jaafar M.H. Elmirghani

Performance Evaluation of a Microcellular Motorway Vehicular Network under Realistic Channel
Characteristics 25
by Wanod Kumar, Bilal R. Qazi, Jaafar M. H. Elmirghani

Performance of Fixed and Dynamic Channel Allocation Schemes in a Motorway Environment 30
by Adnan Muhtar, Bilal R. Qazi, Jaafar M. H. Elmirghani

A Cost Effective Intelligent Solution to Reduce Traffic Congestion 36
by Hiruna Dissanayake, Ravindra Koggalage

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2:00 pm

Lunch

2:00 pm –
4:00 pm

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Adaptive Atomic Transaction Support for Service Migration in Wireless Sensor Networks 46
by *Christoph Reinke, Nils Hoeller, Volker Linnemann*

Early Detection Congestion and Control Routing in MANET 54
by *T Senthil kumaran, V Sankaranarayanan*

An Efficient Hybrid Routing Based on Contact History in Delay Tolerant Networks 59
by *Shi Chen, Jun Zhang, Qiang Gao*

Mini session 3: Mobile Communications and Mobility

Super High Speed Hybrid Technology Challenges for Smart Solution in Spectral-Efficient High Data-Rate Wireless Networks 65
by *Nirmalendu Bikas Sinha, P.K.Sutradhar, S.Chakraborty, K.Chowdhury, D.Mondal, S.Manna, M.Mitra*

Congestion Adaptive Routing in Wireless Mesh Networks 70
by *Ashish Kumar Tiwari, T. G. Basavaraju, B. R. Chandavarkar*

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by *Mohammed T. Alresheedi, Jaafar M.H. Elmirghani*

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by *M Nikkar Esfahani, Jaafar Elmirghani*

Hybrid-power IP over WDM Network 86
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Coffee Break

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6:00 pm

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by Uma R. Rao, B. K. Lande

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by Mohamed Khedr, Mohamad Abou El-Nasr, Mona Ali

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by Li-Hsing Yen, Jia-Jun Li, Che-Ming Lin

6:00 pm

Panel Sessions

7:00 pm

Banquet Dinner

Dinner at Curry Leaf Restaurant – Hilton Colombo Hotel

8th of September

Location: Hilton Colombo Hotel, Colombo, Sri Lanka

9:00 am - 10:00 am

Invited Talk:

Speaker: Dr. Durgesh Kumar Mishra

Title: Secure Multi-party Computation for Preserving Privacy in MANET: Issues and Challenges

Panel Sessions

10:00 am - 10:30 am Coffee Break

10:30 am – 12:30 pm **Session 7: WLAN and Mobile WiMAX I**

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by Dina S. Deif, Hesham El-Badawy

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by Majid Shakeri, Ebrahim Hosseini

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by Davinder Parkash, Rajesh Khanna

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End of Conference Program

Thank you.