

**IEEE ANTS 2008, [www.ieee-ants.org](http://www.ieee-ants.org)**

**Day 1: Monday, December 15, 2008      F.C. Kohli Auditorium, IIT Bombay, Mumbai, India**

9:00 am - 9:25 am	Inauguration	Director, Deputy Director, Dean Faculty, IIT Bombay Biswanath Mukherjee and Ashwin Gumaste Suresh Subramaniam and Admela Jukan
9:25 am - 10:05 am	Keynote	<b>KN1: Dr. Arun Netravali, President Emeritus Bell Laboratories USA and OmniVC USA.</b>
10:05 am - 10:45 am	Keynote	<b>KN2: Kishor Chaukar, Managing Director, Tata Industries, India.</b>
10:45 am to 11:05 am	Tea Break	
11:05 am to 1:05 pm	Session 1	<b>IT1: Stan Lumish, former CTO, JDSU, USA and Lumish Consulting.</b> <b>IT2: Rama Subramaniam, Head, Systems Engineering, Juniper, India</b> <b>IT3: Kanwal Jawanda, Vice President, Ciena, India.</b> <b>IT4: Kalimani Venkatesan, Manager, Wipro, India.</b> <b>IT5: Kevin Vachon, Chief Operating Officer Metro Ethernet Forum, Canada.</b>
1:05 pm to 2:15 pm	Lunch	
2:15 pm to 3:35 pm	Session 2	<b>IT6: J. Gopal, Executive Director, MTNL, India.</b> <b>IT7: Inder Monga, Director, CTO office, Nortel Networks, USA.</b> <b>IT8: Shivanand Kanavi, Vice President, Tata Consulting Services.</b> <b>IT9: Avinash Joshi, Manager, Tech Mahindra, India</b> <b>IT10: Milorad Cvijetic, Director NEC America, USA.</b>
3:35 pm to 3:55 pm	Tea Break	
3:55 pm to 4:55 pm	Invited talks	<b>KN3: Karamvir Mankad, CTO, Enterprise Business, Reliance ADA, India.</b> <b>IT11: Andy Chinmulgund, Senior Vice President, 2Wire Inc. USA.</b>
5:00 pm to 6:30 pm	Panel 1	<b>Service Provider Panel</b>  Moderator: <b>Girish Saraph, CEO, Vegayan Systems and IIT Bombay</b> Participants: <b>Arvind Mathur, Chief Architect, Sify, India.</b> <b>J. Gopal, Executive Director, MTNL.</b> <b>Shekhar Gupta, Director, Embarq, USA.</b> <b>T. V. Sriram, Vice President, Airtel.</b> <b>Sumit Chowdhury, CIO, Reliance Communications.</b>
7:00 pm to 9:00 pm	Reception and Dinner (All attendees are invited)	Venue: Gulmohur Lawns

## **Day 2: Tuesday, December 16, 2008**

9:00 am to 10:15 am      Session 3      Service Networks, Chair: **Samrat Ganguly**

**RI1:** Resilience Enhancement of Home Gateways using Failure Analysis  
*Sakkaravarthi Ramanathan (France Telecom - Orange Labs, FR) Chidung Lac (France Telecom - Orange Labs, FR)*

**RI2:** Pseudowire VCCV - BFD Vs Ethernet OAM  
*Narayana Raju Indukuri (Wipro Technologies, IN)*

**RI3:** Automatic Channel Power Control Loops in ROADM Network  
*Anuj Malik (Ciena Coporation, IN) Sanjay Choudhary (Ciena Corporation, US)*

**RI4:** Utility Computing for the SMB Industry  
*Vikram Mohan (Tata Consultancy Services, IN)*

**RI5:** Lawful Interception on SBC using SIP  
*Dhanunjai Nagabhyru (Wipro Technologies, IN) Sudhakar Dhanagopal (Wipro Technologies, IN) Lavanya Venkatesan (Wipro Technologies, IN)*

10:15 am to 10:55 am      Keynote      **KN4: K. Vijaya Kumar, Chief Technology Officer, Wipro Technologies, India.**

10:55 am to 11:15 am      Tea Break

11:15 am to 1:05 pm      Session 4      Chair: **Biswanath Mukherjee**

**IT12: Kevin Rhee, VP, Actus Networks.**

**RPT1:** Broadband Millimeter Wave Networks: Architectures and Applications  
*Upamanyu Madhow (University of California, Santa Barbara, US)*

**RPT2:** Transparent Optical Network Design with Mixed Line Rates  
*Avishek Nag (University of California Davis, US) Massimo Tomatore (Politecnico di Milano, IT)*

**RPT3:** An Overlay Architecture for Fault Diagnosis in Video Delivery Networks  
*Mukundan Venkataraman (University of Central Florida, US) Mainak Chatterjee (University of Central Florida, US)*

**RPT4:** Service Cloaking and Authentication at Data Link Layer  
*Arun Kumar S P (CAIR, IN)*

**RPT5:** A Concurrent Multi-Layer Restoration Scheme for GMPLS-based WDM Networks  
*Seshadri Mohan (University of Arkansas at Little Rock, US) Rabindra Ghimire (University of Arkansas at Little Rock, US) Michael Leary (Space Photonics, Inc., US) Terry Tidwell (Space Photonics, Inc., US)*

**RPT6:** Multi-Point Ethernet-over-SONET/SDH Services  
*Chongyang Xie (University of New Mexico, US) Nasir Ghani (University of New Mexico, US) Qing Liu (University of New Mexico, US) Rolande Kouatang (University of New Mexico, US) Wei Shu (The University of New Mexico, US) Yan Qiao (Shanghai Jiaotong University, CN) Min-You Wu (Shanghai JiaoTong University, CN)*

1:05 pm to 2:15 pm      Lunch

2:15 pm to 4:05 pm      Session 5      Chair:

**IT13: Vinay Ribero, IIT Delhi.**

**IT14: Raj Jain, Washington University at St. Louis, USA.**

**RPT7** Fast Updated Markov Based Split Reservation Protocol in WDM Optical Networks

Malabika Sengupta (Kalyani Govt. Engineering College, IN) Swapan Mondal (Kalyani Government Engineering College, IN) Chayanika Bose (Reader, IN) Debashis Saha (Indian Institute of Management (IIM)- Calcutta, IN)

**RPT8: Dynamic Bandwidth Provisioning and Survivability in IP over WDM Network**  
Amitava Mukherjee (IBM India Pvt Ltd, Calcutta, India, IN) Amitangshu Pal (Jadavpur University, IN) Mrinal Naskar (Jadavpur University, IN) Palash Dey (Jadavpur University, IN) Arkadeep Kundu (Jadavpur University, IN)

**RPT9: Peer-to-Peer Streaming: Lowering barrier to entry in IPTV**  
Saurabh Tewari (Yahoo! Inc., US) Satish Menon (Yahoo! Inc., US)

**RPT10: Performance Evaluation of the WiMedia MAC Protocol in High Density Wireless Environments**  
Frank Leipold (EADS Innovation Works, DE) Sergio Bovelli (European Aeronautic Defence and Space Company, DE) Bernd Müller-Rathgeber (Technische Universität München, DE) Simon Brandner (University of Technology Munich, DE)

**RPT11: Shared versus Dedicated Buffers for Real-Time Traffic in Optical Routers with Very Small Buffers**  
Arun Vishwanath (University of New South Wales, AU) Vijay Sivaraman (University of New South Wales, AU)

**RPT12: Impact of Bounded Jitter on Resource Consumption in Multi-hop Networks**  
Ling Wang (The University of Oklahoma, US) Pramode Verma (The University of Oklahoma, US)

4:05 pm to 4:25 pm	Tea Break	
4:25 pm to 5:35 pm	Panel 2:	Telecommunications Research in India: An Academic Perspective.  Moderator: <b>Krishna Sivalingam, Professor IIT Madras</b> Participants: <b>B. N. Jain, Deputy Director, IIT Delhi</b> <b>Debasis Datta, Professor, IIT Kharagpur</b> <b>Debasis Saha, Professor, IIM Calcutta</b> <b>R.K. Shevgaonkar, Deputy Director, IIT Bombay</b> <b>T. Gonzales, Professor, IIT Madras</b> <b>Anupam Joshi, IBM IRL India.</b> <b>Vikram Srinivasan, Bell Laboratories, India</b>
5:35 pm to 6:45 pm	Panel 3:	Unified Communications and Business Methods Moderator: <b>Venky Krishnaswamy, Director, Avaya, USA</b> Participants: <b>Nandkumar Sarvade, CIO, ICICI Bank</b> <b>Mr. Nath, CIO, State Bank of India (SBI)</b> <b>Deepak Kataria, Director, LSI Inc.</b> <b>Ashit Talukdar, Sr Scientist, JPL, USA.</b>
7:00 pm to 9:00 pm	Authors' dinner	Gulmohur Terrace (All authors are invited. Others by invitation only.)

**Day 3: Wednesday, December 17, 2008**

9:00 am to 10:20 am      Session 6      Chair: **Madhukar Pitke**

**RPT13: Implementation Scheme for End-to-end Quality of Service (QoS) Sessions over Internet**

*Rajesh Joshi (Indian Institute of Technology Bombay, IN) Girish Saraph (Indian Institute of Technology, Bombay, IN)*

**RPT14: Proactive Loss Recovery using Forward Segment Redundancy in Optical Burst-Switched (OBS) Networks**

*Deepak Chandran (University of Massachusetts Dartmouth, US) Neal Charbonneau (University of Massachusetts Dartmouth, US) Vinod Vokkarane (University of Massachusetts Dartmouth, US)*

**RPN1: Fast Dual-Radio Cross-Layer Handoffs in Multi-Hop Infrastructure-mode 802.11 Wireless Networks for In-Vehicle Multimedia Infotainment**

*Jayaraj Poroor (Amrita Vishwa Vidyapeetham (Amrita University), IN)*

**RPN2: An Efficient and Optimized Bluetooth Scheduling Algorithm for Scatternets**

*G. Ramana Reddy (Indian Institute of Science, IN) Shalabh Bhatnagar (Indian Institute of Science, IN)*

**RPN3: Benefits of Inter-Flow Bandwidth Sharing in Broadband Wireless Infrastructure Networks**

*Sandeep Ahuja (ECE Department university of Arizona, US) Abishek Gopalan (University of Arizona, US) Srinivasan Ramasubramanian (The University of Arizona, US)*

**RPN4: Steganography in 802.15.4 Wireless Communication**

*Ankur Mehta (University of California Berkeley, US) Steven Lanzisera (University of California - Berkeley, US) Kristofer Pister (UC Berkeley, US)*

**RPN5: A Scalable and Computationally Efficient Localization Algorithm for WSNs**

*Gopakumar A (National Institute of Technology-Calicut, India, IN) Lillykutty Jacob (National Institute of Technology Calicut, India, IN)*

10:20 am to 11:00 am      Keynote      **KN 5: Paravin Desale**, India, Managing Director, LSI Inc.

11:00 am to 11:20 am      Tea Break

11:20 am to 1:10 pm      Session 7      Chair: **Seshadri Mohan**

**IT15: Arun Somani, Anson Marston Distinguished Professor, Iowa State University, USA.**

**IT16: Weisheng Hu, Professor, Shanghai Jiao tong University, China.**

**IT17: Ashit Talukdar, Jet Propulsion Laboratory, (JPL), USA.**

**RPN6: Greedy Scheduling in Multihop Wireless Networks**

*Nachiket Sahasrabudhe (Indian Institute of Science, IN) Joy Kuri (Indian Institute of Science, IN)*

**RPN7: Loner Links Aware Routing and Scheduling in WMNs**

*Parth Pathak (North Carolina State University, US) Divya Gupta (Microsoft Corporation, US) Rudra Dutta (North Carolina State University, US)*

**RPN8: Layer Manager Controlled Mobility Management on Wireless Overlay Networks**

*Asish Mukhopadhyay (Dr.B.C.Roy Engineering College, IN) Debashis Saha (Indian Institute of Management (IIM)- Calcutta, IN)*

**RPN9:** Experimental Investigation of IEEE 802.11e EDCA  
*Saty Mukherjee (Aston University, UK) Xiaohong Peng (Aston University, UK)*

**RPN10:** Wireless Backhaul for LTE - Requirements, Challenges and Options  
*Kalimani Venkatesan Govindarajan (Wipro Technologies, IN) Kishor Kulkarni (Wipro, IN)*

1:10 pm to 2:15 pm      Lunch

2:15 pm to 4:15 pm      Session 8                      Chair: **Suresh Subramaniam**

**KN6:** **Vijay Yadav, Managing Director, UT-Starcom, India.**

**IT18:** **Venky Krishnaswamy, Director, Avaya Laboratories, NJ, USA.**

**IT19:** **Atul Strivastava, CEO, One Terabit Inc, USA.**

**IT20:** **Krishnaiyan Thulisaraman, Hitachi Chair Professor, University of Oklahoma, USA.**

**IT21:** **H. S. Jamadagni, Professor, Indian Institute of Science (IISc) Bangalore .**

**RPT15:** Evaluation of a Buffered Time-Wavelength Crossconnect with Sparse Wavelength Converters  
*Arush Gadkar (The George Washington University, US)*

**RPT16:** Resource Provisioning Through Traffic-Aware Code Allocation in a Hybrid PON Employing WDM and OCDMA  
*Ratnam Jayashree (Ex-Research Scholar, IN) Saswat Chakrabarti (Indian Institute of Technology, Kharagpur, IN) Debasish Datta (Indian Institute of Technology, Kharagpur, IN)*

**RPT17:** Mathematical Model and Analysis of Peer-to-peer IPTV  
*Hao Liu (Georgia Tech, US)*

**RPN11:** A Bandwidth-Efficient Scheme for Distributed Storage Systems  
*Najmeh Alsadat Bathaee (Sharif University of Technology, IR) Mohammad Reza Pakravan (Sharif University of Technology, IR)*

4:15 pm to 5:00 pm      Extended Tea Break and Poster Session (see Posters below)

Poster Session              Foyer                      Chair: **Rudra Dutta**

**P1:** An Improved Frequency Offset Estimation Algorithm by Multi-Band Averaging Method for MB-OFDM based UWB Communication for WPAN Applications  
*Debarati Sen (Indian Institute of Technology Kharagpur, IN)*

**P2:** Evaluation of the Hybrid Bootstrap Mechanism for Multicast Routing  
*Toshinori Takabatake (Shonan Institute of Technology, JP)*

**P3:** Improving Uploading Performance of TCP in Network Mobility  
*Bhaskar Sardar (Jadavpur University, IN) Mita Nasipuri (Jadavpur University, IN) Debashis Saha (Indian Institute of Management (IIM)- Calcutta, IN) Mahbub Hassan (University of New South Wales, AU)*

**P4:** Energy-Efficient Area Covering by Sensors with Two Adjustable Sensing and Communication Ranges  
*Sergey Astrakov (Russian State University of Trade and Economics, RU) Adil Erzin (Sobolev Institute of Mathematics, SB RAS, RU) Soumyendu Raha (Indian Institute of Science, IN) Vyacheslav Zalyubovskiy (Sobolev Institute of Mathematics, SB RAS, RU)*

**P5:** A Dynamic Bandwidth Guaranteed Routing Using Heuristic Search for Clustered  
*Gajaruban Kandavanam (TSSG, Waterford Institute of Technology, IE) Dimitri Botvich (Waterford Institute of Technology, IE) Sasitharan Balasubramaniam (TSSG, Waterford Institute of Technology, IE)*

**P6:** Review of Standard ITU-T K-60 Procedures for Unintentional Interference Measurements in Broadband over Power Line Systems  
*Claiton Colvero (National Institute of Metrology, Standardization and Industrial Quality, BR)*

**P7:** A Protocol for Quality of Service Aware Routing in Ad hoc Networks  
*Ash Mohammad Abbas (Aligarh Muslim University, IN)*

**P8:** Design and Analysis of New Code Families for Three-Dimensional OCDMA  
*Ravi Maddila (Indian Institute of Technology Kharagpur, IN) Sant Pathak (I.I.T.Kharagpur, IN) Nirmal Chakrabarti (Indian Institute of Technology Kharagpur, IN)*

KN=Keynote (40 mins), IT=Invited Talk, RPT=Research Paper Telecom (15 min),  
RPN=Research Paper Non-Telecom (10 min), P=poster session, RI=Research Industry (15 min).

P9: Clustering and Prefetching techniques for Network-based Storage Systems  
Dhawal Thakker (Middlesex University, UK)

P10: Delay and Throughput Trade-Off in WiMAX Mesh Networks  
Saeed Bastani (Iran Telecommunication Research Center, IR) Saleh Yousefi (Iran university of science and technology, IR) Mojtaba Mazoochi (Iran Telecommunication Research Center, IR) Alireza Ghiamatyoun (University of Tehran, IR)

P11: Comparative Cost Study of Broadband Access Technologies  
Pulak Chowdhury (University of California, Davis, US) Suman Sarkar (University of California at Davis, US) Abu Ahmed Reaz (University of California, Davis, US)

P12: Performance of MMSPEED routing protocol for H.264 video transmission in WMSN  
Saeed Darabi (University of Tehran, IR) Nasser Yazdani (University of Tehran, IR) Omid Fatemi (University of Tehran, IR)

P13: Secure Group Communication for Wireless Sensor Network  
Somanath Tripathy (IIITM Gwalior, IN) Sukumar Nandi (Indian Institute of Technology, Guwahati, IN)

P14: Adaptive Advance Reservation Based Inter-Domain Framework  
Mohit Chamania (Technische Universität Carolo-Wilhelmina zu Braunschweig, DE) Xiaomin Chen (Technische Universität Carolo-Wilhelmina zu Braunschweig, DE) Admela Jukan (Technische Universität Carolo-Wilhelmina zu Braunschweig, DE)

P15: An efficient data structure for storing network intrusion detection dataset  
Neminath Hubballi (Indian Institute of Technology Guwahati, IN)

P16: Design and Analysis of a Quasi Colourless Multi-wavelength 2-port Edge-ROADM  
Prita Nair (SSN College of Engineering, IN) Renil Kumar (SSN College of Engineering, IN)

P17: Flow-Aware Channel Assignment for Multi-Radio Wireless-Optical Broadband Access Network  
Abu Ahmed Reaz (University of California, Davis, US) Vishwanath Ramamurthi (University Of California, Davis, US) Suman Sarkar (University of California at Davis, US)

P18: Robust Traffic Engineering  
Himanshu Agrawal (Research Student, AU) Andrew Jennings (RMIT University, AU) Mark Gregory (Senior Lecturer, AU)

5:00 pm to 6:10 pm      Panel 4      Opportunities in Telecommunications

Moderator: **Deepak Kataria, Rutgers University.**

Participants:

**Saragur Srinidhi, Prometheus Consulting.**

**Pravin Bhagwat, Airtight Networks USA.**

**K. Raghuv eer, GM, Infosys India.**

**H. S. Balaji, Director, Tech Mahindra**

**Dipankar Banerjee, VP, Wipro Technologies.**

**Himanshu Sahu, Director, UT Starcom.**

**Hitesh Jain, Head Tele System.**

**Peter Kwong, CEO, Actus.**

6:10 pm to 7:20 pm      Session      Wireless Telecommunication Networks  
(refreshments will be served)

Organizer: **Samrat Ganguly, NEC America**

Speakers:

**IT22: Girija Naralikar, Bell Laboratories.**

**IT23: C. S. Rao, Intel Inc. USA.**

**IT24: Bhaskar Ramamurthi, Professor and Dean, IIT**

**Madras.**

**IT25: Rob Roy Wi2Wi, USA.**

7:20 pm      Concluding Remarks and IEEE ANTS 2009 information:  
**Biswanath Mukherjee and Ashwin Gumaste.**

## Organizing Committee:

KN=Keynote (40 mins), IT=Invited Talk, RPT=Research Paper Telecom (15 min),  
RPN=Research Paper Non-Telecom (10 min), P=poster session, RI=Research Industry (15 min).

**Technical Program Chairs:**

**Suresh Subramaniam**, George Washington University, USA  
**Admela Jukan**, Technical University of Braunschweig, Germany

**Industry Chairs:**

**Deepak Kataria**, LSI Inc. USA  
**Samrat Ganguly**, NEC, USA

**Publicity Chairs:**

**Rudra Dutta**, North Carolina State University, USA  
**Jianping Wang**, City University of Hongkong, PRC  
**Sridhar Iyer**, IIT Bombay, India

**Tutorial Chair:**

**Abhay Karandikar**, IIT Bombay, India

**Panels Chair:**

**Girish Saraph**, IIT Bombay, India and Vegayan Systems

**Local Arrangements:**

**Santosh Rana (Chair)**  
**Raviraj Vaishampayan**  
**Ishan Arora**  
**Tamal Das**  
**Prasad Gokhale**  
**Ashwin Gumaste**

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**Nasir Ghani**, University of New Mexico, Albuquerque, USA  
**Ashwin Gumaste**, IIT Bombay  
**Biswanath Mukherjee**, University of California, Davis (Chair)