

## Final Program

**IEEE Int. 5G Summit and 28<sup>th</sup> GISFI Standardization Series Meeting (GSSM)**

**March 17-18, 2017**

**Theme: Digital India**

### Venue

SENSES Hotel, DN-26, Sector V, Salt Lake, Kolkata- 700091, India



**Organized by: IEEE ComSoc Kolkata Chapter jointly with IEEE CAS, Kolkata Chapter and GISFI**

**Website:** <http://ewh.ieee.org/r10/calcutta/comsoc/5gsummit.htm>

**General Chair:** Prof. Iti Saha Misra, Dept. of Electronics and Telecommunication Engineering, Jadavpur University, Kolkata, ComSoc Chairperson IEEE Kolkata Chapter, India.

**General Co-Chair:** Prof. Suvra Sekhar Das, GS Sanyal School of Telecommunication, IIT Kharagpur, India.

#### **Contact Persons:**

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## Final Program Schedule

**Day 1-A: Friday March 17, 2017 (IEEE 5G Summit: Digital India)**

08.30- Onwards ( <b>REGISTRATION</b> )
09:00 – 10:30 ( <b>Grand Opening</b> )
<b>09:00-09:05 : Welcome Ceremony: Inaugural Song</b>
<b>09:05 -09:15: Welcome Speech</b> By General Chair, Prof. Iti Saha Misra, Dept. of Electronics and Telecommunication Engineering, Jadavpur University, Kolkata, India, IEEE ComSoc Kolkata Chapter Chairperson
<b>9.15-9.20 Address by Guest-of-Honour</b> By Dr. Krishna Gupta, IAS, Principal Secretary, IT & Electronics, Govt. of West Bengal
<b>09:20 – 9:30: Visionary Talk</b> By Prof. Ramjee Prasad, Founder Chair -GISFI, Founder President - CTIF Global Capsule (CGC), and Professor of Future Technologies for Business Ecosystem Innovation (FT4BI), Aarhus University, Denmark
<b>9.30 – 9:40: Inaugural Talk : IEEE 5G Initiative</b> By Dr. Ashutosh Dutta, IEEE 5G Initiative Co-Chair, Lead Member of Technical Staff, AT&T, USA
<b>9.40 – 9:50: Plenary Talk</b> By Guest-of-Honour, Shri Talleen Kumar, IAS, Principal Secretary, Consumer Affairs, Government of West Bengal
<b>9:50 – 10:15: Address by Special Guest</b> By Dr. Tulika Pandey, Scientist 'F'/ Director, Ministry of Electronics & Information Technology (MeitY), Govt. of India
<b>10:15 – 10:25: Address by Special Guest</b> By Prof. Chiranjib Bhattacharjee, DEAN, FET, Jadavpur University
<b>10.25-10.30 Address by Chief Guest and Lighting of the Lamp:</b> By Shri Bratya Basu, Hon'ble Minister, Dept. of IT & Electronics, Govt. of West Bengal
<b>10: 30-10:40: Vote of Thanks</b> By Prof. Salil Kumar Sanyal, IEEE Kolkata Section CAS Chair and ComSoc Excom Member, Former IEEE Kolkata Section Chair
<b>10:40 – 11:00 (HIGH TEA/COFFEE)</b>

## Final Program Schedule

### Day 1-B: Friday March 17, 2017 (IEEE 5G Summit: Digital India)

#### 11:00-12:30: Keynote Session-1

Session Chair: Prof. Debashis Dutta, IIT Kharagpur

**Keynote Speaker 1:** "System aspects of Digital India – Requirements, Architecture and Standardization Status", Mr. Vinosh Babu James, Technical Standards, Qualcomm India.

**Keynote Speaker 2:** "5G - Out of the Labs and into the Neighbourhood", Indrajit Sanyal, Senior Director, Ericsson Global Services

**Keynote Speaker 3:** "5G Transforming Service Providers' Business", Prakash Suthar, Principal Architect based in US, CISCO

**Keynote Speaker 4:** 'Innovations in Cellular Core Network for IoT and Machine Type Communications', Mr. Vinay Gupta, CTO Polaris Networks.

#### 12.30 - 13.30 Keynote Session-2

Session Chair: Prof. Rajakumar, Director, IIT Bhubaneswar

**Keynote Speaker 5:** Prof. Peter Lindgren, Professor, Multi Business Model Innovation and Technology, Aarhus University, Denmark.

**Keynote Speaker 6:** "Platform based approach for Prototyping 5G Research", Mr. Tarun Gupta, Business Development Manager –RF, National Instrument, India

**Keynote Speaker 7:** "Digital Payments", Mr. Sumit Misra, General Manager, Technology Head of Innovation, RS Software, Kolkata.

**Lunch Break 13.30 -14.30**

#### 14.30- 15.30 Invited Talks Session

Session Chair: Prof. B.P Sinha , ISI Kolkata

**Invited Talk 1:** "MIMO in 5G", M Chandrasekaran, Senior Research Engineer Centre of Excellence in Wireless Technology (CEWIT).

**Invited Talk 2:** "Spectrum Requirements for IoT Applications", Dr. Ashok Chandra, Former Wireless Advisor, Govt. of India.

**Invited Talk 3:** "Applications 5.0 - Riding the 5G wave", Mr. Ravikiran Annaswamy, CEO, Innohabit Technologies Pvt Ltd Education Co-Chair, IEEE 5G Initiative

#### 15.30 - 16.30 : Research Abstract Presentation

Session Chair: Prof. Debashis Saha, IIM Calcutta

**Abstract 1:** Enabling 5G Assisted IoT Solutions for Intelligent Transportation system in Indian Cities – Tamal Chakraborty, Doctoral Student, Dept. of ETCE, Jadavpur University

**Abstract 2:** Waveforms for 5G, Shashank Tiwari, G S Sanyal School of Telecommunications IIT KGP

**Abstract 3:** 5G and IoT System based on Millimeter Wave Radio, Rabindranath Bera, HoD, ETCE , Sikkim Manipal Institute of Technology

**Abstract 4:** Energy Efficient Cognitive Radio Network for IoT: A capacity enhancing and cost effective solution for 5G, Tanumay Manna, Doctoral Student, Dept. of ETCE, Jadavpur University

**Abstract 5:** Visible light communication for 5G System, Dr. Navin Kumar, Amtita School of Engineering, Bangalore

**Tea Break : 16.30-17.00**

**17:00–18:00: Panel Session: Security challenges with 5G technology- A Cross Industry View**

**Moderator: Mr. Sandeep Sengupta- ISOAH Data Securities Pvt. Ltd.**

**Panelists:**

Dr. Ashutosh Dutta- Lead Member of Technical Staff, AT&T, USA

Dr. Sourav Dutta- IBM, Kolkata

Mr. Sumit Poddar- CESC, Kolkata

Mr. Rana Pratap Sircar- Director, GSI SDU IT & C, Head of Information, Ericsson Global Services, Gurgaon

Nirupam Sen- Business Head (East), BSI Group India Pvt. Ltd.

18:00-19:00 (Cultural Program with Tea/Soft Drinks )

**19:00–20:30 (Gala Dinner)**

## Final Program Schedule

**Day 2-A: Saturday March 18, 2017 (28th GSSM)**

**08.30- Onwards (REGISTRATION)**

**9:00 – 9:30 : GISFI Opening Session:**

**Chair: Lt. Gen. AKS Chandele PVSM, AVSM (Retd ), President, IETE**

“**GISFI Future Strategy**”, Prof. Ramjee Prasad, Founder Chair, GISFI, Founder President, CTIF Global Capsule (CGC), and Professor, Future Technologies for Business Ecosystem Innovation (FT4BI), Aarhus University, Denmark

“**IETE and GISFI**”, Dr. Smriti Dagur, Former President, IETE

**Address by Guest of Honor:** Mr. R. N. Jha, Chief General Manager, BSNL, Kolkata, India

**Vote of Thanks-** By Mr. T.R. Dua, Vice Chair, GISFI

**9.30-10.30 : Special Invited Talk Session**

**Session Chair: Dr. Ashok Chandra, Ex-Wireless Advisor, Govt. of India**

**Invited Talk 1:** Prof. Saswat Chakborty, Head G.S.Sanyal School of Telecommunications  
Indian Institute of Technology Kharagpur

**Invited Talk 2:** “Optical Backbone Networks for Telecommunication” Prof. Debashis Dutta, Dept. of E & ECE, Indian Institute of Technology Kharagpur

**Invited Talk 3:** “Role of Satellite in 5G”, Dr. Kalyan Bandhyopadhyay, Dept. of E & ECE, Indian Institute of Technology Kharagpur Ex-Scientist, Space Application Center, ISRO, Ahmedabad

**10:30 - 11:00 ( High Tea/Coffee)**

**11:00 – 12:00 : GISFI Session 1: Security and Privacy**

**Chair:** Dr. Anand R. Prasad, NEC // Dr. Sivabalan Arumugam (GISFI Session 1)

**Vice Chair:** Dr. Debu Nayak, Huawei

**Secretary:** Dr. Balwant Sharma, Individual Member

**Invited Talk 1 :** Dr. Debabrata Nayak, Chief Security Officer, Huawei Telecom, India.

**Invited Talk 2:** “Smart grid Security”, Mr. Pallab Ganguly, Deputy Manager, Corporate Information System, CESE Pvt. Ltd, Kolkata

**Invited Talks:**(3) Dr. Mayur Dave, Reliance Telecom; (4) Dr. Sanjay Kumar, BIT Mesra, Ranchi

**12:00- 13:00: GISFI Session 2: Cloud Service Oriented Network (CSeON)**

Chair: Dr. Parag Pruthi, NIKSUN  
Vice Chair: Dr.Niranth Amogh, Huawei

**Invited Talk 1:** "Software Defined Network" - Samar Shailendra, Scientist in TCS Research Bangalore and the Vice Chair for M2M Workgroup at TSDSI TCS Bangalore

**Invited Talks:(2)** Dr. Suvra Sekhar Das, IIT Kharagpur; **(3)** Dr. Preetam Kumar, IIT Patna

**13:00-14:00 (Lunch Break)**

## Final Program Schedule

### Day 2-B: Saturday March 18, 2017(28th GSSM)

**14:00 -14:45: GISFI Session 3: Spectrum**

Chair: **Dr.Pawan K. Garg**, Former Member, Radio Regulations Board, ITU  
Vice Chair: Dr.Tilak Raj Dua, GISFI  
Secretary: Dr. Sanjay Kumar, BIT, Mesra,

**Invited Talks:(1)** Dr.Navin Kumar, Amrita School of Engineering, Bangalore; **(2)** Prof. N. K. Srivastava, SRMGPC, Lucknow

**14:45 -15:45: GISFI Session 4: Internet of Things**

Chair: Dr. Balamuralidhar P., TCS, India  
Vice Chair: Dr.Preetam Kumar, IIT Patna

**Invited Talks: (1)** Dr. Sriganesh Rao, TCS, Bangalore, India; **(2)** Dr. Arun Golas, RetdSr DDG DoT, Govt. of India  
**(3)** Kasturi Bhattacharjee, Senior Director, Ericsson Global Services

**15:45 -16:15: GISFI Session 5: Special Interest Group**

**Chair:** Dr. Krishna Sirohi, i2TB Research Foundation & GISFI  
**Vice Chair:** Dr. Ashutosh Dutta, AT&T

**Invited Talks: (1)** Prof. Vandana Rohokale, SKNSITS, Lonavala;

**16:15-16:30 (Tea break)**

**16:30 -17:30: Research Abstract presentation**

**Session Chair :** Prof. Suvra Sekhar Das, G.S Sanyal School of Telecommunication, IIT KGP

**Abstract 1:** "Energy Efficient Resource Management For Network Densification in Green 5G" Arijeet Ghosh, Doctoral student, Department of ETCE, Jadavpur University

**Abstract 2:** "Ultra Dense Network for 5G", Aritra Chatterjee, Doctoral Student, G.S.Sanyal School of Telecommunications, Indian Institute of Technology Kharagpur

**Abstract 3:** "Energy Emergency Communication and Location Tracking System for Vehicle Using 5G: An IoT Approach" Subha Koley, Doctoral student, Indian Institute of Engineering Science and Technology, Shibpur, India

**Abstract 4:** "Channel Design for 5G Mobile Technology in the Context of Air Interface", Moley Kumar Chowdhury Department of Electronics and Telecommunication Engineering, Kalna Polytechnic

**Abstract 5:** "Emerging Technological Advancements and Network Architecture for 5G", Anshu Mukherjee, Dept. of Information & Telecommunication, SRM University, Chennai

**17:30 – 18:00 : GISFI Session 6: Future Radio Network**

Chair: Dr. Krishna Sirohi, i2TB Research Foundation, India  
Vice Chair: Dr.Navin Kumar, ASE, Bangalore

**Invited Talks:** (1) Dr.Kalyan Sundaram, SAI Technology Pvt Ltd, Chennai;

**18:00-18:30: GISFI Session 7: Green ICT**

Chair: Dr. Basavaraj Hooli, Individual member  
Vice Chair: Dr. Suvra Sekhar Das, IIT Kharagpur, India

**Invited Talks:** (1) Prof. V Prithviraj, Former Principal, Pondicherry College of Engineering;  
(2) Dr. Pratap Kumar Panigrahi, RetdSr DDG DoT, Govt. of India

**End of the 28<sup>th</sup> GSSM**