The International Symposium on 5G and Beyond for Rural Upliftment with 35th GSSM meeting will provide the platform for exploring and exchanging the ideas among the networked people. It imposes how the combination of 5G, artificial intelligence, smart platforms and the Internet of Things can allow for embedding artificial intelligence into 5G communication systems for the smarter use of network-generated data, the automated enabling of network operators and service providers to adapt to changes in traffic patterns, security risks and user behavior and thus paving the way towards safe and reliable next-generation wireless ecosystems that go beyond the urban area to
Advanced Program

Day 1: Saturday, February 8, 2020

Venue: IIT Dhanbad

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>09:30-10:00</td>
<td>Registration</td>
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<tr>
<td>10:00-10:10</td>
<td>Indian Auspicious Rituals</td>
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<td>10:10-10:20</td>
<td>Welcome Message: Dharmendra Singh, Director, BIT, Sindri</td>
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<td>10:20-10:35</td>
<td>Opening Message: Ramjee Prasad, Chair GISFI and President CTIF Global Capsule, Department of Business Development and Technology, Aarhus University, Herning, Denmark</td>
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<tr>
<td>10:35-11:00</td>
<td>Speech by Chief Guest: Shailesh Singh, Principal Secretary- Higher Education, Technical Education and Skill Development, Government of Jharkhand, Ranchi, India (TBC)</td>
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<td>11:00-11:25</td>
<td>Speech by Guest of Honor: Freddy Svane, Ambassador of Denmark, Delhi, India (TBC)</td>
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<td>11:25-11:50</td>
<td>Speech by Inaugural Guest: Rajiv Shekhar, Director, IIT Dhanbad</td>
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<td>11:50-12:15</td>
<td>Speech by Guest of Honor: Freddy Svane, Ambassador of Denmark, Delhi, India (TBC)</td>
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<td>12:20-12:30</td>
<td>Vote of Thanks: Kishore Kumar Thakur, Chairman IETE (Ranchi) &amp; CGM, BSNL, Jharkhand</td>
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<td>12:30-13:10</td>
<td>LUNCH</td>
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Keynote Speech Session 1: Role of Globalization for Rural Development

Chair: Neil Pundit, BITSA International, USA

13:10-15:10

Speaker 1: Vinod Kumar, France
Speaker 2: Peter Lindgren, CTIF Global Capsule, Aarhus University, Herning, Denmark
Title: The Multi Business Model Innovation Brain
Speaker 3: Knud Erik Skouby, Aalborg University, Copenhagen, Denmark
Speaker 4: Pratap Kumar Panigrahi, DoT, Government of India (Rtd.), India
Speaker 5: Brahma Nand Mishra, DTU, Delhi (Rtd.), India
Title: Teachers as Vehicles of Productivity in Education
Speaker 6: Shankar Lal Masakara, IIT Kharagpur (Rtd.), India

15:10-15:30

Tea/Coffee break

Keynote Speech Session 2: Collaboration between Industry and Academia I
Chair: Bal Trivedi, BITSA International, USA

15:30-17:30

Speaker 1: Vishwnath Sinha, Malaviya National Institute of Technology Jaipur, India
Title: Industry-Academia Interaction – Author’s Indian Perspective
Speaker 2: Suvra Shekar Das, IIT Kharagpur, India
Speaker 3: Iti Saha Misra, Jadavpur University, India
Speaker 4: Ashok Chandra, DoT, Govt. of India (Rtd.), India
Title: Role of World Radio Conferences in Radio Spectrum Management
Speaker 5: Navin Kumar, Amrita School of Engineering, Bengaluru, India
Speaker 6: N.K. Shrisvastava, TEC, Govt. of India (Rtd.), India
Title: Education 4.0

Keynote Speech Session 3: Collaboration between Industry and Academia II
Chair: Shree Sharma, Capital Funding, USA

17:30-19:30

Speaker 1: Tilak raj Dua, GISFI India
Title: Digital India: How to make India a truly connected nation
Speaker 2: Umesh Sah, DoIT, Government of Jharkhand, India
Title: Use of Digitization in Rural India
Speaker 3: Chandrika Prasad, PNCS Rail & Metro Consultancy, New Delhi, India & Sudhanshu Shekhar Jamuar, IIIT Delhi, India
Title: Optimising Indian Railways Infrastructure by AI
Speaker 4: Krishna Sirohi, President, i2TB, GISFI, India
Speaker 5: Kishore Kumar Thakur, Chairman IETE (Ranchi) & CGM, BSNL, Jharkhand
Title: WiFi for Affordable Broadband & 5G in Rural Areas
Speaker 6: Sandip Inamdar, Vishwaniketan, Navi Mumbai, India

19:30-20:30
Cultural Program

20:30-22:30
Gala Dinner

22:30
End of Day 1
### Day 2: Sunday, February 9, 2020

**Venue:** BIT Sindri

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<tr>
<th>Time</th>
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<tr>
<td>08:30-09:00</td>
<td>Registration</td>
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</table>
| 09:00-11:00| Invited Special Session; Wireless World Research Forum  
**Chair:** Nigel Jefferies, Chairman Wireless World Research Forum (WWRF) UK  
**Speaker 1:** Seshadri Mohan, University of Arkansas at Little Rock, USA  
**Speaker 2:** Sachin Sharma, Co-founder and CTO IntelliNexus LLC, Arkansas, USA  
**Speaker 3:** Ravi Puvvala, CEO Savari, Silicon Valley, USA  
**Speaker 4:** Purnima Lala, IILM College of Engineering & Technology, India  
11:00-11:20| Tea/Coffee break |
| 11:20-13:20| LUNCH  
**Speaker 5:** Subodh Gujare, Lead Architect at the Cisco R&D center, Bengaluru  
**Speaker 6:** Subhas Mandal, Chief Architect of 5G and a Fellow at Wipro Limited  
**Speaker 7:** Anand Srivastava, IIIT Delhi (TBC)  
**Speaker 8:** Bhavani Shankar, Research Scientist, The University of Luxembourg (TBC)  
13:20-14:00| Technical Session: I  
**Session Chair:** Prabhat Kumar, BITSA USA  
**Title:** Frame Selection from Test Speech for Robust Speaker Identification  
**Authors:** Swati Prasad  
**Institute:** BIT Mesra, India  
**Title:** Monitoring air pollution Based on Internet of Things (IoT) and Interfacing of Microcontroller with VGA display  
**Authors:** Shahir Uddin et. al  
**Institute:** BIT Patna, India  
**Title:** Industrial Internet of Things (IIoT)  
**Authors:** Prakash Kumar  
**Institute:** BIT Sindri, India  
14:00-16:00| Technical Session: II  
**Session Chair:** Anil Singh, BITSA USA  
**Title:** Radio Frequency EMF Exposure in Living Area in Urban Environmental Conditions  
**Authors:** Hitesh Singh et. al  
**Institute:** Noida Inst. Of Engg and Tech, Greater Noida, India  
**Title:** Data Privacy Technology for Society  
**Authors:** Aaloka Anant et. al  
**Institute:** CGC AU Herning, Denmark  
**Title:** EEHRP: Energy Efficient Hybrid Routing Protocol for Wireless Sensor Network  
**Authors:** Saurabh Srivastava et. al  
**Institute:** CGC AU Herning, Denmark  
**Title:** Where India stands with Advancing Technology  
**Authors:** Nidhi  
**Institute:** PhD, AU Herning, Denmark  
**Title:** CoAP based Energy-aware Cluster-based Mobility management protocol in WBAN health care Environment  
**Authors:** Mirnai. M. Dhanvijay et. al  
**Institute:** Pune University, India  
**Title:** Cryptography on digital implementation with steganography techniques  
**Authors:** Harsh Sahay  
**Institute:** DAV Inst. Of Engg & Tech, Daltonganj, India  
**Title:** Improved RSA Algorithm based on cloud database using Proth  
**Authors:** Risha Mal et. al  
**Institute:** BIT Mesra, India  
**Title:** Improved RSA Algorithm based on cloud database using Proth  
**Authors:** Saurabh Prasad et. al  
**Institute:** BIT Mesra, India  
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<tr>
<th>Time</th>
<th>Session Chair</th>
<th>Technical Session: IV</th>
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<td>16:00-16:20</td>
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<td>Session Chair: Imteyaz Ahmad, BIT Sindri</td>
<td>Session Chair: Arvind Kumar, BIT Sindri</td>
<td>Session Chair: Jaisingh Thangaraj, IIT(ISM) Dhanbad</td>
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<td></td>
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<td>Title: Fractional Fourier Transform based OFDM for 5G</td>
<td>Title: Improved End to End Delay Bound analysis in Software Defined Mobile Edge Vehicular Networks</td>
<td>Title: Authors: Marleen Steinhoff et. al</td>
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<td>Authors: Abhijeet Kumar Singh et. al</td>
<td>Authors: Banoth Ravi et. al Institute: IIT (ISM) Dhanbad</td>
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<td>Title: Possibilities of 5G and its application in rural India: A short survey</td>
<td>Title: QCA Adder-Subtractor</td>
<td>Title: Smart attendance monitoring system with Computer vision using IOT</td>
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<td>Authors: Navaneet Kumar Singh et. al</td>
<td>Authors: Amar Prakash Sinha et. al Institute: BIT Sindri, India</td>
<td>Authors: Ashwin Raj et. al Institute: BIT Sindri, India</td>
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<td>Title: Investigations of Differential Group Delay Behavior in 3-Core Homogeneous Strongly Coupled Multicore Optical Fiber</td>
<td>Title: Hybrid Mode Analysis of Hybrid Dielectric Loaded Plasmonic Waveguide</td>
<td>Title: A Method of Fault Tolerance and Mitigation in Wireless Sensor Networks</td>
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<td>Authors: Umar Farooque et.al</td>
<td>Authors: Pintu Kumar et. al Institute: NIT Patna, India</td>
<td>Authors: Arun Kr Marandi et. al Institute: ARKA Jain University, Jamshedpur, India</td>
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<td>Title: Classification between interictal and ical states of epileptical patients using alpha subband</td>
<td>Title: Investigations on CRLH-TL based Multiband Conformal Antennas for Curved Surfaces</td>
<td>Title: Investigation of Wideband Antenna for Medical Implant in Medical Device</td>
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<td></td>
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<td>Authors: Mustafa Sameer et.al</td>
<td>Authors: Mohammad Ameen et. al Institute: BIT Sindri, India</td>
<td>Radio communications Service Band</td>
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<td>Authors: Pinku Ranjan et. al Institute: BIT Sindri, India</td>
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<td>Title: Radio Frequency Identification (RFID) an automatic identification system</td>
<td>Title: Canonical Huffman Coding based Image Compression using Wavelet</td>
<td>Title: Smart Irrigation System with Alert</td>
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<td>Title: Area Coverage Optimization in WSN using Modified PSO</td>
<td>Title: Analysis of Optical Parameters of Hexagonal Solid Core PCF with Methanol filled inner Cladding ring</td>
<td>Title: A comparative Analysis for Realization of Limit-cycle free 2D Digital Filters with external disturbance</td>
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<td>Authors: Kritika Awasthi et. al Institute: BIT Sindri, India</td>
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<td>Title: Electrical Impedance Analysis On Orange During Storage And Ripening</td>
<td>Title: Performance evaluation of existing Interference mitigation techniques under designed Interference Environment</td>
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<td>Authors: Pritika Singh</td>
<td>Authors: Shilpa.V.Shinde et.al</td>
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| 18:20-19:00 | Valedictory Session |
| Rajiv Shekhar, Director, IIT Dhanbad, | Dharmendra Singh, Director, BIT, Sindri |
| Ramjee Prasad, Chair GISFI and President CTIF Global Capsule, | |

| 19:00 | End of Day 2 and Program |