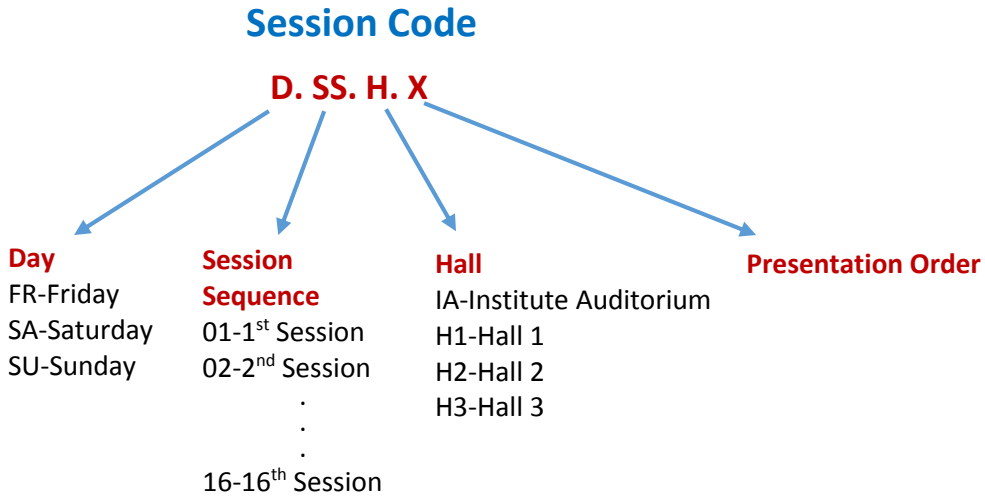
Technical Program Schedule



Conference Day 1: 18 Dec 2015

08:00 AM	Registration					Institute Auditorium
08:45 AM	Inaugural Ceremony					Institute Auditorium
09:45 AM	Refreshment					
Invited Talks						
10:00 AM	Prof. Ratnam V. Raja Kumar, IIT Bhubaneswar, India Title: ***Greening the Cellular Communication***					Institute Auditorium
10:50 AM	Prof. Fabrizio Di Pasquale, Institute of Communication, Information and Perception Technologies, Scuola Superiore Sant'Anna, Pisa, Italy Title: ***Hybrid Distributed Optical Fiber Sensors for Temperature, Strain and Vibration Measurements***					Institute Auditorium
11:40 AM	Prof. Ahmed A. Kishk, Concordia University, *Montréal,* Canada Title: ***UWB Antennas for Wireless Communication and Detection Applications***					Institute Auditorium
12:30 PM	Working Lunch					
01:30 PM	Prof. B. Yegnanarayana, IIIT Hyderabad, India Title: ***ANN: A Tool for Soft Computing in Engineering Research***					Institute Auditorium
Contributory Sessions						
	Session - FR.01.H1.X **Adaptive, Active and Smart Antennas** **Chair: Prof. B. K. Sarap, SOA University, India**		**Session - FR.02.H2.X** **Optical Communication and Networks** **Chair: Prof. Subrat Kar, IIT Delhi, India**		**Session - FR.03.H3.X** **Sensors, Components and Devices** **Chair: Prof. Ganapati Panda, IIT Bhubaneswar, India**	
02:30 PM to 04:00 PM	**FR.01.H1.1**	Frequency Reconfigurable Monopole Antenna Loaded with Dielectric Resonator	**FR.02.H2.1**	Nonlinear optical cryptosystem free from amplitude-phase retrieval attacks	**FR.03.H3.1**	An Algorithm and Implementation for Gain Control and Power Compensation of Amplifiers
	FR.01.H1.2	Broadband Circularly Polarized Antenna Array for S-Band Wireless Applications	**FR.02.H2.2**	Compensation of Fiber Non Linear Impairments using Optical Back Propagation	**FR.03.H3.2**	Highly Selective Cavity based Band Pass Filter Using Asymmetric Double Quadruplets
	FR.01.H1.3	Dual-Linearly Polarized Dielectric Resonator Antenna Array for L and S band Applications	**FR.02.H2.3**	Alternate FRFT Structure in Inline Module in DWDM Fiber Optic Communication System	**FR.03.H3.3**	Projectile Velocity Measurement using Piezoelectric Pressure Sensors and its comparison with Radar Results
	FR.01.H1.4	Frequency Reconfigurable Hourglass Shaped Microstrip Antenna	**FR.02.H2.4**	Performance Analysis of WDM-Free-Space Optical Transmission system with M-QAM Modulation under Atmospheric and optical nonlinearities	**FR.03.H3.4**	In-flight MTF measurement for ResourceSat-2 LISS-III Sensor

	FR.01.H1.5	Design of a compact MIMO antenna with polarization diversity technique for wireless communication	**FR.02.H2.5**	Analysis of Diagonal Eigenvalue Unity (DEU) code for Spectral Amplitude Coding OCDMA systems using Direct Detection technique	**FR.03.H3.5**	A Clustering Model Based on Colliding Bodies Optimization for Analysis of Seismic Catalog
	FR.01.H1.6	Capacity Estimation of A Compact Pattern Diversity MIMO Antenna	**FR.02.H2.6**	Tunable SU-8 Waveguide Grating Filter using Electrostatic Actuation for DWDM Optical Network	**FR.03.H3.6**	GIS based Fire Rescue System for Industries using Quad copter – A Novel Approach
	.....		.....		**FR.03.H3.7**	Development of Low Cost Portable ARM Processor Based GCS Data Interface Module For Range Sensors Network
04:00 PM	Tea Break					
	Session - FR.04.H1.X **Metasurface and Metamaterials** **Chair: Prof. Ajoy Chakraborty, IIT Kharagpur, India**		**Session - FR.05.H2.X** **Wireless Communication Systems** **Chair: Prof. P. R. Sahu, IIT Bhubaneswar, India**		**Session - FR.06.H3.X** **Biosensors and Biomedical Imaging** **Chair: Dr. Alok Shah, LSRB, DRDO, India**	
04:15 PM to 06:00 PM	**FR.04.H1.1**	2x2 MIMO Antenna at 2.4 GHz for WLAN Applications	**FR.05.H2.1**	Overlapped Smart Gradient Projection Tone Reservation PAPR Reduction for FBMC/OQAM Signals	**FR.06.H3.1**	Patch Antenna Miniaturization Technique for BioMedical Implant
	FR.04.H1.2	A Novel Microstrip Antenna Using EBG Structure for Mobile and ISM Band	**FR.05.H2.2**	Analysis of Path Loss mitigation through Dynamic Spectrum Access: Software Defined Radio	**FR.06.H3.2**	Health Monitoring Systems: An Energy Efficient Data Collection Technique in Wireless Sensor Networks
	FR.04.H1.3	Efficient High Gain Circularly Polarized Microstrip Antenna using Asymetrical RIS surface	**FR.05.H2.3**	QPSK Modulation & Demodulation Implementation on CEVA XC-321 DSP for IEEE 802.11b Wi-Fi Phone Application	**FR.06.H3.3**	Breakdown: A Review of Practical Factors Affecting the Acquisition of Bio-signals
	FR.04.H1.4	Numerical Study of Randomly Distributed Wire Based Metamaterial Absorber	**FR.05.H2.4**	A Review on Recent Advances in Spectrum Sensing, Energy Efficiency and Security Threats in Cognitive Radio Network	**FR.06.H3.4**	Performance Analysis of ECG Data Compression using Wavelet Based Hybrid Transform Method
	FR.04.H1.5	A Triple band Compact Asymmetric Monopole-SRR based Antenna for WiMax, WLAN and RFID Applications	**FR.05.H2.5**	Analysis of Sigmoidal Utility Function based Handover in Heterogeneous Wireless Networks	**FR.06.H3.5**	Muscle Degradation Detection –A Practical Medical Application Analysis
	FR.04.H1.6	Adaptation of a Novel Technique to Increase the Band width and Gain of a Bow-tie Antenna by using Frequency Selective Surface	**FR.05.H2.6**	Overlapped Segmental Active Constellation Extension for the PAPR Reduction of the OFDM-OQAM system	**FR.06.H3.6**	Lossless Compression Based on Hierarchical Extrapolation for Biomedical Imaging Applications
	FR.04.H1.7	Design of Bandpass Filer Using U - Shaped Defected Ground Structure	**FR.05.H2.7**	Low Complex Primary and Secondary Synchronization Signal Structure Design for LTE systems	**FR.06.H3.7**	Novel Technique for the Detection of Abnormalities In Mammograms using Texture and Geometric Features
06:00 PM	Networking					Institute Auditorium
06:30 PM	Cultural Programme					Institute Auditorium
07:30 PM	Banquet Dinner					

Conference Day 2: 19 Dec 2015

Invited Talks						
09:00 AM	Prof. M.V. Kartikeyan, IIT Roorkee, India Title: ***Gyrotrons for Clean Energy and Other ISM Applications***					Institute Auditorium
09:50 AM	Tea Break					
10:05 AM	Prof. Pradip Narayan Ghosh, Calcutta University, India Title: ***Optical Atomic Sensors for Medical Applications***					Institute Auditorium
10:55 AM	Prof. Raghunath K. Shevgaonkar, IIT Bombay, India Title: ***Designing optical filters with photonic crystal defects***					Institute Auditorium
Contributory Sessions						
	Session - SA.07.H1.X **Microstrip Antennas** **Chair: Prof. Girish Kumar, IIT Bombay, India**		**Session - SA.08.H2.X** **Optical Components and Devices** **Chair: Prof. Pradip Narayan Ghosh, Calcutta University, India**		**Session - SA.09.H3.X** **Energy and the Environment** **Chair: Prof. N. C. Sahoo, IIT Bhubaneswar, India**	
11:55 AM to 01:10 PM	**SA.07.H1.1**	GPS Micro Strip Rectangular Patch Antenna at 2.45 GHz Mounted over Angular Towers	**SA.08.H2.1**	Design of a Polarization Independent Power Splitter in SOI Platform by Effective Index based Matrix Method	**SA.09.H3.1**	Advanced Signal Processing Techniques For Atmospheric Applications Using EMD
	SA.07.H1.2	Realization of Circular Polarized Microstrip Antenna with Arc-Slot Fractal Geometry	**SA.08.H2.2**	Optoelectronic Properties of Indium-assisted Gallium Nitride Nanowires	**SA.09.H3.2**	Artificial neural network with different learning parameters for crops classification using multispectral datasets
	SA.07.H1.3	Design and Performance Analysis of Low Profile Slotted Circular Patch Antenna	**SA.08.H2.3**	Design and Analysis of 2-D Hexagonal Photonic Crystal Structure based Channel Drop Filter for CWDM System	**SA.09.H3.3**	Evaluating the effect of spatial resolution on land use and land cover classification accuracy
	SA.07.H1.4	Broadband E-Shaped Microstrip Reflectarray Antenna with Microstrip Antenna Feed	**SA.08.H2.4**	Enhanced lateral shifts with Gaussian beam and Laguerre-Gaussian beam in presence of surface plasmon resonance	**SA.09.H3.4**	Spatial modeling of SPAD values for different type of crops using LISS-IV satellite imagery
	SA.07.H1.5	Investigation of Hexagonal Ring Microstrip Antenna	**SA.08.H2.5**	Design of a Gain Flattened Doped Fiber Amplifier with Stabilized Power Output for WDM Transmissions	**SA.09.H3.5**	Embedded System for Mine Process Monitoring in a Network Constrained Environment Using Wireless Communication Bridge
	SA.07.H1.6	Study and Analysis of Microstrip Antenna System on Square body for Telemetry Applications	**SA.08.H2.6**	Optical beam engineering for nanoscale structuring of transparent materials	.....	
01:10 PM	Working Lunch					
02:10 PM	Prof. Ajoy Chakraborty, IIT Kharagpur, India Title: ***EMI/EMC***					Institute Auditorium

03:00 PM	Prof. Girish Kumar, IIT Bombay, India Title: ***Cell phone/tower radiation hazards and solutions***					Institute Auditorium
03:50 PM	Tea Break					
Contributory Sessions						
	Session - SA.10.H1.X **Optimization for Antenna and Array Synthesis** **Chair: Prof. M.V. Kartikeyan, IIT Roorkee, India**		**Session - SA.11.H2.X** **Fiber-Optic Technology and Applications** **Chair: Prof. Fabrizio Di Pasquale, Sant'Anna, Italy**		**Session - SA.12.H3.X** **Planar Antennas and Applications** **Chair: Prof. Ahmed A. Kishk, Concordia University, Canada**	
04:05 PM to 05:20 PM	**SA.10.H1.1**	Performance of a Dipole Linear Array Antenna Optimized using Differential Evolution Algorithm	**SA.11.H2.1**	Digitization of Paper Documented Signals using Vertical Scanning	**SA.12.H3.1**	A Dual Polarized UWB Slot Antenna with Kite Shaped Slot for High Isolation
	SA.10.H1.2	Design and Optimization of Broadband Double Psi Shape Patch Antennas for Bluetooth and WLAN Applications	**SA.11.H2.2**	Analysis of Stimulated Brillouin Scattering based Distributed Optical Fibre Sensor for Micro-Strain Detection	**SA.12.H3.2**	Design and Fabrication of a Microstrip printed T Monopole Antenna for ISM Application
	SA.10.H1.3	Design Optimization of PBG based PIFA System using Soft Computing Techniques	**SA.11.H2.3**	A Survey on the Performances of Distributed Fiber-Optic Sensors	**SA.12.H3.3**	Spectral, Temporal and Spatial Domain Analysis of a Compact Floral-Shaped UWB Monopole Antenna
	SA.10.H1.4	Genetic Algorithm Based Selective Neural Network Ensemble Method to Analyse Rectangular Microstrip Antenna	**SA.11.H2.4**	Depth Resolved Imaging of Non Biological Sample by Spectral Domain Optical Coherence Tomography (SD-OCT)	**SA.12.H3.4**	Printed Multiband Monopole Antenna for MIMO Wireless Applications
	SA.10.H1.5	Synthesis of Aperiodic linear antenna array using multi-objective cat swarm optimization	**SA.11.H2.5**	Inter-satellite Optical Wireless Communication System Design Using Diversity Techniques	**SA.12.H3.5**	Design of a Miniature Ku-Band Monopulse Waveguide Slotted Array Antenna
	SA.10.H1.6	Multivariable Patch Antenna Design using Particle Swarm Optimizer	**SA.11.H2.6**	Effect of Interface Roughness Scattering and Temperature on Quantum Cascade Detectors	**SA.12.H3.6**	Study of Scattering Parameters and Gain of two longitudinal Slots of Same or Different Electrical Lengths Milled on a Single Waveguide for Series and Shunt Slot Array Antenna
	.....		**SA.11.H2.7**	Lock-in Elimination by Orthogonal Polarization in Semiconductor Ring Laser Gyroscope	.....	
05:20 PM	Tea Break					

Interactive Session and Exhibition						
Session - SA.13.IA.X						
05:20 PM	**SA.13.IA.1**	Design of a Compact Two Element MIMO Antenna with Improved Bandwidth and Isolation	**SA.13.IA.8**	Review on Multiple Input Multiple Output Antenna Systems Design	**SA.13.IA.15**	Modulational instability characteristics for few cycle pulse propagation in cascaded-quadratic-cubic-quintic nonlinear media
	SA.13.IA.2	Bandwidth And Gain Enhancement Of Rectangular MSA By Using Parasitic Patch And Capacitive Feeding Technique For Wideband Application	**SA.13.IA.9**	A Compact Truncated Conical Dielectric Resonator Antenna With Concentric Cylindrical Air Gap for Microwave Application	**SA.13.IA.16**	System Identification by Crazy-Cat Swarm Optimization
	SA.13.IA.3	Associative Study of NDVI and Precipitation in Indian Region during Monsoon Season using Satellite and Ground measurements [2000-2013]	**SA.13.IA.10**	Resonance Frequency Formulation for Planar Rectangular Monopole Antenna	**SA.13.IA.17**	Performance Evaluation of FIR filters using Digit Serial Architectures
	SA.13.IA.4	Compact Two Element Antenna Array for USB Dongle Applications	**SA.13.IA.11**	Design of a Dual Port Integrated Antenna for Cognitive Radio Applications	**SA.13.IA.18**	A New Family of 2-D Codes for Multimedia Applications
	SA.13.IA.5	Design of a Finite Attenuation Pole Miniaturized S-band Lowpass Filter Using Elliptic Function	**SA.13.IA.12**	A Methodology for Inter Amplifier Separation Optimization in WDM Systems	**SA.13.IA.19**	A Study of Influence of Fast Fading on the Performance of Mobile Communication System
	SA.13.IA.6	Mode Selection for Conventional Cavity Based 240 GHz, 1 MW DEMO Gyrotron	**SA.13.IA.13**	Theoretical Analysis and Simulation Investigation of designed 1-D and 2-D Modified Walsh Code (MWC) in Optical CDMA System	**SA.13.IA.20**	Design and Implementation of FPGA based Digital Pulse Compression via fast convolution using FFT-OS method
	SA.13.IA.7	Bandwidth Enhancement of Microstrip Patch Antenna using 'U' Slot with Modified Ground Plane	**SA.13.IA.14**	Performance of Nyquist-WDM transmission system due misalignment Timing jitter impairment induced by PMD and fiber nonlinearity	**SA.13.IA.21**	Design Modeling and Certain Investigations of Median Filter

Conference Day 3: 20 Dec 2015

Invited Talks						
09:00 AM	Dr. Alok Shah, LSRB, DRDO, India Title: ***Paradigm of Biosensors in Food Industry and NBC***					Institute Auditorium
09:50 AM	Tea Break					
10:00 AM	Prof. Virander K. Jain, IIT Delhi, India Title: ***Free Space Optical Communication: An Overview***					Institute Auditorium
10:55 AM	Prof. Ganapati Panda, IIT Bhubaneswar, India Title: ***Recent Advances in Signal Processing and Communication***					Institute Auditorium
11:50 AM	Prof. Raja Datta, IIT Kharagpur, India Title: ***Inter-Planetary Network for Deep Space Communication***					Institute Auditorium
12:50 PM	Working lunch					
01:45 PM	Prof. G.S.N. Raju, Andhra University, India Title: ***Investigations on Waveguide Tee Junctions and Radiation Patterns***					Institute Auditorium
Contributory Sessions						
	Session - SU.14.H1.X **Active and Passive Devices for High-Frequency Applications** **Chair: Prof. D. P. Acharya, NIT Rourkela, India**		**Session - SU.15.H2.X** **Wireless Networks** **Chair: Prof. M. S. Manikandan, IIT Bhubaneswar, India**		**Session - SU.16.H3.X** **Speech and Image Processing** **Chair: Prof. N. B. Puhan, IIT Bhubaneswar, India**	
02:40 PM to 04:30 PM	**SU.14.H1.1**	Design of Electron Beam Source for 200 GHz Gyrotron Backward Wave Oscillator	**SU.15.H2.1**	Analysis of Energy Complexity under Mobility for cluster Routing in Wireless Ad hoc Sensor Networks	**SU.16.H3.1**	Importance of Speckle Filtering in Image Classification of SAR Data
	SU.14.H1.2	Noise Characterization of Silicon-Germanium HBTs	**SU.15.H2.2**	Distributed Estimation using Multi-hop Adaptive Diffusion in Sparse Wireless Sensor Networks	**SU.16.H3.2**	Automatic Speech Recognition Based Odia System
	SU.14.H1.3	Effect of Ray Divergence Factor in High Frequency Analysis of Concave Scatterers	**SU.15.H2.3**	Implementation of GSM Channel Estimation using Open-source SDR Environment	**SU.16.H3.3**	Evaluation of Bandwidth Extension of Telephony Speech by Data hiding in three languages
	SU.14.H1.4	Design and Analysis of spiral circular inductors for GaN based low noise amplifier (MMICs)	**SU.15.H2.4**	A Survey of Energy Efficient Schemes in Ad-hoc Networks	**SU.16.H3.4**	Simulation Based Algorithm for tracking Fish Population in Unconstrained Underwater
	SU.14.H1.5	Design of Multi-layer Fractal Inductor for RF Applications	**SU.15.H2.5**	Centralized Cooperative-MIMO Spectrum Sensing over κ-μ Shadow-Faded Reporting Channel	**SU.16.H3.5**	A Study on Automatic Speech Recognition Toolkits

	SU.14.H1.6	Helical Resonator Based Miniature Filters	**SU.15.H2.6**	Study of Real-Time Miner Tracking Using Wireless Sensor Area Network	**SU.16.H3.6**	A Robust Technique for Contrast Enhancement Using Quaternionic Wavelet Transform with Natural Brightness
	SU.14.H1.7	Fast Settling Ultra Low Phase Noise Synthesizer for Frequency Agile Radars	**SU.15.H2.7**	Relaying Networks with Nth Best-Relay Selection over Nakagami Fading Channel	**SU.16.H3.7**	Quantitative Measurements on Despeckling of SAR Clutter Amplitude : An Experiment on MSTAR Data
	SU.14.H1.8	Beam dynamics study of a 100 MeV RF electron linac	**SU.15.H2.8**	FPGA Based Hardware Implementation Of Adaptive Equalizer For Rayleigh Fading Channel	**SU.16.H3.8**	An Experiment on MSTAR Data for CFAR Detection in Lognormal and Weibull Distributed SAR Clutter
	SU.14.H1.9	Mode Selection and Interaction Structure Design of a Megawatt Class, Sub-THz Wave Coaxial Cavity Gyrotron	**SU.15.H2.9**	Dynamic profile based paging in mobile communication network	**SU.16.H3.9**	Improving Performance of K-SVD Based Image Denoising Using Curvelet Transform
	SU.14.H1.10	Review of The Ultra-Wideband Pulse Generation	**SU.15.H2.10**	Combined Amplitude and Phase Noise Effects in QAM Direct Conversion Receivers	**SU.16.H3.10**	Temporal-domain filtering approach for multiband speech enhancement
04:30 PM	Tea Break					
04:40 PM	Concluding Session					Institute Auditorium