TECHNICAL PROGRAM - IEEE WRAP'2022 Dates: 4-6 March, 2022 Venue: SAMEER, MUMBAI					
DAY_1 Date: 04-03-2022 Venue: Sir J.C. Bose Memorial Complex, 5th floor, Main Building, SAMEER Mumbai					
Venue	Timings	Session	Chairman	Speaker	Topic
Conference Hall	9.:30 A.M.-11:00 A.M.	Tutorial-1A (Offline)	**Sh.R. Krishnan, SAMEER, India**	Prof. Ganesh Ramakrishnan,IIT Bombay,India	Data Efficient Machine Learning
	11:00 A.M.-12:30 P.M.	Tutorial-1B (Offline)		Dr. Philip B. Kassey,Petrasys Global Pvt. Ltd., India	Recent trends in Optical Fiber Sensors
	12.:30 P.M.-2:00 P.M.	Tutorial-1C (Offline)		Dr. Jagadish Rane ,ICAR Baramati, India	Emerging opportunities in application of imaging science for climate resilient crop plants
	2:00 P.M. – 3:30 P.M.		**LUNCH BREAK**		
	3:30 P.M. – 5:00 P.M.	Tutorial-1D (Offline)	**Dr. Jagadish Rane ,ICAR Baramati, India**	Prof.Tapanendu Kundu ,IIT Bombay, India	Photonics Technologies for Agro Applications
	5:30 P.M. – 7:00 P.M.	Tutorial-1E (Online)	**Prof. Dibakar Roy Chowdhury Mahindra University, India**	Prof. Michael Feiginov,TU Vienna, Austria	Resonant Tunneling Diodes and Quantum Cascade Lasers for Terahertz Frequencies
Board Room	9.:30 A.M.-11:00 AM	Tutorial-2A (Online)	**Sh. Amol Bhagwat, SAMEER, India**	Prof.Balaji Srinivasan ,IIT Madras,India	Distributed Fiber Optic Sensors - Fundamentals
	11:00 A.M.-12:30 P.M.	Tutorial-2B (Online)		Prof. Kedar Khare ,IIT Delhi, India	Optical Imaging and Artificial Intelligence for Digital Healthcare
	1.:30 P.M.-3:00 P.M.	Tutorial-2C (Online)	**Dr. Anuj Bhatnagar SAMEER, India**	Dr.Jagannath Nayak, CHESS, India	Photonics Applications in Defence
	3:30 P.M.-5:00 P.M.	Tutorial-2D (Online)		Dr.Nimish Dixit ,IRDE,India	Photonics Applications in Defence
7:30 P.M - 8:30 P.M.			**DINNER**		
DAY_2 Date: 05-03-2022 ONLINE on Virtual Conference Platform 'vFAIRS'					
Auditorium	9:00 A.M. – 9:30 A.M.	Welcome Address	MeitY, TIFR, IITB , SAMEER & IEEE Representatives		
	9:30 A.M. - 10:15 A.M.	**KeyNote Address**	**Sh. Anuj Jain Reliance Jio, India**	**Prof. Mohamed-Slim Alouini Distinguished Professor, KAUST, Saudi Arabia**	**Towards Extreme Band Communications**
	10:15 A.M. - 10:30 A.M.	Vote of Thanks for the inaugural session	**Prof. T. Kundu, General Chair**		
10:30 A.M.-10:45 A.M		**TEA BREAK**			
Auditorium	10:45 A.M.-11:15 A.M.	**Quantum Photonics and Nano Photonics**	**Prof. Anil Prabhakar IIT Madras, India**	Dr.Krishnakumar Sabapathy,Xanadu Quantum Technologies, Canada	Q. Computing with Cluster States(invited Talk)
	11:15 A.M. - 11:45 P.M			Prof.Shourya Dattagupta,IIT Hyderabad, India	Understanding the behavior of localized and propagating surface plasmons on alloy thin films and nanostructures
	11:45 P.M. - 12:00 P.M			Rabisankar Samanta,TIFR, India	Interference effect in second harmonic light emitted from sub-micron size nonlinear particles
	12:00 P.M. - 12:15 P.M.			R Muralekrishnan, IIT Madras, India	Influence of sub-system non-idealities on the performance of Gaussian modulated CV-QKD
	12:15 P.M. - 12:30 P.M.			Anjani Kumar Tiwari,IIT Roorkee, India	Topological Surface State by Hierarchical Concatenation of Photonic Stopbands
	12:30 P.M. – 1:00 P.M.			Prof.Michele Heurs,Leibniz University, Germany	Squeezed Light (Invited Talk)
1:00 P.M. -1:45 P.M.		**LUNCH BREAK**			
Auditorium	3:45 P.M. - 4:15 P.M.	**Optical Communication and Networking**	**Prof. Deepa Venkitesh IIT Madras, India**	Prof. Suresh Subramainam,George Washington University, USA	Optical Data Center Networks (Invited Talk)
	2:15 P.M. - 2:45 P.M.			Dr. Fatima Gunning ,Tyndall National Institute, Ireland	Technologies for Flexible Optical Networks (Invited Talk)
	2:45 P.M. - 3:15 P.M.			Dr. Arvind Mishra ,Sterlite Technologies Ltd, India	Applications of SDM fiber in Next Generation Networks (Invited Talk)
	3:15 P.M. - 3:45 P.M.			Prof. Stephen E Ralph, Georgia Tech, USA	Recent Advances in Photonics: Silicon Photonics to Machine Leaning Applications (Invited talk)
	1:45 P.M. - 2:00 P.M.			Imran Ahmed, South Asian University,India	Crosstalk-Aware vs. Crosstalk-Avoided Approaches in Spectrally-Spatially Elastic Optical Networks: Which is the Better Choice?
	2:00 P.M. - 2:15 P.M.			Pramod Kumar Mishra, Sterlite Technologies Limited,India	Successful 200G Transmission over 45 km of 4-Core single mode MCF
4:15 P.M.- 4:30 P.M.		**TEA BREAK**			
Auditorium	5:30 P.M. - 6:00 P.M.	**Tera-Hertz Photonics**	**Prof. Dibakar Roy Chowdhury Mahindra University, India**	Prof. Carsten Rockstuhl, Karlsruhe, Germany	Computational Nanophotonics (Invited Talk)
	5:00 P.M. - 5:30 P.M.			Prof. Diyar Talbayev,Tulane University, USA	Terahertz and time resolved studies of magnetic and polar crystals (Invited Talk)
	4:30 P.M. - 5:00 P.M.			Dr. Withawat Withayachumnankul,University of Adelaide, Australia	Systematically designed broadband terahertz metasurfaces (Invited Talk)
	6:00 P.M. - 6:30 P.M.			Dr. Bala Pesala ,TeraLumen Soultions Pvt. Ltd., India	Terahertz technology solutions (Invited Talk)
	6:30 P.M. - 6:45 P.M.			Subhajit Karmakar, IIT Delhi, India	Resonance hybridization in terahertz stacked metamaterials near Fano excitation threshold
	6:45 P.M. - 7:00 P.M.			Chandan Chandan, IIT Delhi, India	High Quality Fano Resonance by Lattice Mode Coupling in Terahertz Metamaterials
	7:00 P.M. - 7:15 P.M.			Dr. Jyotirmayee Dash, TeraLumen Soultions Pvt. Ltd., India	Development of Compact, Indigenous Terahertz Systems for Medical Diagnostics and NDT Applications
	7:15 P.M. - 7:30 P.M.			Ajinkya Punjal, TIFR, India	Evolutionary Algorithm based design approach for Metamaterials in Terahertz Regime.

DAY_3 Date: 06-03-2022 ONLINE on Virtual Conference Platform 'vFAIRS'					
Auditorium	9:00 A.M - 9:30 A.M.	**Public Talk**		**Dr. Naresh Chand,Associate Vice President, Chapter Relations, IEEE Photonics Society ,USA**	**Challenges and path to reduce the cost of Photonics**
	9:30 A.M. - 10:00 A.M.	**Optical Sensors**	**Prof. Soumyo Mukherji IIT Bombay, India**	Prof. B D Gupta, IIT Delhi,India	Optical fiber based plasmonic sensors for biomedical diagnostics (Invited Talk)
	10:00 A.M - 10:30 A.M.			Dr. Anand Asundi, d'Optron Pte Ltd, Singapore	Computational 3D Imaging (Invited Talk)
	10:30 A.M - 10:45 A.M.			Bharadwaj Peela, IIT Hyderabad, India	Janus nanoparticles for dual wavelength surface enhanced Raman scattering applications
	10:45 A.M - 11:00 A.M.			Amrit Patnaik, IIT Bombay, India	Direct Laser Written Multi-channel Optical Waveguide for Refractive Index Sensing
	11:00 A.M - 11:15 A.M.			Soma Saha,IIT Bombay, India	Tunable Photonic Platform using Optically Reduced Graphene Oxide
	11:15 A.M - 11:30 A.M.			Jagathpriya ,IIT Hyderabad, India	Simulation and fabrication of multi-layer plasmonic substrates for potential SERS application
	11:30 A.M - 11:45 A.M.			Divagar M, IIT Madras, India	Plasmonic Fiberoptic competitive immunosensor: Proof-of-concept studies
Poster Hall	**11:45 A.M.- 3:00 P.M.**	**POSTERS + LUNCH**			
Auditorium	3:00 P.M. - 3:30 P.M.	**Photonics for Renewable Energy + Programmable Photonics**	**Prof. Dinesh Kabra / Prof. Shankar Selvaraja IIT Bombay, India/CeNSE, IISc, India**	Dr. Niels Quack ,The University of Sydney, Australia	Exploring Micro-Electro-Mechanical Systems in Silicon Photonics(Invited Talk)
	3:30 P.M - 4:00 P.M.			Prof. Yana Vaynzof, Dresden Technolgocial University, Dresden - Germany	A Hybrid Approach to High Efficiency All-Inorganic Perovskite Solar Cells. (Invited Talk)
	4:00 P.M - 4:30 P.M.			Dr. Danial Perez ,iPRONICS, Spain	Programmable photonic integrated circuits: performance and scalability (Invited Talk)
	4:30 P.M - 5:00 P.M.			Prof. Lorenzo Pavesi, U Trento, Italy	Neural networks integrated in silicon photonics(Invited Talk)
	5:00 P.M - 5:30 P.M.			Prof. Akshay Rao,UCAM, UK	Ultrafast Pump-probe Microscopy(Invited Talk)
	5:30 P.M - 5:45 P.M.			Tushar Gaur, IISc, India	Automated Route and Cycle Finding Algorithms for Programmable Photonic Integrated Circuits
	5:45 P.M - 6:00 P.M.			Amit Kumar, IISER Mohali,India	Weighted mutation assisted genetic algorithm focuses light tightly through scattering media.
	6:00 P.M - 6:15 P.M.			Ahna Sharan, ISM, Dhanabad, India	Analysis of quasi-Fermi level split in ratchet-type intermediate band solar cells
	6:15 P.M - 6:30 P.M.			Sudarshan Kumar, MNIT, Jaipur, India	Optical Studies of Cadmium Telluride based Solar Cell using Photonic Crystal as a back Reflector
	6:30 P.M - 7:30 P.M.	**Panel Discussion & Valedictory Session**			