International Conference on Recent Trends in Photonics (NPS - 2022)

27 February - 01 March 2022

International School of Photonics
Cochin University of Science and Technology, Cochin, Kerala, India

Program Schedule

Time(IST)	Program	Speaker	Session Chair
Day 1: 27 February 2022			
09:00	**Inauguration**		
10:00	**Plenary Talk**	Dr. V M Murukeshan. Center for Optical and Laser Engineering (COLE), NTU Singapore.	Prof. Pramod Gopinath
11:00 - 11:15	Break		
11.15 - 13:00	**Oral presentations**	NPS-2022-04, 21, 24, 39, 42, 46, 48, 56 In the listed order.	Dr. Saji K J
13:00 - 14:00	Break		
14:00	**Keynote Talk**	Prof. Franz Kaertner. University of Hamburg, Germany.	Prof. A. Mujeeb
15:00	**Plenary Talk**	Dr. Pablo Albella University Of Cantabria, Santander, Spain.	Dr. Mohamed Ameen
16:00 -17:00	**Industry session**		Dr. Mohamed Ameen
17:15 - 18:30	**Poster session**	NPS-2022-06, 09, 11, 13, 15, 20, 22, 27, 28, 32, 35, 40, 50, 60, 61	

Day 2: 28 February 2022			
09:00	**Invited Talk**	Dr. Tatyana Sizyuk, Argonne National Laboratory, USA	Prof. VM Nandakumaran
10:00	**National Science Day Lecture**	Prof. G. Ravindrakumar, Distinguished Professor, TIFR, Mumbai.	Prof. C. P. Girijavallabhan
11:00 - 11:15	Break		
11:15		Dr. Suresh Nair, IEEE India Council Track Chair	Prof. M. Kailasnath
11:30 - 13:00	**Oral Presentations**	NPS-2022-03, 12, 14, 19, 25, 26, 44 In the listed order.	Dr. SKS Nair.
13:00 - 14:00	Break		
14:00	**Invited Talk**	Dr. Swapna Nair Central University of Kerala, Kasaragod.	Dr. Saji K J
15:00	**Invited Talk**	Dr. Madhu Veettikazhy Technical University of Denmark, Denmark	Muhammad Rishad
16:15 - 17:30	**Poster Presentations**	NPS-2022-05, 07, 08, 10, 16, 17, 23, 29, 31, 33, 34, 37, 43, 47, 51, 53, 55, 57, 59.	

Day 3: 01 March 2022			
09:00	**Invited Talk**	Dr. Sonia Mary, The Jackson Laboratory, USA	Dr. Priya Rose
10:00 - 10:30	Break		
10:30	**Plenary Talk**	Dr. Kazuhiko Maeda, Tokyo Institute of Technology, Japan	Dr. Praveen C S
11:30 - 13:00	**Oral Presentations**	NPS-2022-41, 45, 49, 52, 54, 58 In the listed order.	Dr. Praveen C S
13:00 - 14:00	Break		
14:00	**Invited Talk**	Prof. Radhakrishna Prabhu, Robert Gordon University, Aberdeen, UK.	Prof. M. Kailasnath
15:00	**Invited Talk**	Dr. Renil Kumar Chief Scientist, Motion Imager, Twente, The Netherlands. Industry Talk	Dr. Manu Vaishakh
16:00	**Valedictory Meeting**		

The codes mentioned in the schedule can be seen in the email received from Morressier.

CONTRIBUTORY PAPERS	
NPS-2022-03	**Hierarchical Bi-metallic Nanodendrites on Silicon for SERS-based Biomolecular Sensing** V.S. Vendamani, Reshma Beeram, S.V.S. Nageswara Rao, A.P. Pathak, and Venugopal Rao Soma
NPS-2022-04	**Multi-modal stand-off LIBS-LIF-Raman spectroscopy system for material characterization** Dhanada V S, Sajan D George, Santhosh Chidangil and Unnikrishnan V K
NPS-2022-05	**Ultra-low trace elemental detection in liquid sample using Laser Induced Breakdown Spectroscopy Technique** Keerthi K, Sajan D George, Joju George Sebastian, Anish Kumar Warrier, Santhosh Chidangil and Unnikrishnan V K
NPS-2022-06	**Spectroscopic investigation on the luminescent characteristics of Dy3+ activated multicomponent borosilicate glasses for W-LED applications** Adon Jose, T Krishnapriya, Jeffin George, Akshara Baby, Cyriac Joseph, P R Biju
NPS-2022-07	**Effects of Initial Phase on Silicon Nanoparticles Formation in Femtosecond laser Ablation** Kanaka Ravi Kumar, B. Chandu, M.S.S. Bharati, M. Mallikarjuna Rao,
NPS-2022-08	**Surface Plasmon Polariton Assisted Self-Assembly of Nanoparticles for SERS Applications** Ghana Shyam C, Santhosh Chidangil and Aseefhali Bankapur
NPS-2022-09	**Highly chromatic red light emitting Ca(1-x)Zn2(PO4)2: xPr3+ phosphors for blue- chip excited WLEDs** T.Krishnapriya , Adon Jose and P R Biju
NPS-2022-10	**A D-shaped Elliptical Hollow Core Fiber SPR Sensor** Tulika Khanikar and Vinod Kumar Singh
NPS-2022-11	**Evolution of Barium Bismuth Titanate Ceramic by Modified Solid State Process and its Characterization** Soumya Mukherjee

NPS-2022-12	**Evolution of Sodium Niobate based Glass-Ceramic by Melt Quenching and its Characterization** Soumya Mukherjee
NPS-2022-13	**Synthesis, linear and nonlinear optical properties of Ag and Al2O3 nanoparticles** Tiny Thomas, Vijayakumar S, Lekshmi Jayamohan, S Saravana kumar
NPS-2022-14	**Fabrication of oxide photonic crystal thin film using scalable RF sputtering method** Silpa S and Vinayak Kamble
NPS-2022-15	**Nonlinear optical properties of polyaniline doped with cardanol based dye** Lekshmi Jayamohan, Vijayakumar S
NPS-2022-16	**Design and analysis of micro-channelled Quasi D-shape optical Fiber plasmonic Sensor** Maya Chauhan, Sugandha Das, Vinod K. Singh
NPS-2022-17	**Digital Laser Combustion Method: Synthesis of Silver Nanoparticles (AgNps)** Ganesh H Aralikatti, Basavaraj H. G and Dr. Madhukumar R
NPS-2022-19	**Estimation of Random Duty Cycle in Periodically Poled Lithium Niobate Through Second Harmonic Generation** Madhu, Prashant Povel Dwivedi
NPS-2022-20	**Quality Evaluation of Quasi-Phase Matching (QPM) by Diffraction-Noise** Prashant Povel Dwivedi
NPS-2022-21	**Nanoparticle Enhanced Femtosecond Laser Induced Breakdown Spectroscopy of Aluminium Sheet coated with gold Nano-particle Embedded nanofibers** N. Linga Murthy, M.S.S. Bharathi, S. Venugopal Rao
NPS-2022-22	**Enhanced Temperature Sensing Based on the Randomness in the Multilayered 1D Photonic Crystals** Lakshmi Thara R , P. Aruna Priya, Chittaranjan Nayak

NPS-2022-23	**Generation of Parabolic pulse by nonlinear pulse reshaping inside a Silicon on Insulator (SOI) Waveguide** Hemant, Somen Adhikary, Mousumi Basu
NPS-2022-24	**Ultrasensitive Detection of Thiram and Nile Blue using Au Nanostars Decorated Laser-patterned Au Substrate** Jagannath Rathod, Chandu Byram, Venugopal Rao Soma
NPS-2022-25	**Generation of high-frequency pulse train by designing a buried SOI waveguide** Somen Adhikary, Hemant, Mousumi Basu
NPS-2022-27	**Si-based incident angle-sensitive reflective wavelength separator: a single-step FIB lithography based nanopatterning application** Ramanathaswamy Pandian, Rajagopal R, Hrudya Radhakrishnan, G.Mangamma, S. Dhara
NPS-2022-28	**Structural, Cytotoxic and Anti Cancerous Studies on Er3+: Y2O3 Nanophosphors** Sreejaya T S, Deepthi N Rajendran
NPS-2022-29	**Study Of Conversion Efficiency For Second Harmonic Wave From Fundamental Wave (Under Plane-Wave Approximation)** Haziq Ali Peer Mohammed, Madhu, Prashant Povel Dwivedi
NPS-2022-29	**Efficient optical limiting behavior of carbon encapsulated zinc sulfide core-shell nanostructures** Athulya K.S and Chandrasekharan K
NPS-2022-31	**Copper-based Surface Plasmon Coupled Emission Steering for Biosensor Applications** Ajeesh P. Vijayan, A.Sreelakshmi Fasna Sharin and Pradeesh Kannan
NPS-2022-32	**Synthesis and Characterization of Oleic Acid mediated growth of Single crystal perovskites: Optimisation of trap density and mobility** Aiswarya M., Prateek.M, Sujith.P, Saranya Babu, and P.Predeep
NPS-2022-33	**Effect of Solution and Dry processing techniques on the Optical and transport properties of Inorganic CsPbBr3 Perovskite films** Sujith.P, Prateek.M, Aiswarya M, Saranya Babu, P. Saidy Reddy and P.Predeep

NPS-2022-34	**Semiconductor Core Optical Fibers for the Purpose of Nonlinear Pulse Reshaping** Sujeet Singh, Binoy Krishna Ghosh, Mousumi Basu
NPS-2022-35	**The optical linear and nonlinear exploration in a newly synthesized organic chromophore for photonic applications** Mohd Mehkoom, Abid Ali, Sultan, Farman Ali, and S. M. Afzal
NPS-2022-37	**Microfabrication using direct laser writer** K. Prabakar, S. Balasubramanian, M. Raghuramaiah, S. Tripura Sundari and Sandip Dhara
NPS-2022-39	**Sensing and dynamic switching of toroidal resonances in a bilayer terahertz-metamaterial** Angana Bhattacharya, Gagan Kumar
NPS-2022-40	**Hardware Development for Internet of Things-based Real-Time Blood Glucose Monitoring Using Photoplethysmography** Abubeker K M, Baskar S
NPS-2022-41	**Power dependent nonlinear optical characteristics and two-photon absorption of NiO/PVA thin film** V. Pradeep Kumar, C. Pradeep, P. Radhakrishnan, A. Mujeeb
NPS-2022-42	**Fast imaging and spectroscopic study of single and colliding laser produced plasmas** Shilpa S. and Pramod Gopinath
NPS-2022-43	**Characterization of Laser-Driven Air Sparks Using Self Emission and Rayleigh Scattering Studies** Anu Avarachan, Abhirami M. R, Jefry John, Meenu M. S, Jinsi C. P, Akhil Varghese, Riju C. Issac
NPS-2022-44	**Laser ablated silver nanoparticles doped blue light emitting polymer optical fiber with enhanced photostability** B. Anugop, M. Kailasnath
NPS-2022-45	**Non-Linear Optical Properties of AIE Dye Upon Restriction of Intramolecular Motion** R. Lakshmi and Pramod Gopinath

NPS-2022-46	**Transmission properties of one-dimensional periodic structure of metamaterials and dielectric materials with different configurations** Girijesh Narayan Pandey, Narendra Kumar, Pawan Singh and Khem B. Thapa
NPS-2022-47	**Investigation on Nonlinear Optical and Optical Limiting Properties of Cd0.7Zn0.3Te Quantum Dots** Kiran John U., Jilu George, Siby Mathew
NPS-2022-48	**Inline Fabrication of SERS Substrate for Point of Care Sensing Applications** Sanoop Pulassery, Karuvath Yoosaf
NPS-2022-49	**Investigating the Langevin Behaviour of Faraday Rotation in Soft Ferromagnetic CoFe2O4 Nanoparticles Dispersed in PVA-Water Medium** Lakshmi B, Pramod Gopinath
NPS-2022-50	**Development of visible light sensor using nanostructured cadmium sulfide thin films** Midhun P. R, Asha A. S
NPS-2022-51	**Statistical analysis of drying phenomenon of an epoxy adhesive** Keerthana S H, P Radhakrishnan, A Mujeeb
NPS-2022-52	**Investigations on Optical Properties of Ge-Sb-Se Chalcogenide Glass Films Towards Infrared Photonics** Soumya Suresh, Anupama Viswanathan, B Anugop, Sheenu Thomas
NPS-2022-53	**Dual-Channel based LSPR Biosensor for Multi-Analyte detection** Simitha S, Shinto M Francis, Jesly Jacob and Vibin Ipe Thomas
NPS-2022-54	**Photocatalytic activity of Gd2O3 doped Er4Zr3O12 Nanoceramic** Arun Mohan, Athira S and Sam Solomon
NPS-2022-55	**The effect of temperature and power on the structural and optical properties of r.f sputtered ZnO thin films** P. Hajara, T. Priya Rose K. J. Saji
NPS-2022-56	**Network like silver nanostructures as SERS substrates** Aiswarya Mohan, Lekshmi Chandran, KG Gopchandran
NPS-2022-57	**Anti-cancer activity of triangular like silver nanoparticles** Lekshmi Chandran, Rekha C R, Aiswarya Mohan, K G Gopchandran
NPS-2022-58	**Broadband Photoacoustic Imaging for Biodegradable Bone Implants Applications** Valeria Grasso, Philippe Trochet, Regine Willumeit-Römer, and Jithin Jose

NPS-2022-59	**Sunlight Driven Photocatalytic Degradation of Organic Pollutant by Au Doped Anatase TiO2 Nanoparticles** Veena Lalan, K.G. Gopchandran
NPS-2022-60	**Optical Studies in Eu3+ Doped Calcium Magnesium Silicate (CMS: Eu3+) Phosphor** Sreelekha C. A., Navya Sara Kuriyan , Sabeena M
NPS-2022-61	**Investigation of Intensity Dependent Nonlinear Absorption in Cerium Phosphate Nanoparticles** Anita Mary Peter, Ramya M, M. Kailasnath