



33rd KERALA SCIENCE CONGRESS 2021

PROGRAMME SCHEDULE

Preconference Sessions of 33rd Kerala Science Congress

Technical Sessions on Virtual Platform

Day 1: 25.01.2021, Monday	
10.00 -10.30hrs	
Welcome	Dr. S. Pradeep Kumar General Convener, 33 rd Kerala Science Congress & Member Secretary, KSCSTE
Introduction of 33rd Kerala Science Congress	Prof. K. P. Sudheer President, 33 rd Kerala Science Congress Executive Vice President, KSCSTE
Special Address	Dr. T. Jacob John Chairman, 33 rd Kerala Science Congress Professor of Clinical Virology & Microbiology (Rtd.), CMC, Vellore
Word of Thanks	Dr. K. Vijayakumar Joint Convener, 33 rd Kerala Science Congress & Senior Scientist, KSCSTE
Paper & Poster Presentation and Evaluation for Best Paper & Poster Awards (Parallel Sessions)	
01- HEALTH SCIENCE 10.30 – 12.30hrs	
Welcome	Dr. Mohanan Valiyaveetil Institute of Advanced Virology, TVM
Chairperson & Lead Speech	Dr. V. Ramankutty Former Professor, Achutha Menon Centre for Health Science Studies, TVM
Word of Thanks	Dr. William D'cruz KSCSTE-JNTBGRI

ORAL PRESENTATIONS		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
01-01	10662	Fractal Kinetics and Inertia Moment <i>in vitro</i> Study of Corona virus Proliferation Through Replication
01-02	15160	Detection of Sars-Cov-2 in the Tears and Conjunctival Secretions of Covid-19 Patients by Reverse Transcription Polymerase Chain Reaction
01-03	15291	Epidemiological Investigations on Autochthonous Leishmaniasis in Western Ghats of Kerala State
01-04	15310	Utilization of Oral Fluid Metabolites as Diagnostic and Prognostic Markers in Oral Tongue Cancer
STUDENTS		
01-05	10135	A Modified Porcine Cholecystic Extracellular Matrix Scaffold for Diabetic Wound Healing Application
01-06	15204	A Meta-Barcoding Exploration of Bacterial Diversity of Biofilms in Indwelling Urinary Catheters
01-07	15244	Natural Calcium Containing Siloxane Methacrylate Pre-Polymers for Hard Tissue Restorative Applications
01-08	15271	Multiplexed IHC Provides Comprehensive Prognostic Information of Breast Carcinoma
01-09	15343	Effect of the Anti-Fungal Agent, Fluconazole, on Mortality of 4 th Instar Larvae of <i>Aedes albopictus</i> (SKUSE)
01-10	15384	Pleotropic Effects of <i>Epoxyazadiradione</i> in Human Triple Negative Breast Cancer Cells
POSTER PRESENTATIONS 12.30-13.30 hrs		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
01-01	10205	Cytogenetic Profile of De Novo Acute Lymphoblastic Leukemia in Adults: Identification of Novel Chromosomal Aberrations
01-02	15120	A Study on the Effect of Dose Distribution Using Pinewood Slab and Carbon Couch in Radiation Therapy Mv Beam
01-03	15134	Prevalence of Stress and Anxiety Among the Bank Employees During Lockdown Due To Covid 19
01-04	15179	Covid-Anosmia Checker: A Quantitative and Rapid Alternative Tool for Mass Screening of Covid-19
01-05	15230	Electrospun Polysaccharide Scaffolds: Impact on Wound Healing and Stem Cell Differentiation

STUDENTS		
01-06	13446	in Silico Analysis of Leptospiral Surface Adhesion Protein (Lsa46) as A Potential Vaccine Candidate
01-07	14030	Investigation of Anti-Diabetic Potential of Resveratrol Tetramer Isolated from <i>Hopea ponga</i> - A Mechanistic Approach
01-08	15206	An Exploratory Study To Find Out the Working Case Definition of Covid-19 Infection At Cherlai Division of Cochin Corporation
01-09	15270	Prevalence of BRAF and TERT Gene Mutations in Papillary Thyroid Carcinoma
01-10	15308	Mitigation of Host Tissue Reaction To Polypropylene Mesh by Surface Modification with Porcine Cholecystic Extracellular Matrix Hydrogel
02 - AGRICULTURE AND FOOD SCIENCES 10.30 – 12.30 hrs		
Welcome		Dr. M.P. Sujatha KSCSTE-KFRI
Chairperson & Lead Speech		Dr. C. Bhaskaran Former Professor, KAU
Word of Thanks:		Dr. Jyothish P. S. KSCSTE-JNTBGRI
ORAL PRESENTATIONS		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
02-01	11062	Pulse Nutri-Foods: Processing, Quality and Applications
02-02	13351	Growth Enhancement of <i>Oryza sativa</i> by native endophytic diazotrophic Lysinibacillus <i>sphaericus</i>
02-03	15169	Influence of Organic and Biological Agents on the Disease Complex of <i>Rhizoctonia solani</i> and <i>Meloidogyne incognita</i> Infecting Okra
02-04	15197	Immunity Enhancement through Traditional Rice Varieties
02-05	15220	One Step Green Synthesis of Fluorescent N-Doped Carbon Dots from Waste Biomass for the Detection of Cancer Cells
STUDENTS		
02-06	15247	<i>Piriformospora indica</i> confers resistance against Bhendi yellow vein mosaic virus in okra
02-07	15300	<i>Piriformospora indica</i> Enhances Early Seed Germination and Growth in Vegetable Crops
02-08	15381	Morphological Variability in <i>Rhizoctonia solani</i> Isolates from Rice, Cowpea and Amaranth in Southern Kerala

POSTER PRESENTATIONS 12.30-13.30hrs		
Code	Reg. No.	Title of the Abstract
STUDENTS		
02-01	15146	Post-harvest Application of Hexanal formulation for Improving Physical Qualities of Nendran Banana
02-02	15254	Genome Wide Association Mapping of Foliar Blast Resistance Genes in Pearl Millet Using Snp Markers
02-03	15282	Influence of Exogenous Compounds and Crop Residues on Osmoregulation of Maize Grown in Saline Soil
02-04	15321	<i>Piriformospora indica</i> Helps in Establishment of Tissue Cultured Banana Plantlets with Enhanced Growth and Tolerance To <i>Fusarium</i> Wilt

03 - MATHEMATICAL AND STATISTICAL SCIENCES 12.00 – 13.00 hrs		
Welcome		Dr. Sam P. Mathew KSCSTE-JNTBGRI
Chairperson & Lead Speech		Dr. Madhukar Mallayya Professor, Dept. of Mathematics, Mohandas College of Engineering & Technology
Word of Thanks :		Dr. Anish Kini KSCSTE-NATPAC
ORAL PRESENTATIONS		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
03-01	15183	Connecting People – the Role of Social Network in Covid-19 Pandemic
03-02	15226	Statistical Methods for Estimating Cure Fraction of Covid-19 Patients in India
STUDENTS		
03-03	15193	Leveraging Emotions for Fake News Detection:A Special Emphasis on Covid-19 Fake News
03-04	15201	Wavelet and Phase Portrait as Potential Mathematical Tools for High Fidelity Feature Extraction and Classification of Cough Sounds: A Machine Learning Approach
POSTER PRESENTATIONS 13.00-13.30 hrs		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
03-01	10317	New Error Distribution for Microarray Gene Expression Data
03-02	15188	Graph Semi-groups and Their Biorordered Set

LUNCH BREAK

Dr. P.K. Iyengar Memorial Lecture

14.30 – 15.30 hrs

Welcome &Introducing the Speaker

Dr. V. Ajit Prabhu
Chief Scientist, KSCSTE

Commemorative Lecture

Dr. S. Somanath
Director
Vikram Sarabhai Space Centre
Thiruvananthapuram, Kerala, India

Word of Thanks

Dr. E. S. Anilkumar
Scientist, KSCSTE

Technical Sessions of 33rd Kerala Science Congress (Virtual Platform)

Day 2: 26.01.2021, Tuesday

Paper & Poster Presentation and

Evaluation for Best Paper & Poster Awards

(Parallel Sessions)

04- LIFE SCIENCES 10.00 – 12.30hrs

Welcome	Dr. K. K. Sabu KSCSTE-JNTBGRI
Chairperson & Lead Speech	Dr. P. E. Rajasekharan Principal Scientist Division of Plant Genetic Resources Indian Institute of Horticultural Research (IIHR) Bangalore
Word of Thanks:	Dr. Anuragh Dhyani KSCSTE-JNTBGRI

ORAL PRESENTATIONS

Code	Reg. No.	Title of the Abstract
SCIENTISTS		
04-01	15152	Essential Oil Therapy for the Control of Fresh and Marine Water Borne Pathogen <i>Aeromonas hydrophila</i>
04-02	15235	Regulation of Notch Mediated T- Cell Receptor Activation Upon Supplementation of Njavara Rice Bran Oil in Experimentally Induced Atherosclerosis
04-03	15241	Forest Gaps and Regeneration of <i>Cullenia exarillata</i> : A Case Study in the Forest Ecosystem of Silent Valley in the Western Ghats, India
STUDENTS		
04-04	14172	Sulfated Polygalactan from Seafood <i>Crassostrea madrasensis</i> : Prospective Anti-Inflammatory Lead Attenuates Nuclear Factor-Kb Activation and Cytokine Production in Lipopolysaccharide-Activated Macrophages
04-05	15174	Syringic Acid Alleviates Oxidative Stress and Apoptosis in the Pancreas of Streptozotocin Induced Diabetic Rats
04-06	15203	<i>in Silico</i> Evaluation of Anti Diabetic Activity in <i>Plectranthus vettiveroides</i>
04-07	15236	Development of IgY Therapeutics Against <i>Aeromonas caviae</i> and Its Neutralization Efficacy by <i>In-Vitro</i>
04-08	15292	Systematic Relationships on the Genus <i>Dendrocalamus</i> Nees (Poaceae: Bambusoideae)

04-09	15322	A Potential Anti-Dengue Lead from <i>Andrographis paniculata</i> : An <i>in silico</i> Study
04-10	15394	Enhanced Production of the Bioactive Alkamide ‘Spilanthol’ in ‘Tooth Ache Plant’ <i>Acmella ciliata</i> (Kunth) Cass. Via Cell Suspension Culture System
POSTER PRESENTATIONS 12.30 -13.30 hrs.		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
04-01	15385	Biomonitoring of River Muthirapuzha with Special Reference on Biological Water Quality Criteria and Biomapping
STUDENTS		
04-02	10228	Isolation, Identification and Characterization of Anticancer Principles from the Medicinal Plant <i>Corallocarpus epigaeus</i> Effective Against Melanoma
04-03	15170	Evaluation of the Role of Natural Compound Niist F1 in Alleviation of Er Stress Induced Complications in Rat Skeletal Muscle Cells
04-04	15175	Bergenin Exerts Anti-Inflammatory and Displays Synergistic Activity with Sorafenibon Hepg2 Cells.
04-05	15217	Acute Oral Toxicity Study and Antiproliferative Effects of Butanol Fraction of <i>Gardenia gummifera</i> L. F
04-06	15294	Systematic Relationships of the Subtribe <i>aeridinae</i> ; Orchidaceae
04-07	15325	Ameliorative Effect of Menthol on Oxidative Stress in Stz Induced Diabetic Encephalopathic Rats
04-08	15332	<i>in Silico</i> Characterisation of anti-inflammatory Properties of Phytochemicals from Six Indian Medicinal Plants
04-09	15341	Role of Alcohol Based Sanitizers in Pandemics- Composition and Analysis
04-10	15353	<i>Cissus quadrangularis</i> Extract Integrated Osteo inductive chitosan Collagen Scaffold for Regenerative Bone Tissue Engineering

05 –BIOTECHNOLOGY 10.00 – 12.00 hrs

Welcome	Dr. A. R. Sarika Junior Scientist, KSCSTE
Chairperson & Lead Speech	Dr. K. Jayachandran Professor School of Biosciences, MG University
Word of Thanks	Dr. S. Sreekumar KSCSTE-JNTBGRI

ORAL PRESENTATIONS		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
05-01	10556	Dna Barcode Based Screening of Market Samples of “Kurunthotty” Aka “Bala” Used in Ayurveda
05-02	15171	Recapitulating Developmental Cues of Neural Stem Cells Into Cancer Stem Cell Maintenance: is Pleiotropic Hes-1 Responsible?
05-03	15347	Epstein-Barr Virus Infection Upregulates Gls1 Isoforms Kgaand Gac Promoting Mitochondrial Metabolism and Cell Proliferation
STUDENTS		
05-04	11158	Inhibition of Autophagy Potentiates the Anti-Tumor Efficacy of Uttroside B in Hepatocellular Carcinoma
05-05	11230	Alarming Presence of Colistin Resistance Genes in Xdr <i>Klebsiella pneumoniae</i> Isolated from Healthy Broilers.
05-06	15288	Virtual Screening of Natural Compounds and Identification of Anti Sars Cov-2 Leads
05-07	15396	Differential Expression of Small Hsps in Small Cardamom Under Heat Stress
POSTER PRESENTATIONS 12.00 -13.00 hrs		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
05-01	13194	Development of a Microbial System for Controlling Quorum Sensing Mediated Biofilm Formation.
STUDENTS		
05-02	15100	Biofilm Inhibition of <i>Aeromonas hydrophila</i> by Pomegranate Seed Extract
05-03	15239	Identification of Mhc-Class I Epitopes from Spike Protein of Severe Acute Respiratory Syndrome-Coronavirus-2 (Sars-Cov-2) in Kerala Population: An immune informatics Method
05-04	15339	<i>in Silico</i> Evaluation of Anti-Sars-Cov-2 Activity in <i>Aegle marmelos</i>

06 – SCIENTIFIC SOCIAL RESPONSIBILITY 10.30 – 11.30hrs	
Welcome	Dr. Mathew Dan KSCSTE-JNTBGRI
Chairperson & Lead Speech	Prof. C. P. Aravindakshan Former Principal, Women’s College, TVM
Word of Thanks	Dr. V. B. Sreekumar KSCSTE-KFRI

ORAL PRESENTATIONS		
Code	Reg. No.	Title of the Abstract
STUDENTS		
06-01	15216	Recovering Water and Manure from Urine
06-02	15252	Non-Woven Polypropylene-Nitrile Rubber Blend: A Novel Method for the Recycling of Medical Face Mask To An Engineering Product
POSTER PRESENTATIONS 11.30-12.00 hrs		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
06-01	15296	Turmeric During COVID 19 and its Effect ofon Storage Stability of Ginger
06-02	15405	Effect of Special Very Low Calorie Diet on Obese Respondents
STUDENTS		
06-03	15359	Global Trends in Research on Human Viral Diseases
LUNCH BREAK		
Dr. G.N. Ramachandran Memorial Lecture		14.00 – 15.00hrs
Welcome &Introducing the Speaker		Dr. T. V. Sajeev KSCSTE-KFRI
Commemorative Lecture		Prof. Chandrabhas Narayana Director Rajiv Gandhi Centre for Biotechnology (RGCB),Poojappura, Thiruvananthapuram
Word of Thanks		Dr. C. Anil Kumar Senior Principal Scientist, KSCSTE
P T Bhasakara Panicker Memorial Lecture		15.00 – 16.00 hrs
Welcome & Introducing the Speaker		Er. Shaheem S. KSCSTE-NATPAC
Commemorative Lecture		Prof. V K Damodaran Executive Committee Member, KSCSTE
Word of Thanks		Er. P. N. Salini KSCSTE-NATPAC

Technical Sessions of 33rd Kerala Science Congress (Virtual Platform)

Day 3: 27.01.2021, Wednesday

**Paper & Poster Presentation and
Evaluation for Best Paper & Poster Awards
(Parallel Sessions)**

07- CHEMICAL SCIENCES

10.00 – 12.00hrs.

Welcome	Dr. S. Sandeep KSCSTE-KFRI
Chairperson & Lead Speech	Prof. T. S. Anirudhan Professor, Kerala University
Word of Thanks:	Er. M. S. Saran KSCSTE-NATPAC

ORAL PRESENTATIONS

Code	Reg. No.	Title of the Abstract
SCIENTISTS		
07-01	15158	Anti-Inflammatory Polyether Triterpenoids from <i>Gracilaria salicornia</i> : Natural Leads Attenuate 5-Lipoxygenase and Cyclooxygenase-2
07-02	15228	Polyether Marocyclic Polyketide from the Muricid Gastropod <i>Chicoreus ramosus</i> –A Prospective Bioactive Lead Against Inflammation.
07-03	15326	Dietary Citrus Flavonoids as Inhibitors Against Sars-Cov-2 Main Protease: Computational Investigations
STUDENTS		
07-04	15162	Marine-Derived Polygalactofucan and Its <i>B</i> -2-Deoxy-Amino Substituted Glucopyranan Composite Attenuate 3-Hydroxy-3-Methylglutaryl-Coa Reductase: Prospective Natural Anti-Dyslipidemic Leads
07-05	15189	Xenicane-Type Anti-Inflammatory Diterpenoid from An Intertidal Brown Seaweed <i>Sargassum ilicifolium</i>
07-06	15284	Sustainable Synthesis, Photophysical Studies, Theoretical and Experimental Determination of Dipole Moment of 1, 8- Dioxo-Octahydroxanthenes
07-07	15329	Portable Raman Spectrometer Based Iodine Value Estimator
07-08	15345	Sensing of 5-Hydroxyindoleacetic Acid Based on Aggregation Induced Emission Enhancement of Thioglycolic Acid-Capped Cadmium Sulphide Quantum Dots
07-09	15351	Catalytic Hydrothermal Liquefaction of Biomass with plastic Waste for High Productivity of Bio- Derived Hydrocarbons
07-10	15372	Development of Surface Enhanced Raman Spectroscopic Substrate and Machine Learning Tools for Lung Cancer Studies

POSTER PRESENTATIONS 12.00 -13.30 hrs		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
07-01	12796	Dna Binding, Cleavage and Docking by Cu(Ii) Salen Complexes: Factors Affecting Bioactivity
07-02	15142	Development of Nanostructured Conducting Poly (3,4-Ethylenedioxythiophene) Fibres as An Amperometric Sensor for Ascorbic Acid
STUDENTS		
07-03	13314	Determination of Biliverdin and Bilirubin- A Dual Channel Optical Sensing Strategy
07-04	14004	Palladium Loaded Dendritic Polymer as Efficient Catalyst in Heck Coupling Reaction
07-05	14295	Voltammetric Sensor for the Simultaneous Determination of Melanoma Biomarkers
07-06	15125	Comparison of Chemical Composition and Bioactivities of Rhizomes of <i>Zingiber zerumbet</i> and <i>Zingiber nimmonii</i>
07-07	15128	Advanced Glycation End-Products (AGE) Trapping Agents: Design and Synthesis of Nature Inspired Indeno [2,1-C] Pyridinones
07-08	15214	Stomopneulactone D from Sea Urchin <i>Stomopneustes variolaris</i> : Anti-Inflammatory Macrocylic Lactone Inhibiting Cyclooxygenase-2
07-09	15251	Highly Efficient Engineered Dye-Sensitized Indoor Photovoltaic Devices
07-10	15338	Molecular Docking Studies on the Use of Phytochemicals from Some Common Natural Products for the Treatment of COVID-19

08 –EARTH & PLANETARY SCIENCES 10.00 – 11.30 hrs.	
Welcome	Dr. Salini U. KSCSTE-NATPAC
Chairperson & Lead Speech	Dr. K. K. Ramachandran Head, CGL & SIC, CZM Lab Group Head, Atmospheric Processes National Centre for Earth Science Studies
Word of Thanks	Dr. K. C. Wilson KSCSTE-NATPAC

ORAL PRESENTATIONS		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
08-01	15199	Analysis of Hydrocarbon Fluid Inclusions Using Non- Destructive Fluid Inclusion Techniques
08-02	15354	Millimeter/ Submillimeter Wave Radiometry for Studying Planetary Atmospheres
STUDENTS		
08-03	13595	An Assessment of Seawater Intrusion in the Unconfined Aquifer and the Impact of Naturally Induced Influential Factors Along the Sw Coast of India
08-04	15386	Seasonal Variability of Deep Convective Clouds Over the Tropical Region Using Saphir/Megha-Tropiques
POSTER PRESENTATIONS 11.30-12.00 hrs		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
08-01	15210	Reconstructing the Paleo-Positions of Gondwanian Impact Craters
STUDENTS		
08-02	15268	Basement Deep Lunar Impact Event: Evidence from Impact-Melt Bearing Rock

09- ENVIRONMENTAL SCIENCE, FORESTRY AND WILDLIFE 10.00 – 12.00 hrs.		
Welcome	Dr. C. K. Biju KSCSTE-JNTBGRI	
Chairperson & Lead Speech	Dr. Syam Viswanath Director, KSCSTE-KFRI	
Word of Thanks:	Dr. A. V. Raghu KSCSTE-KFRI	
ORAL PRESENTATIONS		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
09-01	12733	Screening and Characterization of Pigments from Yeast, <i>Rhodotorula mucilaginosa</i> Present in Mangrove Sediments of Kerala
09-02	15166	The Host-Agent-Environment Epidemiologic Triad in Function on Host-Parasite Equilibrium and Manifestation of Parasitic Disease in Nilgiri Tahr (<i>Nilgiritragus hylocrius</i>)
09-03	15315	Differential Response of Arsenic in <i>Acanthus Illicifolius</i> L.

STUDENTS		
09-04	10008	Carotenoid Pigments from Marine Yeasts and Their Varied Applications
09-05	15130	Earthworms Communities in the Paddy Fields of Kottayam District, Kerala
09-06	15190	Political Ecology of the Pink Bloom: the Case of Invasive Alien Plant, <i>Cabomba furcata</i> in Kerala
09-07	15198	Pharmacognostic Evaluation and Assessment of Pharmacological Properties of An Ethnomedicinal Plant <i>Myristica beddomei</i> King Ssp. <i>ustulata</i> W.J. De Wilde
09-08	15307	Impact of the Environmentally Relevant Exposure Dosage of Bisphenol-S on Neonatal Thyroid Morphology
POSTER PRESENTATIONS 12.00-13.00 hrs		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
09-01	10486	A Study on Woody Plants Endemic To Kerala: Taxonomy, Distribution and Population Ecological Information for Conservation and Management
09-02	15237	Preliminary Studies on Sustainable Harvesting of <i>Persea macrantha</i> (Nees) Kosterm. - AJigat Species of South India
09-03	13276	Comparative Study of Physico-Chemical Parameters of River Kuppamand River Anjarakandy, Kannur, Kerala, India
STUDENTS		
09-04	14204	Occurrence of Pathogenic Bacteria in the Mangrove Sediments of North Kerala
09-05	15335	Trace Metals Associated with Fine Particulate Matter in Kochi Urban Area
09-06	15390	Response of the <i>Nostoc</i> Species to Cadmium Heavy Metal Stress
LUNCH BREAK		
Dr. P.K. Gopalakrishnan Memorial Lecture		14.30 – 15.30 hrs
Welcome &Introducing the Speaker		Dr. B. Sabulal KSCSTE-JNTBGRI
Commemorative Lecture		Prof. K. P. Kannan Chairman COSTFORD, Thiruvananthapuram The Hamlet, Benedict Nagar, Nalanchira Thiruvananthapuram
Word of Thanks		Dr. N. S. Pradeep KSCSTE-MBGIPS

Technical Sessions of 33rd Kerala Science Congress (Virtual Platform)

Day 4: 28.01.2021, Thursday

Paper & Poster Presentation and
Evaluation for Best Paper & Poster Awards
(Parallel Sessions)

10- PHYSICAL SCIENCES

10.00 – 12.00 hrs.

Welcome

Dr. R. Jayaraj
KSCSTE-KFRI

Chairperson
& Lead Speech

Prof. V. Unnikrishnan Nayar
Former Professor, Kerala University

Word of Thanks:

Dr. P. Sujanapal
KSCSTE-KFRI

ORAL PRESENTATIONS

Code	Reg. No.	Title of the Abstract
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SCIENTISTS

10-01	15109	Nonlinear Optical Properties of Cdte and Cdznte Embedded Polyvinyl Alcohol Composites
10-02	15218	Proximity Distance in Spatial Epidemic
10-03	15375	2d Sheets of Cesium Titanium Bromide (Cstibr ₃) Perovskite Thin Films by In-House Deposition Technique

STUDENTS

10-04	10033	An Innovative and Disruptive Technique for Growing Large Area Perovskite Single Crystalline Wafers for Solar Cell Applications
10-05	13216	Diverse Thermal Quenching in Sr ₂ NaMg ₂ V ₃ O ₁₂ :Eu ³⁺ Phosphor: A Bifunctional Platform for Optical Thermometry and Safety Sign
10-06	14001	Broadband Electromagnetic Response of MgFe _{1.98} O ₄ - BaFe ₁₂ O ₁₉ Composites
10-07	15222	Modification of Curie Temperature in Pmn-Pt Due To Sr ²⁺ Doping
10-08	15229	Luminescence Characteristics of Er ³⁺ /Dy ³⁺ /Sm ³⁺ Triply-Doped Fluoroborosilicate Glasses for White Light Generation
10-09	15356	Cold Sintered Strontium Hexaferrite – Lithium Molybdate Composites Towards Microwave Applications
10-10	15391	Lasing Studies of Lds 821 Dye in Different Solvents

POSTER PRESENTATIONS

12.00 -13.30 hrs

Code	Reg. No.	Title of the Abstract
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STUDENTS

10-01	10085	Structural and Optical Properties of Rgo Doped Moo ₃ Synthesised by Citrate-Sol Gel Method
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10-02	14174	Stability Enhancement of Methylammonium Lead Bromide Quantum Dots with Copper Incorporation
10-03	15180	Electrochemical Performance Study of Vacuum filtered Dry $Ti_3C_2t_xMx$ ene Powder
10-04	15363	Hydrothermal Synthesis of Layered Mos_2/Rgo Composite for Super Capacitor Application
10-05	15376	Plasmon Enhanced Fluorescence in Styryl 7: Gold Nanostar Composites

11 –ENGINEERING AND TECHNOLOGY 10.00-11.30 hrs

Welcome			Er. Vivek B KSCSTE – CWRDM
Chairperson & Lead Speech			Dr. Samson Mathew Director, KSCSTE-NATPAC
Word of Thanks			Er. B. Subin KSCSTE-NATPAC
ORAL PRESENTATIONS			
Code	Reg. No.	Title of the Abstract	
SCIENTISTS			
11-01	10330	Perchlorate Remediation in A Bench Scale Bio-Barrier System	
11-02	10865	Effect of Annealing Temperature on Low Power Organic Field Effect Transistors with Cobalt Phthalocyanineas Active Layer	
11-03	15099	Performance Improvement of An Algan/GanHemton Bgo Substrate Using Gate Recess Technique	
11-04	15260	Nanostructured Multimetallic Fiber Optic Surface Plasmon Resonance Biosensors	
STUDENTS			
11-05	14516	Synergy of Graphene Oxide/ Nano Silica Hybrid Filler for Improving Mechanical Strength of Natural Rubber Nanocomposite for Green Tyre Application	
11-06	15112	A 3D Printed Low Volume Hybrid Enzyme Fuel Cell for Low Power Applications	
11-07	15346	Analysis and Implementation of Compact Mimo Antenna for 5g Communication	
POSTER PRESENTATIONS 11.30 -12.30 hrs			
Code	Reg. No.	Title of the Abstract	
SCIENTISTS			
11-01	15319	Compact Uni-Planar Asymmetric Single Split Meta-Resonator for 5g Applications	

STUDENTS		
11-02	10578	Development of Espi Based Surrogate Method for Surface Roughness Analysis of Thin Films
11-03	10841	Morphology Driven Distribution of Carbon Black in Natural Rubber/Butadiene Rubber Blend Composites
11-04	13326	Modelling the Impact Scenarios for Flooding in Kerala – A Case Study of Pamba River Basin
11-05	14299	A Study on the Mechanical Properties of Concrete Containing Plastic Waste as Aggregate

12 – FISHERIES AND VETERINARY SCIENCES		10.00-12.00 hrs
Welcome	Er. V. S. Sanjay Kumar KSCSTE-NATPAC	
Chairperson & Lead Speech	Prof. Shobhana Kumar Former Professor, Kerala University	
Word of Thanks	Dr. K. B. Ramesh Kumar KSCSTE-JNTBGRI	
ORAL PRESENTATIONS		
Code	Reg. No.	Title of the Abstract
SCIENTISTS		
12-01	10898	Analysis of E2 Glycoprotein Gene of <i>Classical Swine Fever Virus</i> Prevalent in Kerala from 2009 To 2020
12-02	13682	Influence of Sardine Fish, Flax Seed and Basil Leaves on Serum Lipid Profile of Layers
12-03	15243	Studies on Differentially Expressed Genes in the Skin of Vechur Cattle and Holstein Friesian Crossbred Calves following <i>Rhipicephalus annulatus</i> Infestation
12-04	15262	Detection of Point Mutation in <i>Parc</i> Gene of Quinolone Resistant <i>Escherichia coli</i> Isolated from Retail Chicken of Kerala by A Rapid Mismatch Pcr
STUDENTS		
12-05	15194	Effect of Bedding Systems on Milk Yield, Somatic Cell Count and Body Condition Score in crossbred Cows
12-06	15314	Development and Validation of Taqman Probe Based Real-Time Reverse Transcriptase Polymerase Chain Reaction for Detection of Porcine Reproductive and Respiratory Syndrome Virus
12-07	15361	Molecular Characterization of <i>M. pachydermatis</i> isolates Obtained from cases of Dermatitis and Otitis externa in Dogs

POSTER PRESENTATIONS			12.00 -13.30 hrs
Code	Reg. No.	Title of the Abstract	
SCIENTISTS			
12-01	15135	Influence of Structural Components of Cattle Shelters on the Welfare of Dairy Cattle in Kerala	
12-02	15246	Venom Proteomics of Three Common Scyphozoan Jellyfishes (<i>Chrysaora caliparea</i> , <i>Cyanea nozakii</i> and <i>Lychnorhiza malayensis</i>) from the Kerala Coast	
12-03	15401	Application of Single Nucleotide Polymorphism Markers as Potential Tools for Breed Genetic Traceability of Attappady Black Goats	
STUDENTS			
12-04	15208	Modulation of Steroid Hormone Synthesis by Methanolic Extracts of <i>Boerhavia diffusa</i>	
LUNCH BREAK			
Dr. P.R. Pisharoty Memorial Lecture			14.30 – 15.30 hrs
Welcome &Introducing the Speaker		Dr. Kalyan Chakraborty Director, KSCSTE-KSoM	
Commemorative Lecture		Dr. Prakash Chauhan Director, Indian Institute of Remote Sensing ISRO, Govt. of India 4, Kalidas Road, Dehradun, India	
Word of Thanks		Shri. K. Sabareesh Senior Principal Scientist, KSCSTE	

Technical Sessions of 33rd Kerala Science Congress (Virtual Platform)

Day 5: 29.01.2021, Friday

CHILDREN'S SCIENCE CONGRESS

Children's Science Congress Session 09.00 – 13.00 hrs

Welcome	Dr. Sherin B. M. Junior Scientist, KSCSTE
Chairperson	Dr. A. Bijukumar State Academic Co-ordinator, NCSC.
Word of Thanks	Dr. Dipu KSCSTE-CWRDM

Presentation of Child Scientists

Post Graduate Student's Interactive Sessions 14.00 – 16.00 hrs

Welcome	Dr. M. Rajendraprasad KSCSTE-JNTBGRI
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Scientists for Interaction

Prof. K. P. Sudheer Executive Vice President, KSCSTE	Shri. M.C. Dathan Scientific Advisor to Chief Minister, Govt. of Kerala
Dr. Suresh Das Former Executive Vice President, KSCSTE	Dr. V.K Damodaran Executive Committee Member, KSCSTE
Dr. Rajasree M. S. Vice Chancellor, Kerala Technical University	Dr. T.Jacob John Professor of Clinical Virology & Microbiology (Rtd.), CMC, Vellore
Prof. G. M. Nair Hon. Director, Central Laboratory for Instrumentation & Facilitation Kerala University	Dr. P.E Rajasekharan Principal Scientist, IIHR, Bangalore
Dr. V. Unnikrishnan Nayar Former Professor, Kerala University	
Word of Thanks	Dr. Drissia T. K. KSCSTE-CWRDM

Dr. E.K. JanakiAmmal Memorial Lecture 16.30 – 17.30 hrs

Welcome & Introducing the Speaker	Dr. Prakash Kumar R Director, KSCSTE-JNTBGRI
Commemorative Lecture	Dr. M. Sabu CSIR- Emeritus Scientist KSCSTE- Malabar Botanical Garden & Institute for Plant Sciences (MBGIPS) Kozhikode
Word of Thanks	Dr. C. Arunan Principal Scientist, KSCSTE



33rd KERALA SCIENCE CONGRESS 2021

INAUGURAL & FOCAL THEME SESSION

Venue: Padmam Auditorium
Institute of Management in Government
Thiruvananthapuram

30th January 2021, Saturday	
10.00-11.00 hrs	Inaugural Programme
Welcome Address	Dr. S. Pradeep Kumar General Convener, 33 rd Kerala Science Congress Member Secretary, KSCSTE
About 33 rd Kerala Science Congress	Dr. T. Jacob John Chairman, 33 rd Kerala Science Congress Professor of Clinical Virology & Microbiology (Rtd.), CMC, Vellore
Presidential Address	Prof. K. P. Sudheer President, 33 rd Kerala Science Congress Executive Vice President, KSCSTE
Inaugural Address Official launching of Research Equipment Awareness Portal (REAP) Presentation of: <ul style="list-style-type: none">• Chief Minister's Young Scientist Gold Medal Awards• Dr. S. Vasudev Award• Science Literature Awards	Sri. Pinarayi Vijayan Hon'ble Chief Minister, Kerala & President, Kerala State Council for Science, Technology and Environment
Release of Abstract & Special address	Dr. V. P. Mahadevan Pillai Vice Chancellor Kerala University
Word of Thanks	Dr. K. Vijayakumar Joint Convener, 33 rd Kerala Science Congress Senior Scientist, KSCSTE
National Anthem	

11.00 -11.15 hrs	Tea break
11.15 – 13.30 hrs	
Focal Theme Session - Pandemics: Risks, Impacts & Mitigation	
Welcome	Dr. C. Akhil C. Banerjea Director, Institute of Advanced Virology
Chairman	Prof. T. Jacob John Professor of Clinical Virology & Microbiology (Rtd.) CMC, Vellore

Presentation of Focal Theme	Dr. B. Ekbal Member, Kerala State Planning Board Thiruvananthapuram
	Dr. Priya Abhraham Director, National Institute of Virology, Pune
	Dr. E. Sreekumar Principal Scientist, RGCB, Thiruvananthapuram
Word of Thanks	Dr. K. R. Lekha Senior Principal Scientist, KSCSTE
13.30 – 14.15 hrs	Lunch Break
14.15-17.15 hrs Presentation of Best Papers	
Chairman	Prof. V. Unnikrishnan Nayar Former Professor, Kerala University
Presentation of Best Student Oral Presentation Awardees	12 Presentations
Presentation of Best Scientist Oral Presentation Awardees	12 Presentations
Word of Thanks	Dr. P. Harinarayanan Principal Scientist, KSCSTE
National Anthem	