Tentative Program Schedule

31st International Conference
of
International Academy of Physical Sciences
(CONIAPS XXXI)

(December 20-21, 2024)

1st day, 20 December (Friday)

8:00 AM -10:30 AM	**Registration**
10:30 AM -12:00 PM	**Inauguration**
12:00 PM -12:30 PM	**HIGH- TEA**

SESSION-I
DECEMBER 20, 2024 (12:30 PM – 1:30 PM)

KEY NOTE ADDRESS	
12:30 PM - 01:30 PM	Prof. Tankeswar Kumar, Central University of Haryana
1:30 PM - 2:30 PM	**LUNCH**

PHYSICS

Venue: Physics Seminar Hall			
Professor O. N. Srivasatava Memorial Lecture			
Chairperson: Prof. P. K. Bajpai			
14:30-15:00	**Prof. P.C. Pandey** Study of doped $SrMoO_4$ Phosphors for Luminescence thermometry and Lighting applications.		
Young Scientist Presentation		**Chairperson: Prof. Jagjeet Kaur Saluja**	
Venue: M. Sc. Final Physics Dr. Tripti Richhariya- 8770253316 Mr. Akesh Kumar - 9529339163		**Venue: Physics Seminar Hall** Mrs. Dipti Sahu – 9589477707 Dr. Yogita Parganiya - 6264480348	
Young Scientist		**Invited Talk**	
15:00-16:00	PHY YSA-01: **Swapnil Garg** Analyzing long-term trends and variations in the sunspot cycle across Solar Cycles 1-24, and the rising phase of Solar Cycle 25	**15:00-15:30**	**Invited Talk-02** PHY IL-06: **Prof. Ramesh T Subramanium** Next-Generation Polymer Electrolytes and Electrodes: Powering Tomorrow's Energy Devices.
	PHY YSA-02: **Nikita Shubhash Jaisawal** Single-Step Synthesis of Polyaniline via Oxidative Polymerization	**15:30-16:00**	**Invited Talk-03** PHY IL-03: **Dr. Krishna Manaswi Digumarti** Exploiting electrostatics for soft robotics.
	PHY YSA-03: **Visheshvar Verma** Study the Tuning of Electrical and Electronic Properties of Graphene		
	PHY YSA-04: **Manaranjan Mohanta** Low temperature synthesis and optical properties of SnO_2 nanostructures		

16:00-16:15	**Tea Break**		
Young Scientist Presentation		**Chairperson: Prof. Anjali Oudhia**	
16:15-18:05	PHY YSA-05: **P.A. Shingade** Optimizing Structural, Optical, and Photovoltaic Properties of Cobalt Spinel Ferrite with Cerium Substitution	**16:15-16:45**	**Invited Talk-04** PHY IL-05: **Prof. S.J Dhoble** Rare earth free Cr activated phosphors for night vision lamp and challenges.
	PHY YSA-06: **Khrsheed Ahmed** Synthesis of Zinc Oxide Nanoparticles via Simple Hydrothermal Method for Photocatalytic Applications	**16:45-17:15**	**Invited Talk-05** **Dr. Amit Ramesh Bansod** Application of Ferrites in various fields
	PHY YSA-07: **R.P. Panbude** Structural, Morphological, Optical and magnetic studies of Ce^{3+} doped zinc spinel nanoferrites	**17:15-18:05**	PHY OP-1: **Ajay Narayan Sahu** Near White Light Emission from Dy doped $NaCa(PO_3)_3$ Phosphor
	PHY YSA-08: **Shushil Joshi** Investigation of the Structural, Morphological, Dielectric, and Magnetic Properties of La-doped Bismuth Iron Titanate Material		PHY OP-02: **Aksh Kumar Verma** Structural and Photoluminescence studies of Dy doped and Eu co-doped $Y_3Mg_2AlSi_2O_{12}$ based novel phosphor for WLED application
	PHY YSA-09: **Kanchan Tiwari** Enhancing Luminescence Using Banyan Milk as Fuel for Synthesizing Eu^{3+} Doped $YAlO_3$ Phosphors for Fabricating Vibrant Red Flexible Displays and Security Inks		PHY OP-03: **A.A. Bhendale** Spectral Investigation of Zn doped $CoFe_2O_4$ Spinel Ferrites for Antimicrobial Activity
	PHY YSA-10: **Chitrakant Belodhiya** Development and photoluminescence characteristics of $NaCaBi_2(PO_4)_3:Sm^{3+}$ phosphors for solid-state lighting applications		PHY OP-04: **Bharti Singhal** Comparative Analysis of Taper Waveguide Launcher in Microwave Oven
	PHY YSA-11: **Dheeraj Singh Rana** Phase-space analysis of the viscous fluid cosmological models in the coincident $f(Q)$ gravity		PHY OP-05: **Dhanraj** Forbush Decreases in Cosmic Ray Intensity with Solar and Interplanetary Activity Parameters During Decay Phase of Cycle 24
	PHY YSA-12: **Lakhan Jaybhay** Late time cosmic acceleration through parametrization of Hubble parameter in $f(R, L_m)$ gravity		
	PHY YSA-13: **Aaqid Bhat** Extended Bose-Einstein condensate dark matter in $f(Q)$ gravity		

Day 2: Saturday, December 21, 2024

Venue: Physics Seminar Hall Dr. Tripti Richhariya- 8770253316 Mr. Suleman Kujur- 8319495024		**Venue: M. Sc. Final Physics** Mrs. Dipti Sahu – 9589477707 Dr. Yogita Parganiya - 6264480348	
Chairperson: Prof. Kavita Thakur		**Chairperson: Dr. Ravi Sharma**	
09:00-09:30	**Invited Talk-06** PHY IL-02: **Prof. P.K. Bajpai** Accelerators as tools for developing Science & Technology: Bringing societal change through Ion Beams	**09:00-09:30**	**Invited Talk-07** **Prof. Abhay M. Varade** Geological and Thermoluminescence studies of Gypsum, Calcite and Bivalves Samples using High Radiation Dose Dosimetry
09:30-10:00	PHY OP-06: **Kavita Das** A model of Intensive water body cleaning boat powered by solar energy	**09:30-10:00**	PHY OP-09: **Mamata Nandkeolyar** Homogeneous–Heterogeneous Reactions, Hall Current, and Dissipative-Radiative Heat Transfer Effects on MHD Casson Fluid Flow Over a Bi-Directional Stretching Sheet
	PHY OP-07: **Priya Barik** Spectroscopic, Photometric Properties and Energy Transfer Mechanism of White Light Emitting $Li_2SiO_3:Tb^{3+}$, Eu^{3+}, Mn^{4+} Phosphors		PHY OP-10: **Mitu Chaouhan** Solution-Processed 2D Inorganic Semiconductor Transparent Thin Film for Photosensitive Devices
	PHY OP-08: **Laxmikant** Geomagnetic Storms Related with Magnetic Clouds and Their Relation with Solar and Interplanetary Activity Parameters During Decay Phase of Cycle 24		PHY OP-11: **Neha Sharma** White Light Emission from Eu and Dy doped $Gd_2Zr_2O_7$ Phosphor

10:00-10:15	**Tea Break**		
Chairperson: Prof. R. C. Agrawal Prof. R. K. Pandey		**Chairperson: Prof. R. N. Baghel Dr. B. G. Sharma**	
10:15-10:45	**Invited talk-08** PHY IL-01 **Prof. S. K Pandey** A PHYSICIST'S VIEW OF THE UNIVERSE	**10:15-10:45**	**Invited Talk-09** PHY IL-07: **Dr. Tapas Ranjan Sahoo** Nanoceria, a redox active nanoparticle: Its Environmental and Biomedical applications
10:45-11:15	**Invited Talk-10** PHY IL-11: **Dr. Tarkeshwar Trivedi** Investigation on Exotic Modes of Nuclear Excitation through In-Beam Gamma Ray Spectroscopy	**10:45-11:00**	PH ITT -02 OP-43: Dr. **Siteshwari Chandrakar** Up-conversion Luminescence Mechanism and Its Applications.
11:15-13:30	PHY OP-12: **Nayab Ul Malik** Structural, Electronic and Optical Tuning of Ni doped Pd Catalyst for Direct Ethanol Fuel Cell: A Theoretical Model	**11:00-11:15**	PH ITT -01 OP-35: Dr. **G. Nag Bhargavi** Effect of rare-earth substitution on the structural and dielectric properties of Barium Zirconium Titanate ceramics
	PHY OP-13: **Neha Verma** Harnessing Speech Signal Analysis Techniques for Detection of Hormone Levels in Adolescent Females: A Review	**11:15-13:30**	PHY OP-24: **Dipti Sahu** To Synthesis, Structure and Luminescent Property of Ce^{3+} doped $Li_4SrCa(SiO_4)_2$ phosphor as blue-emitting LEDs
	PHY OP-14: **Prachi Satabdi Nanda** Effect of Tb doping on electrochemical performance of CuO nanoparticles for high performance supercapacitor		PHY OP -25: **Manju Tiwari** Reflectivity Assessment of the 2020 Hyderabad Floods Using Synthetic Aperture Radar
	PHY OP-15: **Prashant Kumar Kalo** Luminescence Investigation of $SrAl_{12}O_{19}:Eu^{2+}$ Phosphor		PHY OP-26: **Garima Dewangan** Synthesis, Structural, Optical and Judd-Ofelt studies on red emitting $Ca_{19}Mg_2(PO_4)_{14}$: Eu^{3+} Phosphor for LEDs applications
	PHY OP-16: **Rahul Pali** The enhancement of optical characteristics of RE doped $BaSrSiO_4$: A kinetic analysis of a composite material		PHY OP-27: **Akesh Kumar** Unveiling Structural, Morphological, Optical Properties of Novel Eu^{3+} And Tb^{3+} Doped $Na_2MoO_4.2H_2O$ for phosphor converted LEDs based applications
	PHY OP-17: **Saket Kumar** Low-Frequency Solar Radio Bursts and Their Correlation with Solar Cycle 24 Dynamics: Unveiling Associations with Coronal Mass Ejections and Key Solar Parameters		PHY OP-28: **Anil Verma** Advances in Flexible Solar Cells: Efficient, Lightweight and Scalable Designs
	PHY OP-18: **Ritu Aarya** Integration of intelligent sensors in embedded systems		PHY OP-29: **Gitendra Kumar** Luminescence Properties of Rare Earth Doped Silicate Based Phosphors: A Review
	PHY OP-19: **Shweta S. Sharma** Synthesis and Luminescence Properties of Red light emitting $CaSrAl_2SiO_7:Eu^{3+}$ Phosphor		PHY OP-30: **Indrani Bose** Unlocking the potential of $SrBi_4Ti_4O_{15}$ emerging application in Li-fi communication, Optoelectronic smart lighting, biomedicine energy storage and beyond
	PHY OP-20: **Suleman Kujur** Study of Dielectric and Capacitive properties of multi-ion conducting, $BaTiO_3$ nano-particle doped polymer electrolyte films for Super-Capacitor/Battery applications		PHY OP-31: **Ila Dhurandhar** Study on Cerium doped $Ba_2Al_2SiO_7$ phosphor for blue LED
	PHY OP-21: **Thakur Prasad** Green Energy Harvesting: Materials for Hydrogen Generation and Storage		PHY OP-32: **Kiran Verma** Crystallographic and Photoluminescence Analysis of Trivalent Samarium doped $Ca_{19}Zn_2(PO_4)_{14}$ phosphors for reddish -orange photonic device applications
	PHY OP-22: **Nandanee Shahu** Studies on Luminescence Properties of $Ce^{3+}:Gd_2Si_2O_7$ Phosphors		PHY OP-33: **Pawan Kumar** Investigation of structural and conduction behavior of Barium Calcium Zirconium Titanate Ceramic

	PHY OP-23: **Yugbodh Patle** Dosimetry Characteristics and Kinetic Parameters of Calcium Silicate Phosphors Doped with Cerium and Dysprosium.		PHY OP-34: **Chetna Sahu** Preparation and morphological studies of Nd^{3+} doped La_2SiO_5 phosphor via solid state reaction method
13:30-14:20	**Lunch Break**		
Chairperson: Dr. Deepti Jha		**Chairperson: Dr. B. R. Verma**	
14:20-15:00	PHY OP-36: **Ganesh Ram Banjare** Effect of Different Alkali Metal Ions on Y_2O_3:Eu^{3+} Phosphors For WLED	**14:20-15:00**	PHY OP-45: **Vani Chandrakar** Study The Molarity Depended Properties of Co-Doped ZnO Nanoparticles Prepared by Sol-Gel Method.
	PHY OP-37: **Tripti Richhariya** Impact of synthesis routes on luminescent properties Cerium doped Barium Alumino Silicate phosphor		PHY OP-46: **Nikita Shah** Structural And Luminescent Analysis of The Eu^{3+} Incorporated Single Phase $Ca_2Ga_2SiO_7$ Phosphor for Solid-State Lighting
	PHY OP-38: **Lekhram Hirwani** Numerical Study of Electrical Impact of In_2S_3 Thin films as Buffer Layer in CZTS Solar Cells		PHY OP-47: **Renu Kumari** Electronic Behavior in Mn-O Nanotubes: An Ab Initio DFT Analysis of Chirality and Cell Size
	PHY OP-39: **Parag Palewar** Preparation And Morphological Studies of Y2Sr3B4O12 Doped with Dy3+ Phosphor		PHY OP-48: **Shriya Tiwari** High-Spin Studies of Neutron-Deficient Bromine Isotope
15:00-15:20	**Tea Break**		
Chairperson: Dr. G Nag Bhargavi		**Chairperson: Dr. Shubra Mishra**	
15:20-16:00	PHY OP-40: **Sandeep Kumar Soni** Dosimetry Characteristics and Kinetic Parameters of Calcium Silicate Phosphors Doped with Cerium and Dysprosium.	**15:20-16:00**	PHY OP-49: **Arun Kumar Patel** Recent Progress in Arduino-Based Colorimetric Sensing Devices for Environmental and Clinical Applications
	PHY OP-41: **Sanjay Baghel** Mechanoluminescence Studies Of UV Irradiated $SrZrSi_2O_7$: Ce^{3+} Phosphor		PHY OP-50: **A. D. Saddiq** Effect of Dysprosium Ions n Radiation Attenuation Properties of Magnesium Sulfoborate Glass System Shielding Applications
	PHY OP-42: **Syed Shamroz Arshad** Development of Sziklai pair based Low Noise Amplifiers for Ultra-Wide band Communication System		PHY OP-51: **Naman Shukla** Optimization of Planar Perovskite Solar Cells with F8BT as An Electron Transport Layer for Enhanced Charge Transport and Efficiency
	PHY OP-44: **Urwashi Sahu** A Comprehensive Review of EEG and Speech-Based Techniques for Depression Recognition		PHY OP-52: **Anurag Pandey** Optimization of Lead-Free CsSn0.5Ge0.5I3-on-CH3NH3SnI3 Tandem Perovskite Solar Cells: A Numerical Study Using SCAPS-1D
17:00	**Valedictory and Prize Distribution**		