

# Tentative Program Schedule

**31<sup>st</sup> International Conference**  
of  
**International Academy of Physical Sciences**  
(CONIAPS XXXI)

(December 20-21, 2024)

## **1<sup>st</sup> day, 20 December (Friday)**

<b>8:00 AM -10:30 AM</b>	<b>Registration</b>
<b>10:30 AM -12:00 PM</b>	<b>Inauguration</b>
<b>12:00 PM -12:30 PM</b>	<b>HIGH- TEA</b>

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

<b>KEY NOTE ADDRESS</b>	
12:30 PM - 01:30 PM	Prof. Tankeswar Kumar, Central University Of Haryana
<b>1:30 PM - 2:30 PM</b>	<b>LUNCH</b>

### **Session-II**

**YOUNG SCIENTIST AWARD PRESENTATIONS (Chemistry/Computer Science/BPA)**  
(02:30 PM – 04:00 PM)

**VENUE: M. Sc. Final Chemistry**  
**Chairman: Prof. Kamlesh Shrivastava**

(Mr. Deepak Sahu: 6263181127; Mr. Manoj Kumar: 7000907616)

2:30 PM – 4:00 PM	CHYSA-01	<b>Nikita Raghuvanshi (PRSU, Raipur)</b> Encapsulation of Cumin Seed Essential Oil in Silica-Nanocontainer for Improved Antioxidant Activity
	CHYSA-02	<b>Anurag Mishra (NIT, Raipur)</b> Switching Photoluminescence “On-Off-On” for Detection of Chromium (VI) Ion and Ascorbic Acid with N,S-Codoped Carbon Dots
	CHYSA-03	<b>Pinki Miri (PRSU, Raipur)</b> Nanoconfined Carboxyl Functionalized Oxo Bridged (F) <sub>n</sub> Mon – O – Tin Heterometallic clusters for Photodegradation and Removal of Organophosphorus Pesticides
	CHYSA-04	<b>Ankita Beena Kujur (PRSU, Raipur)</b> Triple-Mode Sensing of Hg <sup>2+</sup> Using FRET Pair of Nitrogen-Doped Carbon Quantum Dots and Gold Nanorods

	<b>Computer Sciences</b>	
	CSYSA-01	<b>Princy Matlani (GGU, Bilaspur)</b> A Deep Learning and Meta-Heuristic Optimization Approach for Content-Based Video Retrieval
	CSYSA-02	<b>Anita Sahu (PRSU, Raipur)</b> Deepfake Video Detection Based On Deep Learning Models: A Review
	<b>Biochemistry, Pharmaceutical And Applied Sciences</b>	
	BPAYSA-01	<b>Nisha Singh (PRSU, Raipur)</b> Sitting Behaviour in Humans as a Function of Workdays and Free days
4:00 PM -4:15 PM	<b>TEA BREAK</b>	

### Session-II

**INVITED LECTURE (Chemistry)**

(02:30 – 04:00 PM)

**VENUE: Dr. CV Raman Hall**

**Chairman: Dr. Anil Srivastava**

(Dr. Dipti Pateriya: 9993489867; Ms. Priti Verma: 7587060007)

2:30 – 4:00 PM	CHIL	<b>Prof. S. N. Upadhyay</b> Curcumin-loaded Nanofibrous Dressing for Rapid and Scarless Wound Healing
	CHIL	<b>Prof. Nitin Chattopadhyaya (Jadavpur University, Kolkata)</b> Development of Potential Strategies from Simple Ideas
	CHIL	<b>Tarasankar Pal (IIT- Kharagpur)</b> Liquid-Liquid Interface A Platform For Porous Nanostructures Of Gold And Palladium
4:00 PM-4:15 PM	<b>TEA BREAK</b>	

### Session-III

**ORAL PRESENTATIONS (Chemistry)**

(4:15 PM – 6:15 PM)

**VENUE: M. Sc. Final Chemistry**

**Chairman: Dr. M. L Satnami**

(Mr. Deepak Sahu: 6263181127; Mr. Manoj Kumar: 7000907616)

4:15 PM -6:15 PM	CHOP-01	<b>Dr. Pallavi Singh (BCJ Science College, Gujarat)</b> A Sustainable Approach for the Synthesis of Thioesters
	CHOP-02	<b>Abhilash Pandey (GGU, Bilaspur)</b>

		A Novel Pyrene Based Highly Selective Reversible Optical Sensor for Rapid Detection of Hg <sup>2+</sup> Ion: Application in Bio-Imaging
	CHOP-03	<b>Shiva Kant Ojha (CMP Degree College, Allahabad)</b> Enhanced Performance of Dye-Sensitized Solar Cells Using Nitrogen-Doped Carbon Quantum Dots
	CHOP-04	<b>Pritimala Sahu (PRSU, Raipur)</b> Bovine Serum Albumin Nanoparticles as a drug Carrier for Antiviral drug delivery Systems
	CHOP-05	<b>Sanju Salima Ekka (Sambalpur University)</b> Soft Magnetic Nanomaterials from Mahua Oil Cake: Process Optimization, Characterizations, Biological Activity, and Application in Azo Dye Removal by Adsorption Method
	CHOP-06	<b>Achyuta Kumar Biswal (Sri Sri University, Odisha)</b> An eco-friendly method for chlorpyrifos pesticide removal from water using a new nano magnetic nanomaterial
	CHOP-07	<b>Ujjwala Patel (PRSU, Raipur)</b> Influence of Surfactant Hydrophilic-Lipophilic Balance on Stability of Essential Oil Loaded Nanoemulsions
	CHOP-08	<b>Suprava Maharana (Dhenkanal Auto. College, Odisha)</b> Interaction of BSA with cationic Gemini surfactants with varying hydrocarbon chain length in aqueous solution
	CHOP-09	<b>Shubhra Sinha (PRSU, Raipur)</b> Fabrication of Nitrogen and Sulphur Co-Doped Graphene with Polyaniline for High Performance Supercapacitor
	CHOP-10	<b>Vaibhav Dixit (PRSU, Raipur)</b> Development of Free-Standing BCN-Coated Carbon Cloth for Advanced Flexible Solid-State Supercapacitor Devices
6:30-7:30 PM	<b>CULTURAL PROGRAM</b>	
7:30 PM-8:30	<b>DINNER</b>	

**Session-III (Special Session)**  
**INVITED LECTURES/ORAL PRESENTATIONS (Chemistry)**  
(4:15 PM -6:15 PM)

**VENUE: Dr. CV Raman Hall**

**DST-PURSE (Environmental Chemistry)**

**Chairman: Prof. Manas K. Deb**

**(Dr. Dipti Pateriya: 9993489867; Ms. Priti Verma: 7587060007)**

4:15 PM -6:15 PM	CHIL	<b>Prof. Shankar G. Aggarwal (CSIR- NPL-New Delhi)</b> Atmospheric Gases and Particle Chemistry in Real Scenarios
	CHIL	<b>Dr. Anil K Shrivastava (DRDO)</b>

		Current Trends in Environmental Management of Submarines.
	CHOP-11	<b>Richa Tembekar (PRSU, Raipur)</b> Removal Study of Methylene Blue Dye by Magnetic Nanoparticles
	CHOP-12	<b>Babita (PRSU, Raipur)</b> FTIR Imaging Spectroscopy as a Tool for In-Depth Analysis of Microplastic Pollution in Environmental Matrices
	CHOP-13	<b>Dishen Kumar (GGU, Bilaspur)</b> A Highly Selective Benzildihydrazone Based Double Schiff Base Chromogenic Chemosensor for Rapid Detection of Ni <sup>2+</sup> Ion in Aqueous Solution
	CHOP-14	<b>Khushali Tandey (PRSU, Raipur)</b> Smartphone Assisted Plasmonic and Portable Paper-Based 3D Printed Assay for Colorimetric Detection of Cadmium in Water and Milk Samples
	CHOP-15	<b>Yogyata Chawre (PRSU, Raipur)</b> pH-Dependent Oxidase and Hydrolase Mimicking Activity of Nanoceria and Its Composite with N-CQD for Sensitive Detection of Dopamine, Glutathione and Organophosphorus Pesticide
	CHOP-16	<b>Anshu Maurya (University of Allahabad)</b> PVA-Alginate Hydrogels as Effective Adsorbents for Methylene Blue in Water Purification
6:30-7:30 PM	<b>CULTURAL PROGRAM</b>	
7:30 PM-8:30	<b>DINNER</b>	

## **2<sup>nd</sup> day, 21 December (Saturday)**

### **Session-I**

**ORAL PRESENTATIONS (Chemistry/)**

(9:30 AM – 11:30 AM)

**VENUE: M. Sc. Final Chemistry**

**Chairman: Prof. Tarasankar Pal**

(Mr. Deepak Sahu: 6263181127; Mr. Manoj Kumar: 7000907616)

9:30 AM – 11:30 AM	CHOP-17	<b>Dr. Manmohan Lal Satnami (PRSU, Raipur)</b> Size and Shape Dependent FRET Donor-Acceptor Efficacy of Nanostructures
	CHOP-18	<b>Dr. Bhanushree Gupta (PRSU, Raipur)</b> Role of Nanotechnology in Aiding the Application of Essential Oils in Food Industry
	CHOP-19	<b>Abhishek Katendra (PRSU, Raipur)</b> A FRET Pair of Nitrogen doped Carbon Quantum Dots-Gold- Nanoparticle for the Detection of Bipyridine
	CHOP-20	<b>Angel Minj (PRSU, Raipur)</b>

		Sensing of Riboflavin with Surface Modified Silver Nanoparticle Through Resonance Energy Transfer
	CHOP-21	<b>Rajiv Nayan (PRSU, Raipur)</b> Synergistic N-Doped carbon nanotubes and B and N Co-Doped Carbon Fiber: A High Efficiency Supercapacitor Electrode
	CHOP-22	<b>Ankita Tejwani (PRSU, Raipur)</b> Nanocomposite of GO/SiO <sub>2</sub> with PANI for Electrochemical Sensing of Dopamine
	CHOP-23	<b>Uttam Sarkar (NIT, Raipur)</b> Lanthanide-Complexes Doped PMMA composite for Tunable White Light Emission
	CHOP-24	<b>Manoj Kumar Banjare (State Forensic Sci. Lab, Raipur)</b> Micellization Behavior of Imidazolium Based Ionic Liquid within Choline Based Deep Eutectic Solvents
	CHOP-25	<b>Bhuneshwari Sahu (PRSU, Raipur)</b> Calixarene functionalized gold nanoparticles for the recognition of diazinon pesticides in agricultural sample as a colorimetric and paper-based sensor
	CHOP-26	<b>Taanisha Mukhopadhyay (Haldia Inst. of Technology)</b> Production of renewable liquid fuels from woody biomass
	CHOP-27	<b>Anat Ram Sidar (NIT, Raipur)</b> Topological Co(II)-malonate polymorph: Degradation properties of Naproxen and colorimetric recognition of acetone, Cr <sub>2</sub> O <sub>4</sub> <sup>2-</sup> , and Fe <sup>3+</sup>
	CHOP-28	<b>Dr. Indrapal Karbhal (PRSU, Raipur)</b> Boron-Carbon-Nitride: A Breakthrough Material for Supercapacitor and Battery Technologies
11:30 AM-11:45 AM	<b>TEA BREAK</b>	

**Session-I**  
**INVITED LECTURES (Chemistry)**  
(9:30 AM – 11:30 AM)

**VENUE: Dr. CV Raman Hall**

**Chairman: Prof. Nitin Chhattopadhyaya**

**(Dr. Dipti Pateriya: 9993489867; Ms. Priti Verma: 7587060007)**

09:00 AM- 09:30 AM <b>ONLINE</b>	CHIL	<b>Prof. Puru Jena</b> (Virginia Commonwealth University, Richmond, USA) Superatoms as Superior Catalyst
9:30 AM – 11:30 AM	CHIL	<b>Dr. Biswarup Chakraborty (IIT, Delhi)</b> Recognizing the Oxygen Evolution Reaction Pathway on SnFe <sub>2</sub> O <sub>4</sub> Electrocatalyst
	CHIL <b>ONLINE</b>	<b>Dr. Surendra Singh Bisht (FRI, Dehradun)</b>

		Exploring Phytochemical Diversity of MAPs Using Cutting-Edge Analytical Tools for Bioactive Compound Profiling
	CHIL	<b>Dr. Kishore Kumar Krishnani (ICAR, Ranchi)</b> Occurrence and remediation of Contaminants of emerging concern with major emphasis on microplastics and nanomaterials
	CHIL	<b>Prof. Anjali Pal (IIT- Kharagpur)</b> Metal catalyst on admicellar support for nitrophenol reduction
	CHIL	<b>Prof. Gautam Kumar Patra (GGU, Bilaspur)</b> Anion Sensing: Challenges and Opportunities
	CHIL	<b>Dr. Hemlata Shukla (Canossa Convent Girls Inter College, Cantt, Faizabad)</b> Electron Density, Molar Volume and Dipole Moment as descriptors for QSAR Study of the Antioxidant Activity of Flavonoids
11:30 AM-11:45 PM	<b>TEA BREAK</b>	

## Session-II

### ORAL PRESENTATIONS

(Biochemistry, Pharmaceutical and Applied Sciences)

(11:45 AM – 1:30 PM)

**VENUE: M. Sc. Final Chemistry**

**Chairman: Prof. Arti Parganiha**

(Mr. Deepak Sahu: 6263181127; Mr. Manoj Kumar: 7000907616)

11:45 AM- 1:30 PM	BPAOP-01	<b>Dr. Arvind Kumar Agrawal (PRSU, Raipur)</b> The campus of Pt. Ravishankar Shukla University has bagworm infestations
	BPAOP-02	<b>Anil Kumar Sahu (University of Allahabad)</b> Heavy Mineral Assemblages of ODP Site 724C: Insights into Sediment Provenance
	BPAOP-03	<b>Anand Gupta (IIT, BHU)</b> Optimizing Critical Suspension Speed in Gas-Sparged Vessels: Experimental Insights and Dimensionless Correlation Development
	BPAOP-04	<b>Chinmaya Mahapatra (NIT, Raipur)</b> Redox Cerium Oxide Nanoparticle coated Carbon Nanotube Nanocomposite for Antifungal Efficacy against <i>Aspergillus fumigatus</i>
	BPAOP-05	<b>Anuradha Sharma (PRSU, Raipur)</b> Assessment of Heavy Metal Contamination in Milk and

		Associated Health Risks in Raipur, India
	BPAOP-06	<b>Shivendra Singh Dewhare (PRSU, Raipur)</b> In silico molecular docking analysis of Staphylococcus aureus RecA with curcumin derivatives
	BPAOP-07	<b>Joanna Rai (NIT, Raipur)</b> Fabrication of High-Mechanical-Strength Bio-composite Scaffolds for Blood Vessel Regeneration and Wound Healing
	BPAOP-08	<b>Dr. Veenu Joshi (PRSU, Raipur)</b> Microbial degradation of textile dyes: An environmentally sustainable approach
1:30 PM -2:30 PM	<b>LUNCH</b>	

**Session-II**  
**INVITED LECTURES (BPA/Computer Science)**  
(11:45 AM – 1:30 PM)

**VENUE: Dr. CV Raman Hall**

**Chairman: Dr. Kishore Kumar Krishnani**

**(Dr. Dipti Pateriya: 9993489867; Ms. Priti Verma: 7587060007)**

11:45 AM – 1:30 PM	BPAIL-01	<b>Prof. Dwijendra Kumar Gupta (University of Allahabad)</b> LYSOSOMAL STORAGE DISEASES: Possible Use of Nanophosphor-Nanogold coated Immunoconjugates in Affinity purification of Lysosomal Transport Vesicles.
	BPAIL-02	<b>Prof. Basant K. Tiwary (Pondicherry University, Pondicherry)</b> Machine Learning in Clinical Diagnosis
	BPAIL-03	<b>Dr. Vijay Tripathi (Jacob Institute of Biotechnology and Bioengineering, Prayagraj)</b> Remedies for Contaminants in wastewater by Moringa oliefera and Azadiarchta indica Biochars: Cost-effective, sustainable and Eco-friendly approach
<b>Chair Person: Prof. Kavita Thakur/ Prof. Vinod K. Patle</b> <b>Invited Talk (Computer Science)</b>		
	CSIL-01	<b>Dr. Neeraj Rathore (IGNT University)</b> AI in Action: Revolutionizing the Modern World
	CSIL-02	<b>Prof. Alok Kumar Singh Kushwaha (GGU, Bilaspur)</b> Image Processing Application in Video Surveillance
	CSIL-03	<b>Dr. Rohit Raja (GGU, Bilaspur)</b> Advanced Detection and Classification of Lung Nodules Using Mask-3 FCM and TWEDLNN Algorithms
	CSIL-04	<b>Dr. Suraj Sharma (GGU, Bilaspur)</b> Blockchain technology and its application

1:30 PM -2:30 PM	<b>LUNCH</b>
------------------	--------------

**Session-III**

**ORAL PRESENTATIONS (Chemistry)**

(2:30 PM – 4:00 PM)

**VENUE: M. Sc. Final Chemistry**

**CHAIRMAN: Prof. Gautam Kumar Patra**

(Mr. Deepak Sahu: 6263181127; Mr. Manoj Kumar: 7000907616)

2:30 AM- 4:00 PM	CHOP-28	<b>Dr. Shraddha Shukla (PRSU Raipur)</b> Copper(II) and Nickel(II) Ternary Complexes: Synthesis, Physical Properties and Applications
	CHOP-29	<b>Vandana Singh Suryavanshi (PRSU Raipur)</b> Microencapsulation of Nelumbo Nucifera Leaf Extract with and its Antibacterial Studies
	CHOP-30	<b>Devendra Kumar Gond (IIT BHU, Varanasi)</b> Synthesis and Characterization of Environment-friendly Composite Film Using Turmeric Leaf Fiber and Polyvinyl Alcohol
	CHOP-31	<b>Prateek Diwan (NIT Raipur)</b> Utilizing Nature Tool Box for Crafting Metal Nanoparticles
	CHOP-32	<b>Dharini Sahu (PRSU Raipur)</b> Analysis of variations in Gaseous Emission factors from Different Solid Fuels Used in Domestic Combustion
	CHOP-33	<b>Suryakant Manikpuri (PRSU, Raipur)</b> Assessment of PM1 carbonaceous matter in an Urban-Industrial Environment

**Session-III**

**ORAL PRESENTATIONS (Computer Sciences)**

(2:30 PM – 4:00 PM)

**VENUE: Dr. CV Raman Hall**

**Chairman: Prof. Neeraj Rathore**

(Dr. Dipti Pateriya: 9993489867; Ms. Priti Verma: 7587060007)

02:30 PM-03:00 PM ONLINE	CSIL-05	<b>Dr. Pramod Gaur</b> (Nottingham Trent University, Nottingham, United Kingdom) <b>A Brain-Computer Interface</b>
03:00 PM- 4:30 PM	CSOP-01	<b>Paritosh Tripathi (DRML Avadh University Ayodhya UP)</b> Efficient Mobility Solutions Through Cost-Effective Vehicle Management
	CSOP-02	<b>Swagota Bera (PRSU, Raipur)</b> A Review on Estimation of soil Micronutrients using Remote Sensing
	CSOP-03	<b>Manisha Chandrakar (PRSU, Raipur)</b>



		Enhanced Energy Efficient LEACH Protocol Based on Modified Gravitational Search Algorithm for WSN-Assisted IoT
CSOP-04	<b>Namrata Sharma (PRSU, Raipur)</b>	Stock Price Forecasting With Sentimental Analysis And LSTM Based Models: A Review
CSOP-05	<b>V K Patle (PRSU, Raipur)</b>	Analytical study of MRHOF and OF0 Objective Functions in RPL For IoT
CSOP-06	<b>Deepak Kumar Deshmukh (PRSU, Raipur)</b>	A Review of Frequent Cyber Threats and its Solutions
CSOP-07	<b>Anju Tirkey (PRSU, Raipur)</b>	Review On Energy Consumption in Mobile Application
CSOP-08	<b>Mukesh Kashyap (PRSU, Raipur)</b>	Scalability Challenges in Cache Coherence Protocols
CSOP-09	<b>Ramesh Raj Dhruwe (PRSU, Raipur)</b>	A Review on Machine Translation Challenges for Low-Resource Languages
<b>VELIDICTORY FUNCTION</b>		