International Conference on
Progress and Challenges in Modern Day Sustainable Science (PCMDSS-2026)

2nd & 3rd November, 2026

Website: https://pcmdss.bborooahcollege.ac.in

Programme Schedule and Abstract Details

Organized by

Department of Chemistry
B. Borooah College (Autonomous)

In association with

Anusandhan National Research Foundation

Anusandhan National Research Foundation (ANRF)

ROYAL SOCIETY OF CHEMISTRY

Royal Society of Chemistry

Assam Science Technology and Environment Council, Govt. of Assam

ASSAM POLLUTION CONTROL BOARD
apcb
सत्यमेव जयते

Assam Pollution Control Board

International Conference
on
Progress and Challenges in Modern Day Sustainable Science (PCMDSS-2026)
Date: 2nd & 3rd November, 2026

Programme Schedule

<table>
<tr><td colspan="4">Day 1 2nd November, 2026</td></tr>
<tr><td colspan="4">Registration</td></tr>
<tr><td>09.00 - 10.00</td><td colspan="3">Venue: Dr. Bhupen Hazarika Auditorium</td></tr>
<tr><td colspan="4">Inaugural Session
(Venue: Dr. Bhupen Hazarika Auditorium)</td></tr>
<tr><td>10.00 - 11.15</td><td colspan="3">Inaugurator: Dr. Arup Kumar Misra
Chairman, Pollution Control Board, Assam
Guest of Honour: Dr. Jaideep Baruah
Director, Assam Science Technology & Environment Council
Keynote Address:
Speaker: Prof. Bhupendra Nath Goswami
ANRF Prime Minsiter Professor, Gauhati University</td></tr>
<tr><td></td><td colspan="3">High Tea (30 minute)</td></tr>
<tr><td>11.45 - 12.15</td><td colspan="3">Keynote Address
(Venue: Dr. Bhupen Hazarika Auditorium)
Speaker: Prof. Bill Jones
Yusuf Hamied Department of Chemistry
University of Cambridge, UK</td></tr>
<tr><td colspan="4">Technical Session I
Venue: Dr. Bhupen Hazarika Auditorium</td></tr>
<tr><td rowspan="3">12.15 - 13.15</td><td colspan="3">IL 1: Prof. Sasanka Deka
Delhi University</td></tr>
<tr><td colspan="3">IL 2: Prof. Ranjit Thakuria
Gauhati University</td></tr>
<tr><td colspan="3">IL 3: Prof. Tridib Kumar Sarma
IIT Indore</td></tr>
<tr><td colspan="4">Lunch Break (Poster Presentation PP-1 to PP-20)
(13.15 – 14.30)</td></tr>
<tr><td rowspan="8">14.30 - 16.00</td><td>Technical Session II
(Offline Mode)
Venue: S. M. Das Lecture Gallery</td><td>Technical Session III
(Hybrid Mode)
Venue: Conference Hall-1</td><td>Technical Session IV
(Hybrid Mode)
Venue: Conference Hall-2</td></tr>
<tr><td>IL 4: Prof. Debajyoti Mahanta
Gauhati University</td><td>IL 6: Prof. Ved Prakash Singh
Mizoram University</td><td>IL 7: Dr. Dhrubajyoti Kalita
Gauhati University</td></tr>
<tr><td>IL 5: Dr. Bipul Sarma
Tezpur University</td><td>SIL 4: Dr. Manoj Mon Kalita
Carl Zeise, Munich, Germany</td><td>IL 8: Dr. Tridib Sarma
Cotton University</td></tr>
<tr><td>SIL 1: Dr. Jiban Saikia
Dibrugarh University</td><td>SIL 5: Dr. Dhruba Jyoti Kalita
Aditya Birla Group, Mumbai</td><td>SIL 8: Dr. Surajit Sarker
ICFAI University Tripura</td></tr>
<tr><td>SIL 2: Dr. Gauranga Chakraborty
Rangapara College</td><td>SIL 6: Dr. Kangkan Talukdar
Tihu College</td><td>SIL 9: Dr. Sagar Sarma
S B Deorah College</td></tr>
<tr><td rowspan="2">SIL 3: Dr. Paramartha Gogoi
Sibsagar University</td><td rowspan="2">SIL 7: Dr. Biva Talukdar
EU Sustainable Technology, Munich, Germany</td><td>SIL10: Dr. Rupinder Singh
Cotton University</td></tr>
<tr><td>SIL11: Dr. Surajit Kalita
Tezpur University</td></tr>
</table>

Tea Break (10 minute)				
16.10-18.40	**Technical Session V (Online Mode)** Venue: Conference Hall-1	**Technical Session VI (Online Mode)** Venue: S. M. Das Lecture Gallery	**Technical Session VII (Hybrid Mode)** Venue: Conference Hall-2	**Technical Session VIII (Hybrid Mode)** Venue: Conference Hall-3
	SIL 12: Dr. Sabera Sultana *Dibrugarh University*	**IL 9: Prof. Sayan Bhattacharyya** *IISER Kolkata*	**SIL 19: Dr. Ashim Baishya** *Behali Degree College*	**SIL 23: Dr. Anupal Gogoi** *B. Borooah College (A)*
	SIL 13: Dr. Malabika Borah *B. N. College(A), Dhubri*	**IL 10: Prof. Suranjana V. Mayani** *Marwadi University, Rajkot*	**SIL 20: Dr. Abhilash Sharma** *B. Borooah College (A)*	**SIL 24: Dr. Apurba Kalita** *B. Borooah College (A)*
	SIL 14: Dr. Parmita Phukan *North Lakhimpur University*	**IL 11: Dr. Arunabhiram Chutia** *University of Lincoln, UK*	**SIL 21: Dr. Sukanya Baruah** *Silapathar College*	**SIL 25: Dr. Pradyumna Mazumdar** *B. Borooah College (A)*
	SIL 15: Dr Tarali Devi *IIT Hyderabad*	**IL 12: Dr. Anne-Christine Diehl** *Max Planck Institute for Chemical Energy Conversion, Germany*	**SIL 22: Dr. Kashyap Kumar Sarma** *Behali Degree College*	**SIL 26: Dr. Hemanta Kalita** *Nowgong Girls' College*
	SIL 16: Dr. Nipu Kumar Das	**SIL 18: Dr. Bidyut Bikash Sarma** *University of Toulouse, France*	**Oral Presentation:** OP-11, OP-12, OP-13, OP-14	**Oral Presentation:** OP-15, OP-16, OP-17, OP-18
	SIL 17: Dr. Rajesh Deka *Uppsala University, Sweden*			
	Oral Presentation: OP-1, OP-2, OP-3, OP-4, OP-5, OP-6	**Oral Presentation:** OP-7, OP-8, OP-9, OP-10		
18.40-20.00	**Cultural Programme**			
20.00-21.00	**Conference Dinner**			
End of Day 1				
Day 2	**3rd November, 2026**			
9.30 - 11.00	**Technical Session IX (Online Mode)** Venue: S. M. Das Lecture Gallery	**Technical Session X (Online Mode)** Venue: Conference Hall-1	**Technical Session XI (Online Mode)** Venue: Conference Hall-2	
	IL 13: Prof. Achintya Bezbaruah *North Dakota State University*	**IL 17: Dr. Mausam Kalita** *Stanford University School of Medicine, USA*	**SIL 28: Dr. Abdur Rahim** *University of Minnesota*	
	IL 14: Prof. Nadeesh M. Adassooriya *University of Peradeniya, Sri Lanka*	**IL 18: Dr. Debajit Sarma** *IIT Patna*	**SIL 29: Dr. Biju Majumdar** *Aix Marseille University, France*	
	IL 15: Dr. Sadhan Jyoti Dutta *CEO, Synthea*	**SIL 27: Dr. Partha J Das** *Harvard University, USA*	**SIL 30: Dr. Hitesh Das** *Madhab Choudhury College*	
	IL 16: Dr. Bhaskar Jyoti Deka *IIT Roorkee*	**Oral Presentation:** OP-19, OP-20, OP-21, OP-22	**Oral Presentation:** OP-23, OP-24, OP-25, OP-26, OP-27	
Tea Break (10 Minute)				
11.10-13.40	**Technical Session XII (Offline Mode)** Venue: Conference Hall-2	**Technical Session XIII (Offline Mode)** Venue: Conference Hall-1	**Technical Session XIV (Offline Mode)** Venue: S. M. Das Lecture Gallery	
	IL 19: Prof Amlan Kusum Roy *IISER Kolkata*	**IL 21: Dr. Tridib Kumar Goswami** *Gauhati University*	**IL 23: Prof. Prodeep Phukan** *Gauhati University*	
	IL 20: Dr. Ankur Kanti Guha *Cotton University*	**IL 22: Dr. Debabrata Baishya** *Gauhati University*	**IL 24: Prof Raja Shunmugam** *IISER Kolkata*	
			IL 25: Dr. Binod Bihari Palei *Department of CSIR-IMMT, Bhubaneswar*	

	SIL 31: Dr. Parashmani Das *Pragjyotish College*	**SIL 34: Dr. Siva PK Chetri** *Dimoria College*	**SIL 37: Dr. Rajan Kumar** *IIT Guwahati*
	SIL 32: Dr. Sarojmoni Kalita *Thong nokbe College, Karbi Anglong*	**SIL 35: Dr Pratiksha Bhorali** *Thong nokbe College, Karbi Anglong*	**SIL 38: Dr. Ashapurna Boro** *Cotton University*
	SIL 33: Dr. Somik Banerjee *B. Borooah College (A)*	**SIL 36: Dr. Ganesh Chandra Paul** *ICFAI University Tripura*	**SIL 39: Dr. Dhrubajyoti Talukdar** *NECBH, IIT Guwahati*
	Oral Presentation: OP-28, OP-29, OP-30, OP-31, OP-32, OP-33	**Oral Presentation:** OP-34, OP-35, OP-36, OP-37, OP-38, OP-39, OP-40	**SIL 40: Dr. Diganta Bhuyan** *Barnagar College*
Lunch Break (Poster Presentation PP-21 to PP-38) **(13.40 – 15.00)**			
Valedictory Session			
15.00 – 16.00	Venue: S. M. Das Lecture Gallery		

Contents

Abstract of Keynote Address		
Sl No	**Author**	**Title**
1	Prof. Bhupendra Nath Goswami	Challenges for Sustainability: Beyond GDP Growth Model
2	Prof. Bill Jones	Exploring pathways to *enable sustainable and efficient* manufacturing of medicines
Abstract of Invited Lectures		
IL-1	Prof. Sasanka Deka	Advanced nanomaterial-based catalysts for green H_2O_2, NH_3, and H_2 production
IL-2	Prof. Ranjit Thakuria	Application of Mechanochemistry in Molecular and Supramolecular Synthesis
IL-3	Prof. Tridib Kumar Sarma	Biogenic Self-Assembled Supramolecular Functional Materials: Nucleotide Hydrogels and Their Applications
IL-4	Prof. Debajyoti Mahanta	Design of Asymmetric Electrochemical Capacitors for Energy Storage
IL-5	Dr. Bipul Sarma	Smart Gels: A New Way to Separate Mirror-Image Molecules
IL-6	Prof. Ved Prakash Singh	Drug Design, Synthesis and Study of Novel Series of Bio-active analogues
IL-7	Dr. Dhrubajyoti Kalita	First-Principles Studies of Functional Materials for Solar Energy Conversion and Gas Sensing
IL-8	Dr. Tridib Sarma	Guest- and Metal-Induced Structural Changes in Hydroxy- and Methoxy-Substituted *meso*-Tetraaryl Porphyrins
IL-9	Prof. Sayan Bhattacharyya	Atomic Arrangement and Catalytic Function in Multimetallic Alloys
IL-10	Prof. Suranjana V. Mayani	Waste-to-Wealth Strategies through Sustainable Nanotechnology for Environmental Remediation
IL-11	Dr. Arunabhiram Chutia	The curious case of Ag-atoms on the Si(111)-7×7 surface
IL-12	Dr. Anne-Christine Diehl	How to benefit from insights into reaction mechanisms in reductive molecular electrocatalysis
IL-13	Prof. Achintya Bezbaruah	Convergence of Nano and Quantum Technologies for Sustainable Futures: Translating Molecular Precision into Ecosystem Resilience in India and the Northeast
IL-14	Prof. Nadeesh M. Adassooriya	Nanocrystallization approach for Advanced Pharmaceutical and Agrochemical Materials
IL-15	Dr. Sadhan Jyoti Dutta	Can Robotics and Deep Technologies Revolutionize Food Manufacturing for a Sustainable Future?
IL-16	Dr. Bhaskar Jyoti Deka	Membranes for a Water-Secure Future: Progress, Pitfalls and the Path to Sustainability
IL-17	Dr. Mausam Kalita	Visualizing proinflammatory myeloid cells in neuroinflammation and brain metastases with GPR84-positron emission tomography
IL-18	Dr. Debajit Sarma	Coordination-Directed Self-Assembled Frameworks: Structure–Property Relationships in Catalytic and Sensing Applications
IL-19	Prof. Amlan Kusum Roy	Current status of In DFT
IL-20	Dr. Ankur Kanti Guha	Aromaticity: Legacy for 200 years

IL-21	Dr. Tridib Kumar Goswami	Metalloporphyrins for Photodynamic Therapy
IL-22	Dr. Debabrata Baishya	Sustainable Glycoscience: From Renewable Biomass Valorisation to Functional Oligosaccharides and Biomedical Application
IL-23	Prof. Prodeep Phukan	DMAP-Based Metal Complexes for Sustainable Organic Catalysis: From Ligand Accelerating Effects to Synthetic Applications
IL-24	Dr. Raja Shunmugam	
IL-25	Dr. Binod Bihari Palei	Green synthesis of Graphene from O-Carbon and its reinforcement in synthetic Anorthite from secondary steelmaking slag for aerospace applications
Abstract of Short Invited Lectures		
SIL-1	Dr. Jiban Saikia	Plant Nutrient-Crosslinked Biodegradable Hydrogels for Controlled Nutrient Release and Pathogen Prevention intending Sustainable Agriculture
SIL-2	Dr. Gauranga Chakraborty	Synthesis and Glutathione Peroxidase (GPx)-like activity of Tiopronin analogues containing Selenium
SIL-3	Dr. Paramartha Gogoi	Valorization of E-Waste from Spent Lithium-Ion Batteries
SIL-4	Dr. Manoj Mon Kalita	The Hidden Plastic Footprint of Medical Device Packaging
SIL-5	Dr. Dhrubajyoti Kalita	Functional fibers for a greener World: Solving everyday problems with sustainable cellulose
SIL-6	Dr. Kangkan Talukdar	Pd(II)-Catalyzed C(sp^3)-H Alkoxycarbonylation of 8-Methylquinolines with $Mo(CO)_6$ as a CO Surrogate
SIL-7	Dr. Biva Talukdar	From Chemistry to Industry: Advancing Critical Mineral Recovery from Electric and Electronic Waste
SIL-8	Dr. Surajit Sarker	Design, Synthesis, and Mechanistic Evaluation of Boronopeptide-based Proteasome Inhibitors: Selective Anti-Cancer Activity in Breast Cancer Cells
SIL-9	Dr. Sagar Sarma	Computational Design of Organic Semiconductors: Heteroatom and Substituent Effects on Structure–Property Relationships and Charge Transport
SIL-10	Dr. Rupinder Singh	A Benzil-Derived Molecular Sensor for Naked-Eye Detection of Cu(II) Ions
SIL-11	Dr. Surajit Kalita	Nature's Catalytic Strategies for Sustainable Chemistry: The Role of Local Electric Fields in Enzymatic Reactivity
SIL-12	Dr. Sabera Sultana	Synthetic Strategies for the Construction of Functionalized Aromatic Compounds and Heterocycles
SIL-13	Dr. Malabika Borah	A comparative study of cleansing action of detergents based on surface tension values
SIL-14	Dr. Parmita Phukan	Sustainable Multicomponent Synthesis of 4-Aryl-NH-1,2,3-Triazoles under PEG-400-Mediated ZnO Nanocatalysis
SIL-15	Dr. Tarali Devi	Bioinspired Metalloenzyme Mimetics for Small Molecule Activation
SIL-16	Dr. Nipu Kumar Das	Thermophysical Characterisation, Heat Transfer Analysis, and Green Chemistry Evaluation of Menthol-Lauric Acid Deep Eutectic Solvent/MWCNT-COOH Nanofluids for Sustainable Thermal Energy Storage
SIL-17	Dr. Rajesh Deka	When Molecules Twist: Contortion, Electronic Structure, and Redox Chemistry of Phosphaalkenes

SIL-18	Dr. Bidyut Bikash Sarma	X-ray Absorption and Emission Spectroscopy to Investigate Electron Transfer Oxygen Transfer Reactions of Polyoxometalate
SIL-19	Dr. Ashim Baishya	Binding and Functionalization of Dinitrogen (N_2) at Main Group Metal Centers
SIL-20	Dr. Abhilash Sharma	Azulene containing natural products
SIL-21	Dr. Sukanya Baruah	Mulberry Fruit Extract Mediated Green Synthesis of Bimetallic Ni-Co Nanoparticles and Their Antibacterial Potential
SIL-22	Dr. Kashyap Kumar Sarmah	Synthesis of drug–drug and drug–nutraceutical multicomponent solids of Olanzapine using Mechanochemistry
SIL-23	Dr. Anupal Gogoi	Selective detection of copper using readily accessible bisthiazoleimine
SIL-24	Dr. Apurba Kalita	Ligand Engineering and Cooperative Strategies in Copper-Based Molecular Catalysts for Electrocatalytic Water Oxidation
SIL-25	Dr. Pradyumna Mazumdar	DFT and molecular dynamics simulations of single-walled carbon nanotubes for nitrogen mustard drug delivery
SIL-26	Dr. Hemanta Kalita	Synthesis and Properties of Oxacorroles and P (V) Complexes of meso-Aryl 25-Oxasmaragdyrins
SIL-27	Dr. Partha J Das	"A First-in-Class Zebrafish Embryo Separation Using MagLev
SIL-28	Dr. Abdur Rahim	Identification of Protein Readers of N6medA Epigenetic Mark in Human Brain
SIL-29	Dr. Biju Majumdar	Advancing Oligonucleotide Delivery and Biophysical Properties by Chemical Modifications
SIL-30	Dr. Hitesh Das	Night Jasmine (Nyctanthes arbor-tristis L.) Leaf Powder as a Biosorbent for the Adsorption of Methylene Blue and Congo red from Aqueous Solutions
SIL-31	Dr. Parashmani Das	Assessment of Groundwater Quality near MSW Open Dumping Site Boragaon, Guwahati, Assam, India
SIL-32	Dr. Sarojmoni Kalita	Dye encapsulated clays, zeolites and mesoporous materials as fluorescent and electrochemical sensors
SIL-33	Dr. Somik Banerjee	Evolution of Crystallographic Parameters, Microstrain, and Crystallite Size in Fe_2O_3 Nanoparticles with Calcination Temperature: Insights from Rietveld Refinement
SIL-34	Dr. Siva PK Chetri	"Ethnobotanical Survey of Medicinal Plants for Hepatic Disorders in Dimoria region with Phytochemical Evaluation of Phyllanthus niruri for Hepatoprotective Potential"
SIL-35	Dr. Pratiksha Bhorali	A pd(ii) catalyzed denitrative alkyne annulation reaction for the synthesis of cyclopenta[*b*]chromanes
SIL-36	Dr. Ganesh Chandra Paul	Experimental and Theoretical Insights into an Unsupported Oxo-Bridged Mn (III,III) Dimer with Two Iminobenzosemiquinone π-Radical Ligands
SIL-37	Dr. Rajan Kumar	Unique Methods Adopted using Functional Materials to Sense Mercury
SIL-38	Dr. Ashapurna Boro	Marble dust and Ocimum tenuiflorum mediated green synthesis of CaO nanocatalysts supported on bentonite clay and its application in biodiesel production using Mustard Oil
SIL-39	Dr. Dhrubajyoti Talukdar	Precision Oxidation: A Novel Catalyst for the Selective Conversion of Sulfides to Sulfoxides Using H_2O_2
SIL-40	Dr. Diganta Bhuyan	Comparative photocatalytic performance of ZnO nanomaterials for Malachite Green dye degradation under solar light

Abstract of Oral Presentation		
OP-1	Manoj Upadhyay	Unlocking Nonlinear Fluorescence through Sequential Excitation: Tricyanofuran-Substituted Merocyanine–Fluorophore Dyads
OP-2	Jinti Moni Kumar	Supramolecular polymerization-driven fluorescence enhancement and liquid-crystalline behavior of diazaanthracene macrocycle
OP-3	Archita Kar	Interfacial Band Alignment and Charge-Carrier Dynamics in $CoWO_4/Bi_2MoO_6$ Heterostructures for Enhanced Photoelectrochemical Performance
OP-4	Saurav Saha	Programmed Zinc Loss Directs Carbon Pathways for Long Term Coke-Tolerant DRM
OP-5	Dhruba Jyoti Deka	Tyrosinase Enzyme-Inspired Cu(I)-Porous Organic Polymer for Selective Oxidation of Biomass-Derived 5-HMF
OP-6	Meetali Borah	TCLP-based assessment of heavy metal leachability in soils near the Boragaon MSW Dumping Site, Guwahati, Assam, India
OP-7	Debajit Kalita	Kinetic Frustration of Collagen Folding Drives Condensate-Mediated Fibrous Assembly
OP-8	Partha Pratim Deka	Degradable Imine-based Conjugated Polymers
OP-9	Suryakamal Sarma	Minimalist Structural Tunability in G-Quadruplex Driven Biomass DNA Hydrogel Enables Multiple Programmable Drug Release Regimes for Anticancer Therapeutics
OP-10	Himakshi Baishya	Development of pH sensitive, intelligent film from PVA and gelatin loaded with betacyanin from Clitoria ternatea.L for real-time monitoring of spoilage in food sample
OP-11	Hrishikesh Talukdar	Nickel Catalyzed O-Methylation of Cinnamic Acid Using DMSO as a Methyl Surrogate
OP-12	Rabu Ranjan Changmai	Theoretical study of the mechanism, thermodynamics and kinetics of the reaction of $CF_3CH_2CFCl_2$ (HCFC-234fb) with OH-radicals and Cl-atoms
OP-13	Pinky Das	Challenges of Modern-Day Sustainable Development
OP-14	Ishan Saikia	Traditional Environmental Knowledge of Assam and Their Relevance to Sustainable Development
OP-15	Dr. Satyabrata Baruah	Religion and Environment: Ecological Crisis, Indigenous Knowledge and the Quest for a Sustainable Future
OP-16	Dr. Pranjal Das	Influence of ternarification and chelate ring size on electrocatalytic water oxidation by Cu (II) complexes
OP-17	Dr. Madhusmita Devi	Empowering Young Minds for a Sustainable Future: Implementation of the Environment Education Programme (EEP) in Assam
OP-18	Dr. Anjan Deka	Climate Change, Changing agricultural practices and the loss of indigenous farming knowledge in Assam
OP-19	Diku Raj Deka	Tailoring Surface Defects in SBA-15 via Heteroatom Distortion for Enhanced CO_2-to-Methanol Yield
OP-20	Priyam Sarma Baruah	Molecular Dynamics Study On Transdermal Neurological Drug Penetration Through Blood-Brain-Barrier
OP-21	Dhritismita Sarma	ns2 Electron Engineering in Zero-Dimensional Metal Halides for Modulating Emission Behaviour
OP-22	Arkojyoti Majumdar	Optimization and Prediction of Methylene Blue Adsorption onto Hibiscus rosa-sinensis Using Response Surface Methodology and Artificial Neural Networks
OP-23	Nilotpal Deka	A Highly Electrostrictive A2BX4-Type Hybrid 2D Perovskite Ferroelectric and the Utility of Its Piezoelectric Nanogenerator in Wireless Mat-Sensor Technology

OP-24	Pranjit Barman	Accelerated Zn^{2+} Diffusion Kinetics with a High Redox-site Utilization in an All-organic Aqueous Zn-ion Battery
OP-25	Debasmita Sarkar	Exploring Antimicrobial Activity of Fungal Flora Inhabiting in Houttuynia cordata Thunb
OP-26	Dr. Raktim Deka	Lighting up the dark triplets: Potential in future Display and Energy Solutions
OP-27	Bhaskar Kakoty	A Contrasting Tale of Two Lactam Co-solvents in Affecting Zn-anode Performance
OP-28	Chayanika Pathak	A Dual-Functional Zirconium-Based Metal-Organic Framework for Catalytic Carbon Dioxide Fixation into Cyclic Carbonates
OP-29	Simanta Kalita	Optically switchable CLEAR probes enable rapid, biocompatible, high-plex immunofluorescence imaging
OP-30	Dr. Monalisha Sarma	Effects of Side-Chain Functionality and Conformation on Anion Binding by Squaramide-Based Dipeptides: A Computational Study
OP-31	Ruhit Kumar Paul	Engineering a ZnSe/CeO_2@ZnNiFe-LDH Hybrid for Dual Environmental Remediation: Organic Pollutant Degradation and Chromium Detoxification under Sunlight
OP-32	Hima Barman	Radical Mediated Photochromism in a Naphthalenediimide-Based Cadmium Metal-Organic Framework: Mechanistic Insights and Sensing Applications
OP-33	Akbar Hussain	Engineering a Magnetically Separable SnO2/Fe_3O_4/WSe_2 Heterostructure for Efficient Photocatalytic Degradation of Tinidazole in Aqueous Environments
OP-34	Bandita Kalita	Synthesis of Nitrogen and Sulfur doped Graphene Quantum Dots and the study of their Fluorescence
OP-35	Mustafizur Rahman	Electrochemical Screening of MXene–Electrolyte Couples Using Cavity Microelectrode (CME)
OP-36	Prakriti Sharma	A Study on the Biochemical analysis of insects consumed by the ethnic groups in South Kamrup of Kamrup district of Assam, India.
OP-37	Surabhi Lahkar	Phloroglucinol Based Covalent Organic Polymers as Metal-free Organocatalyst for CO_2 Cycloaddition Reactions
OP-38	Dhirunabh Swargiary	Exploring Antimicrobial Activity of Fungal Flora Inhabiting in Houttuynia cordata Thunb
OP-39	Saurav Paul	Hydrogen-Bond Donor Assisted CO_2-Epoxide Cycloaddition Catalysed by Schiff Base-Derived Ionic Liquids
OP-40	Debolin Das	An Assessment of Trophic Status of Deepor Beel Wetland with Special Reference to Carlson's Trophic State Index and Phytoplankton Diversity

Abstract of Poster Presentations

PP-1	Binod Chhetry	Green Synthesis of Benzothioamide Derivatives Using a Choline Chloride–Urea Deep Eutectic Solvent.
PP-2	Angarag Kashyap	DFT Investigation of Doxorubicin Tautomers Intercalation
PP-3	Dr. Dipsikha Kalita	Analysis of lateral distribution of Cherenkov light and its dependence on air shower parameters
PP-4	Dr. Smritimala Sarma	Nature's Blue in a New Light: Spectroscopic Insights into Butterfly Pea Extracts
PP-5	Dr. Nandini Roy	Green synthesis of silver nanoparticles using Clitoria ternatea and application in chemical dye degradation
PP-6	Dr. Anindita Deka	Nanoscale Surface Engineering of Silicon through Ion-Beam Irradiation: A Route Towards Chemically Sustainable Nanofabrication

PP-7	Kripangkar Choudhury	Tuning Aziridinium Ion Formation in the Anticancer Drug Melphalan using External Electric Fields: A Density Functional Theory Study
PP-8	Bishnujyoti Kashyap	Electric Field-Induced Changes in the Structure, Aromaticity, and Electronic Properties of 1,4-Dioxin, 1,4-Dithiin, and 1,4-Diselenin: A DFT Study
PP-9	Dr. Diganta Kumar Sarma	Investigating the Onset of the Southwest Monsoon over North-Eastern India using ERA5 Reanalysis Data
PP-10	Baisali Hazarika	Electrocatalytic Water Oxidation by Ternary Cu(II) Complexes of Redox Active Amino Acids
PP-11	Moitreyee Bhattacharjee	Synthetic Access to N-Aryl-N-Sulfonyl Cyanamides via Metal-Free Amidoxime Rearrangement
PP-12	Shuchangi Deka	Endowing Multifunctionality in Lanthanide(III) based Molecular Materials
PP-13	Lakhya Jyoti Gogoi	Metabolomic Profiling and Bioactivity of Centella asiatica (L) Urb. Leaf Extracts: Antioxidant and Anti Biofilm Effects on Yeast
PP-14	Ananta Sarkar	Donor-π-Acceptor-Based Multifunctional Near-Infrared Small Organic Molecules for Turn-On Fluorescence Detection and Therapeutic Modulation of Amyloid-β Fibrils in Alzheimer's Disease
PP-15	Dhrubajyoti Talukdar	Supramolecular control of charge separation in panchromatic light-harvesting heteromeric dye foldamers
PP-16	Swashat Pran Das	Heterogeneous Crystallization using Low Molecular Weight Gels for Controlled Polymorphism in APIs
PP-17	Rinkee Routh	Socio-Economic Inertia in Local Apiculture: A Diagnostic Study on Production-Commercialization Gaps in South Kamrup, Assam
PP-18	Barsha Rani Gohain	Selective Detection of Picric Acid Using 2D Zinc-Coordination Polymer (Zn-CP): "Turn On" Fluorescence Response Triggered by PET Suppression
PP-19	Amit Das	Double Möbius Aromaticity in Oxo-Platinum Complex
PP-20	Palash Jyoti Thakuria	C4Ae (Ae = Be – Ba) Cluster: Planar Tetracoordinate Alkaline Earth Metals and Involvement of d-orbital for Heavier Alkaline Earth Metals
PP-21	Himangshu R. Bujarbaruah	Morphological and Structural study of Clitoria ternatea Extract Films for Sustainable Applications
PP-22	Dhritismita Das	Insect-Based Resources and Livelihoods: Exploring their Potential for Sustainable Development in South Kamrup, Assam
PP-23	Nitisha Baruah	Computational Study on Thermodynamic Properties and Radical Susceptibility of Selected Organochlorine and Carbamate Pesticides
PP-24	Nikhil Bharali	Molecular-Level Insights into Methane Affinity of COF Building Blocks: A Computational Study
PP-25	Dhanyashree Das	Guest-Dependent Charge Transfer and Folding of NDI-Oligomers
PP-26	Dona Deb	Harnessing G-Quartet Interactions to Engineer Sericin Based Supramolecular Hydrogel for Efficient Encapsulation and Delivery of Hydrophobic Drugs
PP-27	Pranati Choudhury	Polarity-Tuned Deep Eutectic Solvents for Efficient Extraction of Phenolics from Bambusa-balcooa
PP-28	Nipa Basumatary	Defining the relationship of bulk density, particle density and soil porosity with soil organic carbon in different tillage sites of Chirang and Kokrajhar districts of Assam
PP-29	Jakia Parbin Sultana	Antibacterial Activity of Flavone-based Metal Complexes

PP-30	Nabadeep Kalita	Odd-even effect controls twist-elasticity of an organic fluorophore in cocrystals prepared using mechanochemistry
PP-31	Nabajit Barman	Functionalized Borophene Quantum Dots as Fluorescence Probes for Folic Acid Detection
PP-32	Jyotismita Saikia	Development of a novel imine Base Ligand based on N-phenylacetamide, for selective detection and complexation of copper (II) ion
PP-33	Karishma Talukdar	Multifunctional properties of green extract mediated NiO and Cu-NiO bimetallic nanoparticles
PP-34	Kaushik Kakoti	Redox-Driven Modulation of Peroxidase-Like and Radical-Scavenging Activities in Core–Shell Fe_3O_4 Nanocomposites
PP-35	Subhrata Dutta	Selective Removal of Gadolinium from Hospital Wastewater Using Capacitive Deionisation with Anodised Aluminium Electrodes
PP-36	Niku Ahmed	Engineering Cyano-Bridged [CoFe] Molecular Dimers with Multi-Functional Behaviour
PP-37	Dabasish Deka	Ligand-Directed Assembly of Cyanido-Bridged Complexes with Trigonal-Bipyramidal Co(II)/Fe(II) Centers
PP-38	Dr. Shivanee Borpatra Gohain	Ni–V stabilized Ag/AgCl nanocomposite for multifaceted reaction