

# Program Schedule

**National Conference**  
on  
**Advances in Chemical Research (ACR-2022)**  
22-23 April, 2022

Venue: Department of Chemistry, Manipur University

Code for Google Meet: [zsa-ycxg-uta](https://meet.google.com/zsa-ycxg-uta)

## Day 1 : 22 April 2022 (Friday)

9:30 AM – 10:00 AM : Registration and Tea

10:00 AM – 11:05 AM : Inaugural Programme

Chief Guest **Prof. K. Yugindro Singh**  
*Dean, School of Mathematical & Physical Sciences*

Guests of Honour **Prof. Laitonjam Warjeet Singh**  
*Director, R&D Cell, MU*  
**Prof. Ng. Nimai Singh**  
*Controller of Examinations*

President **Prof. Okram Mukherjee Singh**  
*Head, Department of Chemistry, MU*

### Technical Session 1

Chairperson: **Prof. Laitonjam Warjeet Singh**

11:10 AM – 11:40 AM : PL **Prof. Subrata Ghosh**, IACS Kolkata  
Total Synthesis of Natural Products - A Never-Ending Challenge

11:45 AM – 12:05 AM : IL-01 **Prof. Prodeep Phukan**, Gauhati University  
A Square Pyramidal [Cu(DMAP)<sub>4</sub>]I Catalyst for C-C and C-Heteroatom Bond Forming Reactions

12:10 PM – 12:30 PM : IL-02 **Prof. Rajib Kumar Goswami**, IACS Kolkata  
Total Synthesis of Bioactive Natural Products: Carolacton and Alveolaride C

12:35 PM – 12:55 PM : IL-03 **Prof. Anil K. Saikia**, IIT Guwahati  
Stereoselective Synthesis of Heterocyclic Compounds

Lunch Break & Poster Session (1:00 PM – 2:00 PM)

**PP-01 to PP-40**

### Technical Session 2

Chairperson: **Prof. Homendra Naorem**

2:00 PM – 2:20 PM	: IL-04	<b>Dr. Keisham S. Singh</b> , CSIR-NIO Goa Ruthenium(II)-Catalyzed Synthesis of Heterocycles and Selected Marine Natural Product Analogues
2:25 PM – 2:45 PM	: IL-05	<b>Dr. N. Raghmani Singh</b> , BARC Mumbai Application of Nanoparticles in Cancer Therapy
2:50 PM – 3:00 PM	: OP-01	<b>Paresh Debnath</b> , NIT Agartala Synthesis, Characterization, Crystal Structures and Anti-Diabetic Assay of Dibutyltin(IV) Complexes with Azo-Carboxylates
3:00 PM – 3:10 PM	: OP-02	<b>Ningombam Ibenoubi Devi</b> , Manipur College Studies on the Stepwise Stability Constants and the Thermodynamic Quantities Pertaining to the Interaction of Some Bivalent Transition Metal Complexes with 1-Amidino-O-Isopropylurea
3:10 PM – 3:20 PM	: OP-03	<b>Pratima Debnath</b> , NIT Agartala Organotin(IV) Azo-Carboxylates: Synthesis, Characterization, Crystal Structures and Anti-Diabetic Activity
3:20 PM – 3:30 PM	: OP-04	<b>Sagolsem Nonganbi Chanu</b> , NIT Manipur Design and Preparation of Reduced Graphene Oxide/Vanadium Pentoxide/Polycaprolactone Nanofiber as Supercapacitor Electrode Material
3:30 PM – 3:40 PM	: OP-05	<b>Kriti</b> , Himachal Pradesh University Synthesis of Plantago Ovata and Vinylsulfonic Acid Sodium Salt based Polymeric Networks for Removal of Mercuric Ions from Wastewater

Tea Break (3:40 PM – 4:00 PM)

### Technical Session 3

Chairperson: **Prof. Okram Mukherjee Singh**

4:00 PM – 4:20 PM	: IL-06	<b>Dr. T. Sanjoy Singh</b> , Assam University Photophysics of Donor-Acceptor Based Schiff Base Systems in Varying Solvents Polarities
4:20 PM – 4:30 PM	: OP-06	<b>Atom Rajiv Singh</b> , Manipur University Synthesis, DFT and Crystal Structure of Three Oxovanadium(IV/V) Complexes with Substituted 2,2-bipyridine

4:30 PM – 4:40 PM	: OP-07	<b>Ligands and it's Antidiabetic Property Studies</b> <b>Jhuma Debbarma</b> , NIT Agartala Synthesis of N/N-S Containing Graphene from Fruitwastes: Chemistry and Mechanism
4:40 PM – 4:50 PM	: OP-08	<b>Rameshor S. Atom</b> , Manipur University Phytochemical Profiling of Petroleum Ether and Chloroform Extracts of Curcuma Caesia Rhizome by GC-MS and Comparing Their Bioactivities
4:50 PM – 5:00 PM	: OP-09	<b>Nishithendu Bikash Nandi</b> , NIT Agartala Structures, Redox, Magnetic and Protein Binding Properties of Two Monomeric Copper(II) Complexes Derived From 1,3-Dimethyl-5-(4'/3'-pyridylazo)-6-aminouracil
5:00 PM – 5:10 PM	: OP-10	<b>M. Asharani Devi</b> , Manipur University Release of Iodine Entrapped in Hydrogels of Aloe Vera or Gelatin or Blended Hydrogels of Aloe Vera and Gelatin in Aqueous Media and the Kinetics of the Release Process
5:10 PM – 5:20 PM	: OP-11	<b>Puneet Kumar</b> , Himachal Pradesh University Synthesis of Guar Gum Based Potent Hydrogel for Dye Adsorption
5:20 PM – 5:30 PM	: OP-12	<b>Rakhi Khunjamayum</b> , Manipur University Antimicrobial Activities and Identification of Chemical Constituents from Endophytic Bacteria Associated with Ethnomedicinal Plants

**Day 2 : 23 April 2022 (Saturday)**

<b>Technical Session 4</b>		
Chairperson: <b>Prof. R. K. Lonibala</b>		
9:30 AM – 9:50 AM	: IL-07	<b>Prof. M. R. Maurya</b> , IIT Roorkee Synthesis, Reactivity and Catalytic Potential of Vanadium Complexes
9:55 AM – 10:15 AM	: IL-08	<b>Prof. G. Krishnamoorthy</b> , IIT Guwahati Proton Transfer Triggered Processes
10:20 AM – 10:40 AM	: IL-09	<b>Prof. Ramesh Chandra Deka</b> , Tezpur University QM/MM Studies on the Mechanism of CO Oxidation over Pd <sub>4</sub> Catalyst
10:45 AM – 10:55 AM	: OP-13	<b>Sophy A. Shimray</b> , Manipur University Assessment of Density Functional for Predicting Structural and

10:55 AM – 11:05 AM	: OP-14	<b>Electronic Energies in Photoactive Biomolecules</b> <b>Manish Rana</b> , Jamia Millia Islamia Pyrazoline Analogs as Potential Anticancer Agents and their Apoptosis, Molecular Docking, MD Simulation, DNA Binding and Antioxidant Studies
11:05 AM – 11:15 AM	: OP-15	<b>Pintubala Kshetri</b> , ICAR Imphal Extraction and Characterization of Melanin from Poultry Feathers Using Keratinolytic Bacteria

Tea Break (11:15 PM – 11:30 PM)

<b>Technical Session 5</b>		
Chairperson: <b>Prof. Nongmaithem Rajen Singh</b>		
11:30 AM – 11:50 AM	: IL-10	<b>Prof. Kiran Kumar K. Sharma</b> , Shivaji University Innovations in Nanoscience and Nanotechnology: Role of Chemistry
11:55 AM – 12:15 PM	: IL-11	<b>Dr. Meitram Niraj Luwang</b> , NCL Pune Graphene Nanogate Structure: A New Chemical Bond Entity and Its Energy Applications
12:20 PM – 12:40 PM	: IL-12	<b>Dr. Chingakham Brajakishor Singh</b> , IBSD Imphal Zerumbone, a Sesquiterpene from Zingiberaceae plant, <i>Zingiber zerumbet</i> Smith as Anti-Cancer Agents
12:40 PM – 12:50 PM	: OP-16	<b>Lisham Paris Chanu</b> , Manipur University Effect of Transition Metal Ions Substitution at Mn-Site on the Structural and Electrical Properties of Multiferroic Rare Earth Manganite $YMnO_3$
12:50 PM – 1:00 PM	: OP-17	<b>Sh. Anju Devi</b> , Manipur University Enhanced Visible Light Active Photocatalytic Performance of CdS/PVDF Nanocomposite towards Malachite Green Dye Degradation

Lunch Break & Poster Session (1:00 PM – 2:30 PM)

**PP-01 to PP-40**

<b>Technical Session 6</b>		<b>Technical Session 7</b>	
Chair: <b>Prof. R. K. Bhubon Singh</b>		Chair: <b>Dr. W. Rameshwar Singh</b>	
2:30 PM – 2:40 PM	: OP-18	: OP-29	
	<b>Reema Khangembam</b> , MU Evaluation of Acute Toxicity of Seed Extract of <i>Catunaregam spinosa</i> (Thunb.) (Rubiaceae) using Zebra Fish ( <i>Dani rerio</i> ) as a Model	<b>Salam Asbin Singh</b> , MU Prospective Novel Bioactive Compound in Chloroform Fraction of <i>Oroxylum indicum</i> Leaves Induce Apoptosis in HeLa and PC3 Cells	

	Organism	through Differential Molecular Mechanism
2:40 PM – 2:50 PM	: OP-19 <b>Yengkhom Dhanapriya Devi</b> , MU Synthesis and Characterization of Bi-Functional Magneto-Luminescent Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> @GdPO <sub>4</sub> :Tb <sup>3+</sup> ,Ce <sup>3+</sup> Composites for Hyperthermia Application	: OP-30 <b>S. Babeeta Chanu</b> , MU Oak tasar ( <i>Antheraea proylei</i> J.) Cocoon Sericin Extract Exhibits both Chemical and Cellular Antioxidant Activities
2:50 PM – 3:00 PM	: OP-20 <b>L. Anju Chanu</b> , MU Bridging of ZnO Nanostructure with CuO to Form Nanocomposite for Enhanced Photocatalytic Activity	: OP-31 <b>S. Pramodini Devi</b> , MU Studies on DNA Interaction of bis(1-Phenylamidino-O-alkylurea)copper(II) Perchlorate Complexes (alkyl = methyl, ethyl, n-propyl, n-butyl, iso-butyl or n-pentyl)
3:00 PM – 3:10 PM	: OP-21 <b>Tanuj</b> , Himachal Pradesh University Green Synthesis of Metal Oxide Nanoparticles by Using Rhododendron Arboretum	: OP-32 <b>Khaidem Dilan Kumar Singh</b> , MU Effects of substitution on Excited State Intramolecular Proton Transfer (ESIPT) reactions in 12,12 $\alpha$ -dihydrobenzo[4,5]imidazo[2,1- $\alpha$ ]isoquinoline: A Density Functional Theory Study
3:10 PM – 3:20 PM	: OP-22 <b>Salima Begum</b> , MU Green Synthesis of Silver Nanoparticles Using Medicinal Plant Extract: Anticancer Activities and DFT Studies	: OP-33 <b>T. Suma Chanu</b> , MU Structural, Optical and Electrical Properties of PVA/Ag Doped ZnO Nanocomposite Films for Multifunctional Application
3:20 PM – 3:30 PM	: OP-23 <b>Chetan Chauhan</b> , Himachal Pradesh University Synthesis and Characterization of Copper (II) Complex of Sodium Salt of Chloro-Benzoic Acid	: OP-34 <b>Sangeeta Yanglem</b> , MU 2,2-Diphenyl-1-picryl-hydrazyl Free Radical Scavenging Activity of Different Parts of <i>Homalomena aromatica</i> (Spreng.) Schott
3:30 PM – 3:40 PM	: OP-24 <b>Ramina</b> , MU Synthesis, Characterization and CT-DNA Binding Studies On Co(III), Ni(II) and Cu(II) Schiff Base Complexes of (E)-6-hydrazinyl-N'-(1-(2,3-dihydro-1,3-dioxo-1Hinden-2-yl)ethylidene)pyridine-3-	: OP-35 <b>T. Kriyananda Singh</b> , Imphal College Comparative Study of Energy Interaction Parameters for the Complexation of Pr(III) with Cytidine in Absence and Presence of Zn(II) in Aqueous and Aquated Organic Solvents

3:40 PM – 3:50 PM	carbohydrazide (L) : OP-25 <b>L. C. Sonia, MU</b> Law of Approach to Saturation Magnetization and Induction Heating Study of Zinc Substituted CoFe <sub>2</sub> O <sub>4</sub> for Magnetic Hyperthermia Applications	: OP-36 <b>A. Deepak Sharma, MU</b> The Impact of Co-Doping in Nanocrystalline Multiferroic Thin Films of Bismuth Ferrite on Transparent Substrate
3:50 PM – 4:00 PM	: OP-26 <b>Potsangbam Jolly Devi, MU</b> Sericin from <i>Antheraea proylei</i> J.cocoons Induces Cell Death through Activation of p38 in PC3 Cells	: OP-37 <b>Kshetrimayum Ophelia, MU</b> Antioxidant Activity Analysis of Methanolic Extracts from the Inflorescence of <i>Elsholtzia communis</i>
4:00 PM – 4:10 PM	: OP-27 <b>Amar Ningthoujam, MU</b> Effect of Various Ionic Liquid Media on the Energy Storage Performance of Cell Employing Coronene and Its Mono Heteroatom Substituted Analogues as Electrodes	: OP-38 <b>Khullakpam Shaheen, MU</b> Partial Characterization of Bioactive Metabolites from Streptomyces sp. MBRL 758 Associated with <i>Celtis timorensis</i> (Heigregng)
4:10 PM – 4:20 PM	: OP-28 <b>Langlen Meinam, MU</b> A Comparative Study Between Oak Tasar ( <i>Antheraea proylei</i> J.) and Mulberry ( <i>Bombyx mori</i> L.) Silk Cocoon Fibroin Thin Films with Respect to Biomaterial Application	

Tea Break (4:20 PM – 4:40 PM)

4:45 PM – 5:15 PM	:	Valedictory Function Chief Guest <b>Prof. S. K. Srivastava</b> <i>Professor of Chemistry, MU &amp; Former VC, NEHU Shillong</i>
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