

# International Symposium on Materials of the Millennium: Emerging Trends and Future Prospects (MMETFP-2021)

**November 19-21, 2021**

**Onsite Venue: Pandit Deendayal Energy University, Gandhinagar, Gujarat, India**

Program Overview:

## Day: 1, November 19, 2021, Friday

8:30 am - 9:25 am	Registration	Auditorium
9:30 am - 10:15 am	Inaugural Session  Address by Prof. R. Bandyopadhyay, Chairman MMETFP, Head, Dept. of Chemistry, PDEU Address by Prof. AR Jani, Chairman MMETFP, Chairman, MRSI, Gujarat Chapter Address by Prof. S. Khanna, Vice-Patron MMETFP, Director SOT, PDEU Address by Prof. S. Sundar Manoharan, Patron MMETFP, Director General, PDEU Summary of Technical Sessions by Dr. K. Mukherjee, Convener MMETFP Vote of Thanks by Prof. S. Shinde, Co-Convener MMETFP, Head, Dept. of Physics, PDEU	<a href="#">Click here to join Online</a>
10:15 am - 10:30 am	High Tea	Auditorium Foyer
10:35 am - 11:20 am	Keynote Lecture “Materials-related Challenges for Energy Storage” by Prof. Vijayamohanan K Pillai, IISER Tirupati (On-site)	Auditorium <a href="#">Click here to join Online</a>
11:25 am - 12:10 pm	Distinguished Lecture “Emerging Nanomaterials for Light Harvesting Systems” by Prof. Amitava Patra, INST Mohali (On-site)	
12:15 pm - 01:00 pm	Distinguished Lecture “Functional Materials Research @ CSIR-CSMCRI for Diverse Applications” by Prof. Kannan Srinivasan, CSIR-CSMCRI (On-site)	
01:00 pm - 1:55 pm	Lunch	Canteen
2:00 pm - 2:55 pm	Special session “Women in Materials Research” Prof. Alike Khare (IIT Guwahati)(online) Prof. Shubhangi B Umbarkar (NCL Pune)(online)	Auditorium <a href="#">Click here to join Online</a>
03:00 pm - 4:40 pm	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <b>Invited Lecture-Session A</b>             Prof. Asim Bhaumik (IACS, Kolkata) (online)             Prof. K. G. Suresh (IIT Mumbai) (online)             Prof. S. P. Singh (IICT Hyderabad) (online)             Prof. S. Pratihar (CSMCRI, Bhavnagar)(onsite)   <a href="#">Click here to join Online</a> </div> <div style="width: 5%; text-align: center; font-size: small;">Auditorium</div> <div style="width: 45%;"> <b>Invited Lecture-Session B</b>             Prof. Sabu Thomas (MG University, Kerala) (online)             Prof. P. K. Iyer (IIT Guwahati) (online)             Prof. Prakash C. Jha (Central Univ. Gujarat) (onsite)             Prof. Tapas Kuila (CSIR-CMERI Durgapur) (online)   <a href="#">Click here to join Online</a> </div> </div>	LTC B-Block
4:45 pm - 6:45 pm	<b>Online and Onsite poster presentation</b> <b>**Posters will be displayed throughout the conference</b>	Auditorium Foyer
6:45 pm - 7:30 pm	Cultural Program by OSAIL, PDEU  <a href="#">Click here to join Online</a>	Auditorium
7:30 pm - 9:00 pm	Dinner	Canteen

# Day: 2, November 20, 2021, Saturday

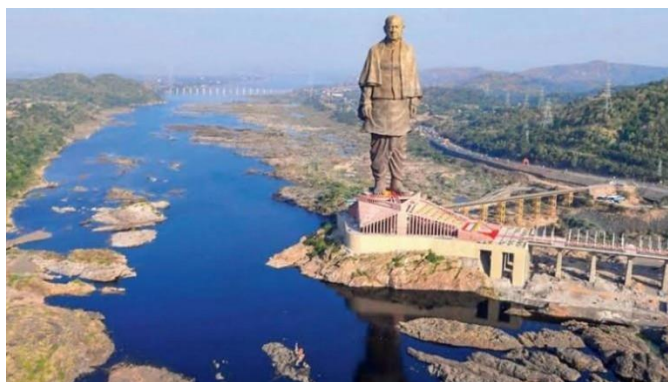
8:15 am - 8:55 am	Breakfast and Tea	Canteen
9:00 am - 9:35 am	Distinguished Lecture “Graphene Based Nanomaterials & Transition Metal Oxides for Energy Storage, Spintronics and Bio-Sensing Applications: Insights From DFT Simulations” by Prof. B. Chakraborty (BARC, Mumbai) (online)	Class E201 <a href="#">Click here to join Online</a>
9:40 am - 10:15 am	Distinguished Lecture “Synthesis and framework stabilization of YNU-5 zeolite for catalytic application” by Prof. Y. Kubota, Yokohama National University, Japan (online)	<a href="#">here to join Online</a>
10:15 am -10:30 am	<b>Tea Break</b>	E block foyer
10:35 am -1:20 pm IL: (22+3) mins OP: (10+2) mins	<b>Oral Presentation (OP)- Session-A</b> Invited Lecture (IL): Prof. Rajesh Sardar (Indiana University-Purdue University Indianapolis, USA) (online) OP – 1 to OP-13 <a href="#">Click here to join Online</a>	Class E-201
	<b>Oral Presentation (OP)- Session-B</b> Invited Lecture (IL): Prof. S.K. Gupta (BARC, Mumbai) (online) OP – 1 to OP-13 <a href="#">Click here to join Online</a>	Class E-202
	<b>Oral Presentation (OP)- Session-C</b> Invited Lecture (IL): Prof. D. Ghosh (CSIR-CMERI) (online) OP – 1 to OP-12 <a href="#">Click here to join Online</a>	Class E-203
	<b>Oral Presentation (OP)- Session-D</b> Invited Lecture (IL): Prof. S. Mahato (Osaka University, Japan) (online) OP – 1 to OP-12 <a href="#">Click here to join Online</a>	Class E-204
1:30 pm - 2:15 pm	Lunch	Canteen
2:20 pm - 3:40 pm	<b>Young Research Colloquium (YRC) Session A</b> YRC-I to YRC-8 <a href="#">Click here to join Online</a>	Class E-201 <b>Young Research Colloquium (YRC) Session B</b> YRC-9 to YRC-16 <a href="#">Click here to join Online</a>
3:45 pm - 6:25 pm	Special Session –I (AI in Materials Engineering) <b>Coordinators:</b> <u>Alchemy Club, PDEU and Dr. Mohendra Roy, PDEU, India</u> <b>Speakers:</b> Prof. M. Raval (Ahmedabad University) Prof. V. Vakharia (PDEU) Prof. Mohendra Roy (PDEU) <a href="#">Click here to join Online</a>	Class E-201
	Special Session –II (Advanced Materials and Manufacturing Technology) <b>Coordinators:</b> <u>Dr. Prasenjit Saha, JIS University, Kolkata</u> <b>Speakers:</b> Prof. Jyotshna Dutt Majumder (IIT Kharagpur) Prof. Rajan Jose (Universiti Malaysia Pahang) Prof. Shubhasis Halder (Ashoka University, Delhi) <a href="#">Click here to join Online</a>	Class E-202
	Special Session –III (Career Opportunity for UG/PG/PhD students) <b>Coordinators:</b> <u>Dr. Rama, Dr. Nandini, Dr. Anu, Dr. Megha; PDEU, India</u> <b>Resource persons/ organisations:</b> Dr. Reddy's lab, Ants Ceramic, Metrohm, Havells, PDEU Incubation Centre, Startups, PDEU Alumnus, Indo American Education Societies, International and National Fellows for different grants (Humboldt, JSPS, Fulbright, Mary Curie, Ramanujan, Inspire etc. ) <a href="#">Click here to join Online</a>	Class E-203
	<b>Online and Onsite poster presentation</b> <b>**Posters will be displayed throughout the conference</b>	E-block Foyer
6:30 pm - 7:00 pm	Prize distribution and valedictory session <a href="#">Click here to join Online</a>	Class E-201
7:00 pm - 8:00 pm	Dinner	Canteen

**Day: 3 November 21, 2021, Sunday (Optional)**

## Visit to the Statue of Unity

Travel will start at 7:30 AM from PDEU main gate

Return to PDEU main gate at 10 PM



**Visit to the Statue of Unity:** Arrangements will be made for visit to Statue of Unity on Day 3 of the symposium. The visit will remain optional @ 1500/-participants (includes travel, entry fees, breakfast, lunch and dinner).

# Invited Lectures

Sl.	Invited Speakers	Title of Presentation
1.	Prof. Vijayamohanan K Pillai <i>IISER Tirupati, India</i>	Materials relate challenges for Energy Storage
2.	Prof. Amitava Patra <i>INST Mohali, India</i>	Emerging Nanomaterials for Light Harvesting Systems
3.	Prof. Kannan Srinivasan <i>CSIR-CSMCRI, India</i>	Functional Materials Research @ CSIR-CSMCRI for Diverse Applications
4.	Prof. Sabu Thomas <i>M. G. University, Kerala, India</i>	New Opportunities in Sustainable Nano Materials
5.	Prof. Asim Bhaumik <i>IACS, Kolkata, India</i>	CO <sub>2</sub> fixation reactions catalysed by metallic nanoparticles supported over porous nanomaterials under moderate pressure conditions
6.	Prof. Brahmananda Chakraborty <i>BARC, Mumbai, India</i>	Graphene Based Nanomaterials & Transition Metal Oxides for Energy Storage, Spintronics and Bio-Sensing Applications: Insights From DFT Simulations
7.	Prof. Alike Khare <i>IIT Guwahati, India</i>	Role of Pulsed High Power Laser in material processing
8.	Prof. K. G. Suresh <i>IIT Mumbai, India</i>	New materials for spintronics
9.	Prof. Y. Kubota <i>Yokohama National University, Japan</i>	Synthesis and framework stabilization of YNU-5 zeolite for catalytic applications
10.	Prof. Parameswar K. Iyer <i>IIT Guwahati, India</i>	Influencing perovskite and polymer photovoltaic device performances using functional molecules for trap passivation and structural engineering
11.	Prof. Prakash C. Jha <i>Central Univ. Gujarat, India</i>	Two-dimensional boron: lightest catalyst for hydrogen and oxygen evolution reaction
12.	Prof. Surya Prakash Singh <i>CSIR-IICT Hyderabad, India</i>	New Light-Harvesters: Design, Synthesis and their Applications in Photonic Devices
13.	Prof. Rajan Jose <i>Universiti Malaysia, Pahang</i>	Reimagining Materials for Sustainable Development
14.	Prof. Shubhangi B Umbarkar <i>NCL Pune, India</i>	Solid acid supported palladium for efficient hydrogenation under mild conditions
15.	Prof. Rajesh Sardar <i>Indiana University-Purdue University Indianapolis, USA</i>	Plasmonic metal-oxide Nanostructures for Electrocatalysis of Hydrogen Evolution Reaction
16.	Prof. Tapas Kuila <i>CSIR-CMERI, India</i>	Chemically Derived Graphene for Clean Energy Application
17.	Prof. Sanjay Pratihar <i>CSIR-CSMCRI, India</i>	Metal Complexes to Smart Materials: Catalytic and Photocatalytic applications

18.	Prof. Santosh Kumar Gupta <i>BARC Mumbai, India</i>	A2B2O7 type Pyrochlores for Lighting and Nuclear Applications
19.	Prof. Debasis Ghosh <i>CSIR-CMERI, India</i>	Nanostructured coating for corrosion Resistance applications of high temperature components
20.	Prof. Sanjit Mahato <i>Osaka University, Japan</i>	Ir(III)-Catalyzed Direct Intermolecular $\alpha$ -C(sp <sup>3</sup> )-H Amidation via Nitrene Insertion
21.	Prof. Shubhasis Halder <i>Ashoka University, India</i>	Covalent Magnetic Tweezers: A New Window To See Biochemistry
22.	Prof. Vinay Vakharia <i>Pandit Deendayal Energy University, India</i>	Applications of synthetic data generation in materials science
23.	Prof. Jyotshna Dutta Majumder <i>IIT Kharagpur</i>	Tailoring Corrosion Resistance Properties of Component by Laser Surface Melting and Alloying
24.	Prof. Mehul Raval <i>Ahmedabad University, India</i>	Artificial Intelligence in Materials Science: New Dawn in Development
25.	Prof. Mahendra Roy <i>Pandit Deendayal Energy University, India</i>	Artificial Intelligence (AI) powered Materials Search Engines

# Oral Presentations (Day 2: 20<sup>th</sup> November)

Oral Presentations	Time	Sl.	Presenter	Title
<b>Session-A</b>	10:35 am- 1:20 pm  (Time limit 10+2 min.)	1	Dr. Dip Prakash Samajdar	A Novel Dual Gate Hetero Dielectric Hetero Material Reconfigurable FET
		2	Dr. Priyanka Das	High Broadband Photoconductivity of few-layered MoS <sub>2</sub> Field-effect Transistor Measured in Multi-terminal Method: Effect of Contact Resistance
		3	Dr. Ehsan Zamani	Synthesis and Characterization of Fluorescent and Self-colored Biomaterials
		4	Dr. Lakshmana Rao Jeeru	Development and Characterization of Prosopis Juliflora Fiber and Granite Filler Reinforced Epoxy Composites
		5	Dr. M. Balachandar	Evaluation of Hardness and Impact properties on Metal Matrix Composites using Taguchi Analysis
		6	Dr. Sumit Bhawal	Developing Ionic Liquid based Drugs-An opportunity hiding in plain view
		7	Dr. Chandrakant Tagad	Biotemplated synthesis of CuO/ZnO Nano-composite for catalytic degradation of environmental pollutants
		8	Dr. Suranjana V. Mayani	Development of Gold@Nanocarbon Composite and its potential catalytic and adsorption applications
		9	Dr. Yennam Rajesh	Synthesis and Characterization of Low- Cost Wood – based Biosorbents
		10	Dr. Susanta Kumar Jana	Synthesis of micro- and nano PCC from Ca-based wastes
		11	Dr. Suja George	Green biomaterial Hydroxyapatite derived from waste marble powder for applications in water defluoridation: comparative study on materials synthesized through different processing route
		12	Dr. Xiaojie Zhang	In-situ grafting of cardanol on reclaimed rubber to preparation of high performance recycled products
		13	Dr. Prakash Chandra	A Review on the Consequence of 3D-Orination of Cu/TEMPO/Imidazole Sequence on Selective Alcohol Oxidation
<b>Session-B</b>	10:35 am- 1:20 pm  (Time limit 10+2 min.)	1	Dr. M. Althaf Hussain	MD simulations on the mechanical properties and internal structure of plastics
		2	Dr. Tarapada Sarkar	Ferromagnetic order beyond the superconducting dome in a cuprate superconductor
		3	Dr. Sumit Chakraborty	Development of the natural fibre reinforced bypass dust based auto activated concrete for future sustainable infrastructural solution: challenges and remedies
		4	Dr. M.V. B. Unnamatla	Palladium mediated cross-coupling reaction: Synthesis of Quinoxalin-2(1H)-one derivatives by Ugi 4CR
		5	Dr. Bhuwanesh Kumar Sharma	Study on the effect of structural composition and accelerated moisture exposure on the crosslinking, crystallinity and thermal stability of ethylene vinyl acetate (EVA) co-polymer

		6	Dr. Pratik Arvind Nagwade	Investigation of the formation, particle characteristics, and Rheological properties of ceramic Cobalt Aluminate (CoAl <sub>2</sub> O <sub>4</sub> ) synthesised using dicarboxylate coprecipitation method
		7	Dr. Ravi Tejasvi	Shape Tailoring of TiO <sub>2</sub> nanostructures during Thermochemical Synthesis by Etchant-Oxidant Combinatorics
		8	Dr. Rama Layek	Layered structure graphene oxide/gelatin composite with enhanced physical and mechanical property
		9	Dr. M. Balachandar	Analysis of vapour adsorption refrigeration system suitable for remote areas
		10	Dr. Abha Vyas	Emerging Trends of Nanomaterial: Carbon nanostructure as in Cancer Therapy
		11	Dr. L. Jithender	X-ray study of composition dependence of Debye temperature in the Aluminium -Lead alloy system prepared by mechanical alloying
		12	Dr. Arpan Kumar Nayak	Advanced Functional Materials Synthesis for Energy and Environmental Applications
		13	Dr. Sheetal Rawat	Light yield and efficiency studies of a large size GGAG:Ce single crystal scintillator
<b>Session-C</b>	10:35 am-1:20 pm  (Time limit 10+2 min.)	1	Dr. Anima Ghosh	Cu <sub>2</sub> BaSnS <sub>4</sub> thin film absorber for chalcogenide photovoltaic devices
		2	Dr. Rishi Maiti	Mapping electronic & optical behavior in a spatially tunable strained 2D materials
		3	Dr. Shyambo Chatterjee	F and CF <sub>3</sub> substituted solution processable oligopara-phenylenevinylene for ambipolar and hole-transporting organic field effect transistors
		4	Dr. Jaspal Singh	Structural, Electronic, Vibrational, Thermoelectric and Mechanical Properties of Li Based Quaternary Heusler Compound LiTiCoSn: A DFT Approach
		5	Dr Dhrubajyoti Bhattacharya	Development of pouch cell prototypes for supercapacitor and Li-ion capacitor
		6	Dr. Dipanjan Sengupta	Piezo-phototronic effect in Zn <sup>2+</sup> /PVDF composite
		7	Dr. Manmatha Mahato	Functional nano-structural covalent triazine frameworks for electroactive application
		8	Dr. Neha Tavker	Cellulose based silver phosphate microstructures for improved RhB degradation under visible light
		9	Dr. Rajkumar Chadge	Experimental investigation of Photovoltaic System with different Electrical Configurations and Topologies
		10	Dr. Tanushree Bala	Boosting Photocatalysis by Changing Morphology of the Nanoparticles
		11	Dr. Vikas Malik	Effect of Range of Hops on Optimization of Electron glass
		12	Dr. N. Mani	Life prediction of steam generator shell nozzle junction for fast breeder reactor
		1	Dr. Barsha Das	Antibacterial material as a cement additive: A unique approach to construction

<b>Session-D</b>	10:35 am-1:20 pm (Time limit 10+2 min.)	2	Dr. Diptonil Banerjee	Enhanced Fire Retardant Properties of ZnO Rods Coated Cotton Fabrics
		3	Dr. Abhishek Gupta	Hydrogen-bond dynamics of Poly(methacrylic acid) and Sodium-(Polymethacrylate) (Na <sup>+</sup> -PMA) in aqueous salt solutions investigated by molecular simulations
		4	Dr. Bhoopesh Kumar Sharma	Antibacterial Efficacy of a Synthesized Amidoximated Acrylic Copolymer Membrane Treated with Nano Silver Particles
		5	Dr. Jayshree K. Khedkar	Density Functional Investigations on Binding of Methyl Viologen and its Radical to p-sulfonatocalix[5]arene
		6	Dr. Kanchan Anil Phatak	Safety Evaluation of Zinc oxide on Drosophila melanization pathway
		7	Dr. Vinay Kumar	Molybdenum disulfide: A novel material for Supercapacitor applications
		8	Dr. Mahuya Bandyopadhyay	Amine modified mesoporous materials for ring opening of oxiranes
		9	Dr. Manish Kumar Sinha	pH and temperature responsive study of polysulfone membrane modified with poly (n-vinylcaprolactum-co-acrylic acid)
		10	Dr. Sutapa Mondal Roy	Inclusion Complex Materials of $\beta$ -cyclodextrin-oxicam NSAIDs: Combined Theoretical and Experimental Studies on Molecular Basis behind Reduced Gastro-Intestinal Toxicity
		11	Dr. Vinay M. Bhandari	Vortex Diodes as vortex flow based cavitation devices for wastewater treatment applications- Newer designs and applications
		12	Dr. Tapas Ghatak	Organometallic Chemistry and Catalysis: Transition Metal to Actinide



# Young Research Colloquium

**Day 2: 20<sup>th</sup> November**

YRC		Presenter	Title
<b>Session A</b>	1	Anusmita Chakravorty	3D Thermal Spike Simulation: Swift Heavy Ion irradiation of embedded a-SiC nano-zone inside 4H-SiC
	2	Bhooma Bhagat	Wet chemical synthesis of zinc ferrite particles and study on their acetone and ethanol sensing characteristics.
	3	Bhupender Kumar	Synthesis of Insitu Immobilized Copper Oxide Nanoparticles on Microcrystalline Cellulose: Investigation of Catalytic Activity in 1,3-Dipolar Cycloaddition Reaction for the Synthesis of Fluorescent Active Compounds
	4	Dheeraj Jaiswal	Electrochemical behaviour of lead free Sn-In-Al solder alloys in 3.5wt. % NaCl salution
	5	Hemant Jatav	The effect of metal concentration and annealing temperature on the optical properties of silver nanocomposite
	6	Jaideep Adhikari	Polycaprolactone assisted electrospinning of honey/betel with chitosan for tissue engineering
	7	Mayur Khan	Study of structural and electronic properties of few-layer MoS <sub>2</sub> film
	8	Mohsin Ali	A Novel Potentiometric sensor for Determination of Fluoride ion based on Ionophore N, N- Ethylene bis (Salicylideneaminato) nickel
<b>Session B</b>	9	Moumita Sarkar	Simultaneous Effect of CaF <sub>2</sub> and TiC on Tribological Properties of ZTA Ceramics for High Temperature Application
	10	Navpreet Kamboj	Utilizing laser-irradiated graphene-polymer contact electrification as a sustainable power source in triboelectric nanogenerator
	11	Nirbhay Singh	High Efficient Activated Carbon based Asymmetric Electrode for Energy Storage Device
	12	Pratik Chhapi	Nano-structured thin films of copolymer with graphene and its derivative for gas sensing
	13	Sachin Kumar Ben	Synthesis of g-C <sub>3</sub> N <sub>4</sub> /Zn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> Composite for Photocatalytic Degradation of Crystal Violet Dye under Solar Light
	14	Saikat Bolar	3D hierarchical V and N-codoped MoS <sub>2</sub> /rGO composite as a superior electrode material towards hydrogen evolution reaction in acidic and alkaline medium
	15	Shweta Tanwar	Aging Impact of Se powder on the Electrochemical Properties of Molybdenum Selenide: Supercapacitor Application
	16	Vibhuti Chauhan	Performance Investigation of Ferroelectric Spacers for Negative Capacitance FinFETs

# Poster Presentations

**Day 1: 19<sup>th</sup> November**

Poster ID	Presenter	Title
P1.	Dr. Busupalli Balanagulu	Use of Synthetic Membranes and Nanotechnology for the treatment of industrial wastewater containing Dyes and Heavy metals
P2.	Mr. Sourav Bhattacharjee	Synthesis and characterization of Ba-doped vanadium-based double perovskite for multifunctional applications
P3.	Mrs. Femina Brahma	Structural, Dielectric and Magnetic investigation of Sm-modified Fe doped perovskite
P4.	Sachin Kumar Ben	Synthesis of g-C <sub>3</sub> N <sub>4</sub> /Zn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> Composite for Photocatalytic Degradation of Crystal Violet Dye under Solar Light
P5.	Dr. Abhisek Maikap	Nano-structured semiconductor thin-film based enzyme-free sensor devices for environmental applications
P6.	Dr. Rama Gaur	Facile synthesis of Type II ZnO-CdS nanostructures for applications in waste water treatment
P7.	Manish Joshi	Materials for Green Energy: A Review
P8.	Miss Arshia Khan	Calcium based photocatalyst as a material for green environmental sustainability: Synthesis and application in water and wastewater treatment
P9.	Miss Akanksha Nema	A Mini Review on Photo-active Construction and Building Materials for Pollutant Treatment: Challenges & Opportunities
P10.	Miss Arunima Singh	Enhanced Generation of Hydroxyl Radicals by OMS-2 Catalyst for Flue Gas Absorption
P11.	Miss Bindia Thakur	Glass for high-level nuclear waste immobilization
P12.	Miss Dhyanvi	Study of composite based plastic scintillators for nuclear battery application
P13.	Miss Muskan Jain	Hybrid Perovskite based Memristor Devices
P14.	Miss Pooja Talwar	Accident tolerant fuel cladding material challenges
P15.	Miss Prerna Vinchhi	Nanocrystalline YSZ Electrolyte by coprecipitation for Solid Oxide Fuel Cell
P16.	Miss Suchismita Dutta	Renewable energy harvesting through Maglev windmill
P17.	Mr Shobhit Chaturvedi	Application of PSO and GA stochastic algorithms to select optimum building envelope and air conditioner size - A case of a residential building prototype
P18.	Mr. Debabrata Chakraborty	Phosphonate ligand based novel Co-MOF for electrocatalytic hydrogen evolution
P19.	Mr. Hemanth Kumar Beere	Metal sulfides loaded biomass derived carbon sheets for efficient hydrogen evolution reaction
P20.	Mr. Jiasheng Chen	Hierarchical Fe-Co-P@Ni(OH) <sub>2</sub> Core@Shell Nanoarrays for High-Performance Asymmetric Supercapacitors
P21.	Mr. Naveen Kumar	Ceramics for high-level nuclear waste immobilization
P22.	Mr. Nirbhay Singh	High Efficient Activated Carbon Based Asymmetric Electrode for Energy storage Device
P23.	Mr. Soham Chakraborty	Connecting conformational stiffness of the protein with energy landscape by a single experiment
P24.	Mr. Subhajit Mojumder	Copper chromite thick film based trace Ethanol sensor

P25.	Mr.A. Ponshanmugaku mar	Enhancement of solar dehydrator heat transfer for agriculture products
P26.	Mrs Chandni Pachouri	Factorial design based preparation, optimization, characterization and in vitro drug release studies of Rifampicin loaded chitosan nanoparticles
P27.	Ms. Maya Balasaheb Mane	Vortex Diodes as vortex flow based cavitation devices for wastewater treatment applications- Newer designs and applications
P28.	Miss Mansi Bharatbhai Patel	Flexible Metal Halide Perovskite Solar Cells
P29.	Miss Navpreet Kamboj	Utilizing laser-irradiated graphene-polymer contact electrification as a sustainable power source in triboelectric nanogenerator
P30.	Miss Priyanka Barauh	A review on energy efficient solar dryer for drying agricultural crops
P31.	Miss Sharmin S. Tinwala	Harvesting Solar Energy from Lead-free Perovskite Solar cells by Photo-Electrochemical water splitting: A Review
P32.	Mr. Hari Krishna Mishra	Piezoelectric Polymer Nanocomposites for High Energy Storage Density
P33.	Mr. Himanku Bordoloi	A Review on Improved Biomass Cook Stove for Rural Application
P34.	Mr. Kanishk Shah	Reduction of Carbon Footprint of Electric Vehicles by using battery alternatives and integrated Photovoltaics.
P35.	Mr. Kirankumar Jivabhai Chaudhary	Nanocrystalline YSZ Electrolyte by coprecipitation for Solid Oxide Fuel Cell
P36.	Mr. Milind V Dudhiya	Energy efficient solar drying configurations with storage incorporation
P37.	Mr. Neeraj Kumar Biswas	Role of electrolytic pH on the performance of nanostructured TiO <sub>2</sub> thin films in photoelectrochemical water splitting
P38.	Mr. Nishant Mandal	Latent energy storage systems and its applications
P39.	Mr. Niteen R. Yeole	Advancements in modification and characterization of adsorbent materials including zeolites for removal of sulfur from diesel fuels
P40.	Mr. Prahlad Yadav	Constructing a Zinc ion miniaturized planer battery with patterned laser scribed carbon supported electrodes
P41.	Mr. Rajan Jaiswal	Novel methods for biofuel production
P42.	Mr. Robin Singh	A Critical Review on Green Hydrogen
P43.	Mr. Santu Ruidas	"Metal-Free Triazine based 2D Covalent Organic Framework for Efficient H <sub>2</sub> Evolution via Electrochemical Water-Splitting"
P44.	Mr. Shashank Gautam	Impact of hydrogen embrittlement in pipeline structures- A critical review
P45.	Mr. Shubham Srivastava	Solar Photovoltaic System and Its Fire Safety in Indian Scenario
P46.	Mr. Souhardya Bera	Structural features and optical properties of double perovskite Cs(CH <sub>3</sub> NH <sub>3</sub> )AgPb <sub>1-x</sub> Sn <sub>x</sub> Cl <sub>6</sub> for decreased lead use in photovoltaic applications
P47.	Mr. Sreedhar Doraswamy	Lead-carbon composite as a current collector for lead-acid energy storages
P48.	Mr. Mukesh Ashokkumar Khandla	Nanocrystalline CeO <sub>2</sub> based Water Gas Shift (WGS) Catalysts for Fuel Cell Application
P49.	Mrs. Alpna Singh	Green materials for carbon storage in depleted oilfields: An experimental study

P50.	Ms.Shweta Tanwar	Aging Impact of Se powder on the Electrochemical Properties of Molybdenum Selenide: Supercapacitor Application
P51.	Mr. Keita Djibril Sekou	The mobility study of metal oxide nanoparticles (NPs) in City and Agricultural soils
P52.	Mr. Sabyasachi Ghosh	Ecological safety of biogenic mono and bimetallic (Au-Ag) alloy nanoparticles and its catalytic performance in environmental remediation
P53.	Mr. Sachin Bisht	Corrosion inhibitors in oil and gas industry- A critical review
P54.	Dr Dip Prakash Samajdar	~18% Efficient GaAs Nanowire-based Radial junction Solar cells with excellent Light Harvesting and Charge Transport properties
P55.	Miss Aditi Singh	Development of Gold@Nanocarbon Composite and its potential catalytic and absorption applications.
P56.	Miss Unnati Dipakkumar Patel	Synthesis, characterization and application of Cd(II) MOF as a functional material for reversible dye adsorption
P57.	Mr. Abdul Jabbar Ansari	Microstructure and mechanical behaviour of reinforced aluminium based surface composites synthesized by friction stir processing route: A review
P58.	Mr. Vikaskumar Patel	Influence of substrate temperature on structure, and optical absorption characteristics of Zn <sub>1-x</sub> Mg <sub>x</sub> O thin films grown by Pulsed Laser Deposition Method
P59.	Mr.Jayendra Ahire	Hydrothermal Synthesis of ZrO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> and Its catalytic application for direct synthesis of dimethyl carbonate
P60.	Ms. Bhooma Bhagat	Wet chemical synthesis of zinc ferrite particles and study on their acetone and ethanol sensing characteristics
P61.	Ms. Jeny D Gosai, Ms. Monikaben Patel, Mr. Ranjit Dandapani Mohili	Development of 2D MXene by HF-free Approach towards Electrochemical Devices
P63.	Dr. Nitya Chawda	Lanthanide based nanosensors for sensing application
P64.	Dr Dip Prakash Samajdar	First principle Study of Structural and Optical Properties of InP and InP <sub>1-x</sub> N <sub>x</sub>
P65.	Dr. Sabuj Kanti Das	A 2D Covalent Organic Framework as a Metal Free Cathode Material Towards Electrochemical Oxygen Reduction Reaction
P66.	Dr. Sandeep Gholap	Basically Controlled MgCo <sub>2</sub> O <sub>4</sub> Nanostructures as Catalyst for Hydrogenation of Carbon Dioxide (CO <sub>2</sub> ) to Formic Acid (HCOOH)
P67.	Dr. Tapan K. Pal	Network Engineering of MOFs for Heterogeneous Catalysis
P68.	Kavil Mehta	Probing the Cavitation Bubbles Produced during Laser Ablation of Copper Immersed in Liquid under Tightly Focused Conditions using Shadowgraphy Technique
P69.	Miss Dharaben Jayeshbhai Joshi	Analytical applications of surface modifications graphene oxide
P70.	Miss Nandini Verma	Critical Aspects of Materials in LNG Value Chain
P71.	Miss Puja Ghosh	Comparison Sensing Study of Antase Cube and Rutile Rod based Structure
P72.	Miss Roshni Rathore	Removal of aqueous Phosphate from water using MNFe <sub>2</sub> O <sub>4</sub> @g-C <sub>3</sub> N <sub>4</sub> Nanocomposites
P73.	Miss Shilpa Singh	An Ab-initio analysis of Rutile Phase of ThO <sub>2</sub>
P74.	Miss Veena Sodha	Zeolites based nano-composites for waste water treatment

P75.	Miss Zenab Darban	Hydrogel-based adsorbent materials for heavy metal removal from industrial waste water.
P76.	Miss. Elangbam Pinky Devi	An Efficient Approach Toward P(III)-Mediated Aza-Michael Addition of 1,2-Diazoles to Enones
P77.	Miss. Moumita Sarkar	Simultaneous Effect of CaF <sub>2</sub> and TiC on Tribological Properties of ZTA Ceramics for High Temperature Application
P78.	Mr. Vedant Soni	Influence of tool travel direction on microhardness and tribological properties of AA2014/SiC-CNT hybrid surface composites produced by multi-pass friction stir processing
P79.	Mr. Ajay Desai	Insilico studies of novel functionalized calix[4]pyrrole derivatives for selective and sensitive detection of antibiotics and metal ions
P80.	Mr. Amiy Anshukar Yaduvanshi	Comparative study of CuO/ZTA & ZTA composites in terms of Mechanical and Frictional Properties
P81.	Mr. Debsundar Dey	Prediction Of Mechanical Properties Of Steel Using Machine Learning
P82.	Mr. Kevin Kumar Patel	Effect of single and double pass friction stir processing on microhardness and wear properties of AA5083/Al <sub>2</sub> O <sub>3</sub> surface composites
P83.	Mr. Mohsin Ali	A Novel Potentiometric sensor for Determination of Fluoride ion based on Ionophore N, N- Ethylene bis (Salicylideneaminato) nickel
P84.	Mr. Pomal Nandankumar Chamanlal	Strapped calix[4]pyrrole: Emerging Trends Based on Calix Protected Metal Nanoparticles
P85.	Mr. Pranjal Nath	Ammonia Sensing by Silicon Nanowires (SINWs) obtained Through Metal Assisted Electrochemical Etching
P87.	Mr. Saikat Bolar	3D hierarchical V and N-codoped MoS <sub>2</sub> /rGO composite as a superior electrode material towards hydrogen evolution reaction in acidic and alkaline medium
P88.	Mr. Sovandeb Sen	Room temperature gas sensing properties of reduced grapheme oxide decorated NiO-SnO <sub>2</sub> nanocomposite
P89.	Mr. Swarup Kumar Rout	Catalytic Iodine and Morpholine as a Reagent Combination for Hydration of Alkynes via Markovnikov Addition
P90.	Mr. Tirthankar Mukherjee	Optimization of adsorption parameters using modified activated carbon in removal of cationic dye employing Response Surface Methodology
P91.	Mr. Varun Pratap Singh	Designing of CoWO <sub>4</sub> Nanostructures based Electrochemical Biosensor for the Detection of Hazardous Hydroquinone
P92.	Mr. Yash Thakare	Waste Lignin and Metal Oxides for altering the Physical and Chemical Properties of Bitumen
P93.	Mr. Padmor Manohar Shivaji	Metallo-Organic Coordination Assembly based Co-Mn Bimetallic Supramolecular Material for Dehydrogenation and Hydrogenation Reaction
P94.	Mrs Malini Jayaram	CO <sub>2</sub> adsorption studies on N-doped activated carbon prepared from Chitosan/Casein macrospheres
P95.	Ms. Dolly Gandhi	Naturally occurring Bentonite clay: structural augmentation, characterization and application as catalyst
P96.	Silvana Rodrigues Pereria	Self-healing ultra-thin film of a tetrathiafulvalene vinylogue at the air-water interface
P97.	Mr Nikhil Vekariya	Improvement in the properties of carbon/carbon composites by tailor-made approach
P98.	Dr. Dip Prakash Samajdar	Design and Simulation of InAsBi PIN Photodetector for Long Wavelength Infrared Applications

P99.	Dr. Dip Prakash Samajdar	Bandgap Tailoring of InAsBi for Long Wavelength Infrared Applications using Density Functional Theory
P100.	Dr Subhendu Chakraborty	Nanoceramics: Synthesis and Versatile Applications
P101.	Miss Deeksha	Improving oxygen evolution reaction activity by tuning the morphology of LaCoO <sub>3</sub> from nanoparticles to nanorods using surfactant-assisted synthesis.
P102.	Miss Moulie Ghosh	Effect of Molar Ratio of Feed on the Facile Synthesis of Silicon Nano-Sheets from Laboratory Waste Glass
P103.	Mr. Ravi Rai	Rapid growth of ZnO nanostructures on woven carbon fiber using microwave treated chemical bath deposition and their characterization
P104.	Ms. Neha Tiwari	Electrochemical Approaches for Atmospheric CO <sub>2</sub> Capture
P105.	Siba Soren	Hydrothermal Synthesis of SnO <sub>2</sub> /N-rGO nanocomposite for Oxygen Reduction Reaction
P106.	Miss Jinal Patel	Recent advances in use of Carbon-based Nanomaterials for the degradation of Agrochemicals
P107.	Miss Sadhana Kundu	Colorimetric sensing of fluoride ion by 4-quinonimine functionalized gold nanoparticles
P108.	Mr. Aungat Shah	Parameters Involved in CNT Growth: A Review
P109.	Mr. Bharatkumar Prajapati	P-aminobenzoic acid functionalized silver nanoparticles for colorimetric determination of deferoxamine
P110.	Mr. Gauravkumar Girishchandra Trivedi	An Efficient Decolorization and Adsorption of Cationic Dye by Mesoporous SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> Nanocomposite
P111.	Mr. Ghinaiya Nirav Vajubhai	Nanomaterials based colorimetric and fluorometric method for assays of ROS: A review
P112.	Mr. M. Armstrong	The review on recent trends in experimental and numerical study on the thermal performance of double pipe heat exchangers with nanofluids
P113.	Mr. Shivshambhu Kumar	Mechanistic study of improved rheological properties and thickening time of oil-well cement slurries using silica nanoparticles
P114.	Mr. Taral Patel	Development of gold@nanocarbon composite and its potential catalytic and adsorption applications
P115.	Mr. Arun K. Venuvanka	Design, development and evaluation of ketorolac tromethamine nanoparticles"
P116.	Mr. Bharat Patel	Chloroquine phosphate loaded PLGA Nanoparticles: Formulation and Characterization against Antimalarial activity
P117.	Smt .Sandhya Pathak	Formulation and Evaluation of Alendronate loaded Chitosan Nanoparticles for Effective treatment of Osteoporosis
P118.	Miss Bhaswati Chakraborty	ZnO Nanorod-Based FET Biosensor for Detection of Cancer Biomarker
P119.	Miss Tanushri Das	ZnO nanostructured based trace ammonia sensor for medical application
P120.	Mr. Aakash Waghmare	Synthesis of Iron Phosphate Nanoparticle and Removal of Lead from Water
P121.	Mr. Rohit Lakhani, Mr. Hardik Nasit	Hydrothermally Synthesized Copper- Nanocomposites for C(sp <sup>3</sup> )-H Oxidative Methylesterification

# Poster Presentations

**Day 2: 20<sup>th</sup> November**

Poster ID	Presenter	Title
P122.	Miss Shivangi Adhiya	Design, Synthesis And Characterization Of Thiazole Containing Heterocyclic Derivatives Of Medicinal Interest
P123.	Mr. Ravikumar Abhesinh Dabhi	Synthetic approach towards spiro quinoxaline- $\beta$ -lactam based heterocyclic compounds: Spectral characterization, DNA/BSA interactions and biological studies.
P124.	Mr. Tushar Patel	Design and Synthesis of Novel Imidazolidine-2,4-dione Derivatives as InhA Inhibitors: Spectral Characterization, Computational and Biological Studies
P125.	Vivekshinh Kshtriya	Self-assembly of a benzothiazolone conjugate into panchromatic fluorescent fibres and their application in cellular imaging
P126.	Dr. Krishna Kumari Swain	An emerging overview on copper catalyzed $\alpha$ -Ketoamides assembly Pharmacophores synthesis against COVID-19 pandemic
P127.	Rohit Prajapati	Synthesis of hierarchical silicoaluminophosphate (SAPO) molecular sieves by post-synthetic modification and their catalytic application
P128.	Dr. Debasis De	Fabrication of DSSC with nanoflower shaped ZnO photoanode and natural dye sensitizer
P130.	Miss Aayushi Joshi	Fluorescent probes for cellular-organelle specific detection of cysteine
P131.	Miss Bharti Koshti	Unusual Aggregates Formed by the Self-Assembly of Proline, Hydroxyproline, and Lysine
P132.	Miss Komal Sutaria	Study of Surface modification of Gold Nanoparticles by Bilastine through Surface Plasmon Resonance study for cellular cytotoxicity
P133.	Miss Surabhi Singh	Enhanced lipid recovery from chlorella sp. biomass by green approach: combination of ultrasonication and homogenization pretreatment techniques (Hybrid method) using aqueous deep eutectic solvents
P134.	Miss Vaishali Chugh	Thiazole based Heterocyclic Complexes as Important Moiety for Biological Applications in Medicinal Field
P135.	Miss. Reetu	In-Silico Studies for targeting PPAR $\gamma$ for the Type II Diabetes Mellitus
P136.	Mr. Anupam Roy	Highlights on Biological Activities of 1,3,4- Thiadiazole and Indazole Derivatives
P137.	Mr Parth Parmar	Enhanced Oil Recovery by Biomaterials-based Nanofluids – A State-of-Art Review
P138.	Mr. Chandresh Kumar Patel	Iodine-catalyzed C-N Bond Formation: Synthesis of $\alpha$ -Ketoamides in Water
P139.	Mr. Dileep Pathote	Optimization of Corrosion Behavior of 316L Stainless Steel as an effective biomaterial for orthopaedic applications
P140.	Mr. Kamalkant	Docking-based Evaluation against Human Tankyrase-1 Enzyme
P141.	Mr. Jaymin Parikh	Calixarene encapsulated nano-system: Selective recognition of amino acids
P142.	Mr. Nikunj Kumar Vagadiya, Mr. Mohil Odedara	Recent advances in fluorescent chemosensors for aromatic amino acids detection

P144.	Mr. Rahul Kumar Vishwakarma	Anti-oxidants, COX inhibition activity of various extracts of bark of Betula utilis and molecular docking analysis of its phytochemicals against COX-1 and COX-2 isoenzyme.
P145.	Mr. Rahul Sirvi	Characterization of naturally occurring Geomaterials for the remediation of ions of nuclear importance
P146.	Mr. Ranjit Barua	Analysis the surgical needle insertion modeling and viscoelastic tissue material interaction for minimally invasive surgery (MIS)
P147.	Mr. Sudipto Datta	Advancements of Biopinks used in Extrusion-based Bioprinting
P148.	Ms Rajinder Kaur	Pharmacological importance of novel harmine derivatives
P150.	Miss Biva Ghosh	A hydrogel Sheet Mask with tea tree essential oil entrapment and targeted dose delivery capability
P151.	Miss Stuti Jha	Biochar: a sustainable approach towards environmental remediation
P152.	Mr Chinnappareaddy	Study of antimicrobial applications of Bismuth Oxide
P153.	Mr. Milan Parsottambhai Dhaduk	Tryptathrin Based Pt(II) Complexes: Biological and Computational Studies
P154.	Mrs. Isha Gupta	Biocomposite incorporated with plant-mediated Silver nanoparticles for improved anti-microbial and wound healing properties
P155.	Miss. Amutha Arul	Self-assembly of cell penetrating cationic tripeptide Nanospheres for biomedical application
P156.	Dr. Yennam Rajesh	Drag Reduction by Addition of Polymer in the Conical Tank
P157.	Bhupender Kumar	Synthesis of Insitu Immobilized Copper Oxide Nanoparticles on Microcrystalline Cellulose: Investigation of Catalytic Activity in 1,3-Dipolar Cycloaddition Reaction for the Synthesis of Fluorescent Active Compounds
P159.	Miss Mekhna Venu	Controlled Synthesis of g-C <sub>3</sub> N <sub>4</sub> Nanofibers /NaNbO <sub>3</sub> Arrayed Nanostructures for Enhanced Visible Light-Driven Photocatalysis
P160.	Miss Pund Sangita Nanasaheb	Impact of Mg <sup>2+</sup> substitution on structural, magnetic and optical properties of Cu-Cd ferrites
P161.	Mr. Akshay Bharatbhai Panchasara	Effect of Growth Condition on the I-V behavior of BiFeO <sub>3</sub> / Si Thin Film Devices
P162.	Mr. Saurabh Yadav	Investigation of Structural and Dielectric Properties of Sn-doped Ga <sub>2</sub> O <sub>3</sub> Nanoparticles
P163.	Mr. Soumalya Roy	Syntheses, Structures, and Magnetic Properties of Pentanuclear Spirocyclic Ni <sub>4</sub> Ln Derivative: Field Induced Slow Magnetic Relaxation by Dysprosium and Erbium Analogue"
P164.	Mr.Muthaimanoj Periyasamy	Influence of hydrothermal carbonization temperature on structural, optical and photocatalytic properties of magnetite/carbon (Fe <sub>3</sub> O <sub>4</sub> /C) nanocomposites
P165.	Dr. Anup V. Sanchela	The effect of sulfur doping on thermoelectric properties of FeSb <sub>2</sub>
P166.	Miss Jeel Swami	Magnetic Ordering of GdCrO <sub>3</sub> : An Ab initio Study
P167.	Miss Jyoti Shukla	Effect of Ti <sup>4+</sup> on Structural and Electrical Transport Properties of Y <sub>0.95</sub> Ba <sub>0.05</sub> MnO <sub>3</sub> Ceramics
P168.	Miss Mynam Venkata Harshita	Material Selection for City Gas Distribution: A Review



P169.	Miss Nabasmita Saikia	Structural and Electrical behavior of Gd-doped LaFeO <sub>3</sub> for Device Application
P170.	Miss Rimpi Chakravarty	Dielectric and electrical properties of Ca-modified BFN perovskite
P171.	Miss Tulasi A	A Brief Review On Material Used In MEMS Devices For Various Applications
P172.	Miss Vibhuti Chauhan	Performance Investigation of Ferroelectric Spacers for Negative Capacitance FinFETs
P173.	Miss. Shashikana Paria	Electronic and Optical Properties of MoS <sub>2</sub> 0D and MoS <sub>2</sub> 2D Sheet
P174.	Mr. Dheeraj Jaiswal	Electrochemical behaviour of lead free Sn-In-Al solder alloys in 3.5wt. % NaCl solution
P175.	Mr. Ezhava Manu Manohar	A Mini-Review on Emerging Trend of Co(II)/Ln(III) Complexes as Single Molecule Magnets
P176.	Mr. Hemant Jatav	The effect of metal concentration and annealing temperature on the optical properties of silver nanocomposite
P177.	Mr. Jignesh G. Hirpara	Optical properties investigation of reactively sputtered Tantalum oxynitride films
P178.	Mr. Mayur Khan	Study of structural and electronic properties of few-layer MoS <sub>2</sub> film
P179.	Mr. Mohamad Numan	Vacancy induced mixed valence state in nickel telluride Ni <sub>3</sub> TeO <sub>6</sub>
P180.	Mr. Neelesh Jain	Investigation of Optical and Electronic Properties of InAsNBi for Infrared Detection
P181.	Mr. Rakesh Kumar Prasad	Effect of structural quality of Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) nanosheets on g-C <sub>3</sub> N <sub>4</sub> /p-Silicon photodiode Performance
P182.	Mr. Varun Gupta	Self-Powered Pyroelectric Nanogenerator
P183.	Ms. Mayuri Vikramsinh Vaghela	The First-principles investigation of Structural and Electronic Properties of B <sub>3</sub> -HgSe amalgam
P184.	Pratik M Gadhavi	First Principal Study of Electronic and Thermal Properties of Arsenic doped Graphene
P185.	Dr. Vikram Uttam Pandit	Layered MoS <sub>2</sub> for photocatalytic dye degradation
P186.	Mr. Bachir Yaou Balarabe	Hydrothermal Synthesis of TiO <sub>2</sub> /Au Nanocomposites for Photocatalytic Dye Degradation in Continuous Flow Reactor Under Visible Light
P187.	Mr. Santanu Sen	Electrical impedance and dielectric property investigation of CaTiO <sub>3</sub> modified BFO perovskites for possible device applications
P188.	Miss Zinnia Mallick	In-situ CsPbI <sub>3</sub> synthesis in single-step electrospinning process within piezoelectric host polymer
P189.	Miss. Sakshi Gupta	Synthesis and Characterization of Titanium Phosphate – Polypyrrole Composite for Application in Adsorption of Hexavalent Chromium
P190.	Mr. Hareshkumar Sevantilal Modi	Synthesis and physico-chemical studies of unsaturated polyester polyol of multifunctional epoxy resin containing s-triazine ring and its jute/glass composites
P191.	Miss Anindita Mukherjee	Ferroelectric Properties of Mn Doped PZT Polystyrene Composites Prepared by Melt Mixing Method
P192.	Miss Shewli Pratihari	Enhanced dielectric, ferroelectric and energy harvesting properties of three phase composites based on PVDF/ZnO and modified carbon nano tube
P193.	Miss Snehal Vataliya	Growth of PPy in PVDF-PVP matrix using two different approaches of in-situ polymerization

P194.	Miss Tanya Ladla	Structural, optical and dielectric properties of ZnO dispersed PVDF based conducting polymer nanocomposites
P195.	Mr M Siranjeevi	Analysis and optimization of Carbon Fiber Reinforced Polymer SEA structures to impart the crashworthiness
P196.	Mr Saurabh Kumar	Ballistic Efficiency of Corchorus Fiber and Aramid Reinforced Epoxy Composite For Armor Material Application
P197.	Mr. Abhijit Nath	Polystyrene-NiO-CNT Ball and Film for Photocatalytic Degradation of Methylene Blue
P198.	Mr. Amit Chanda	Compressive and thermomechanical properties of random and aligned carbon nanofiber/epoxy composites
P199.	Mr. Avik Chowdhury	Porous organic polymer for adsorptive removal of mercury: experimental and theoretical insights
P200.	Mr. Jaideep Adhikari	Polycaprolactone assisted electrospinning of honey/betel with chitosan for tissue engineering
P201.	Mr. Nilesh Tiwari	Thermomechanical behaviour of the smart polymer nanocomposites reinforced with graphene and its modelling
P202.	Mr. Prathwiraj Meena	Comparative study of TGA kinetic data for LDPE and PET plastics using model-fitting and model-free methods
P203.	Mr. Pratik Chhaphia	Nano-structured thin films of copolymer with graphene and its derivative for gas sensing
P204.	Mr. Priyankkumar H. Kachhia	Castor-oil based Polyurethane/NiCo-OLDH Nanocomposites with Improved Flame Retardant Properties
P205.	Mr. R. S Krishna	A Review on Potential of Graphene Reinforced Geopolymer Composites
P206.	Mr. Rushik Rameshbhai Radadiya	Waste to Best: Chemical recycling of polyethylene terephthalate (PET) for generation of useful molecule
P207.	Mr. Sourav Maity	Donor Acceptor co-doped BaTiO <sub>3</sub> as an efficient dopant in the output voltage enhancement of PVDF nanogenerator
P208.	Mr.Ashwin Sailesh	Mechanical Properties of Kenaf-Arecanet Fiber Reinforced Polymer Composites
P209.	Mr.Selvakumar.C	Impact and hardness properties of sisal-coir-glass hybrid fiber reinforced polymer composites
P210.	Mrs. Sushma Jha	Alumina dispersed PNC films of PVA-CMC-PPy
P211.	Ms. Pinki	Double Layer Spin Coating Deposition of PVDF for Controlling Surface Roughness and Piezoelectric Response
P212.	Mr. Tahir Mehmood	Bis(2-methylpridinium) tetrachlorocuprate(II): Synthesis, Structure and Hirshfeld surface analysis:
P213.	Dr. Ranjan Kumar Pati	Preparation of Ceria based Water Gas Shift Catalyst by Coprecipitation Method
P214.	Miss. Pooja B. Naik	Fabrication of a high performance flexible Zinc ion capacitor with agricultural biomass derived mesoporous layered carbon sheets
P216.	Mr. Rudra Desai, Mr. Dashrathbhai B. Kanzariya	Synthesis of fluorescent Zn(II) based MOF: selective and sensitive detection of pesticides in aqueous media
P217.	Mr. Utsav Sengupta	Fabrication and structural insights of spinel heterostructure Fe <sub>3</sub> O <sub>4</sub> @Co <sub>3</sub> O <sub>4</sub> at various ratios

P218.	Mr. Gulam Shabbani	Synthesis and Characterization of bis [1-(thiophen-2-yl)-N(p-tolyl)methanimine]PdCl <sub>2</sub> Complex
P219.	Miss Khushali Joshi	Hydrogen Generation using Abundant Materials via Membraneless Electrochemical Water Splitting
P220.	Dr. Punit H Suthar	Thermodynamics calculation of Al-TM (TM=Fe, Co, Ni and Cu) binary alloys - A local pseudopotential Approach
P221.	Miss Aarti Solanki	Morphological alteration in tricalcium aluminate system with and without silica nanoparticles
P222.	Miss Vaishali Chauhan	Study on the Dye Adsorption Characteristics of Activated Alumina and Fe(III)
P223.	Miss. Parvathy Hari	Efficacy Study of non-Lanthanide Small Luminescent Molecules as Gunshot Residue Indicators
P224.	Mr Amarjeet Dutta	Development Progress on Infrared Stealth Composites
P225.	Mr. Amishwar Raysing Shelte	Nanoscale Nickel Oxide-Nickel Heterostructure in a Zinc Oxide Support: Selective and Sustainable Hydrogenation and Dehydrogenation
P226.	Mr. Debsundar Dey	Machine Learning Approaches for Phase Prediction of High Entropy Alloys
P227.	Mr. Harsh D. Trivedi	Quinoline Incorporating Pyrimidine Ring Assemblies: Synthesis, Characterization, Applications and In Silico Admet Studies
P228.	Mr. Harsh Prajapati	Use of Synthetic Membranes and Nanotechnology for the treatment of industrial wastewater containing Dyes and Heavy metals
P229.	Mr. Hiren Sureshbhai Patel	Adverse Effect of K-Mesh Shifting in Several Crystal Systems: An Analytical Study
P230.	Mr. Jadav Santoshkumar Chhaganbhai	Recovery of Phosphorus from Wastewater
P231.	Mr. Jay Kirtibhai Patel	Insight into Crude Oil Solubilization During Surfactant Assisted Enhanced Oil Recovery: An Experimental Study With Optical Spectroscopic Approach
P232.	Mr. Krunal Parekh	Recent Advances in Reclamation of Used Lubricant Oil
P233.	Mr. Padariya Mrugesh Kishorbhai	Selective and Solvent Switchable Synthesis of Phthalide and 2-methyl benzoic acid from Phthalic Anhydride
P234.	Mr. Sathish K V	Gamma and X-ray shielding properties of Aluminium alloys
P235.	Mr. Sauvik Chatterjee	Designing Triclinic ZnO
P236.	Mr. Vikrant Singh	Calorimetric Measurement Of In-Zn System By Drop Calorimeter
P237.	Mr. Vishal N Patil	Improved aqueous solubility of Curcumin in Choline Levulinate based Ionic Liquid
P238.	Mr. Varun Sangwan	A critical review on evaluation methodologies in pipeline integrity management
P239.	Mrs. Madhu Pandey	Zn complex incorporated mesoporous silica for epoxide ring opening reaction
P240.	Mrs. Shivani Punj	Simultaneous Effect of CaF <sub>2</sub> and TiC on Tribological Properties of ZTA Ceramics for High Temperature Application
P241.	Ms. Anusmita Chakravorty	3D Thermal Spike Simulation: Swift Heavy Ion irradiation of embedded a-SiC nano-zone inside 4H-SiC
P242.	Ms. P. Josely Jose	To study the Dielectric Behavior of Cow Manure

P243.	Patel Nihal Pravinbhai	A novel approach of thiacalixarene based macrocyclic compound and its sensing application
P244.	Miss Raval Dharaben Vasantkumar	Semiconductor 2D 1T-PdS <sub>2</sub> monolayer : A tuning of Electronic Band Gaps Under the External Electric field
P245.	Mr Vishnu A Dabhi	Structural, Electronic and Vibrational Properties of PbS: A DFT Study
P246.	Ms. Uttakantha Dixit	Textured and Solid Lubricant Based Tool Coatings: A Brief Review
P247.	Mr Gulam Shabbani	Synthesis and Characterization of bis [1-(thiophen-2-yl)-N(p-tolyl)methanimine]PdCl <sub>2</sub> Complex
P248.	Miss Lamabam Rebika Devi	Organocatalyzed-Aerobic Oxidation of Arylboronic Acids towards the Synthesis of Phenolic Derivatives
P249.	Miss Priyanka Singh	Synthesis and characterisation of bis(p-methoxyphenyl) tellurium dichloride
P250.	Mr. Jyotiranjana Mishra	Selective and Solvent Switchable Synthesis of Phthalide and 2-methyl benzoic acid from Phthalic Anhydride
P251.	Mr. Laimujam Sidartha Singh	Facile Synthesis of 2,4-Disubstituted-1,3,5-triazines via Nickel-Catalyzed Cyclization of Amidines with DMSO
P252.	Mr. Dalip Saini	3D Printed Polylactic Acid (PLA) Ferroelectret Based Piezoelectric Self-Powered Pressure Sensor for Border Security
P253.	Mr. Abhishek Sahoo	Overview on Diverse Biological Activities of Benzisoxazole Derivatives
P254.	Mr. Abhishek Sahoo	Comprehensive Highlights on Biological Impacts of Imidazoline Derivatives
P255.	Mr. Anupam Roy	Overview on Medicinal Impacts of 1,2,4-Triazole Derivatives
P256.	Mr. Kshitij Dave	Microwave plasma modification of Graphene oxide
P257.	Mr. Devanshu Shrivastav	Microwave heating assisted synthesis of Gold nanoparticles (Au NPs) and its application as a sensor.
P258.	Mr. Ganesh Gamit	Efficacy of microwave plasma as a tool for surface modification of materials
P259.	Mr. Patel JayKumar Vishnubhai	Review on Perovskite material
P260.	Mr. Sarbjit Singh	Tuning the Magnetic properties of KFeO <sub>2</sub> nanoparticles with change in temperature
P261.	Miss. Aayasha Negi	Synthesis and evaluation of antibacterial, anti-fungal, anti-inflammatory properties of silver nanoparticles mediated via roots of smilax aspera