Indo – Norwegian International online conference on Functional mAterials For energy, environment And biOmedical applicatioNs" (FARAON - 2022)

2 February 2022, Wednesday

IST **12:00 - 12:15**	**Participant registration (Login)**
12:15 - 12:50	**Inaugural Function** **Dr. Merethe Sandberg,** NFR, Norway **Dr. Sivaji Chadaram,** Scientist-G, DST, Government of India **Dr. Maan Singh Sidhu,** Counsellor for Science, Technology and Higher Education, Royal Norwegian Embassy **Dr. Muthu Manickam,** Scientist-G (DRDO), Avadi, Chennai, India **Dr. Arve Holt- Director,** IFE, Norway **Dr. D. Karthikeyan, IAS,** Principal Secretary, Higher Education Department, Tamil Nadu, India **Dr. Klaus Magnus Håland Johansen,** Head of SMN, UiO, Norway **Prof. V.S. Vasantha,** Registrar (i/c), Madurai Kamaraj University, India **Dr. Smagul Karazhanov,** Institute for Energy Technology, Norway **Prof. Terje Finstad,** University of Oslo, Norway **Prof. S. Murugesan,** Madurai Kamaraj University, India **Dr. J. Annaraj,** Madurai Kamaraj University, India
Plenary Session **Session chairs:**	
12:50 - 13:50	**Plenary 01:** **Prof. Truls Norby,** University of Oslo, Norway **Proton Ceramics for Energy Applications**
Session break 5 minutes	
13:55 - 14:55	**Plenary 02:** **Dr. Suraj Soman,** CSIR- National Institute for Interdisciplinary Science and Technology, India. **Demystifying Indoor Photovoltaics: A New Home for Dye Cells**
Coffee break 10 minutes	

Parallel Session **Session chair:**	**Session 1: PV**	**Session 2: Energy Storage**	**Session 3: Environment**
15:05 - 15:35	**Invited 01** **Dr. Alexander Ulyashin,** SINTEF Industry, Norway **Recycling of Si based PV panels**	**Invited 02** **Dr. Svein Kvernstuen,** Beyonder AS, Norway **World's first sustainable battery cell based upon activated carbon from sawdust.**	**Invited 03:** **Prof. Bjørn Hauback,** Institute for Energy Technology, Norway **Multifunctional metal hydrides for energy storage applications.**
15:35 - 16:05	**Invited 04 :** **Mr. Sandeep Dixit,** Adani Power Ltd., India **Photovoltaic modules and installations**	**Invited 05:** **Dr. Kuldeep Singh,** CSIR - Central Electro Chemical Research Institute, India **Energy storage materials**	**Invited 06 :** **Dr. T.N. Narayanan,** Tata Institute of Fundamental Research Hyderabad, India **Engineering Interfaces towards Catalysis**
Lunch/Session break – 45 minutes			
Plenary Session **Session chair:**			
16:50 - 17:50	**Plenary 03: Prof. S. Sampath,** Indian Institute of Science, India **Organic and Inorganic Materials for Electrochemical Energy Storage**		
Session break 5 minutes			
Parallel Session **Session chair:**	**Session 1: PV systems ++**	**Session 2: Energy Storage**	**Session 3: Environment**
17:55 - 18:25	**Invited 07:** **Prof. Tobias Boström,** The Arctic University of Norway, Norway **Nationwide pure PV-EV system**	**Invited 08:** **Dr. R. Vaidhyanathan,** Indian Institute of Science Education and Research, India **Covalent Organic Framework (COF) for Energy Storage**	**Invited 09:** **Dr. Per-Anders Hansen,** Institute for Energy Technology, Norway **Solar photo catalysis in oxide films by photon up-conversion**

18:25 - 18:40	Participant Oral OP PV -01: **Dr. S. Saravanan,** Swarnandhra College of Engineering & Technology, India **The role of photonic and plasmonic modes in ultrathin amorphous silicon solar cells using finite difference time domain (FDTD) method**	Participant Oral OP ES -11 **Dr. P. Siva Prakash,** Centre for High Pressure Research, BDU, India **Fabrication of high performance asymmetric supercapacitors on ZnF2 metal difluoride materials for high energy and high power density**	Participant Oral OP PEB -19 **Mohammad Ibrahim,** University of Agder, Norway **Safety hazards associated with powders produced by gas atomization and their prevention**
18:40 - 18:55	Participant Oral OP PV -02: **Dr. P. Venkatachalam** Annamalai University, India **Photovoltaic study of silver doped titanium nanoparticles photoanodes in DSSCs**	Participant Oral OP ES -12 **S. Kumaraguru** Department of Chemistry, SRM Institute of Science and Technology, India **Enhanced Cycling Behavior of Cubes-like NiO-Co3O4-MnCo2O4 oxide as an Adequate, Competent and Robust Negative Electrode Material for Li-ion Batteries**	Participant Oral OP PEB -20 **Dr. M. Maghimaa** Muthayammal College of Arts & Science, Rasipuram **Phyto-mediated nanoparticles synthesis and coating on the fabrics for antimicrobial potential and wound healing property**
Coffee break 10 minutes			
19:05 - 20:30	**Poster session 1** **PP PEB 063 to PP PEB 141** **(Details of the posters at the end of the table)**		

3 February 2022, Thursday

12:10 - 12:30	**Participant registration (Login)**		
Plenary Session **Session chairs:**			
12:30 - 13:30	**Plenary 04:** **Dr. Fride Vullum-Bruer**, SINTEF Energy AS, Norway **Energy storage in phase change materials for medium to cold temperatures and potential for industrial applications**		
Session break 10 minutes			
13:40 - 14:40	**Plenary 05:** **Dr. Vijayamohanan Pillai,** Indian Institute of Science Education and Research, Tirupati, India **Applications of Two Dimensional Materials for Renewable Energy Storage**		
Coffee break - 5 minutes			
Parallel Session **Session chair:**	**Session 1: PV**	**Session 2: Energy Storage**	**Session 3: Environment**
14:45 -15:15	**Invited 10:** **Dr. Saravanan Somasundaram,** RenewSys India Pvt. Ltd., India (Industry) **Overview on Silicon Solar Technology Developments**	**Invited 11:** **Fredrik Ringnes,** COO, Hagal AS, Norway **Sustainable production of reusable batteries**	**Invited 12:** **Prof. Deepa Khushalani,** Tata Institute of Fundamental Research, India **Effective Sea Water Splitting – Myth or Reality**
15:15 - 15:45	**Invited 13:** **Prof. Tor Oskar Sætre,** University of Agder, Norway. **Role of Grain boundaries in Si solar cells**	**Invited 14:** **Dr. Ulaganathan Mani,** AcSIR, CSIR-CECRI Karaikudi, India. **All Vanadium Redox Flow Battery - A High Energy Storage Device for Off-Grid Applications**	**Invited 15:** **Prof. Alejandro Escalona ,** University of Southern Norway **Towards a sustainable subsurface value chain: NCS2030 National Research Center**

15:45 - 16:00	Participant Oral OP PV -03 **Nandhakumar Eswaramoorthy** Vellore Institute of Technology, Vellore **Flexible Perovskite solar cells: waste PET bottles Carbon with 1D g-C3N4 nanosheets incorporated TiO2 as hybrid electron transport layer**	Participant Oral OP ES -13 **G. Muthulakshmi** Presidency College Chennai, India **Investigation of electrochemical properties of SnO2/MoS2 Nanocomposties for supercapacitor applications**	Participant Oral OP PEB -21 **Sivagowri Shanmugaratnam** Western Norway University of Applied Sciences **Electrocatalytic Water oxidation of Metal chalcogenide (MS2: M=Co, Ni, Sn) embedded TiO_2 nanocomposite**
Lunch/Session break – 45 minutes			
Plenary Session **Session chair:**			
16:45 - 17:45	**Plenary 06:** **Dr. Rajendrakumar Sharma,** SPEL Technologies Pvt. Ltd., Pune, India **Generation Next Supercapacitors – A Disruptive Technology**		
Session break 5 minutes			
Parallel Session **Session chair:**	**Session 1: PV**	**Session 2: Energy Storage**	**Session 3: Environment**
17:50 - 18:20	**Invited 16:** **Prof. Dhayalan Velauthapillai,** Western Norway University of Applied Sciences, Norway **Perovskite Solar cell**	**Invited 17:** **Prof. S.R.S. Prabaharan,** CEO, Inventus Bioenergy Pvt., Ltd., Chennai, India **Protected Lithium Metal Anode Cassette (PLC) for All-Solid State Rechargeable Batteries**	**Invited 18:** **Dr. Viktoriya Yarushina**, Institute for Energy Technology, Norway **CCS & hydrogen storage**
18:20 - 18:50	**Invited 19:** **Dr. Kristin Bergum,** University of Oslo, Norway **Tandem Solar Cells**	**Invited 20:** **Dr. Gunstein Skomedal,** Vianode AS (an Elkem Company), Norway **Synthetic Graphite Anodes in Li batteries**	**Invited 21:** **Dr. Elise Rundén Pran,** Norwegian Institute for Air Research (NILU) **Nanosafety of nanoparticles**

Coffee break 10 minutes			
19:00 - 19:15	Participant Oral OP PV -04: **Anurag Roy** University of Exeter, UK **Replacement of Pb with Cu in Perovskite Solar Cells – Possibilities and Performance**	Participant Oral OP ES -14: **Dr. M. Malarvizhi** K.S.Rangasamy College of Technology, Tiruchengode, India **Design and fabrication of flexible asymmetric hybrid supercapacitor using groundnut shell derived activated carbon and metal ferrite electrodes**	Participant Oral OP PEB -22 **Dr. C. Balaji Ayyanar** Coimbatore Institute of Technology **An in-vitro Investigation of Plant extracts Blended PVA Bio Membrane**
19:15 - 19:30	Participant Oral OP PV -05: **Wanniarachchige Chapa Pamodani:** Western Norway University of Applied Sciences **Ab initio investigation of the optoelectronic properties on Cs2AgBiX6 (X = Br, Cl, F, I) Mixed Anion Perovskites**	Participant Oral OP ES -15: **Dr. S. Meyvel** Chikkaiah Naicker College, Erode, India **Facile synthesis of Zinc Cobalt Sulfide nanoparticles as an electrode material for high performance supercapacitor Applications**	Participant Oral OP PEB -23 **Sangeeta Mahala** Center of Innovative and Applied Bioprocessing Mohali, Punjab, India **Conversion of biomass derived glucose into fructose towards synthesis of energy fuel precursors**
19:30 - 20:30	**Poster session 2** **PP PV 001 to PP PV 024** **PP ES 025 to PP ES 062** **(Details of the posters at the end of the table)**		

4 February 2022, Friday

12:10 - 12:30	**Participant registration (Login)**		
Plenary Session **Session chair:**			
12:30 - 13 :30	**Plenary 07:** **Dr. Erik Marstein,** Institute for Energy Technology, Norway **Recent advances in crystalline silicon technology**		
Session break 5 minutes			
Parallel Session **Session chair:**	**Session 1: PV**	**Session 2:**	**Session 3:**
13:35 - 14:05	**Invited 22:** **Prof. Parameswar K. Iyer,** ÍIT Guwahati, India, **Strategies influencing perovskite and polymer photovoltaic device performances and stability**	**Invited 23:** **Dr. Per Ohlckers,** nanoCaps AS, Norway **Supercapacitors**	**Invited 24:** **Dr. Richard Blom,** SINTEF Energy AS, Norway **Carbon capture with nano-porous adsorbents**
14:05 - 14:35	Participant Oral OP PV -06: **G. Kiruthiga,** Avinashilingam Institute for Home Science and Higher Education for Women, CBE, India **SnO_2: Investigation of optical, structural and electrical properties of transparent conductive oxide thin films Prepared by nebulizer spray pyrolysis for large scale perovskite solar cell applications**	**Invited 26:** **Dr. Santanu Das,** Indian Institute of Technology (BHU), India **Materials for electrocatalysis for hydrogen generation**	**Invited 27:** **Dr. Chidambaram Mandan,** Hindustan Platinum Pvt. Ltd., India **Precious Metal Catalysts as Functional Materials for Biomedical/ Medical/API Applications**

	OP PV -07: **Tharmakularasa Rajaramanan** Western Norway University of Applied Sciences **Facile synthesis of Ni-doped, N-doped and Ni/N co-doped TiO_2 nanomaterials for DSSC application**		
14:35 - 14:50	Participant Oral OP PV -08: **Dr. M. Kandasamy** K. Ramakrishnan College of Technology, Trichy **Photovoltaic Performance of Dye- sensitized Solar Cells Using Amine-functionalized TiO2 nanobelts as Photoanode Prepared Using A Simple Solution Route**	Participant Oral OP ES -16 **Dr. R. Yuvakkumar** Alagappa University, India **Cu doped ZnS nanostructure for water oxidation reaction**	Participant Oral OP PEB -24 **Dr. K.Kannaki** Govt Arts & Science College for Women, Barugur, Krishnagiri **A Study on Pure and Polymer Templated CuO Nano Crystals by Hydrothermal Method for potential Applications**
Coffee break - 10 minutes			
Parallel Session **Session chair:**	**Session 1: PV**	**Session 2:**	**Session 3: Bio-Materials**
15.00 - 15.30	**Invited 28:** **Dr. Rune Nordheim,** REC Solar Norway AS, Norway **From waste to solar panels**	**Invited 29:** **Prof. Steven Boles,** Norwegian University of Science and Technology, **Aluminum foil anodes for lithium-ion batteries**	**Invited 30:** **Prof. Yogesh C Sharma,** IIT (BHU), India **Nano adsorbents for waste water treatment**

15:30 - 15:45	Participant Oral OP PV -09 **Dr. S. Kumar** Sri Vasavi College (SF Wing), Erode, India **Fabrication of High Efficiency Semitransparent Nanostructured Perovskite Photovoltaic Cells**	Participant Oral OP ES -17 **Kajana Thirunavukarasu** Western Norway University of Applied Sciences, Norway **Electrochemical Performance of Supercapacitor based on Silver Molybdate Electrode**	Participant Oral OP PEB -25: **Dr. R. Anithadevi** Easwari Engineering College, Chennai, India **Antimicrobial Activity of Hybrid ZnMgTiO2 Nanocomposites and undoped ZnO**
15:45 - 16:00	Participant Oral OP PV -10 **Dr. M.R. Venkatraman** Dr. N.G.P. Arts and Science College, Coimbatore, India **Characterization of Plasma Assisted Chemical Vapor Deposited Hydrogenated Carbon (a-C:H) films and Its Solar Cell Characteristics**	Participant Oral OP ES -18 **Foysal Kabir Tareq** University of Agder, Norway **Microstructure and electrochemical properties of inductively coupled plasma spheroidized nickel silicide powder**	Participant Oral OP PEB -26 **Dr. K. Thenmozhi** University College of Engineering Kanchipuram, India **A Comparative study on the photocatalytic activity of biosynthesized and commercially available ZnO nanoparticles towards the degradation of methyl orange dye**
Lunch/Session break – 45 minutes			
Plenary Session **Session chair:**			
16:45 - 17:45	**Plenary 08:** **Dr. A.K. Tyagi**, Bhabha Atomic Research Centre, India **Crystallographically designed nano-catalysis for various applications**		
Session break 5 minutes			

Parallel Session Session chair:	Session 1: Environment	Session 2:	Session 3: Bio-Materials
17:50 - 18:20	**Invited 31:** Participant Oral OP PEB -27: **Siddhi Jaiswal** Dept. of Chemistry IIT BHU, india **Synthesis, Characterization & Application of Li/Tio2 Catalyst for the conversion of Glycerol to Glycerol Carbonate** OP PEB -28 **Dr. V. Prabhu** Nallamuthu Gounder Mahalingam College, Pollachi, India **Greener synthesis of silver nanoparticles from kabasurakudineer and its anticholine esterase activity**	**Invited 32:** **Prof. Helen K. French,** Norwegian University of Life Sciences, Norway **Sustainable green and smart cities**	**Invited 33:** **Dr. K.B. Jinesh,** Indian Institute of Space Science and Technology, India **Brain-inspired technologies for next-generation artificial intelligence**
Interaction with Funding Agencies:			
18:20 - 19:50	**Dr. Muthu Manickam,** Scientist G (DRDO), Avadi, Chennai, India		
18:20- 18:40	**Dr. Maan Singh Sidhu,** Counsellor for Science, Technology and Higher Education, **Royal Norwegian Embassy**		
18:40- 19:00	**Dr. Merethe Sandberg,** NFR, Norway		
19:20 -20:00	Open discussion with **Coffee break**		
20:00 - 20:30	**Valedictory address**		

Poster Presentation session 1			
Poster ID	**Name**	**University/ Institution**	**Abstract Title**
PP PEB063	S. Rajaduraipandian	Sri Paramakalyani college, India	Synthesis and characterization of metal oxide polymer nano composite
PP PEB064	Vinoth S	CSIR-Central Electrochemical Research Institute, Karaikudi, Tamilnadu	Construction of g-C3N4/BiOF heterojunction for enhanced photoelectrochemical water splitting performances based on photochemical environment
PP PEB065	K.A. Karthick	Thiagarajar College, Madurai, India	Ratiometric fluorescence detection for Na(I) using triazole-pyridoxal based chemosensor and Solid state sensor app
PP PEB066	Vijay Jeyakumar	Sri Sivasubramaniya Nadar College of Engineering	Testing and Analysis of Nanoparticle-based Textrodes for Physiological Signals
PP PEB067	Rahul Varma	Alagappa University, India	Synthesizing and Characterizing Cellulose and Cellulose Nanocrystals from Decaying Seagrass
PP PEB068	Balaji Dhandapani	SSN College of Engineering, India	Surface engineered cointegrated superparamagnetic nanobiochar from waste groundnut residues – Batch and Column studies in the removal of copper and lead ions
PP PEB069	Lekshmi GS	Anna University, India	Eco-friendly synthesis of silver nanoparticles integrated oil-derived reduced graphene oxide hybrids as a potential candidate for visible-light-driven photocatalytic degradation of Congo-red dye
PP PEB070	Nagaraja M	PSNA College of Engineering and Technology, Dindigul	Pyrolysis of Plastic Waste for a better environmental system
PP PEB071	S Chitra	Thiru A Govindasamy Govt Arts College	Photocatalytic degradation of dyes using ZnO nanoparticles prepared by coprecipitation method
PP PEB072	Tamilarasi K	S.T. Hindu College, Nagercoil	Enhancement on the electrical and optical behaviour of znfe2o4 nano particles via transition metal substitution
PP PEB073	Vasantha Kumar Palaniswamy	Madurai Kamaraj University, Madurai	Degradation of Methylene Blue (MB) Dye in Aqueous Environment using Copper Vanadate/graphitic Carbon Nitrate (CVO/gCN) Nanocomposite: An Eco-friendly Approach
PP PEB074	Ashika J Ashok	Mar Ivanios College Nalanchira	Synthesis and Characterization of Highly Luminescent Carbon Dots:A Green Approach

PP PEB075	Milna George	Sahrdaya College of Engineering and Technology	Green synthesized nanoparticles as biofilter media
PP PEB076	Aravinth kumar.K	The Gandhigram Rural Institute – Deemed University	Effect of process temperature on the $SrTiO_3$ nanoparticles for Dye-Sensitized Solar Cell Applications
PP PEB077	J.Kabiriyel	The Gandhigram Rural Institute – Deemed University	Optical and thermodynamical properties of Chitosan-CeO_3 with Neem oil based Bionano Composites
PP PEB078	Koushalya A	Madurai Kamaraj University	Synthesis of MoS2-LaCoO3 nanocomposite for efficient degradation of methylene blue dye under sunlight irradiation
PP PEB079	Adwide Vijai Narayan	Sahrdaya College of Engineering and Technology	Biosurfactant and enzyme mediated degradation of Chrysene
PP PEB080	Vijayakumar T P	Bharathiar University	Hydrothermal Synthesis and Characterization of ZnO Nanoparticles With Photo catalytic Activity
PP PEB081	Balamurugan Arumugam	Thiagarajar College, Madurai	Robust Detection of Antibiotic Sulfadiazine in Food Samples Based on Highly Reactive Pyrochlore type Lanthanum Cerate Nanoparticles modified electrode
PP PEB082	Anju Joseph	St.Thomas college,Ranni	Green Synthesis of Silver Nanoparticles Using Leaf Extract of Chromolaena Odorata and its Antibacterial Study.
PP PEB083	Arun Warrier	Sahrdaya College of Engineering and Technology	Electrochemical Detection Of Anticancer Drug - Sunitinib Malate
PP PEB084	Sivasakthivel R	Electrical and Electronics Engineer	Reuse of Condensate Water from Air Handling Units in Commercial Buildings
PP PEB085	M. P. Jeya	Madurai Kamaraj University	Preparation and Characterization of Ball milled noncarbon Nanomaterial for Heavy Metal ion Detection
PP PEB086	Athira Maria John	Christ(Deemed to be University)	Photophysical studies of fluorescent azo pyridine dyes: A theoretical investigation with experimental validation
PP PEB087	L. Ganesh	The American College	Synthesis and Characterization of Tin (II) Oxide Nanoparticles Using Microwave Method
PP PEB088	Anandhakumari .G	Gobi Arts & science College, Gobichettipalayam.	Photocatalytic properties of SrO-znO Nanocomposites : Synthesis and characterization

PP PEB089	S Swathi	Alagappa University	Neodymium doped novel barium tungstate nano spindles for enhanced oxygen evolution reaction
PP PEB090	SP Keerthana	Alagappa University	Transition metal (Ni, Co) doped TiO2 for reduction of organic pollutant under photocatalysis
PP PEB091	G. Gowrisankar	Sri Ramakrishna College of Arts and Science	Sn-substituted β-Cu2V2O7 for dye degradation under visible light irradiation
PP PEB092	Sharmila S	JSS academy of higher education and research	The Eco-friendly synthesis of graphene oxide (GO) and its applications
PP PEB093	Pragna M Shivannavar	JSS Academy Of Higher Education & Research	A Blend Of Nanotechnology And Forensic Science : A Comprehensive Review
PP PEB094	Dr. Alagunambi Ramasubbu	Govt. Arts College (Autonomous), Coimbatore – 641018	Synthesis, characterization and biological evaluation of Copper Nanoparticles using Palm Nectar as bioreductant
PP PEB095	A. Srinivasan	Govt. Arts College (Autonomous), Coimbatore- 641018	Green synthesis, characterization and biomedical applications of Copper and Gold Nanoparticles using Cocos nucifera Inflorescence as bioreductant
PP PEB096	R. Karankumar	Govt. Arts College (Autonomous) Coimbatore - 641018,	Eco – Benign synthesis, characterization of Metal Nanoparticles (Cu, Ag, Au) by Mentha spicata root apozem and its biological applications
PP PEB097	S.S. Saravanakumar	Sethupathy Government Arts College Ramanathepuram	Synthesis and characterization of biomolecules on nanostructured porous silicon for biomedical application
PP PEB098	Gayathri Sekar	Periyar University	Copper (I) complexes containing α-diimine hydrazone based ligands: Synthesis, characterization and biological applications
PP PEB099	Dr Jyotsna Pandey	K C College,Mumbai	Growth, Vibrational and Thermal characterization of doped KDP crystal-Gel Technique
PP PEB100	Ilangovan R	National Centre for nanoscience and nanotechnology, University of madras	Green Synthesis of Silver Nanoparticles from Methanolic Root Extract of Asparagus Racemosus
PP PEB101	Bhawana Devi	Center of Innovative and Applied Bioprocessing	MgBr2 salt promoted interconversion of bioderived glucose into fructose in aqueous medium: kinetics and modeling

PP PEB102	Dr. C.R. Minitha	PSGR Krishnammal College for Women, Coimbatore	Synthesis, characterization of CeO2/rGO composite and its photocatalytic properties towards organic dye
PP PEB103	Premkumar	Sri Kaliswari College, Sivakasi – 626123, Tamil Nadu, India	Nitrogen enriched g-C3N4 for Solvent Sensing: A First Principle Approach
PP PEB104	P. Kalyani	DDE, Madurai Kamaraj University	Phytomass carbon: A multifunctional engineering material for bio-medical applications
PP PEB105	R Vijaya Shanthi	Parvathy's Arts and Science College, Dindigul	Studies on Optical and Photo catalytic properties of Gd3+ doped MgO nano crystals
PP PEB106	Nishat Kumar Das	Utkal University, Odisha / CIPET:IPT, Bhubaneswar	Waste into energy by mechano-magneto-triboelectric nanogenerator
PP PEB107	S. Sugi	Women's Cristian College, Nagercoil	Photocatalytic and Antibacterial Activity of PVA Mediated Zinc-Copper Ferrite Composites
PP PEB108	Banupriya M	Mother Teresa Women's University	Surface Assimilation Of Pollutants On The Dispersed Agglomerated BiSNPs@PsCFO Nanosensor/Bare GCE To Recognize Substantial Metallic Particles In Real Samples
PP PEB109	V Chakkravarthy	National Institute of Technology, Trichy	Additive manufacturing of novel Ti-30Nb-2Zr biomimetic scaffolds for successful limb salvage
PP PEB110	R. Abirami	Mother Teresa Women's University,Kodaikanal	The effect of Calotropis Gigantea Extract in the preparation of Nickel Oxide Nanoparticles
PP PEB111	A Poongodi	Mother Teresa Women's University	Chalcogenide Hybrid Quantum dots for Biomedical and Heavy Metal Sensors
PP PEB112	S Pavithra	Mother Teresa Womens University	Green Synthesis of Titanium Oxide(TiO2) Nanoparticles by Calotropis Gigantea Extract
PP PEB113	Amutha Eswaran	Manonmaniam Sundaranar University	Green synthesis and characterization of cu-ag nanoparticles using antibacterial activity
PP PEB114	V. Thamil Priya	VHNSN College, Virudhunagar, Tamil Nadu, India	Dodonaea viscosa (L.) leaves extract of partially purified compounds effect on anti-inflammatory activity
PP PEB115	S. Ila Amirthamani	Ayya Nadar Janaki Ammal College, Sivakasi	Synthesis of 1,3,5-substituted pyrazole derivatives using hierarchical nanoporous mmzcey zeolite catalyst
PP PEB116	Kavitha V	Periyar University	Synthesis of an oxochromane based chemosensor to target toxicity of Hg2+ and Cd2+ ions: Applications on real samples and live cells

PP PEB117	Eswari Thulasimuthu	National center for nanoscience and nanotechnology, University of madras	Bactericidal action of copper nanoparticles synthesized from methanolic root extract of Asparagus racemosus
PP PEB118	Kaniraja G	Virudhunagar Hindu Nadars' Senthikumara Nadar College	Electrochemical determination of non-enzymatic glucose using molecularly imprinted poly 3,4-ethylenedioxythipene
PP PEB119	Dhinesh Kumar M	Virudhunagar Hindu Nadars' Senthikumara Nadar College	Electrochemical immunosensor for determination of oxalate oxidase using anti-oxalate immobilized on Gold nanoparticle in poly-3-aminophenylboronic acid matrix
PP PEB120	Raji Mary Mathew	Christian College Chengannur, University of Kerala	Carbon Nanodot Mediated Photodegradation of Methylene Blue Under Sunlight Irradiation
PP PEB121	Gayathri Unnikrishnan	Karunya Institute of Technology and Sciences, Coimbatore	Biocompatible Polycaprolactone/ Graphene Oxide/Zinc Oxide 2-D scaffolds for biomedical applications – an in vitro study
PP PEB122	Megha M	Karunya Institute of Technology and Sciences , Coimbatore	A novel bio-compatible V/Sr co-substituted Hydroxyapatite for bone tissue regeneration applications
PP PEB123	Anjumol Joy	Karunya Institute of Technology and Sciences, Coimbatore	Multifunctional Polycaprolactone/Graphene oxide/Gold 2D Scaffold for Biomedical Applications
PP PEB124	Senthilnathan. S	SSN College of Engineering	g-C3N4/MoS2/CeO2 nanocomposite: synthesis and photocatalysis for organic dye degradation
PP PEB125	Anandan Manickam	Sakthikailash Women's college	Photocatalytic Performance of Co-precipitation Route prepared Ni-doped ZnO nanoparticles
PP PEB126	Rajkumar Manickam	Periyar University	Galantamine tethered hydrogel as novel therapeutic target for Intracerebroventricular - Streptozotocin induced Alzheimer's disease in rat model
PP PEB127	Sharmila T	Bharathidasan University	A comparative study on the Nonlinear optical properties of Graphene Oxide and Activated Carbon
PP PEB 128	Uma Maheshwari Nallal. V	Mother Teresa Women's University	Biogenic microbial and eco-friendly synthesis of Silver nanoparticles and their biomedical applications
PP PEB 129	Dr. M.Razia	Mother Teresa Women's University	Avocado-waste mediated synthesis of Silver nanoparticles and exploration of their potential biological properties

PP PEB130	Prabhu M	Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, 124Tamilnadu	Nanocomposite based Metal Oxide Nanoparticles for Photocatalysts in the Degradation of Dyes
PP PEB131	S Vishnu Priya	Madurai Kamaraj University	Rutile, Anatase and mixed phases of TiO2 nanoparticles is investigated for the effective Photocatalytic activity
PP PEB132	P. Suganthi	Raja Doraisingam Govt Arts College, Sivagangai	Optical and structural properties of silver doped zinc oxide nanoparticles
PP PEB133	R.Reeja	Raja Doraisingam Govt.Arts College, Sivagangai	Optical properties of strontium tinanate nanoparticles prepared for different temperatures
PP PEB134	Dr. S. Mahalakshmi	Raja Doraisingam Govt. Arts College,Sivagangai	Structural and optical analysis of tin titanate nanoparticles
PP PEB135	S. Chelladurai	Raja Doraisingam Govt. Arts College, Sivagangai	Synthesis and characterization of calcium titanate nanoparticles
PP PEB136	A. Karuppasamy	Raja Doraisingam Govt. Arts College, Sivagangai	Optical and structural characterization of silver doped calcium titanate nanoparticles
PP PEB137	Vanal Krishnan Saravanan	MKU Madurai	Micro-structural Characterization and hardness studies of Alumina based Composites
PP PEB138	K. Velmurugan	The M.D.T. Hindu College, Tirunelveli	Fabrication of novel GO@Dy2MoO6 nanocomposite for the efficient visible light induced superior photocatalytic activity
PP PEB139	Anupama Balu	Amirta School of Engineering, Coimbatore	Synthesis and Characterization of $CoNi_2O_4$ by one step hydrothermal method
PP PEB140	T.Raguram	Amirta School of Engineering, Coimbatore	Synthesis and Characterisation of Mn doped TiO_2 nanoparticles by Sol-gel Technique for Photocatalytic Applications
PP PEB 141	M. Jayashree	Madurai Kamaraj University, Madurai	Review: Recent Advancements in Solar Cell

Poster Presentation session 2			
Poster ID	**Name**	**University/ Institution**	**Abstract Title**
PP PV001	P. Arockia Michael Mercy	Madurai Kamaraj University	Optimizing thickness of triple layer antireflection coating for tuning the optical properties of GaAs semiconductor
PP PV002	Athira Vijayan	Madurai Kamaraj University	An Attempt to Tailor the Properties of Si/TiO2 Nanomaterials for Photoelectrochemical Applications
PP PV003	M Jeevaraj	Kalasalingam academy of research and education	Synthesis and Characterization of Imidazolium tin halides
PP PV004	Inamul Hasan Z	The National Institute of Engineering	Perovskite Thin Films Structural Studies Using Synchrotron Source X-ray Diffraction
PP PV005	Rekha Aggarwal	Lovely Professional University	Effect of thermal annealing on optical and structural properties of sol-gel driven spin coated CdS thin films
PP PV006	N.Balagowtham	Sri Sivasubramaniya Nadar College of Engineering	Synthesis of Highly Stable Perovskite Nanoparticles by Sonochemical method for Efficient Perovskite Solar Cells (PSCs)
PP PV007	Amit Kumar sharma	Maharana Pratap Govt. College Amb,Distt. Una, Himachal Pradesh	C-V and C-f measurements of lead-free perovskite solar cell in MASnI3/CuI configuration using SCAPS -1D software
PP PV008	Riyas KM	MES Ponnani College, Ponnani	Spectral and structural characterization of Li doped Gd2O3:Eu3+ Microstructures synthesized by high-temperature solid-state method
PP PV009	Kajol Taiwade	M.A.N.I.T, Bhopal	Basic Review of Perovskite Solar Cells
PP PV010	Bidyashakti Dash	CIPET-IPT Bhubaneswar	Numerical modelling and simulation studies of Formamidinium tin triiodide-based perovskite solar cell
PP PV011	Alok Kumar Das	Department of Physics, Dibrugarh University	A study on the effect of bath deposition temperature on the structural and optical properties of fabricated CdsSe/pva thin films by chemical bath deposition method
PP PV012	K. Nithish Sriram	Madurai Kamaraj University	Structural, mechanical and electronic properties of Cu2O for different XC-Functionals using Quantum Espresso
PP PV013	Viplove Bhullar	Guru Nanak Dev University	Effect of humidity on Electrospun TiO2 nanofibers for Dye Sensitized Solar Cells

PP PV014	Vasanth B	SSN College of Engineering, Chennai.	Hole transport material free carbon-based perovskite solar cell using methyl ammonium lead iodide light absorber.
PP PV015	Aswathy P Vijayan	Sree Kerala Varma College, Thrissur, Kerala	Tuning of Plasmonic resonance peak of core-shell structure using simulation studies
PP PV016	Durairaj M	Bharathidasan University	Hydrothermally Prepared Molybdenum Disulfide (MoS2) as an Alternate Counter Electrode for Dye Sensitized Solar Cells
PP PV017	Kawya J	Bharathidasan University	Upconverter Laden MoS2 Counter Electrode for Dye Sensitized Solar Cells
PP PV018	R. Sasikala	Madurai Kamaraj University	Strontium titanate perovskite oxide embedded reduced graphene oxide for efficient electron capturing photoanode for dye-sensitized solar cell
PP PV019	N. Murugesan	Sethu Institute of Technology, Tamil Nadu, India	Synthesis and Characterization of reduced graphene oxide modified nickel oxide thinfilms for solar thermal applications
PP PV020	Dr. K. Poonkodi	Nallamuthu Gounder Mahalingam College, Pollachi	Hydrothermal Synthesis of BiVO4/RGO- BiVO4 for Photocatalytic Performance under Visible Light towards Congo Red and Methylene Blue Dye Removal
PP PV021	N. Rajamanickam	National Institute for Materials Science (NIMS)	Magnetic properties depending on Mn doping in halide CH3NH3PbI3 perovskite films
PP PV022	Kanimozhi Balakrishnan	Madurai Kamaraj University	Optical properties of p-type doping on SnO2 super lattice
PP PV023	Lathifa Banu .S	Madurai Kamaraj University	Structural Stablity and Electrical Properties of MoSe2 polymorphs:DFT
PP PV024	D. Arthi	Madurai Kamaraj University	Computational study on Electronic and Thermal stability of Low Energy Indium Oxide Polytypes
PP ES025	Sabna. M	MES Ponnani College, Kerala	Substitutional Effect of Sb3+ ions on the Lattice Dynamics, Surface Chemical States and Optical Properties of Vanadium Pentoxide
PP ES026	M. Kaaviah	Madurai Kamaraj University	Activated Carbon Derived from Tangerine Peel as an Efficient Electrochemical Hydrogen Storage Material for Fuel Cell Applications
PP ES027	Bhuvaneshwari R	Madurai Kamaraj University	Synthesis and Characterization of BiOBr Anode material for Supercapattery Applications

PP ES028	Pushpa Selvi M.	Lady Doak College	Role of lithium bonds in doped graphene nanoribbons as cathode hosts for Li-S batteries: A first-principles study
PP ES029	Gavaskar.T	St. Joseph's College of Engineering, Chennai , India	Experimental Investigation of PCM With Added E-Graphite and Analysis of Its Thermal Characteristics
PP ES030	Meera Naachiayr R	Fatima College, Madurai	Synthesis of Water-insoluble Biopolymer Gellan gum GQD for enhancing the property of Solid Polymer Electrolyte
PP ES031	Aafrin Hazaana S	Fatima College, Madurai	Effect of Graphene Quantum dots on Gellan gum based solid biopolymer electrolyte for electrochemical device applications
PP ES032	N. Vimalasundari	Madurai Kamaraj University	Fabrication of wurtzite zno embedded functionalized carbon black as sustainable electrocatalyst fendocrine disruptor trichlorophenol
PP ES033	Navaneethan D	J.K.K. Nataraja College of Arts and Science	Natural bio-waste derived activated carbon for supercapacitor application
PP ES034	Anantha Prabhu C	THE M.D.T. HINDU COLLEGE	Synthesis and Characterization of TiO_2
PP ES035	Anubhab Ray	Maulana Azad National Instiute Of Technology	Pull-in Analysis of CMUT device
PP ES036	Dr. R. Yuvakkumar	Alagappa University	Direct growth of binder free CNT growth on Nickel foam substrate for highly efficient symmetric supercapacitor
PP ES037	Rishi Dhar Gandhi	M.A.N.I.T., Bhopal	Synthesis and Characterization of Nano-Perovskite ZnSnO3 for the Application of UV Shielding
PP ES038	G.Baby Sri Pratha	Madurai Kamaraj University	Effect of Copper doping on Strontium Titanate Perovskite Oxide material for Energy Storage Application
PP ES039	Narayan Gaonkar	University College of Science, Tumkur University, Tumkur	Electronic thermal transport in phosphorene
PP ES040	R G Vaidya	University College of Science, Tumkur	Thermoelectric power in AlGaN/GaN heterostructure: Polarization effect
PP ES041	C Bhagya Lakshmi	St. Xavier's College, Palayamkottai	Discussion on structural & optical properties of binary metal selenide/Nb2O5 nanocomposite synthesized by hydrothermal method.
PP ES042	Anandhu T P	Sanatana Dharma College, University of Kerala, Alappuzha	Ni3S2/MnO2 Nanocomposite Electrodes with High Areal Capacitance and Long Cycling Stability.

PP ES043	M. Sivanantham	PRIST Deemed to be University, Thanjavur	Fabrication of porous carbons using amino-acid based amphiphilic block copolymers as template and their electrodes as supercapacitors
PP ES044	Muniraj @ Vignesh N	Mannar Thirumalai Naicker College	Fabrication of Na+ ion conducting polymer electrolyte based on PVA and Nelumbo Nucifera for energy applications
PP ES045	K. Vinoth Kumar	Madurai Kamaraj University	Hydrogen Adsorption on 2D Cobalt Carbide from first-principles calculation
PP ES046	Jemini Jose	Mercy College, Palakkad	3-dimensional architecture of reduced graphene oxide/multiwalled carbon nanotubes/zirconium oxide from zero-, one- and two- dimensional building blocks for supercapacitors
PP ES047	Om Priya Nanda	(CIPET)-IPT, Bhubaneswar	A Study of Performance of Bio-Derived Carbon for Supercapacitor in Different Electrolytes
PP ES048	Samya Chaudhary	MANIT Bhopal	Design of piezoelectric bulk acoustic resonators for GHz resonant frequency
PP ES049	Rm Sivakumar	Lakshmi Ammal polytechnic college	Forced convective solar air dryer with combined Thermal storage systems
PP ES050	Ashalatha V	Nirmalagiri College	Preparation of MCo2O4 (M = Mn and Zn) using a rapid solution combustion synthesis for oxygen evolution reaction
PP ES051	Shyamli Ashok. C	Nirmalagiri College	A facile approach to prepare spinel structured MnCo2O4 nanoparticles for supercapacitor applications
PP ES052	G.Vignesh	Kalasalingam Academy of Research and Education	Facile preparation of Zinc Cobalt Oxide (ZnCo2O4) Nanoparticles for Supercapacitor electrode applications
PP ES053	K. Venkatesh	Thiagarajar College	Hydrothermal synthesis spinel NiMn2O4 Nano/-microspheres for high performance Supercapacitor applications
PP ES054	C. Sharmila	Thiagarajar College	Mn2P2O7 anchored Graphene Nano Sheets as an Electrocatalyst for Simultaneous Hydrogen evolution reaction and oxygen evolution reaction
PP ES055	Sharmili.T	Fatima college, Mary land, Madurai	Investigation on rare earth based double Perovskite - La2NiMnO6 and La2NiFeO6 for optical and electrochemical properties
PP ES056	Anjana Baby	CHRIST (Deemed to be University)	Photoresponse and electrochemical behavior of azobenzene modified graphene oxide of energy storage applications

PP ES057	Dr. S. Jayanthi	The Standard Fireworks Rajaratnam College for Women, Sivakasi	A novel Nanocomposite Proton Conducting Polymer Electrolytes based on Poly(vinyl Chloride
PP ES058	Jerries Infanta J	Bharathidasan university	2D Sheet like of Ni-doped CuCo2O4 as anode material for high performance energy storage applications
PP ES059	M.S.Sivaharis ankar	PSNA College of Engineering and Technology, Dindigul-624622	Hydrogen as a future source of energy and its energy storage technologies
PP ES060	J Vigneshwaran	Madurai Kamaraj University	3D Hierarchical MXene-CoWO4 Composite Freestanding Porous Carbon electrode: An asymmetric supercapacitor device
PP ES061	Dr. D. Silambarasan	The MDT Hindu College, Tirunelveli	Hydrogen Storage Property of Gamma-ray Irradiated Graphite
PP ES062	M. Saraswathi	MKU Madurai	Theoretical investigation on B_{12} N_{12} nano cage with beryllium hydride clusters towards Hydrogen storage applications