

SESSION 1: SUSTAINABLE APPROACHES, 3/2/2023

Session Chair by Dr. M.L. Meena (MNIT Jaipur) and

Co- Session Chair by Dr. Shailendra K. Jain (Amity Delhi)

Paper ID	S.No.	Paper Title	Authors
P-13	1	Energy Education for the Development of Rural India	Deepak Sharma and Pushpendra Singh
P-16	2	Implementation of sustainable practices in Indian SMEs: A MICMAC analysis of challenges	Ravinder Kumar, Shailendra Kr Jain
P-24	3	Influence of Impeller Design Modifications on Pump as Turbine (PAT)	Mohnish Soral , Rahul Painter , Ashish Doshi, Mukund Bade BÄ
P-38	4	<i>Optimization of the ultimate pit design of a limestone deposit to improve the sustainable development in the mining area</i>	Deepak Chandra Pandey and Dr. Anupam Bhatnagar
P-44	5	<i>Mine water analysis and sustainable use in opencast iron ore mine</i>	Gosavi Vijay Navnath, Deepak Pandey, Manjeet Singh
P-64	6	Sustainable Buildings: Designing Elements and Green Solutions	Swati Singh, Kumud Tanwar, and Ashok Kakodia
P-78	7	From Waste to Energy: Electro-ecological System for Sustainable development of Pollutant Removal and Energy Recovery	Meena Choudhary, • Monali Muduli, Sanak Ray
P-84	8	Assessing the contribution of urban vegetation in improving air quality to advance sustainable development goals	Mallika Vashist, T. Vijay Kumar, S. K. Singh
P-87	9	Zero Liquid Discharge Strategies- A Sustainable Way of Wastewater Management	Rachna Garg' S. K. Singh, T. Vijay Kumar
P-88	10	Need of thin walled energy absorbers in accident prevention for sustainable transport system: a review	S. K. Tak, M.A.Iqbal

SESSION 2: BIODIESEL PRODUCTION AND ANALYSIS, 3/2/2023

Session Chair by Prof. Rajkumar (YMCA Faridabad) and

Co-Session Chair by Dr. B.L. Salvi (CTAE Udaipur)

Paper ID	Session	Paper Title	Authors
P-10	1	Estimation of Green House Gas Reduction through Domestic Biogas Plants	Dinesh Kumar Sharma, O S Prajapati
P-35	2	<i>Environmental Scan to Identify Key Parameters in Performance of Spark Ignition Engine using Gasoline-Ethanol Blends</i>	Jyoti Umesh Pawar, Amit Kumar Sarraf, Mahendra Pratap Singh, Pawar Umesh Ankush
P-65	3	Combustion assessment of ternary blends of Biodiesel/Methanol/Diesel in CI	Manpreet Singh, Mohd. Yunus Sheikh, Dharmendra Singh, C. S. Rajoria
P-66	4	A Sustainable Hydrogen Fuel Cell Technology: Renewable Energy Generation, Storage and Application	Sanidhya Jain, M. L. Meena
P-74	5	Experimental study on compressed bio-syngas as green fuel for spark ignition engine for power generation	Bheru Lal Salvi
P-76	6	Recent advancements in gaseous fuel based cook-stove burners for sustainable development	Anshul Paliwal, Bheru Lal Salvi, MS Khidiya, Chitranjan
P-80	7	Green Hydrogen Production: Opportunities and Challenges Ahead for Sustainable Development	Tanay Pansari*, Bheru Lal Salvi, Shiv Lal
P-86	8	Green production of hydrogen	Suraksha , Muskan Jain, Kumud Tanwar and Ashok k.Kakodia
P-98	9	Biofuel Formation from Green Nanoparticles	Suraksha* Muskan Jain, Kumud Tanwar, Ashok k.Kakodia
P-108	10	Production Of Biofuel From The Algal Biomass	Pooja Sharma, Neerja Shrivastava Shikha Bhadoria

SESSION 3: Passive solar, Heat Transfer and Phase change materials, 3/2/2023

Session Chair by Dr. Harender (SNU Greater Noida) and

Co- Session Chair by Dr. Aditi Sharma (Parul University, Vadodara)

Paper ID	S.No.	Paper Title	Authors
P-5	1	Review of Heat pipe Heat exchangers in HVAC and R Systems	Manishkumar Gadle, Dr. Emrati Kumari
P-6	2	Experimental investigation of nanoparticles coating with various concentrations on absorber plate of solar air heater for enhancement of thermal efficiency	Amit Tiwari, Neeraj Kumar, Sujeet Kumar
P-9	3	A Strategic Plan for PMU Installation in Power System	Sonu Kumar Bairwa, Satyendra Pratap Singh
P-11	4	Two stage evaporative cooling (TSEC): A review	Gajanand Sharma, V Bansal, O S P
P-12	5	Performance evaluation of two stage evaporative cooler using correlation and regression	Gajanand Sharma, V Bansal, O S P
P-28	6	<i>Advances in Phase changing materials in solar thermal energy storage and applications</i>	<i>Shri Krishna Mishra, Mukesh Kumar Gupta, Rahul Kumar, Abhishek Sharma, Neeraj Kumar</i>
P-29	7	<i>A comprehensive review on the solar still using PCM material</i>	<i>Khushbu Rai, Harsh Pandey , Rahul Kumar, Abhishek Sharma</i>
P-33	8	<i>Solar space conditioning system operated by a parabolic trough collector using nanofluid at New Delhi, India</i>	<i>Abdul Qadeer, Shah Alam, Suhail Ahmad Siddiqui, Mohd Parvez, Hasan Zakir Jafri</i>
P-41	9	<i>Application of artificial roughness to increase the performance of solar air heaters: A Review</i>	<i>Anoo Dadhich, Brajesh Tripathi, K.B. Rana</i>
P-42	10	<i>A critical analysis of thermal conductivity of nanofluids and its applications</i>	<i>Vivek Sharma, K.B. Rana, Ritesh Patidar</i>

SESSION 4: Passive solar, Heat Transfer and Phase change materials, 3/2/2023

Session Chair by Prof.SPS Rajput (MANIT Bhopal) and

Co- Session Chair by Dr. Ghanshyam Sharma (Kota University, Kota)

Paper ID	S.No.	Paper Title	Authors
P-45	1	<i>Combined cooling and power system based on solar Kalina cycle with ejector</i>	Nahid Akhtar, Abdul Khaliq, Mohd Parvez Shiv lal
P-47	2	Latent Heat Storage system in Solar Dryers: A Review	Rajat Arya, Om Shankar Prajapati, Dr. Vikas Bansal
P-68	3	Recent Modification in Design of Solar Still for Enhancing Productivity and Efficiency- A Review	Abhishek Bhardwaj, <i>Raj Kumar, Nitin Panwar</i>
P-79	4	Energy efficient residential buildings – a review	Rahul Kumar Banshiwal and Sanjay Kumar Tak
P-85	5	A comprehensive review on recent advancements in solar air heater using artificially roughness	Ankush Jain, K B Rana, B. Tripathi
P-92	6	Adaption of PCM in Building Envelope: A Review	Anshul Kumar Bansal, Mayank Bhardwaj and Mohd. Shahid
P-93	7	Integration of PCM in Ground Heat Exchanger: State of the Art	Komal Sharma, Mayank Bhardwaj
P-100	8	Utilization of PCM in Solar Energy Technologies: Current State of Art	Mohd. Shahid, Komal Sharma and Swapnil Chitnis
P-109	9	Solar Road Ways in Indian Panorama: A Review	Aryan Sharma, Dharmraj Meena, Shiv Lal, Shanti Lal Meena

SESSION 5: Sustainable manufacturing, 3/2/2023

Session Chair by Prof. R.S. Walia (PEC Chandigarh) and

Co- Session Chair by Dr. S.K. Parashar (RTU Kota)

Paper ID	S.No.	Paper Title	Authors
P-31	1	<i>New method of friction stir welding of aluminium alloys</i>	Sumer Singh, Gaurav Purohit
P-32	2	<i>Optimization of Process parameters in EDM of heat treated carbon tool steel (SK2MCr4)</i>	Sumer Singh, Gaurav Purohit
P-36	3	<i>Development of Modified Predictive Material Removal Model in Abrasive Water Jet Cutting</i>	Ketan D Panchal, Dr. A. A. Shaikh
P-81	4	Applications of Additive Manufacturing and 3D Printing Technology in the Environmental Sustainability: A Review	Subhankar Dey ¹ , Dr. Manish Bhargava
P-113	5	Sustainable Manufacturing Comprehension – A Critical Review	Deeksha Bhatnagar , Shanti Lal Meena, Dharmraj Meena
P-37	6	<i>Evaluate the hydrodynamic performance of DTHE with varied shape grooves on the inner tube crosssection Using Al₂O₃ /water nano fluid</i>	Prateek Tiwari 1 , R. C Gupta
P-83	7	Sustainability in industrial ergonomics: A bibliometric analysis	Prakash Naraian Sharma ¹ , M. L. Meena ² , Rajhans Meena

SESSION 6: Mines and sustainable environment 3/2/2023

Session Chair by Prof. Praveen Kumar (RTU Kota) and

Co- Session Chair by Prof. K.S. Grover (RTU Kota)

Paper ID	S. No.	Paper Title	Authors
P-18	1	<i>Study of waste treatment of t.k private company to minimizing environmental degradation by environmental audit</i>	Dipti Tiwari, Dr.Monika Yadav, Dr.Rajendra Kumar, Dr.Santosh k Singh
P-19	2	<i>Geological Block Modeling Of a Limestone Deposit Using Inverse Square Distance Method to Improve Environment Management</i>	Deepak Chandra Pandey, Dr. Anupam Bhatnagar
P-20	3	Spatial Assessment of PM _{2.5} due to Mining and Industrial Activities	Manjeet Singh Bhullar, Dr. Anupam Bhatnagar
P-39	4	<i>Analysis of waste management in opencast iron ore mines</i>	Tule Dhanraj Murlidhar, Deepak Pandey, Mr. Manjeet Singh
P-40	5	<i>Optimum Utilization of Heavy Earth Moving Machinery in Opencast Iron Ore Mine</i>	Gaonkar Babaji Datta, Manjeet Singh, Deepak Pandey
P-43	6	<i>Analysis of the water & soil quality parameters for controlling pollution in iron ore mine</i>	Parab Gaonkar Tukaram Madhukar, Deepak Pandey, Manjeet Singh
P-46	7	<i>Leaching of iron ore from low grade dumps</i>	Ullhas Vishnu Bagi, Manjeet Singh, Deepak Pandey
P-48	8	Study of Mine Water for Better Reutilization	Manjeet Singh Bhullar, Dr. Anupam Bhatnagar
P-49	9	Comparative analysis of environmental conditions before and after mining activities	Guindo ibrahim, Manjeet Singh, Deepak Pandey
P-57	10	To Study the Importance of Reclamation in Mining to Make a Green Environment in India	Syed. Afroz Hussain, Manjeet Singh, Deepak Pandey

SESSION 7: Thermal materials, FGM, 4/2/2023

Session Chair by Prof. S.K. Rathore (RTU Kota) and

Co- Session Chair by Dr. P.M. Meena (MBM University Jodhpur)

Paper ID	S.No.	Paper Title	Authors
P-4	1	Design and analysis of internal combustion engine piston pin.	Emarati Kumari
P-8	2	Recent advancements in modal Analysis of FGM Structure	Prabhat Mahawar, Pankaj Sharma
P-15	3	Designing of Ni/NiO core/shell and Co-Ni/Co ₃ O ₄ -NiO Nano-Heterostructures	Sumi Kumari and Deepak Bhatia
P-52	4	<i>Use of Nanomaterials in the Glass compositions to enhance the integrity and stability of Glass to Metal Joints: A Review</i>	Vinod Kumar Verma, Kunj Bihari Rana, Brajesh Tripathi
P-55	5	<i>Modelling of Bi-directional functionally graded material (BDFGM) beams using exponential rule</i>	Ashish Khinchi, Pankaj Sharma
P-96	6	Concrete Mix Rationalization Through Sustainable Ingredient using Coconut Shell	Vishnu Prasad Dangi, Sudesh Kumar Sohani
P-97	7	ENCAPSULATION OF NANO ALUMINIUM IN CEMENT BLOCKS BY STABILIZATION/ SOLIDIFICATION	Lavi Dhiman, Vikas Kumar Gahlot, Shalini Anand, S. K. Singh and P. K. Rai
P-102	8	Energy Conservation Potential in Mechanical Bearings: A review	Meharvan Singh, Dharmraj Meena, Shanti Lal Meena, Shiv Lal
P-117	9	Review of recent trends of Augmentation of heat transfer from solar air heater using arc shaped ribs	Rajan Karir, Kunj Bihari Rana, Piyush Kumar Jain

SESSION 8: Photovoltaic's and Renewable Energy Options, 4/2/2023

Session Chair by Prof. Dinesh Birla (RTU Kota) and

Co- Session Chair by Dr. Rahul Rawat (MNRE Delhi)

Paper ID	S.No.	Paper Title	Authors
P-1	1	State-of-the-art in Hybrid Electric Scooter: Scopes and Challenges ahead in Indian Scenario	Jay upadhyay
P-2	2	Study of Load Pattern of Real Distribution System and Peak Load Compensation by Solar PV System	Chandan K. Mehra
P-50	3	An overview of the advancement of the Solar Cells	Sudha Gulati , Richa Jain
P-7	4	Django React Integration	Dileep Bangad, Anshuman Singh Shekhawat,
P-111	5	Solar Photovoltaic Systems for Satellites working	Garvit Agarwal, S.L. Meena, Shiv Lal, Dharmraj Meena
P-21	6	EV Charging	Mayank Pratap Singh, D K Chaturvedi
P-22	7	Solar Powered Drain Cleaner System	Mayank Pratap Singh, D K Chaturvedi
P-25	8	Single Phase Grid Connected PV Inverter Based Islanding Detection using Phaselet algorithm	Pamita jain, M Lalwani
P-27	9	<i>Mitigating Techniques for Power Variability with Grid Integration of Renewable Energy Sources: A comprehensive Review</i>	<i>Virendra Sharma, Preeti Garg, Aditya Gupta, Nishant Bharti</i>
P-34	10	<i>Design and Comparative Analysis of OPC-DCF-FBG Dispersion Compensation Technique with RZ Pulse Generator for 300km Length of SMF</i>	M.L.Meena and Raj Kumar Gupta

SESSION 9: Photovoltaics and Renewable Energy Options, 4/2/2023

Session Chair by Prof. Dheeraj K. Palwalia (RTU Kota) and

Co- Session Chair by Er. Radheshyam Meena (MNRE Delhi)

Paper ID	S. No.	Paper Title	Authors
P-54	1	<i>Study of Electrical Effect on Capacitive Pressure Sensor using Silicon Nanowires</i>	Suman, Deepak Bhatia
P-58	2	Performance improvement of photovoltaic cell by using different cooling technique: a review	Abdul Quaiyoom ¹ , Nikhil Dev ² , Bhupinder Singh
P-60	3	Solar power with pv-technology: a review	P M Meena, Urjasvita P Gaur
P-61	4	Offshore Wind Energy Generation in India: Future Energy	Anubhav Singh, Dharmraj Meena, Shanti Lal Meena, Shiv Lal
P-75	5	Speed Control of DC Motor using Arduino Uno	Aman Dixit, Mohammed Zaid Khan, Seema Agarwal
P-77	6	A circular directional UWB antenna for microwave imaging applications integrated with GSM band and C-band applications	Asheesh Gupta and M.L. Meena
P-89	7	Perovskite Solar Cell with Improved Cell Stability Based on Ambient Processed Organic - Inorganic Hybrid Materials	<i>Sumit Kumar Sharma, Sanju Tanwar, Aswani Yella</i>
P-94	8	Performance analysis of Matrix Converter fed Induction Motor Drive- A Review	Reena Bhati
P-95	9	An update on microbial fuel cell technology for chemical waste treatment and bioenergy production	Navneet', Shalini Anand, Vandana Mishra, Radhey Shyam, PK Rai
P-107	10	Advanced Metering Infrastructure Security as a Functionality of Smart Grid: A Review	Shibna Hussain, Dr. Santosh Kumar Sharma

SESSION 10: Sustainable Chemistry, 4/2/2023

Session Chair by Prof. Dilip Sharma (MNIT Jaipur) and

Co-Session Chair by Dr. Ashok K. Kakodia (Govt. College Rajgarh)

Paper ID	S. No.	Paper Title	Authors
P-26	1	Synthesis, characterisation and Performance Enhancement of CuO and CuO-Paraffin Nano Composite	Santosh Kumar Singh, Sujit Kumar Verma
P-30	2	<i>Effect of variables on the gelation of an organically cross-linked phpa polymer gel system</i>	Manoj Vaishnav, Naveen Kumar Verma
P-51	3	<i>Analysis of various air quality parameters for controlling pollution in iron ore mine</i>	Parab Gaonkar Tukaram Madhukar, Manjeet Singh, Mr. Deepak Pandey
P-63	4	Graphene Oxide: Ingenious Future for Novel Water Filtration	Muskan Jain, Suraksha, Kumud Tanwar, Dr. Swati Singh
P-67	5	Role of alternative carbon sources in chemical production	Sunita Bhargava, Anju Agrawal, Suman Sharma, Loni Lokwani
P-70	6	Reuse of Waste Plastic Material for Road Construction Work: A Review	Vishal Saxena
P-72	7	Catalytic Degradation of Methyl Orange Dye Utilizing Silver Nanoparticles from <i>Parmelia perlata</i>	Akshita Agarwal ¹ , Dr. Ashok K. Kakodia ² and Dr. Kumud Tanwar
P-91	8	Green knoevenagel synthesis of novel isatin derivatives using silver nanoparticles as catalyst	Ashok K. Kakodia, Kumud Tanwar, Swati Singh, Prakash Chandra Dhabas, Ronak Khandelwal, Latika Khandelwal
P-105	9	Catalytic Degradation of Methyl Orange Dye Utilizing Silver Nanoparticles from <i>Parmelia perlata</i>	Akshita Agarwal, Ashok K. Kakodia, Kumud Tanwar
P-106	10	Preparation and characterization of 3-Nitrophenyl Maleimide and copolymerized with Methylacrylate	Suresh Kumar Meena, Sanjeet Singh

SESSION 11: Pollution and Environmental Issues, 4/2/2023

Session Chair by Dr. Qasim Murtaza (DTU Delhi) and

Co- Session Chair by Prof V. Fuskele (BTIRT Sagar)

Paper ID	S.No.	Paper Title	Authors
P-56	1	Atmospheric Deposition of Some Heavy Metals in the Vicinity of a Coal Based Thermal Power Plant in an Industrial City Kota, Rajasthan	Bharat Singh Meena, Manju Meena, Uttra Chandrawat, Ashu Rani
P-69	2	Fish Marketing in Southeastern Rajasthan	Rajendra Singh Rajawat
P-71	3	Recovery and Utilisation of Sulphur Dioxide Contained in Flue Gases in Thermal Power Plants	Shveta Acharya, Manju Sharma, Meenakshi Mayangar
P-73	4	Air Purifier and Humidifier using Water as a filter for improvement in Air quality Inside the House	Devendar Kumar Meena ¹ , Simit Malgat ² , Balwant singh ³ , Siddharth ⁴ , Dr. Manish Bhargava
P-82	5	Smart technologies for control of water pollution	Harshit Chawla*, Harsh Pipil, Shivani Yadav, Sonam Taneja, S. K. Singh, A. K. Haritash
P-90	6	Life cycle assessment of first- and second-generation biofuel: A comparative study	Kulvendra Patel, S.K. Singh
P-99	7	Assessment of Uranium and Physico Chemical of Water of Digod Tehsil, Kota and Their Statistical Interpretation	Ramet Meena, Suresh Kumar Meena, Rambilas Meena and Dhanraj
P-101	8	Analysis of renewable energy and economic growth of Germany	Nandini Agrawal , Nishil Bansal , Shweta Kumari , Akanksha Singh , Nand Kumar
P-110	9	Plastic Degradation by Microorganisms: A Sustainable Approach to Reduce Environment Pollution	Yash Jadaun, Dharmraj Meena, Shiv Lal, Shanti Lal Meena, Manoj Vaishnav
P-112	10	The present sustainable library issues & challenges in library automation with reference academics -a brief study	Neetu singh

SESSION 12: Pollution and Environmental Issues, 4/2/2023

Session Chair by Prof. R.K. Tomar (Amity Noida) and

Co- Session Chair by Dr. N. Raghuwanshi (MNIT Jaipur)

Paper ID	S.No.	Paper Title	Authors
P-23	1	BIOMIMICRY: State of the Art	Solanki Pratik, Vagadiya Vaibhav, Chavda Bhavin, Savaliya Shreyansh, Rajshree Charan, Gopi Raval
P-59	2	Agrivoltaic System in Hot Arid and Semi-arid Climatic Regions	Ravi Kumar Chopdar, Namrata Sengar
P-62	3	Hydroelectric power: Current Status	Bhupesh Jain, Vijendra Singh Tanwar
P-53	4	<i>Advances In Power Generation, Renewable Energy And Sustainable Development</i>	Megha Saini
P-3	5	Renewable energy evolution in India	Divya Gidwani
P-17	6	<i>Designing and Prototyping of Solar Powered Rice and Wheat Crop Harvesting Machine</i>	Deepak Meena, D K Yadav
P-114	7	<i>Performance Analysis of Hybrid Energy System based on Wind Power and Solar Watch Tower at Kota-Airport.</i>	Baldev Charpota, Santosh Sharma
P-115	8	A Comprehensive Review on Darrieus VAT and Its Performance	Aditya Yadav*, K.B. Rana, R.K. Bhamu
P-116	9	Thin Film Photovoltaic Cell Technology in Solar Energy: A Review	Naveen Kumar, BL Gupta, Pankj Mohan Rastogi, Ritesh Tirole