





### National Conference on Energy and Environment for Sustainable Development 2022

Day 1: 5<sup>th</sup> July 2022

Session No: 1A Session Chair: Dr. Ravi Warkhedkar Session Coordinator: Prof. Abhijeet Kousal

Session theme: Fundamental Issues and Strategies

Time: 2.00 -3.30 pm Venue: Seminar Hall, Mechanical Department

| Sr. | Paper | Paper title                                       | Name of the authors  |
|-----|-------|---|--|
| No. | ID    | -   |  |
| 1   | 001   | Energy efficiency enhancement in cellular         | Shruti R. Danve, Manoj S. Nagmode, and Shankar B.              |
|     |       | network   | Deosarkar  |
| 2   | 058   | Battery management system of electric vehicle     | Jaydeep Patil, Abhishek Kumbhar, Mangesh Shinde, Shraddha      |
|     |       | using passive cell balancing technique            | Shigare, Rutuja Solankar and S Pavitran                        |
| 3   | 007   | Prediction and Optimization of Thermal            | Kishor Deshmukh, Dr. Suhas Karmare                             |
|     |       | Conductivity and Viscosity of Stable Plasmonic    |  |
|     |       | TiN 1 Nanofluid Using RSM and ANN combined        |  |
|     |       | Approach for Solar thermal Application            |  |
| 4   | 013   | An experimental investigation and mathematical    | Pramod Wadate and Hanumant Dharmadhikari                       |
|     |       | quantification of a Scheffler reflector           |  |
|     |       | concentrator system                               |  |
| 5   | 027   | Investigation of Heat Transfer in-wall having Air | Aniket Hiray, Ashok Pise, Anil Acharya, Swati Jadhav,          |
|     |       | cavity  | Vaibhav Talandage5   |
| 6   | 034   | Design & development of radius measurement        | Arati Bhagat, Nivrutti Sarafdar, Akshay Patil, Virat Ranaware, |
|     |       | gauge for Inner and Outer Crescent Radius of      | Aniket Lonare  |
|     |       | Low-pressure Pump for reduce inspection time      |  |
| 7   | 053   | A Review on Design Factors for Vertical Axis      | Onkar Dhakne, Shailesh Ambekar                                 |
|     |       | Wind Turbine                                      |  |







### National Conference on Energy and Environment for Sustainable Development 2022

Day 1: 5<sup>th</sup> July 2022

Session No: 1B Session Chair: **Dr. N. S. Nehe** Session Coordinator: **Prof. S. R. Patil** 

Session theme: Advanced control and monitoring in energy technology

Time: 2.00 to 3.30 pm Venue: Seminar Hall, Automobile Department

| Sr. No. | Paper<br>ID | Paper title  | Name of the authors  |
|---------|-------------|--|--|
| 1       | 002         | Amplification of Variations in the Video Sequence Using Region Based<br>Approach for Saving Computational Energy | Rajkumar D. Komati, M. S. Nagmode  |
| 2       | 004         | Enhancement of Power System performance using Series FACTS<br>Controller   | Kiran B Dhatrak, Jitendra Shinde   |
| 3       | 009         | Design and Implementation of Smart Water Level Monitoring system (IoT) with Real-Time Dashboard                  | A. M. Dhande, K. S. Doke, , R. I. Dalvi, R. P. Borase, J. P. Gawande5 and B. B. Digey6 |
| 4       | 020         | Wireless power transfer system for moving electric vehicles using magnetic resonance                             | A.R. Kesti   |
| 5       | 029         | Implementation of controlled robot for fire detection and extinguish based on Arduino                            | M. D. Balaraf, A. S. Jondhale, M. R. Bongulwar   |
| 6       | 044         | Solar Power based ECG monitoring using android mobile phone  | Deepali Potdar and Manoj Nagmode   |
| 7       | 059         | Pick and place robot using PLC   | M. B. Husaini, R. P. Jangid, C. P. Patil and S. D. Tidame                              |
| 8       | 060         | Application of IOT : Water level monitoring and control  | N.R. Bhange, R.T. Bharambe, S.V. Nirgude, Mr. S. B. Lukare                             |
| 9       | 061         | Design of wireless digital notice board with weather monitoring parameters                                       | Prathamesh Garge, Shubham Mishra, and Nitesh Gupta                                     |







### National Conference on Energy and Environment for Sustainable Development 2022

Day 1: 5<sup>th</sup> July 2022

Session No: 2A Session Chair: **Dr. Mohan Khond** Session Coordinator: Prof. B. A. Patil

Session theme: Energy efficiency, energy market and policy

Time: 4.00 to 5.30 pm Venue: Seminar Hall, Mechanical Department

| Sr. | Paper | Paper title   | Name of the authors                                      |
|-----|-------|---|--|
| No. | ID    |   |  |
| 1   | 008   | Investigation the effect of channel geometry on Heat Transfer coefficient in two phase domain of Condenser of Automotive AC | P. V. Kengar and S. V. Karmare                           |
| 2   | 011   | Influence of backward heat conduction in continuum flows  | A. A. Jha, A. Agrawal                                    |
| 3   | 015   | Impact on shelf life of tomatoes: using clay pot refrigerator.  | Nishigandha Patel, Virendra Bhojwani, Sachin Pawar       |
| 4   | 021   | Thermal management of electric vehicle battery for different c rates  | O. D. Desai, M.M. Madgundi, J. M. Patil, Y. H. Marne, R. |
|     |       | using indirect liquid cooling   | R. Patil1, T. S. Patil1, and M. B. Chaudhari             |
| 5   | 031   | A review paper on analysis and development of real time simulation of   | Pratik Satav, Shyam Sonawane                             |
|     |       | end milling cutter to avoid tool breakdown  |  |
| 6   | 033   | Design and development of a material handling trolley operated by   | R. Kadam, A.V.Bobad, A.S.Nimbalkar, P. Madkar, P.        |
|     |       | self-weight of the job  | Nikam, and M. Pise                                       |
| 7   | 047   | A Review of Distributed Generation (DG) Technologies and  | Mohammed Shoeb Mohammed Younus, S. P.                    |
|     |       | optimization techniques for optimal placement of Distributed  | Ghanegaonkar   |
|     |       | Generation  |  |
| 8   | 049   | A review of ancillary services through DER's for grid stability: its  | Kalyani Kurundkar, Geetanjali Vaidya                     |
|     |       | prospects, benefits, policies and regulatory reforms in context of  |  |
|     |       | growing Indian power sector   |  |







### National Conference on Energy and Environment for Sustainable Development 2022

Day 1: 5<sup>th</sup> July 2022

Session No: 2B Session Chair: Dr. Vikrant Haribhakt Session Coordinator: Dr. Nitin Futane

Session theme: Integrated energy systems, modeling and simulations

Time: 4.00 to 5.30 pm Venue: Seminar Hall, Automobile Department

| Sr. No. | Paper | Paper title  | Name of the authors  |
|---------|-------|--|--|
|         | ID    | _  |  |
| 1       | 012   | Thermal resistance modeling of closed loop thermosyphon for Water by artificial intelligence   | Mahasidha R. Birajdar, C. M. Sewatkar                                      |
|         |       | approach   |  |
| 2       | 016   | Performance analysis of waste to best solar water  | Dharmesh Chavda, Aakash Chaudhari, Bhavesh Deore,                          |
|         |       | heater   | Sanjeev Suryawanshi  |
| 3       | 017   | Design, development and evaluation of solar tunnel   | Yashashri Patil, Kiran Jadhav, Saurabh Mahesh Dusane, S.                   |
|         |       | dryer for seasoning and straightening  | Suryawansh   |
| 4       | 019   | Experimental and Numerical Simulation of Flows<br>over Wetted Surfaces of Different Cross section<br>Profile Pipes                       | Pravin Sarode, Vilas Baviskar 2,Dr. Sanjeev Suryawanshi                    |
| 5       | 030   | Design and development of solar-wind hybrid energy system for home appliances  | Amit Adsul, Pratik Bankar, Arati Talwar, Tejswini Bakkad,<br>Nikita Arekar |
| 6       | 041   | Investigation of seismic performance of unsymmetrical steel building with installed viscous fluid dampers and buckling restrained braces | P. S. Shete, S. Sajjanshetty, S. N. Madhekar                               |







### National Conference on Energy and Environment for Sustainable Development 2022

Day 2: 6<sup>th</sup> July 2022

Session No: 3A Session Chair: Dr. M. S. Randive Session Coordinator: Prof. R. P. Thanedar

Session theme: Environmental issues, its protection and regulation

Time: 9.30 to 11.00 am Venue: Seminar Hall, Mechanical Department

| Sr.<br>No | Paper<br>ID | Paper title   | Name of the authors  |
|-----------|-------------|---|--|
| 1         | 24          | Review Of Air Quality Index In The Four Metropolitan Cities of Maharashtra During Pre-To-Post Covid-19        | Abhishek S.Kshatriya, Chetan S. Sawant, and Sanjay D. Patil  |
|           |             | Pandemic  |  |
| 2         | 26          | Evaluation of the semi-arid regions groundwater budgeting: a case study of Solapur region, Maharashtra, India | Yuvraj R. Patil, Amarsinh B. Landage   |
| 3         | 32          | Ultra high-performance concrete: composition  | Umesh U. Manale, Amarsinh B. Landage   |
| 4         | 37          | Design and fabrication of wearable chair  | G.V. Thombare, V.V.Gundage, Smita Bandekar, Anuradha Bansode, Asif Shaikh, Akshay Lakade, Tushar Nale, |
| 5         | 45          | Waste To Wealth: Low-Cost Base Isolators From<br>Scrap Tyre Rubber Pads                                       | S. N. Madhekar, M. Kumar, and H. R. Vairagade  |
| 6         | 46          | Fabrication And Design Of Automatic Sugar Cane Bud<br>Cutter  | D. J. Sangale, G. V. Thombare, S. D. Ranaware, R. A. Korde, A. B. Pathan5, D. D. Karve, P. M. Bhosale  |







# National Conference on Energy and Environment for Sustainable Development 2022

Day 2: 6<sup>th</sup> July 2022

Session No: 3B Session Chair: Dr. P. A. Sadgir Session Coordinator: Dr. M. G. Shaikh

Session theme: Bio Mass, bio-based products, carbon pricing, eco design, eco efficiency and energy control

Time: 9.30 to 11.00 am

Venue: Seminar Hall, Automobile Department

| Sr.<br>No. | Paper<br>ID | Paper title   | Name of the authors   |
|------------|-------------|---|---|
| 1          | 010         | Effective Biological waste management system  | Mrs. Arti A. Utikar, Milind Bongulwar , Mrs. Ashwini Kulkarni                         |
| 2          | 018         | Review on Second Generation Biofuel in India  | Mr. S. D. Galande, R. Pangavhane  |
| 3          | 028         | Future fuel: ethanol blending   | V.A. Utikar   |
| 4          | 048         | Simulation of PSO & duty sweep MPPT control techniques for solar power Generation             | Ritisha Ankushe, Walmik Gavhane   |
| 5          | 057         | Iot based industrial parameters monitoring and control system for safe industrial environment | hubhangi Belkunde, Rohit Mhatre, Manasi Mokal,<br>Hemangi Patil and Prof.D.B Trimukhe |
| 6          | 054         | Study of Ferrocement in Construction: Review paper  | Sarvesh Jadhav and Manisha Waghmare   |







### National Conference on Energy and Environment for Sustainable Development 2022

Day 2: 6<sup>th</sup> July 2022

Session No: 4A Session Chair: Dr. S. V. Karmare Session Coordinator: Prof. Jos Arackal

Session theme: Sustainability, challenges and barriers

Time: 2.00 to 3.30 pm

Venue: Seminar Hall, Mechanical Department

| Sr. No. | Paper<br>ID | Paper title  | Name of the authors  |
|---------|-------------|--|--|
| 1       | 022         | Review on Data Acquisition and monitoring of CNC Machine tools using Smart Manufacturing tools                     | Dhanshri R.Lahore, Dr.S. A. Sonawane   |
| 2       | 023         | Catalytic pyrolysis of thermoplastic waste for enhancement of gasoline fraction                                    | M Y Khaladkar1M R Shindikar2, Y B Sonawane2  |
| 3       | 025         | Design and fabrication of electromagnetic shock absorber: a sustainable alternative to conventional shock absorber | Jaydip Khose, Sumeet Patil, Rishikesh Chinchankar, Shaikh<br>Shoaib, Dheeraj Lengare                 |
| 4       | 035         | Intelligent reverse braking system   | D. J. Sangale, G. V. Thombare, S. R. Nanaware, S. M. Pawar, S.S. Deshmukh, A. D. Bhujbal6            |
| 5       | 039         | Design & modification of tackle  | D. J. Sangale, G.V. Thombare, S.A. Shaikh, V. A. Doifode, A.S. Deshmukh, S.L. Jagtap and A.A. Kamble |
| 6       | 040         | benchmark problems on bridges  | S. N. Madhekar   |
| 7       | 051         | Plastic formwork for sustainable   | Swapnil Bapu Kharmale, Wasudeo Narayanrao Deulkar and Amarshinh B. Landge                            |
| 8       | 056         | Dynamic response characteristics of RC buildings with plan irregularities  | S. S. Sonawane, Arati Bhapkar, S. S. Yeole, P. R. Pansare, S. N. Madhekar                            |







### National Conference on Energy and Environment for Sustainable Development 2022

Day 2: 6<sup>th</sup> July 2022

Session No: 4B Session Chair: Dr. U. S. Kakade Session Coordinator: Prof. A. J. Bhosale

Session theme: Miscellaneous Time: 2.00 to 3.30 pm Venue: Seminar Hall, Automobile Department

| Sr. | Paper | Paper title   | Name of the authors   |
|-----|-------|---|---|
| No. | ID    |   |   |
| 1   | 006   | A case study on Electricity Bill Saving using Solar Plant at Technical Institute (DVVPCOE), Ahmednagar, Maharashtra, India              | Kalpana Vidhate and Dr.Pragya Nema  |
| 2   | 042   | An Innovative Approach for Distribution System Analysis with DSM in Micro-grid  | Shalaka Chaphekar, Anjali Dharme  |
| 3   | 043   | Analysis of Schedule Delay & Cost Overrun using EVM & ESM<br>Concept for Infrastructure Flyover Construction Project                    | G A Gaddam, A B Landage   |
| 4   | 014   | Design of helical involute spline assembly for linear to rotary actuator (lrm)  | Sumit Kale, Priya Gajjal, and Dipak Bhirud  |
| 5   | 050   | Combustion cylinder block surface milling application   | Govind Thombare, Sangale Dattatray, Pradip Patil, Swapnil<br>Kakade, Digvijay Jadhav, Prasad Chaudhari and Prathamesh<br>Nale |
| 6   | 052   | Domestic Detection By Using Six Sigma   | Govind Thombre, Saurabh Dhembare and Narendra Bankar  |
| 7   | 055   | Improve safety, quality, productivity and cost using MES installation and integration of paint shop parameters by industrial automation | Prajakta Pawar and Sadananda Deshpande  |
| 8   | 062   | Yogesh Gangasagare, Rutik Khandekar and Nitin Futane  | Regenerative Braking System   |