



**Department of Chemical Engineering**  
**RV college of Engineering**

**Research Publications and Conference Proceedings**

SI No	Author / Co-author	Publication Details
<b>2021-22</b>		
1	Dr. R Suresh	Development of Nano Copper Sulfide (CuS) Structures for Electrochemical Detection of Vitamin C, Sudeep, M., Manjunatha, C., Aan, M.P.S., ...Suresh, R., Ujwal, S.M. Journal of Nanostructures, 2021, 11(3), pp. 628–637,
2	Dr. J.H. Patil	Optimization of parameters affecting dealcoholization of anthocyanin extract from red cabbage by liquid emulsion membrane using response surface methodology, Binnal, P., Rajashekhara, S., Patil, J.H, Journal of Applied Research and Technology, 2021, 19(6), pp. 562–574
3	Dr. J.H. Patil	Spiro Benzodiazepine Substituted Fluorocoumarins as Potent Anti-Anxiety Agents, Patagar, D., Uttarkar, A., Patra, S.M., .J.H...Niranjan, V., Kumar, H.G.A., Russian Journal of Bioorganic Chemistry, 2021, 47(2), pp. 390–398
4	Dr. Rajalaksmi M	Treatment and Disposal Methods of Concentrate Stream of Seawater Reverse Osmosis - A Review, Tabassum, Z., Mudbidre, R., Nature Environment and Pollution Technology, 2021, 20(4), pp. 1403–1414
5	Dr. Rajalaksmi M,	Thermal and mechanical properties of glass fibre reinforced polyphenylene ether/polystyrene/nylon-6 ternary blends, Hadimani, P., Narasimha Murthy, H.N., Mudbidre, R., Polymers and Polymer Composites, 2021, 29(7), pp. 1075–1088
6	Dr. Ujwal Shreenag Meda	Development of non-stoichiometric hybrid Co <sub>3</sub> S <sub>4</sub> /Co <sub>0.85</sub> Se nanocomposites for an evaluation of synergistic effect on the OER performance, Manjunatha, C., Lakshmikant, S., Shreenivasa, L., ..Babu, G.S., Pollet, B.G, Surfaces and Interfaces, 2021, 25, 101161
<b>2022-23</b>		
7	Dr. Rajalaksmi M	Effect of melamine cyanurate on thermal and flame-retardant behaviour of chopped glass fibre reinforced polyphenylene ether/polystyrene/nylon-6, Hadimani, P., Narasimha Murthy, H.N., Mudbidre, R., Angadi, G., Polymers and Polymer Composites, 2022, 30
8	Dr. Rajalaksmi M	A transport channel-regulated graphene oxide-based composite membranes for salt rejection, International Journal of Environmental Science and Technology, 2022-09-29   Journal article, DOI: 10.1007/s13762-022-04562-5, Part of ISSN: 1735-1472, Part of ISSN: 1735-2630, CONTRIBUTORS: J. Kavitha; M. Rajalakshmi; A. R. Phani; P. Sherugar; M. Padaki
9	Dr. Vinutha Moses	Hydroxymethyl furfural (HMF) a high strength cellulose resin for wood composite laminates, Moses, V., Narula, A., Chetan, N., Kumar Mishra, R., Heliyon, 2022, 8(12), e12081



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10	Dr.Ujwal Shreenag Meda	Titanium dioxide based heterogeneous and heterojunction photocatalysts for pollution control applications in the construction industry, Meda, U.S., Vora, K., Athreya, Y., Mandi, U.A., Process Safety and Environmental Protection, 2022, 161, pp. 771–787
11	Dr.Ujwal Shreenag Meda	Solid Electrolyte Interphase (SEI), a boon or a bane for lithium batteries: A review on the recent advances, Meda, U.S., Lal, L., M, S., Garg, P., Journal of Energy Storage, 2022, 47, 103564
12	Dr. Basavaraja R J.	Development of multimode gas-fired combined-cycle chemical-looping combustion-based power plant layouts. Environ Sci Pollut Res 29, 54967–54987 (2022)
13	Dr.J.H.Patil	Synthesis and characterization of chitosan-hydroxyapatite composite for bone graft applications Journal of the Indian Chemical Society, 2022-01
14	Dr.J.H.Patil	Upgrading rice husk biochar characteristics through microwave-assisted phosphoric acid pretreatment followed by co-pyrolysis with LDPE. Binnal, P., Kumar, D.J., Sasalu Parameshwaraiah, M., Patil, J., Biofuels, Bioproducts and Biorefiningthis link is disabled, 2022, 16(5), pp. 1254–1273
15	Dr. Rajalaksmi M	Effect of melamine cyanurate on thermal and flame-retardant behaviour of chopped glass fibre reinforced polyphenylene ether/polystyrene/nylon-6, Hadimani, P., Narasimha Murthy, H.N., Mudbidre, R., Angadi, G, Polymers and Polymer Composites, 2022, 30
16	Dr.J.H.Patil	Equilibrium removal, isotherm and kinetic studies of chromium (VI) adsorption onto biopolymers from aqueous solution: A comparative study, Materials Today: Proceedings, 2022
17	Dr. C. Vidya	C. Vidya, C. Manjunatha, A. Pranjali, I. Faraaz & K. Prashantha, A multifunctional nanostructured molybdenum disulphide (MoS <sub>2</sub> ): an overview on synthesis, structural features, and potential applications, 2022, Materials Research Innovations
18	Dr. C. Vidya	Vidya C, Kiran Shenoy , Vinutha Moses, Chetan, Nanomaterials For Hydrogen Generation: A Review, Journal of University of Shanghai for Science and Technology, ISSN: 1007-6735, Volume 24, Issue 3, 2022
<b>2023-24</b>		
19	Dr. Rajalaksmi M	Renewed physiognomies of titanium nanotubes for implementation in the polysulfone membrane matrix for desalination, Desalination, 2023-04, J. Kavitha; Nagaraj S. Naik; A.R. Phani; G. Arthanareeswaran; M. Rajalakshmi; Mahesh Padaki
20	Dr. Basavaraja R J	Basavaraja, R.J. Rahul, O. Ranganatha, M. Suhas, K.S. Vishnumurthy, K.A. Reduction of Chromium in Waste Water from Hard Chrome Plating Processes: A Review. Asian Journal of Water, Environment and Pollution, vol. 20, no. 1, pp. 49-55, 2023.



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21	Dr.J.H.Patil	8-benzimidazolyl coumarin-3-oxadiazoles – Synthesis, docking studies and Anti-proliferative evaluation against breast cancer, Patagar, D.N., Kusanur, R., Batakurki, S.R., Patil, N.R., Patil, J.H., Journal of Molecular StructureThis link is disabled., 2023, 1294, 136377
22	Dr. Rajalakshmi M	A transport channel-regulated graphene oxide-based composite membranes for salt rejection Kavitha, J., Rajalakshmi, M., Phani, A.R., Sherugar, P., Padaki, M. , International Journal of Environmental Science and TechnologyThis link is disabled., 2023, 20(9), pp. 10031–10048
23	Dr.Ujwal Shreenag Meda	Nano-engineered textiles: Development and applications Meda, U.S., Soundarya, V.G., Madhu, H., Bhat, N, Materials Science and Engineering: 2023, 296, 116636
24	Dr.Ujwal Shreenag Meda	Generation of green hydrogen using self-sustained regenerative fuel cells: Opportunities and challenges, Meda, U.S., Rajyaguru, Y.V., Pandey, A., International Journal of Hydrogen Energy, 2023, 48(73), pp. 28289–28314
25	Dr.Ujwal Shreenag Meda	Challenges associated with hydrogen storage systems due to the hydrogen embrittlement of high strength steels, Meda, U.S., Bhat, N., Pandey, A., Subramanya, K.N., Lourdu Antony Raj, M.A., International Journal of Hydrogen Energy, 2023, 48(47), pp. 17894–17913
26	Dr. Vinutha Moses	Economical synthesis of oxygen to combat the COVID-19 pandemic Bhat, N., Moses, V., N, C., Hygiene and Environmental Health Advances, 2023, 6, 100048
27	Dr. Vinutha Moses	Effects of polymeric microcapsules on self-healing composites reinforced with carbon fibers: A comparative study, Veeramani, N., Samikannu, R., Deshpande, A.P., Varghese, S., Moses, V., International Polymer Processing., 2023, 095062
28	Dr. C Vidya	Gayitri H M, Murad Q. A. Al-Gunaid, Suma G. R, Vidya C, Manimozhi R, Kumar J R, Pva Polymer (Cao/Cdo/Al2o3) Nanocomposites: Toward Improved Super Capacitor And Optoelectrical Properties, Eur. Chem. Bull. 2023, 12(Special Issue 10), 671 – 684
2024-25		
29	Dr.J.H.Patil	Production of Fuel Oil from Waste Low Density Polyethylene and its Blends on Engine Performance Characteristics, Desai, G.N., Patil, J.H., Deshannavar, U.B., Hegde, P.G., Metallurgical and Materials Engineering, 2024, 30(2), pp. 57–70
30	Dr. C Vidya	M.R. Rajani, R. Ravishankar, Srinidhi Raghavan. M, K Asha, C. Vidya, G.R. Suma, K. Prashantha, Effective removal of Cr (VI) from an aqueous solution using a carbon coated NiFe2O4 nano-adsorbent, Colloids and Surfaces A: Physicochemical and Engineering Aspects 693 (2024) 134012,



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		<a href="https://doi.org/10.1016/j.colsurfa.2024.134012">https://doi.org/10.1016/j.colsurfa.2024.134012</a> , Impact factor: 4.9, Quartile Score: Q1
31	Dr. Ujwal Shreenag Meda	High selectivity and sensitivity through nanoparticle sensors for cleanroom CO <sub>2</sub> detection, Channegowda, M., Verma, A., Arabia, I., ... Bhalla, N., Chaudhary, V., Nanotechnology, 2024, 35(31), 315501
32	Dr. Rajalakshmi M	Quantification of natural uranium and its risk evaluation in groundwater of Chikkaballapur district in Karnataka, India, Naik, P.R., Rajashekara, V.A., Mudbidre, R., Environmental Monitoring and Assessment, 2024, 196(9), 779
33	Dr. Rajalakshmi M	Estimation of Natural Uranium and Its Risk-Assessment in Groundwater of Bangalore Urban District of Karnataka, India, Naik, P.R., Rajashekara, V.A., Mudbidre, R., Geomatics and Environmental Engineering, 2024, 18(2), pp. 21–49

**SCOPUS INDEXED conference proceedings**

Sl. No	Details of Publication
<b>2022 - 23</b>	
1	Designing a Solar PV Module for Powering an Electrolyzer Ujwal Shreenag Meda, Aditi Pandey, Yashesh Vijay Rajyaguru, Manjunatha C International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 5509 - 5517; 2022
2	Water Management in Proton Exchange Membrane Fuel Cells Amrit Aman, Iqra Ali Khan, Ujwal Shreenag Meda International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 19403 - 19413; 2022
3	Competitor Analysis of Hydrogen Sensing Systems Ujwal Shreenag Meda, Ashni Melissa Mery Prabhu, Anupama Joshi, Vidya C, Ranganath D International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4377 - 4387; 2022
4	Influence of Mixers on Dry Dispersion of Nanoparticles in the Cementitious Composites Ujwal Shreenag Meda, Bhavana B, Radhakrishna International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 3537 - 3545; 2022
5	Bio Polyurethane Foam and Its Fire-Retardant Applications Ujwal Shreenag Meda, Haritha Rajaram, Harshitha N, Sripriya U International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4299 - 4314; 2022
6	Studies on Leak Detection in Process Pipelines Using Artificial Neural Networks/Machine Learning Ujwal Shreenag Meda, Hashitha N, Vinakyak Hulake, Ashwin Padubidri International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4281 - 4297; 2022
7	Alternatives to Conventional Platinum-Based Catalysts in Polymer Electrolyte Membrane Fuel Cells Ujwal Shreenag Meda, Iqra Ali Khan, Amrit Aman, Suresh R, Rajalakshmi Mudbidre



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	International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 5487 - 5498; 2022
8	Modelling and Simulation of Manufacturing Process of Paracetamol Ujwal Shreenag Meda, Taher Hussain, Khushi Vora, Manjula Sarode, Vinod Kallur International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4389 - 4410; 2022
9	Hydrogen Impermeable Materials for Efficient Hydrogen Storage Ujwal Shreenag Meda, Nidhi Bhat, Chitra Agrawal International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4875 - 4883; 2022
10	Photocatalytic Cementitious Materials to Reduce Air Pollution Ujwal Shreenag Meda, Pavan Kumar, Sachin K C, Radhakrishna International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4863 - 4874; 2022
11	Synthesis of Silicon Di Oxide Nano-Particles By Sol-Gel Method for Applications in Geopolymer Composites Ujwal Shreenag Meda, Sachin K C, Radhakrishna International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 5533 - 5541; 2022
12	Incorporation of Nanoparticles in Building Materials Sachin K C, Radhakrishna, Ujwal Shreenag Meda International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 3375 - 3391; 2022
13	Advances in Incorporation of Nanomaterials Onto Fabrics Ujwal Shreenag Meda, Samhita Kiran, Shravan S Ranga International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4853 - 4862; 2022
14	Product Design of Hydrogen Sensing System Ujwal Shreenag Meda, Sharanya Chakravarthi, Akshit M Harthi International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 3011 - 3025; 2022
15	Nanotechnology in the Textile Industry: Present and Future Ujwal Shreenag Meda, Shravan S Ranga, Samhita Kiran International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4791 - 4798; 2022
16	Wastewater Treatment Using Anaerobic Fluidized Bed Membrane Bioreactor Coupled with Microbial Fuel Cells for Circular Economy Ujwal Shreenag Meda, Shreya N M, Jagadish Patil, Muralidhara P L, Vinutha Moses International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4435 - 4448; 2022
17	A Review on the Development of IoT Enabled Hydrogen Sensing Systems Ujwal Shreenag Meda, Sowrav Adithya International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4767 - 4789; 2022
18	Market Study of Hydrogen Sensors and Sensing Systems Ujwal Shreenag Meda, Sripriya U International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4489 - 4502; 2022



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19	Pollution Control Applications of Nano Titanium Dioxide in the Construction Industry Ujwal Shreenag Meda, Ujwal Arun Mandi, Yash Athreya, Khushi Vora International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 3281 - 3293; 2022
20	Electrolyzers for Green Hydrogen Generation and Their Integration with Fuel Cells Ujwal Shreenag Meda, Yashesh Vijay Rajyaguru, Aditi Pandey, Manjunatha C International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 4723 - 4731; 2022
21	Powering Implantable Medical Devices with Biological Fuel Cells Nishaa V, Vishwesh Desai, Soumya, Spoorthi B V, Ujwal Shreenag Meda International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 19197 - 19215; 2022
22	Microbial Fuel Cells and Genomics Ujwal Shreenag Meda, Amulya Rao, Riya Sharma, Abhipsa Rath International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 10729 - 10755; 2022
23	Remediation of Lead Ions from Wastewater Using Magnetic Iron Oxide Nanoadsorbents – A Review Ujwal Shreenag Meda, Subana P S, Suresh R, Hari Krishna R, Sham Aan M P, Manjunatha C International Conference on Technologies for Smart Green Connected Societies; ECS Transactions; Volume 107, Issue 1, Pages 17217 - 17228; 2022
<b>2023 – 24</b>	
24	Advances in Biogas Purification Techniques; Ujwal Shreenag Meda, Ameya Kamath; 2023 7th International Conference on Computation System and Information Technology for Sustainable Solutions; IEEE Explore; Pages 1-5; 2023
25	Storage of Hydrogen in Carbon Nano Tubes; Ujwal Shreenag Meda, Shivangi Rai, Glen Dsouza, Vijay Kumar R P; 2023 7th International Conference on Computation System and Information Technology for Sustainable Solutions; IEEE Explore; Pages 1-5; 2023