

Dr. G. Puthilibai
Professor
Department of Chemistry
Sri Sairam Engineering College
Chennai 600 044.

List of Publications for last 5 years

1. "Implementation of Ammonia Gas Leakage Detection Monitoring System using Internet of Things", **IEEE digital explore**, pp778-781, 2019.
2. "Synthesis, Properties and Catalytic Applications of Co_3O_4 Nano Materials with Photoluminescence Emission spectra for Oxygen Vacancies", **Journal of Advanced Science Engineering and Medicine**. (Google Scholar) 11(7) 2019, 600-605.
3. "Synthesis, DNA Binding, Anticancer and Cytotoxic Evaluation of Novel Ruthenium (II) Isatin based Schiff base complex", **Rasayan Journal of Chemistry**. (Elsevier, Scopus indexed) 12(2) (2019) 855-859.
4. "A new Understanding of Mn_3O_4 catalysts Different Fuels for Highly Selective Oxidation of Cyclohexane", **Sensor Letters**. (Google Scholar) 17(7) 2019, 530-537.
5. "A starch-assisted innovative synthesis of spinel-structured and ferromagnetic behavior of Fe_3O_4 nanoparticles catalytic activity evaluated in the selective oxidation", **SN Applied Sciences**. (Google Scholar) 1(5) 2019, 472.
6. "Experimental Research on Glass Fibres / Caustic soda Treated Banana Fibers Hybrid Composite", **Materials Today Proceedings**, 2020
7. "Study on nano particles of Aluminium oxide and Magnesium oxide used counter flow heat exchanger heat transfer, effectiveness enhancement", **Materials Today Proceedings**, DOI: <https://doi.org/10.1016/j.matpr.2020.08.192> (Published and Available on line, 10.09.2020).
8. "Simple study on behavior of composites with augmentation of Silicon carbide on Al6061 Aluminium alloy based on mechanical properties", **Materials Today**

Proceedings, DOI: <https://doi.org/10.1016/j.matpr.2020.08.189> (Published and Available on line, 09.09.2020).

9. “Characterizations on Hybrid of Caustic treated Natural and Glass Fiber Composites”, **Materials Today Proceedings**, DOI: <https://doi.org/10.1016/j.matpr.2020.07.669> (Published and Available on line, 16.09.2020).
10. “Heat Transfer Enhancement Analysis of Al₂O₃ and MgO through counter flow in Heat Exchanger”, **Materials Today Proceedings**, DOI: <https://doi.org/10.1016/j.matpr.2020.07.663> (Published and Available on line, 15.09.2020).
11. “Enhancing Heat Transfer Rate in Heat Exchanger Using Nano Particles of the Natural Glay”, **Materials Today Proceedings**, DOI: <https://doi.org/10.1016/j.matpr.2020.07.661> (Published and Available on line, 15.09.2020).
12. “Electrochemical behaviour of Ni-Ti (Superelastic) Alloy in artificial saliva in the presence of Phexin”, **Materials Today Proceedings**, DOI: <https://doi.org/10.1016/j.matpr.2020.07.022> (Published and Available on line, 12.08.2020).
13. “Synthesis, spectral, electrochemical and DNA binding properties of Ruthenium (III) complexes of Schiff bases containing N,O Donor atoms”, **Materials Today proceedings**, DOI: <https://doi.org/10.1016/j.matpr.2020.07.008> (Published and Available on line, 01.08.2020).
14. “Experimental investigation regarding emissivity of black nickel coated on aluminium surface”, **Materials Today Proceedings**, DOI : <https://doi.org/10.1016/j.matpr.2020.05.149> (Available on line, 17.06.2020).
15. ”Effects on the Crystal Structure, Magnetic and Optical Properties Nd doped Co₃O₄ Nanoparticles Prepared by Microwave Synthesis”, **Journal of Superconductivity and novel Magnetism**, Vol 32, No4, pp1-7, 2019.

16. "Influence of structural, Thermoelectric power and Catalytic Efficiency of Nd doped Mn₃O₄, "Asian Journal of Chemistry' Vol.32, 147-152, 2020.
17. "Study of the effect of photoluminescence structural and Magnetic Properties of Nd doped Nd_xNi_{1-x}O hexagonal Particles", **Physica E: Low-Dimensional Systems and Nanostructures**, Vol.118, 2020.
18. "Piezoelectric Energy Pavements" **IEEE digital explore** (Accepted on 16.11.2020 for publication).
19. "Power Production by Microbial Fuel Cell having Conductive Polymer Electrode and Bio Catalysts" **IEEE digital explore** (Accepted on 09.10.2020 for publication).
20. "Urinal Microbial Fuel Cell: Electricity Generation – An Eco friendly Approach" **IEEE digital explore**(Accepted on 09.10.2020 for publication).

PATENTS (Filed/Published/Granted)

1. NOVEL MIXED LIGAND RUTHENIUM(III) COMPLEXES, ITS PRODUCTION METHOD AND USE IN CANCER THERAPY. (Granted)

Patent Grant No: 343002

Date of Grant: 31.07.2020

2. RUTHENIUM-HYDRAZONE COMPLEX CATALYSTS: PRECURSORS AND PROCESS FOR THE PREPARATION AND THEIR USE. (Published)

Patent Appln No: 201741022096

Journal No: 27/2017

Date of filing of Application : 23/06/2017

Date of publication : 28/07/2017

3. SYNTHESIS ROUTE FOR THE PREPARATION OF RUTHENIUM TRIPHENYL PHOSPHINE CATALYSTS. (Published)

Patent Appln No: 201741022097

Journal No: 27/2017

Date of filing of Application : 28/07/2017

Date of publication : 07/07/2017

4. SYNTHESIS OF BIOLOGICALLY ACTIVE MULTI TARGETED ISATIN BASED SCHIFF BASE COMPLEX. (Published)

Patent Appln No: 201941019466

Journal No: 28/2019.

Date of filing of Application : 16/05/2019

Date of publication : 12/07/2019

5. AMMONIA GAS LEAKAGE MONITORING SYSTEM USING INTERNET OF THINGS. (Published)

Patent Appln No: 201941038241

Journal No: 50/2019.

Date of filing of Application : 23/09/2019

Date of publication : 13 /12/2019

6. PIEZOELECTRIC ENERGY HARVESTING IN PAVEMENTS. (Published)

Patent Appln No: 201941045061

Journal No: 50/2019.

Date of filing of Application : 06/11/2019

Date of publication : 13/12/2019

7. IOT BASED ATOMATED TOILBOTS. (Published)

Patent Appln No: 201941045366

Journal No: 44/2020.

Date of filing of Application : 19/10/2020

Date of publication : 30/10/2020

8. CARITEETH-HANDHELD DEVICE FOR TOOTH CAVITY DETECTION. (Published)

Patent Appln No: 201941047231

Journal No: 45/2020.

Date of filing of Application : 29/10/2020

Date of publication : 06/11/2020

9. A SMART SYSTEM FOR PRE-DETECTION OF CARDIAC ISSUES. (Published)

Patent Appln No: 201941047200

Journal No: 45/2020.

Date of filing of Application : 29/10/2020

Date of publication : 06 /11/2020