



**Dr.S.KALIAPPAN**  
Professor

Department of Mechanical Engineering,  
KCG College of Technology,  
Chennai 600097.

Phone No: 9444138001

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❖ **EDUCATION QUALIFICATION:**

- **Ph.D (2020)**, Mechanical Engineering,  
Anna University, Chennai, Tamil Nadu, India.
- **Master of Engineering (2006)**, Internal Combustion Engineering,  
College of Engineering Gundy, Anna University, Chennai. Tamil Nadu, India.
- **Bachelor of Engineering (1997)**, First Class, Mechanical Engineering,  
R.V.S College of Engg. And Tech., Dindigul, Madurai Kamaraj University, Tamil Nadu, India.

❖ **EXPERIENCE :**

- **Professor-Mechanical Engineering Department,**  
KCG College of Technology, Chennai , Aug-2023 to Till Date.
- **Professor / HoD-Mechanical Engineering Department,**  
Velammal Institute of Technology, Chennai , Aug-2022 to Aug-2023.
- **Professor / HoD-Mechanical & Mechatronics Engineering Department,**  
Velammal Institute of Technology, Chennai , 2022 to Aug-2022.
- **Associate Professor / HoD-Mechanical Engineering Department,**  
Velammal Institute of Technology, Chennai – 2012-2022.
- **Assistant Professor Grade-II / HoD-Mechanical Engineering Department,**  
Velammal Institute of Technology, Chennai , 2011-2012 .
- **Professor/ HoD-Aeronautical Engineering Department,**  
SAMS College of Engineering and Technology, Chennai , 2010-2011.
- **Assistant Professor/ HoD-Aeronautical Engineering Department,**  
SAMS College of Engineering and Technology, Chennai , 2008-2010.
- **Lecturer** , St. Peter's Engineering College, Chennai ,2006-2008.
- **Lecturer** , Rajarajeswari Engineering College, Chennai ,2000-2006.
- **Lecturer** , Thangavelu Engineering College, Chennai, 1998-2000.
- **Production Engineer,** Sels Industries, Chennai – 19,1997-1998.

❖ **GRANTS RECEIVED AND PROPOSAL SUBMITTED:**

**1. Title : ASSESSMENT IN ENGINEERING EDUCATION: A PEDAGOGICAL APPROACH**

Scheme : **AICTE- Short Term Training Program (STTP)** under AQIS 2019-20.

Total Cost (in Rs.) : 2,67,000

Ref. No. 34-66/424/FDC/STTP/Policy-1/2019-20.

Dated: 10-Aug-2020.

**Status: Completed**

**2. Title: MULTIFACETED ELECTRIC WHEELCHAIR**

Name of the Agency : DST-TIDE

Total Cost (in Rs.) : 1 lakh

Date : 31/10/2019

Status : Not Considered

**3. Title: Magnesium based composites for biomedical applications using 3D printing process**

Name of the Agency : SERB(Core Research Grant)

Total Cost (in Rs.) : 26,24,472

Date : 17/03/2021

Status : Not Considered

**4. Title : Design and Development of low-cost leather Ironing Machine A Miniature model for leather artisans.**

Name of the Agency : DST-SEED(STI Hub for SC Community)

Total Cost (in Rs.) : 36,60,000

Date : 30/09/2021

Status : Not Considered

**5. Title: Autonomous Windows closing system for buildings and Automobiles**

Name of the Agency : MSME

Total Cost (in Rs.) : 1,00,000

Date : 05/04/2022

Status : 1<sup>st</sup> Level Selected.

**6. Title: Design of Ultra Sonic Gas and Steam Flow meter For Industrial Applications**

Name of the Agency : MSME

Total Cost (in Rs.) : 5,00,000

Date : 05/04/2022

Status : 1<sup>st</sup> Level Selected.

**7. Title: Development of Food Dispensing Machine Using IOT & Artificial Intelligence Techniques**

Name of the Agency : DST-SERB(SURA)

Total Cost (in Rs.) : 23,21,700

Date : 05/10/2022

Status : Proposal Not Considered

**8. Title: Low Cost Calcium Ion Battery with Higher Efficiency Suitable For Electric Vehicle Application**

Name of the Agency : MSME

Total Cost (in Rs.) : 7,99,520

Date : 14/11/2022

Status : 1<sup>st</sup> Level Sort listed.

**9. Title: DEVELOPMENT OF BAMBOO FIBER WITH GRAPE STALK CELLULOSE FIBER COMPOSITE MATERIAL USING SMART MANUFACTURING PROCESS FOR HEALTHCARE APPLICATIONS.**

Name of the Agency : DST-SERB(CRG)

Total Cost (in Rs.) : 29,41,000

Date : 16/3/2023

Status : Proposal Submitted

❖ **EDITORIAL ACTIVITIES:**

One of the **Editor** in IGI Global publisher Book Chapter title, “**Cyber –Physical systems and supporting Technologies for Industrial Automation**”.

❖ **DC MEMBER:**

Acting as **DC member** for Ph.D.(2 Research Scholars) at Saveetha School of Engineering, SIMATS ,Chennai - 602 105, TN.

❖ **REVIEWER/ EDITORIAL BOARD MEMBER/ Session Chair member (International Conference):**

1. Act as a Session Chair for **International Conference on Intelligence in Manufacturing, Energy and Design – ICIMED 2023** ‘ at Saveetha Engineering College, Chennai-602105 by **Mechanical Engineering Department**, on 12th April and 13<sup>th</sup> April, 2023.
  2. Act as a Session Chair for International Conference on **Automation and Computing Technologies (ICACT’18)** ‘ at **Velammal Institute of Technology**, Chennai-601204 by **EEE , ECE & Mechanical Engineering Department**, on 17-03-2018.
- Act as a Session Chair in International Conference titled, ‘**International Conference on research Advancements & Challenges in engineering Sciences (ICRACE’20)**’ , at **Velammal Institute of Technology**, Chennai-601204 jointly organized by the CSE, IT,ECE,EEE, H&S and Mechanical Engineering Department on 06<sup>th</sup> & 07<sup>th</sup> March 2020.
  - Editorial Board Member in **Journal of Coating Technology and Innovation** from **01-08-2023**.
  - Reviewer Panel Members in “**Corpus Online Journal of Civil Engineering (COJCE)**” from **28-04-2023**.
  - Reviewer Panel Members in “**Applied Energy**” from **11-04-2022**.
  - Reviewer Panel Members in “**Journal of Industrial Textiles**” from **07-04-2022**.
  - Reviewer Panel Members in “**Materials Today Proceedings**” from **01-02-2022**.
  - Reviewer Panel Members in “**Biomass Conversion and Biorefinery**” from **01-02-2022**.
  - Editorial Board Member in **Journal of Computer Aided Manufacturing and Automation** from **24-**

**04-2021.**

- Editorial Board Member in **Journal of Thermal Engineering and Technology** from 24-04-2021.
- Editorial Board Member in **Journal of Automotive Engineering and Technology** from 24-04-2021.
- Reviewer Panel Members in “**International Research Journal of Automotive Technology**” (**IRJAT**) (**E ISSN 2581-5865**) from **01-09-2020**
- Editorial Board Member in **The Hertz Journal Of Engineering** from **13-06-2020**.
- Reviewer in **Technium: Romanian Journal of Applied Sciences and Technology** from **28-05-2020**.
- Editorial Board Member in **Engineering Report** from **03-01-2019**.
- Editorial Board Member in **International Journal of Theoretical and Applied Mechanics (IJTAM)** from **11-06-2018**.
- Reviewer in **International journal of Engineering Research & Technology (IJERT)** from **13-10-2017**.

❖ **LIST OF PUBLICATIONS:**

No of SCI / Scopus Indexed / WoS /Anna University Annexure Journals
142

**PUBLICATIONS:**

**AY-2023**

1. SK. Fakruddin Babavali, N.S.M.P. Latha Devi, **Seeniappan Kaliappan**, Neha Garg, V. Nagalakshmi, N.R. Rajagopalan, “Thermal management of PV panel through the circulation of a nano-MgO/water-based nanofluid”, **Materials Today: Proceedings**, 2023, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2023.09.001>.(<https://www.sciencedirect.com/science/article/pii/S2214785323046606>)
2. Trupti S. Gajbhiye, Keval C. Nikam, **S. Kaliappan**, Pravin P. Patil, P. K. Dhal, C. K. Arvinda Pandian, “Sustainable renewable energy sources and solar mounting systems for PV panels: A critical review”, **Proceedings of the International Conference on Materials for Emerging Technologies** , AIP Conf. Proc. 2800, 020066-1–020066-10; <https://doi.org/10.1063/5.0163017>. (Scopus/WOS).
3. Laxmikant D. Jathar, S. Ganesan, Keval Chandrakant Nikam, Pravin P. Patil, **S. Kaliappan**, Pandurang Y. Patil, “Physiochemical analysis of distillate output obtained from novel desalination unit”, **Proceedings of the International Conference on Materials for Emerging Technologies**, AIP Conf. Proc. 2800, 020150-1–020150-8; <https://doi.org/10.1063/5.0162822>. (Scopus/WOS).
4. **S. Kaliappan**, Pranav Kumar Prabhakar, Joseph Manuel, Pravin P. Patil, M. Sathya Prakash, Baskara Sethupathy Subbaiah, “Recent advancements in aluminum metal matrix composites: A review of processing and application” **Proceedings of the International Conference on Materials for Emerging**

- Technologies, AIP Conf. Proc. 2800, 020130-1–020130-6; <https://doi.org/10.1063/5.0168369>. (Scopus/WOS).
5. D. P. Kamble, Hanumant P. Jagtap, S. **S. Kaliappan**, Pravin P. Patil, Kshitij Anand , “Comparative analysis of heat pipe with PCM, Cu powder, and fin for thermal enhancement” , Proceedings of the International Conference on Materials for Emerging Technologies , AIP Conf. Proc. 2800, 020142-1– 020142-11; <https://doi.org/10.1063/5.0163117>. (Scopus/WOS).
  6. Anand K. Bewoor, Harish M. Shinde, Ajit A. Bhosale, Pravin P Patil, **S. Kaliappan**, S. Socrates , “Ergonomic analysis and improvement for ease of work of post engine testing activities by using RULA and REBA techniques” , Proceedings of the International Conference on Materials for Emerging Technologies , AIP Conf. Proc. 2800, 020169-1–020169-18; <https://doi.org/10.1063/5.0165413>. (Scopus/WOS).
  7. **S. Kaliappan**, Baskara Sethupathy Subbaiah, Pranav Kumar Prabhakar, Pravin P. Patil, S. Socrates, V. Balaji , “Sand-casting process parameters influence casting mechanical properties in stainless steel alloys” , Proceedings of the International Conference on Materials for Emerging Technologies , AIP Conf. Proc. 2800, 020235-1–020235-7; <https://doi.org/10.1063/5.016791>. (Scopus/WOS).
  8. P. K. Prabhakar, B. S. Subbaiah, V. Balaji, P. P. Patil, R. K. Meivel Dhavamani, **S. Kaliappan**, “Elemental stack method optical and surface properties of Fe doped ZrO<sub>2</sub>”, Proceedings of the International Conference on Materials for Emerging Technologies, AIP Conf. Proc. 2800, 020132-1–020132-5; <https://doi.org/10.1063/5.0162705>. (Scopus/WOS).
  9. Pranav Kumar Prabhakar, Joseph Manuel, **S. Kaliappan**, Pravin P. Patil, T. Mothilal, H. Mohammed Ali , “ Mechanical and wear properties of 7075 Al reinforced with graphite particulate metal matrix composites: Preparation and evaluation”, Proceedings of the International Conference on Materials for Emerging Technologies, AIP Conf. Proc. 2800, 020239-1–020239-7; <https://doi.org/10.1063/5.0167686>. (Scopus/WOS).
  10. Jatoth Heeraman, Laxmi A. Bewoor, Anand Bewoor, **S. Kaliappan**, Pravin P. Patil, S. Socrates, “Applications of firefly algorithm in hydrology”, Proceedings of the International Conference on Materials for Emerging Technologies , AIP Conf. Proc. 2800, 020137-1–020137-7; <https://doi.org/10.1063/5.0163090>. (Scopus/WOS).
  11. Jatoth Heeraman, Sumit Kumar, **S. Kaliappan**, Pravin P. Patil, Dheerendra Vikram Singh, “Paddy residue potential as energy resources - A critical review”, Proceedings of the International Conference on Materials for Emerging Technologies, AIP Conf. Proc. 2800, 020145-1–020145-7; <https://doi.org/10.1063/5.0163092>. (Scopus/WOS).
  12. A. K. Bewoor, Nitin Patil, **S. Kaliappan**, Pravin P. Patil, Raja Raju, P. Ramanathan, V. A. Kulkarni, “Sustainability assessment of tungsten inert gas welding process using grey relational analysis”, Proceedings of the International Conference on Materials for Emerging Technologies, AIP Conf. Proc. 2800, 020232-1– 020232-14; <https://doi.org/10.1063/5.0163918>. (Scopus/WOS).

13. Chetan Pawar, Shreeprakash Balekumeri, Nitin Motgi, Pravin P. Patil, **Kaliappan Seeniappan**, Joseph Manuel , “A comprehensive look at the aluminum oxide nano-additive effects on engine performance and emissions”, Proceedings of the International Conference on Materials for Emerging Technologies , AIP Conf. Proc. 2800, 020155-1–020155-7; <https://doi.org/10.1063/5.0163475>. (Scopus/WOS).
14. **Kaliappan Seeniappa**, Baskara Sethupathy Subbaiah, V. Balaji, Pravin P. Patil, Manish Gupta, S. Socrates, “Magnetic characteristics of electroplated NiAl/CuO<sub>2</sub> composite wires as a function of magnetic field”, Proceedings of the International Conference on Materials for Emerging Technologies, AIP Conf. Proc. 2800, 020236-1–020236-5; <https://doi.org/10.1063/5.0167920>. (Scopus/WOS).
15. **Kaliappan Seeniappan**, Mothilal Thulasiraman, Manish Gupta, Pravin P. Patil, Nageswari Devana, Raj Kamal M. Dhavamani, “Experimental analysis of Al-SiC-TiB<sub>2</sub> hybrid metal matrix composite” , Proceedings of the International Conference on Materials for Emerging Technologies, AIP Conf. Proc. 2800, 020238-1–020238-6; <https://doi.org/10.1063/5.0162706>. (Scopus/WOS).
16. **Kaliappan Seeniappan**, Rajkamal M. Dhavamani, Baskara Sethupathy Subbaiah, Pravin P. Patil, Ramanathan Pichappan, Pranav Kumar Prabhakar, “Material characterization and testing using linear polarization optical coherence tomography”, Proceedings of the International Conference on Materials for Emerging Technologies, AIP Conf. Proc. 2800, 020131-1–020131-7; <https://doi.org/10.1063/5.0162703>. (Scopus/WOS).
17. Kadirvel Arumugam, Mohammed Ali Haleem, **Kaliappan Seeniappan**, Pravin P. Patil, V. Balaji, Pranav Kumar Prabhakar , “Ni addition results in the formation of a bulk metallic glass matrix composite based on ductile Cu” Proceedings of the International Conference on Materials for Emerging Technologies, AIP Conf. Proc. 2800, 020133-1–020133-5; <https://doi.org/10.1063/5.0162704>. (Scopus/WOS).
18. SK. Fakruddin Babavali, N.S.M.P. Latha Devi, **Seeniappan Kaliappan**, Neha Garg, V. Nagalakshmi, N.R. Rajagopalan, “Thermal management of PV panel through the circulation of a nano-MgO/water-based nanofluid”, Materials Today: Proceedings, 2023, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2023.09.001>. (<https://www.sciencedirect.com/science/article/pii/S2214785323046606>) (Scopus). **Cite Score: 2.3**
19. Patlola Madhusudhan, N.S.M.P. Latha Devi, **Dr. Seeniappan Kaliappan**, Dinesh Chandra Pandey, J. Sai Chandra, C.A. Jyothirmayee, “Improving the productivity of the solar-based evaporative still (SBES) using the nano-coated absorber”, Materials Today: Proceedings, 2023, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2023.09.014>. (<https://www.sciencedirect.com/science/article/pii/S2214785323046734>) (Scopus). **Cite Score: 2.3**
20. G.A. Sivasankar, C. Balakrishna Moorthy, **Seeniappan Kaliappan**, Ravishankar Sathyamurthy, T. Sathish, R. Saravanan, Ümit Ağbulut, "Sustainable nano-added biofuel production from borassus flabellifer oil for conventional internal combustion engines", Energy, Volume 282, 2023, 128381, ISSN 0360-5442, <https://doi.org/10.1016/j.energy.2023.128381>. (<https://www.sciencedirect.com/science/article/pii/S0360544223017759>). (WOS/SCIE/Anna University Annexure). Impact factor : 9 Q1 Journal

21. Prabhushankar, N., Balaji, N. & Kaliappan, S. (2023) , Effect of sisal/kevlar inter-ply stacking and silane-treatment on mechanical, wear, fracture toughness, drop load impact, and hydrophobicity behavior of cellulose toughened polyester composite. *Biomass Conv. Bioref.* (2023). <https://doi.org/10.1007/s13399-023-04416-1>. (WOS/SCIE/Anna University Annexure-1).Impact factor : 4.050 Q2 Journal
22. S. Kaliappan, T. Mothilal, L. Natrayan, P. Pravin, Tewedaj Tariku Olkeba, "Mechanical Characterization of Friction-Stir-Welded Aluminum AA7010 Alloy with TiC Nanofiber", *Advances in Materials Science and Engineering*, vol. 2023, Article ID 1466963, 7 pages, 2023. <https://doi.org/10.1155/2023/1466963>. (Scopus/Anna University Annexure-1). **Impact Factor:2.098 Q2 Journal**
23. L. Natrayan, Raviteja Surakasi, Pravin P. Patil, S. Kaliappan, V. Selvam, P. Murugan, "Optimizing Numerous Influencing Parameters of Nano-SiO<sub>2</sub>/Banana Fiber-Reinforced Hybrid Composites using Taguchi and ANN Approach", *Journal of Nanomaterials*, vol. 2023, Article ID 3317584, 14 pages, 2023. <https://doi.org/10.1155/2023/3317584>. (Science Citation Index Expanded/Scopus/WoS /Anna University Annexure-1). **Impact Factor:3.791 Q2 Journal**
24. M. P. Natarajan, K. Rameshkumar, D. Vijayakumar, Pravin P. Patil, **S. Kaliappan**, T. Thirumalai (2023); Carburization effect on mechanical properties of EN-12 steel in different quenching medium at different quenching time intervals. *AIP Conference Proceedings* 12 May 2023; 2747 (1): 020020. <https://doi.org/10.1063/5.0132575>. (Scopus/WOS).
25. **S. Kaliappan**, S. Syath Abuthakeer, Piyush Gaur, Pravin P. Patil, G. Bhavani, M. Logesh (2023); A study on multi-walled carbon nanotube reinforced Al7075 nano composites by P/M route. *AIP Conference Proceedings* 12 May 2023; 2747 (1): 020019. <https://doi.org/10.1063/5.0132555>. (Scopus/WOS).
26. **S. Kaliappan**, Chandrashekhar K. Pati, M. Karthick, Pravin P. Patil, S. Socrates, V. Balaji (2023); Determinants of dielectric behaviour of MO<sub>8</sub>+ substituted LiFe<sub>5</sub>O<sub>8</sub>. *AIP Conference Proceedings* 12 May 2023; 2747 (1): 020018. <https://doi.org/10.1063/5.0132567>. (Scopus/WOS).
27. S. Syath Abuthakeer, A. Alagu Sundara Pandian, M. P. Natarajan, Pravin P. Patil, **S. Kaliappan**, V. Balaji (2023); Factors influencing the gas porosity formation in A438 alloy wheels produced by gravity die casting. *AIP Conference Proceedings* 12 May 2023; 2747 (1): 030003. <https://doi.org/10.1063/5.0132576>. (Scopus/WOS).
28. **S. Kaliappan**, Chandrashekhar K. Pati, M. D. Raj Kamal, Pravin P. Patil, M. S. Sureshkumar, V. Balaji (2023); A study on methylene blue photocatalytic activity in the presence of different shape lead (II) sulphide nanoparticles. *AIP Conference Proceedings* 12 May 2023; 2747 (1): 020017. <https://doi.org/10.1063/5.0132568>. (Scopus/WOS).
29. **S. Kaliappan**, K. Muralidharan, M. P. Natarajan, Pravin P. Patil, R. Karthick, S. Socrates (2023); A study on mechanical properties of heat treated Fe-Ag-Al alloys. *AIP Conference Proceedings* 12 May 2023; 2747 (1): 020016. <https://doi.org/10.1063/5.0132557>. (Scopus/WOS).
30. G. Mehershilpa, K. Muralidharan, **S. Kaliappan**, Pravin P. Patil, T. Sathish, D. Meganathan (2023); Mechanically constrained single-loop 6-bar chain from double 6R chain. *AIP Conference Proceedings* 12 May 2023; 2747 (1): 040004. <https://doi.org/10.1063/5.0132556>. (Scopus/WOS).

31. S. Kaliappan, T. Mothilal, P. Pravin, B. Raja Bharathi, E. S. Esakkiraj, "Evaluation of Mechanical Behaviour of Multiwalled Nanotubes Reinforcement Particles in Jute-Glass Fibres Hybrid Composites", *Advances in Materials Science and Engineering*, vol. 2023, Article ID 2219460, 7 pages, 2023. <https://doi.org/10.1155/2023/2219460>. (Scopus/Anna University Annexure-1). Impact Factor:2.098 Q2 Journal
32. L. Natrayan, **S. Kaliappan**, S. Chinnasamy Subramanian, Pravin P. Patil, S. D. Sekar, Y. Sessa Rao, Melkamu Beyene Bayu (2023), "Optimization of Activated Carbon Fiber Preparation from Hemp Fiber through Dipotassium Hydrogen Phosphate for Application of Thermal Storage System", *Adsorption Science & Technology*, vol. 2023, Article ID 7228408, 9 pages, 2023. <https://doi.org/10.1155/2023/7228408>. (Science Citation Index /Scopus) **Impact Factor: 4.373 Q2 Journal**
33. S. S. Kumar, M. Jyothirmai, S. Kaliappan and V. Rathiv, "An Application of IoT in Programmed Tidal Energy Observation System," *2023 International Conference on Innovative Data Communication Technologies and Application (ICIDCA)*, Uttarakhand, India, 2023, pp. 868-872, doi: 10.1109/ICIDCA56705.2023.10100013. (Scopus). **Cite Score: 31.2**
34. J. Madhusudhanan, S. Kaliappan, Ravishankar sathyamurthy, R. Saravanan, T. Sathish, D. Prabu, M. Rajasimman, Abdullah A. Al-Kahtani, Elena-Niculina Dragoi (2023), "Influence of nanopores volumes in hydrogen absorption properties of B4C and WC carbide-derived carbon nanomaterials", *International Journal of Hydrogen Energy*, 2023, ISSN 0360-3199, <https://doi.org/10.1016/j.ijhydene.2023.03.318>. (SCI/Scopus). **Impact factor 7.139 Q1 Journal**
35. T. Suman, **S. Kaliappan**, L. Natrayan and D. C. Dobhal (2023), "IoT based Social Device Network with Cloud Computing Architecture," *2023 Second International Conference on Electronics and Renewable Systems (ICEARS)*, Tuticorin, India, 2023, pp. 502-505, doi: 10.1109/ICEARS56392.2023.10085574. (Scopus). **Cite Score: 31.2**
36. R. Josphineleela, **S. Kaliappan**, L. Natrayan and A. Garg (2023), "Big Data Security through Privacy – Preserving Data Mining (PPDM): A Decentralization Approach," *2023 Second International Conference on Electronics and Renewable Systems (ICEARS)*, Tuticorin, India, 2023, pp. 718-721, doi: 10.1109/ICEARS56392.2023.10085646. (Scopus). **Cite Score: 31.2**
37. R. Josphineleela, **S. Kaliappan**, N. L and U. M. Bhatt (2023) , "Intelligent Virtual Laboratory Development and Implementation using the RASA Framework," *2023 7th International Conference on Computing Methodologies and Communication (ICCMC)*, Erode, India, 2023, pp. 1172-1176, doi: 10.1109/ICCMC56507.2023.10083701. (Scopus). **Cite Score: 31.2**
38. L. L. P. Kumar, C. Ahalya, **S. Kaliappan** and A. P. H (2023), "Development of Healthcare Architecture based on Cloud Technology and IoT Applications," *2023 7th International Conference on Computing Methodologies and Communication (ICCMC)*, Erode, India, 2023, pp. 1385-1388, doi: 10.1109/ICCMC56507.2023.10084029. (Scopus). **Cite Score: 31.2**



39. L. Natrayan, V. R. Niveditha, S. Kaliappan, Pravin P. Patil, C. K. Arvinda Pandian, Y. Sessa Rao, P. Murugan (2023), "Optimization Process of Potassium Carbonate Activated Carbon through Jute-Based Core Materials by Using Artificial Neural Network with Response Surface Methodology", *Adsorption Science & Technology*, vol. 2023, Article ID 8674382, 14 pages, 2023. <https://doi.org/10.1155/2023/8674382>. (Science Citation Index /Scopus) **Impact Factor: 4.373 Q2 Journal**
40. L. Natrayan, Yenda Srinivasa Rao, Gayatri Vaidya, Sumanta Bhattacharya, **S. Kaliappan**, Pravin P. Patil, Prabhu Paramasivam (2023) , "Biosynthesis of Iron Oxide Nanoparticles Using Leaf Extract of *Ruellia tuberosa*: Mechanical and Dynamic Mechanical Behaviour Kevlar-Based Hybrid Epoxy Composites", *Bioinorganic Chemistry and Applications*, vol. 2023, Article ID 1731931, 10 pages, 2023. <https://doi.org/10.1155/2023/1731931>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:4.724 Q1 Journal**
41. Palaniswamy, V., **Seeniappan, K.** ., Rajasekaran, T. ., & Lakshmaiya, N. . (2023). ENHANCING MRR AND ACCURACY WITH MAGNETIZED GRAPHITE TOOL IN ELECTROCHEMICAL MICROMACHINING OF COPPER: Original scientific paper. *Chemical Industry & Chemical Engineering Quarterly*, 29(3), 201–208. <https://doi.org/10.2298/CICEQ220731027P> (**SCIE, Anna University Journal List and SCOP2US**) **Impact factor 0.925 Q3 Journal**
42. **S. Kaliappan**, Laxmi Biban, D. Prasad, Amir Shaikh, P. Ragupathy, H. Mohammed Ali (2023), "Dielectric and conductance of biochar-based PVA flexible nanocomposite film", *Materials Today: Proceedings*, 2023, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2023.02.445>. <https://www.sciencedirect.com/science/article/pii/S221478532301009X>) (Scopus). **Cite Score: 2.3**
43. **S. Kaliappan**, V. Balaji, N. Mohan Raj, Gori Yatika, L. Natrayan, D Shyam (2023), "Friction stir welding of nylon 6–6 thick plates using biochar colloidal nanoparticle", *Materials Today: Proceedings*, 2023, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2023.03.007>. (<https://www.sciencedirect.com/science/article/pii/S2214785323010489>) (Scopus). **Cite Score: 2.3**
44. Sivakumar, V., **Kaliappan, S.**, Natrayan, L. *et al.* (2023) , Effects of Silane-Treated High-Content Cellulose Okra Fibre and Tamarind Kernel Powder on Mechanical, Thermal Stability and Water Absorption Behaviour of Epoxy Composites. *Silicon* (2023). <https://doi.org/10.1007/s12633-023-02370-1>. (SCIE/Anna University Annexure-1/SCOPUS). **Impact Factor:2.941 Q2 Journal**
45. L. Natrayan, A. Bhaskar, Pravin P. Patil, **S. Kaliappan**, M. Dineshkumar, E. S. Esakkiraj (2023), "Optimization of Filler Content and Size on Mechanical Performance of Graphene/Hemp/Epoxy-Based Hybrid Composites using Taguchi with ANN Technique", *Journal of Nanomaterials*, vol. 2023, Article ID 8235077, 15 pages, 2023. <https://doi.org/10.1155/2023/8235077>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:3.791 Q2 Journal**

46. V. Balaji, **S. Kaliappan** , Kumutha R , Sudhir Joshi (2023) “IMPACT OF SOLAR ABSORPTION ON CRYSTAL TRANSFER COEFFICIENTS IN UPWARD THERMAL EXPANSION IN SINGLE AND DOUBLE-GLAZING HORIZONTAL COLLECTORS”,ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.180-189. (UGC/SCOPUS).**Impact factor : 0.1, Q4 Journal.**
47. V. Balaji, **S. Kaliappan** , S. Socrates , Anuj Raturi (2023) “EXPERIMENTAL ANALYSIS ON COUPLED HEAT EXCHANGE AND WINDAGE EFFECT IN WALKED LABYRINTH GASKETS”,ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.170-179. (UGC/SCOPUS).**Impact factor : 0.1, Q4 Journal.**
48. N. Balaji, S. Kaliappan, M. D. Raj Kamal, Anuj Raturi, “NATURAL CIRCULATION HEAT FLUID FLOW TRANSFER AND ADSORPTION PROPERTIES IN SQUARE CAVITIES”, ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.160-169. (UGC/SCOPUS). **Impact factor : 0.1, Q4 Journal.**
49. V. Balaji, **S. Kaliappan** , Kumutha R , Anuj Raturi (2023) ,“ INVESTIGATE THE FLAMES ELEVATION, HEAT DISTRIBUTION AND ADSORPTION BEHAVIOUR OF FLOATING WINDOWS SPILLAGE PLUME UNDER COMPARTMENTS EXPLOSION”,ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.150-159. (UGC/SCOPUS).**Impact factor : 0.1, Q4 Journal.**
50. V. Paranthaman, **S. Kaliappan** , M. D. Raj Kamal , Sudhir Joshi (2023) ,“ INVESTIGATE THE ADSORPTION BEHAVIOUR OF DRY PALM OIL PLANTATION STEM DEBRIS TO CONTROLLED AND EXPOSED ENVIRONMENT CLEANING BY AIR MOVEMENT.”,ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.140-149. (UGC/SCOPUS).**Impact factor : 0.1, Q4 Journal.**
51. V. Paranthaman , **S. Kaliappan** , S. Socrates , Anuj Raturi (2023) ,“ AN INVESTIGATION ON ADSORPTION PROPERTIES OF GAS TRAPPING MECHANISM IN CLOSED-END MICROCHANNELS”,ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.130-139. (UGC/SCOPUS).**Impact factor : 0.1, Q4 Journal.**
52. **S. Kaliappan**, R. Velumayil, L. Natrayan, P. Pravin(2023), ”Mechanical, DMA, and fatigue behavior of Vitis vinifera stalk cellulose Bambusa vulgaris fiber epoxy composites”, Polymer Composites, 1. <https://doi.org/10.1002/pc.27228>. (SCI/Scopus/Anna University Annexure-1). **Impact Factor:2.098 Q2 Journal**
53. R. Vezhavendhan , **S. Kaliappan** , S.Socrates , Ruchika Tondon(2023) ,“INVESTIGATE THE ADSORPTION PROPERTIES AND NATURAL CONVECTION OF THREE-DIMENSIONAL HORIZONTAL PARALLEL PLATES FROM THE STABLE TO AN UNSTEADY STATE”,ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.10-17. (UGC/SCOPUS).**Impact factor : 0.1, Q4 Journal.**
54. R. Vezhavendhan , S. Jagan Raj , **S.Kaliappan** , Sudhir Joshi(2023) ,“ADSORPTION AND THERMAL PROPERTIES OF A POROUS CHANNEL WITH SLANTED FACADE SWELLS UNDER SPINNING AND BULLPEN CIRCUMSTANCES”, ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.18-26. (UGC/SCOPUS).**Impact factor : 0.1, Q4 Journal.**

55. S. Kaliappan , S. Chezhan Babu , M.D.Rajkamal , Sudhir Joshi(2023), “EXPERIMENTAL INVESTIGATION OF LAMINAR-TURBULENT TRANSITION IN VARIABLE ADSORPTION VISCOSITY IN LONGITUDINAL WARMED PIPE”, ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.27-34. (UGC/SCOPUS).**Impact factor : 0.1, Q4 Journal.**
56. S. Kaliappan , V. Subha , S. Socrates ,Ruchika Tondon(2023),“WATER ADSORPTION KINETICS ON LOOSE GRANULES OF SWS-1L IN ISOBARIC PHASES OF ADSORBENT HEATING SYSTEMS”, ION EXCHANGE AND ADSORPTION, Vol. 23, Issue-01, 2023 pp.01-09. (UGC/SCOPUS). **Impact factor : 0.1, Q4 Journal.**
57. Balaji, N, Gurupranes, S. V., Balaguru, S, Jayaraman, P, Natrayan, L,Subbiah Ram, **Kaliappan.S** (2023),“Mechanical, wear, and drop load impact behavior of Cissus quadrangularis fiber–reinforced moringa gum powder–toughened polyester composite”, Biomass Conversion and Biorefinery, 2190-6823, <https://doi.org/10.1007/s13399-023-04491-4>. (WOS/SCIE/Anna University Annexure-1).**Impact factor : 4.050 Q2 Journal**
58. **Kaliappan, S.**, Natrayan, L., Kumar, P.V.A. *et al.* (2023), “ Mechanical, fatigue, and hydrophobic properties of silane-treated green pea fiber and egg fruit seed powder epoxy composite”, *Biomass Conv. Bioref.* . <https://doi.org/10.1007/s13399-023-04534-w>. (WOS/SCIE/Anna University Annexure-1).**Impact factor : 4.050 Q2 Journal**
59. Muralidaran, V.M., Natrayan, L., **Kaliappan, S.** *et al.* Grape stalk cellulose toughened plain weavedbamboo fiber-reinforced epoxy composite: load bearing and time-dependent behavior. *Biomass Conversion and Biorefinery* (2023). <https://doi.org/10.1007/s13399-022-03702-8>. (WOS/SCIE/Anna University Annexure-1).**Impact factor : 4.050 Q2 Journal**
60. Saravanan, K., **Kaliappan, S.**, Natrayan, L. *et al.* Effect of cassava tuber nanocellulose and satin weaved bamboo fiber addition on mechanical, wear, hydrophobic, and thermal behavior of unsaturated polyester resin composites. *Biomass Conv. Bioref.* (2023). <https://doi.org/10.1007/s13399-023-04495-0>. (WOS/SCIE/Anna University Annexure-1).**Impact factor : 4.050 Q2 Journal.**
61. L Natrayan, Raviteja Surakasi, **S. Kaliappan**, Pravin P. Patil, A. Saravanan, R. Siranjeevi (2023), Explore the elimination of toxic dye using Bio-Synthesized cerium oxide nanoparticles derived from Morinda citrifolia leaf extracts, *Surfaces and Interfaces*, Volume 41,2023,103151,ISSN 2468 0230, <https://doi.org/10.1016/j.surfin.2023.103151>.(<https://www.sciencedirect.com/science/article/pii/S2468023023005217>) (Scopus Indexed Journal).**Impact factor : 6.2 Q1 Journal**
62. Velmurugan, G.Natrayan, L.Chohan, Jasgurpreet Singh, Vasanthi, P. Angalaeswari, S.Pravin, P.**Kaliappan**, S. Arunkumar, D (2023), Investigation of mechanical and dynamic mechanical analysis of bamboo/olive tree leaves powder-based hybrid composites under cryogenic conditions, *BiomassConversion and Biorefinery*, 2023/07/11,2190-6823, <https://doi.org/10.1007/s13399-023-04591-1>, [10.1007/s13399-023-04591-1](https://doi.org/10.1007/s13399-023-04591-1). (WOS/SCIE/Anna University Annexure-1).**Impact factor : 4.050 Q2 Journal**

## AY-2022

63. Chirag Vibhakar, R. S. Sabeenian, **S. Kaliappan**, Pandurang Y. Patil, Pravin P. Patil, P. Madhu, C. Sowmya Dhanalakshmi and Habtewolde Ababu Birhanu (2022), "Production and Optimization of Energy Rich Biofuel through Co-Pyrolysis by Utilizing Mixed Agricultural Residues and Mixed Waste Plastics", Hindawi Advances in Materials Science and Engineering, Volume 2022, Article ID 8175552, 9 pages. <https://doi.org/10.1155/2022/8175552>. (WOS/SCIE/Anna University Annexure-1). **Impact Factor:2.098. Q2 Journal**
64. N. Pragadish, **S. Kaliappan**, M. Subramanian, L. Natrayan, K. Satish Prakash, Ram Subbiah, T. Ch. Anil Kumar (2022), "Optimization of cardanol oil dielectric-activated EDM process parameters in machining of silicon steel", Biomass Conversion and Biorefinery (2022). <https://doi.org/10.1007/s13399-021-02268-1>. (WOS/SCIE/Anna University Annexure-1). **Impact factor : 4.050 Q2 Journal**
65. Balaji V., **Kaliappan S.**, Madhuvanesan D.M., Ezhumalai D.S., Boopathi S., Patil PravinP., Saiprakash Mani (2022), "Combustion analysis of biodiesel-powered propeller engine for least environmental concerns in aviation industry", *Aircraft Engineering and Aerospace Technology*, Vol. ahead-of-print No. ahead-ofprint. <https://doi.org/10.1108/AEAT-11-2021-0344>. (WOS/SCIE/Scopus/Anna University Annexure-1). **Impact factor : 1.54 Q3 Journal**
66. Ram Subbiah, Arivumangai.A, **S. Kaliappan**, Balaji V, Yuvaraj G, Pravin P. Patil (2022), "Effect of nanosilica on mechanical, thermal, fatigue, and antimicrobial properties of cardanol oil/sisal fiber reinforced epoxy composite", *Polymer Composites*, 2022, Volume43, Issue11,,November 2022 ,Pages 7940-7951. DOI: 10.1002/pc.26930. (SCI/WOS/SCIE/Scopus/Anna University Annexure-1). Impact factor :3.531 Q2 Journal
67. S. Senthil Kumar ,T. CH Anil Kumar, Mohan Chokkalingam, **S. Kaliappan**, S. Boopathi, Chidurala Srinivas and Pravin P. Patil (2022), "Mechanical, fracture toughness, and fatigue behavior of spinifex littoreus fiber on echinoidea-spike toughened epoxy composite", *Polymer Composites*, 2022, 1. <https://doi.org/10.1002/pc.26543>. (SCI/WOS/SCIE/Scopus/Anna University Annexure-1). **Impact factor :3.531 Q2 Journal.**
68. Venkatesan Govindarajan , R. Sivakumar, Pravin P. Patil, **S. Kaliappan**, T. Ch Anil Kumar , M. Kannan and B. Ramesh (2022), "Effect of Tungsten Carbide Addition on the Microstructure and Mechanical Behavior of Titanium Matrix Developed by Powder Metallurgy Route", Hindawi Advances in Materials Science and Engineering Volume 2022, Article ID 2266951, 7 pages <https://doi.org/10.1155/2022/2266951>. (WOS/SCIE/Anna University Annexure-1). **Impact Factor:2.098 Q2 Journal**
69. L. Natrayan, S. Angalaeswari, **S. Kaliappan**, C. Naga Dheeraj Kumar Reddy, V. Sivaprakash , Pravin P. Patil, P. Murugan (2022), "Reduction of Noise in Single-Walled Carbon Nanotubes (SWCNTs) Using Gas Adsorption Technique", *Adsorption Science & Technology* vol. 2022, Article ID 3244702, 10 pages,

2022. <https://doi.org/10.1155/2022/3244702>. (SCI/Scopus/Anna University Annexure-1). **Impact Factor:**

**4.373. Q2 Journal**

70. K. Raja Karthikeyan, K. Tamilmannan, S. Socrates, **S. Kaliappan**, Pravin P. Patil, N. Ramasamy, V. Jayaseelan (2022), "Experimental investigation on the coconut fiber reinforced hybrid gear composites ", *Materials Today: Proceedings*, 2022,ISSN 2214-7853.<https://doi.org/10.1016/j.matpr.2022.04.540>.<https://www.sciencedirect.com/science/article/pii/S2214785322027043>. (Scopus). **Cite Score: 2.3**
71. A.Balajikrishnabharathi, Vijayananth Suyamburajan, **S.Kaliappan**, Pravin P Patil, D. Jayabalakrishnan, M. Sathya Prakash, T. Sivabalan (2022), "Study of mechanical properties on Nano metal matrix Composites: Duralcan process", *Materials Today: Proceedings*,2022,ISSN-2214-7853,<https://doi.org/10.1016/j.matpr.2022.04.569>.  
<https://www.sciencedirect.com/science/article/pii/S221478532202702X>. **Cite Score:2.3** (Scopus).
72. R. Arravind, S. Kaliappan, Suyamburajan Vijayananth, Pravin P. Patil, M. Sathya Prakash, N. Ramasamy (2022), "An investigation on mechanical properties of AA336/Al2O3 composites by Duralcan process ", *Materials Today: Proceedings*,2022,ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.04.617>.  
(<https://www.sciencedirect.com/science/article/pii/S2214785322027808>). (Scopus). **Cite Score:2.3**
73. Yarrapragada K. S. S. Rao, C. Sowmya Dhanalakshmi, Dinesh Kumar Vairavel, Raviteja Surakasi, S. Kaliappan, Pravin P. Patil, S. Socrates, J. Isaac Joshua Ramesh Lalvani (2022) , "Investigation on Forestry Wood Wastes: Pyrolysis and Thermal Characteristics of Ficus religiosa for Energy Recovery System", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 3314606, 9 pages, 2022. <https://doi.org/10.1155/2022/3314606>. (SCI/Scopus/Anna University Annexure-1). **Impact Factor:2.098 Q2 Journal**
74. P. Madhu, M. Sasireka, Ravi Samikannu, K. Vinoth, A. Udhaya Kumar, Pravin P. Patil, **S. Kaliappan**, Atkilt Mulu Gebrekidan (2022), "Production and Characterization of Maximum Liquid Oil Products through Individual and Copyrolysis of Pressed Neem Oil Cake and Waste Thermocol Mixture ", *Advances in Polymer Technology* , vol. 2022, Article ID 5258130 11 pages ,2022. <https://doi.org/10.1155/2022/5258130>. (SCIE/ScopusIndexed/WOS/Anna University Annexure-1). **ImpactFactor:2.502 Q2 Journal**
75. I. Kathir, K. Haribabu, Aditya Kumar, S. Kaliappan, Pravin P. Patil, C.Sowmya Dhanalakshmi, P. Madhu, Habtewolde Ababu Birhanu (2022), "Utilization of Tea Industrial Waste for Low-Grade Energy Recovery: Optimization of Liquid Oil Production and Its Characterization", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 7852046, 9 pages, 2022. <https://doi.org/10.1155/2022/7852046>. (WOS/SCIE/Anna University Annexure-1). **Impact Factor: 2.098 Q2 Journal**
76. Solomon Jenoris Muthiya, L. Natrayan, **S. Kaliappan**, Pravin P. Patil, B. E. Naveena, Joshuva Arockia Dhanraj, Mohankumar Subramaniam, Prabhu Paramasivam (2022), "Experimental Investigation to Utilize Adsorption and Absorption Technique to Reduce CO2 Emissions in Diesel Engine Exhaust Using Amine Solutions ", *Adsorption Science & Technology*, vol. 2022, Article ID 9621423 , 11 pages, 2022.

<https://doi.org/10.1155/2022/9621423> . (SCI/Scopus Indexed/Anna University Annexure-1). Impact

Factor: **4.373 Q2 Journal**

77. P. Madhu, L. Vidhya, S. Vinodha, Shiny Wilson, S. Sekar, Pravin P. Patil, **S. Kaliappan**, S. Prabhakar (2022), "Co-pyrolysis of Hardwood Combined with Industrial Pressed Oil Cake and Agricultural Residues for Enhanced Bio-Oil Production", *Journal of Chemistry*, vol. 2022, Article ID 9884766, 12 pages, 2022. <https://doi.org/10.1155/2022/9884766>. (SCI/Scopus Indexed/WOS/Anna University Annexure-1). **Impact Factor:3.241 Q2 Journal**
78. C. Sowmya Dhanalakshmi, N. Ahalya, P. Vidhyalakshmi, C. Krishnaraj, N. Selvam, Pravin P. Patil, **S. Kalippan**, S. Prabhakar (2022), "Individual and Catalytic Co-Pyrolysis of Agricultural Outcomes and Polymeric Materials over Nano-HZSM-5 Zeolite: Synergistic Effects and Yield Analysis for Heating Applications", *Journal of Nanomaterials*, vol. 2022, Article ID 3743299, 11 pages, 2022. <https://doi.org/10.1155/2022/3743299>. (SCIE/Scopus Indexed/WOS/Anna University Annexure-1). **Impact Factor:3.791 Q2 Journal**
79. Natrayan, Piyush Gaur, Anjibabu Merneedi, **S. Kaliappan**, Pravin P. Patil, V. Sivaprakash, Muse Degefe Chewaka (2022), "Investigation of Tribological Behaviour on DLC Coatings for AA5051 using DC Sputtering", *Adsorption Science & Technology*, vol. 2022, Article ID 4574218, 9 pages, 2022. <https://doi.org/10.1155/2022/4574218>. (SCI/Scopus Indexed/Anna University Annexure-1). Impact Factor: **4.373 Q2 Journal**
80. Manjunathan Karthick, M. Meikandan, **S. Kaliappan**, M. Karthick, S. Sekar, Pravin P. Patil, S. Raja, L. Natrayan, Prabhu Paramasivam (2022), "Experimental Investigation on Mechanical Properties of Glass Fiber Hybridized Natural Fiber Reinforced Penta-Layered Hybrid Polymer Composite", *International Journal of Chemical Engineering*, vol. 2022, Article ID 1864446, 9 pages, 2022. <https://doi.org/10.1155/2022/1864446>. ( Science Citation Index Expanded/Scopus/WoS) **Impact Factor:2.729 Q2 Journal**
81. G. Gokilakrishnan, R. Sathishkumar, N. S. Sivakumar, **S. Kaliappan**, S. Sekar, Pravin P. Patil, Ram Subbiah, K. P. Yuvaraj, Feleke Worku Tadesse (2022), "Wear Behavior and FESEM Analysis of LM 25 Alloy MMHCs Reinforced with  $Fe_3O_4$  and Gr by Utilizing Taguchi's Technique", *Journal of Nanomaterials*, vol. 2022, Article ID 3203057, 10 pages, 2022. <https://doi.org/10.1155/2022/3203057>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:3.791 Q2 Journal**
82. L. Natrayan, **S. Kaliappan**, Baskara S. Sethupathy, S. Sekar, Pravin P. Patil, G. Velmurugan, Tewedaj Tariku Olkeba (2022), "Effect of Mechanical Properties on Fibre Addition of Flax and Graphene-Based Bionanocomposites", *International Journal of Chemical Engineering*, vol. 2022, Article ID 5086365, 8 pages, 2022. <https://doi.org/10.1155/2022/5086365>. (Science Citation Index Expanded/Scopus/WoS) **Impact Factor:2.729 Q2 Journal**
83. Naresh Kumar, L. Natrayan, G. Kasirajan, **S. Kaliappan**, M. D. Raj Kamal, Pravin P. Patil, Muse Degefe Chewaka (2022), "Development of Novel Bio-mulberry-Reinforced Polyacrylonitrile (PAN) Fibre Organic Brake Friction Composite Materials", *Bioinorganic Chemistry and Applications*, vol. 2022, Article

- ID 6426763, 11 pages, 2022. <https://doi.org/10.1155/2022/6426763>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:4.724Q1 Journal**
84. C. Sowmya Dhanalakshmi, **S. Kaliappan**, H. Mohammed Ali, S. Sekar, Melvin Victor Depoures, Pravin P. Patil, Baskara Sethupathy Subbaiah, S. Socrates, Habtewolde Ababu Birhanu (2022), "Flash Pyrolysis Experiment on *Albizia odoratissima* Biomass under Different Operating Conditions: A Comparative Study on Bio-Oil, Biochar, and Noncondensable Gas Products", *Journal of Chemistry*, vol. 2022, Article ID 9084029, 9 pages, 2022. <https://doi.org/10.1155/2022/9084029>. (Science Citation Index Expanded/Scopus/WoS) **Impact Factor:3.241. Q2 Journal**
85. V. Siva Shankar, G. Velmurugan, **S. Kaliappan**, S. Baskara Sethupathy, S. Sekar, Pravin P. Patil, G. Anitha, Geremew Geidare Kailo (2022), "Optimization of CO<sub>2</sub> Concentration on Mortality of Various Stages of *Callosobruchus maculatus* and Development of Controlled Atmosphere Storage Structure for Black Gram Grains", *Adsorption Science & Technology*, vol. 2022, Article ID 3381510, 12 pages, 2022. <https://doi.org/10.1155/2022/3381510>. (Science Citation Index /Scopus) **Impact Factor: 4.373 Q2 Journal**
86. P. Shalini Priya Dharsini, N. Ahalya, S. Kaliappan, S. Sekar, Pravin P. Patil, Varasala Pragna, Gurusamy Pathinettampadian, J. Isaac Joshua Ramesh Lalvani, and Kibrom Menasbo (2022), "Performance and Environmental Effects of CeO<sub>2</sub>/ZrO<sub>2</sub> Nanocomposite in Triple Blend Methyl Ester of Pumpkin and Neem Seed Oil Dosed with Diesel on IC Engine", *Hindawi, Journal of Nanomaterials*, Volume 2022, Article ID 5736453, 9 pages, <https://doi.org/10.1155/2022/5736453>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:3.791 Q2 Journal**
87. K. Raju, M. Balakrishnan, D. V. S. S. V. Prasad, V. Nagalakshmi, Pravin P. Patil, **S. Kaliappan**, B. Arulmurugan, K. Radhakrishnan, B. Velusamy, Prabhu Paramasivam and A. El-Denglawey (2022), "Optimization of WEDM Process Parameters in Al<sub>2</sub>O<sub>3</sub>-Li-Si<sub>3</sub>N<sub>4</sub> MMC", *Hindawi, Journal of Nanomaterials*, Volume 2022, Article ID 2903385, 12 pages. <https://doi.org/10.1155/2022/2903385>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:3.791 Q2 Journal**
88. Raja Subramani, **S. Kaliappan**, S. Sekar, Pravin P. Patil, R. Usha, Narapareddi Manasa, E. S. Esakkiraj (2022), "Polymer Filament Process Parameter Optimization with Mechanical Test and Morphology Analysis", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 8259804, 8 pages, 2022. <https://doi.org/10.1155/2022/8259804>. (SCI/Scopus/Anna University Annexure-1). **Impact Factor:2.098 Q2 Journal**
89. L. Natrayan, P. V. Arul Kumar, Joshuva Arockia Dhanraj, S. Kaliappan, N. S. Sivakumar, Pravin P. Patil, S. Sekar, Prabhu Paramasivam (2022), "Synthesis and Analysis of Impregnation on Activated Carbon in Multiwalled Carbon Nanotube for Cu Adsorption from Wastewater", *Bioinorganic Chemistry and Applications*, vol. 2022, Article ID 7470263, 8 pages, 2022. <https://doi.org/10.1155/2022/7470263>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:4.724 Q1 Journal**
90. L. Natrayan, P. V. Arul Kumar, **S. Kaliappan**, S. Sekar, Pravin P. Patil, R. Jayashri, E. S. Esakki Raj (2022), "Analysis of Incorporation of Ion-Bombarded Nickel Ions with Silicon Nanocrystals for

Microphotonic Devices", *Journal of Nanomaterials*, vol. 2022, Article ID 5438084, 7 pages, 2022. <https://doi.org/10.1155/2022/5438084> (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:3.791 Q2 Journal**

91. S. Kaliappan, A. Shanmugam, Pradeep Johnson, M. Karthick, S. Sekar, Pravin P. Patil, M. K. S. Sai, K. P. Yuvaraj, Venkatesan Govindaraajan (2022), "Impact of AlN-SiC Nanoparticle Reinforcement on the Mechanical Behavior of Al 6061-Based Hybrid Composite Developed by the Stir Casting Route", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 1399618, 8 pages, 2022. <https://doi.org/10.1155/2022/1399618>. (SCI/Scopus/Anna University Annexure-1). **Impact Factor:2.098 Q2 Journal**

92. K Tamil Mannan, V. Sivaprakash, S. Raja, Pravin P Patil, S. Kaliappan, S. Socrates (2022), "Effect of Roselle and biochar reinforced natural fiber composites for construction applications in cryogenic environment", *Materials Today: Proceedings*, 2022, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.09.003>. (<https://www.sciencedirect.com/science/article/pii/S2214785322057959>) (Scopus). **Cite Score: 2.3**

93. K. Tamil Mannan, V. Sivaprakash, S. Raja, Mohanraj Kulandasamy, Pravin P Patil, S. Kaliappan (2022), "Significance of Si<sub>3</sub>N<sub>4</sub>/Lime powder addition on the mechanical properties of natural calotropis gigantea composites", *Materials Today: Proceedings*, 2022, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2022.09.002>. (<https://www.sciencedirect.com/science/article/pii/S2214785322057947>) (Scopus). **Cite Score: 2.3**

94. Naresh Kumar, S. Kaliappan, S. Socrates, L. Natrayan, Praveen Bhai Patel, Pravin P. Patil, S. Sekar, Wubishet Degife Mammo (2022), "Investigation of Mechanical and Thermal Properties on Novel Wheat Straw and PAN Fibre Hybrid Green Composites", *International Journal of Chemical Engineering*, vol. 2022, Article ID 3598397, 8 pages, 2022. <https://doi.org/10.1155/2022/3598397>. (Science Citation Index Expanded/Scopus/WoS) **Impact Factor:2.729 Q2 Journal**

95. L. Natrayan, S. Kaliappan, C. Naga Dheeraj Kumar Reddy, M. Karthick, N.S. Sivakumar, Pravin P Patil, S. Sekar, Subash Thanappan (2022), "Development and Characterization of Carbon-Based Adsorbents Derived from Agricultural Wastes and Their Effectiveness in Adsorption of Heavy Metals in Waste Water", *Bioinorganic Chemistry and Applications*, vol. 2022, Article ID 1659855, 9 pages, 2022. <https://doi.org/10.1155/2022/1659855>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:4.724 Q1 Journal**

96. S. Krishnamohan, Harishchander Anandaram, V. Rathinam, S. Kaliappan, S. Sekar, Pravin P Patil, Asheesh Kumar, Venkatesan Govindaraajan (2022), "Optimization of Water Absorption and Mechanical and Thermal Behavior of Polylactic Acid/Chitosan/Titanium Carbide", *Advances in Materials Science and Engineering*, vol. 2022, Article ID 5176584, 8 pages, 2022. <https://doi.org/10.1155/2022/5176584>. (SCI/Scopus/Anna University Annexure-1). **Impact Factor:2.098 Q2 Journal**

97. R.Ramaswamy, S.Kaliappan, L.Natrayan, Patil.Pravin P.(2022), "Pear cactus fiber with onion sheath biocarbon nanosheet toughened epoxy composite: mechanical, thermal, and electrical properties", *Biomass*



Conversion and Biorefinery, 2190-6823. <https://doi.org/10.1007/s13399-022-03335-x>. (WOS/SCIE/Anna University Annexure-1). **Impact factor : 4.050 Q2 Journal**

98. S. V. Gurupranes, L. Natrayan, **S. Kaliappan**, Praveen Bhai Patel, S. Sekar, P. Jayaraman, C. K. Arvinda Pandian, E. S. Esakkiraj (2022), "Investigation of Physicochemical Properties and Characterization of Leaf Stalk Fibres Extracted from the Caribbean Royal Palm Tree", *International Journal of Chemical Engineering*, vol. 2022, Article ID 7438411, 10 pages, 2022. <https://doi.org/10.1155/2022/7438411>. (Science Citation Index Expanded/Scopus/WoS) **Impact Factor:2.729 Q2 Journal**
99. Naresh Kumar, Piyush Gaur, **S. Kaliappan**, L. Natrayan, S. Socrates, Pravin P. Patil, Subash Thanappan (2022), "Processing and Characterization of Novel Bio-Waste Hybrid Brick Composites for Pollution Control", *Bioinorganic Chemistry and Applications*, vol. 2022, Article ID 3127135, 8 pages, 2022. <https://doi.org/10.1155/2022/3127135>. (Science Citation Index Expanded/Scopus/WoS). **Impact Factor:4.724 Q1 Journal**
100. Natrayan Lakshmaiya , **Seeniappan Kaliappan** , Pravin P. Patil , Velmurugan Ganesan , Joshuva Arockia Dhanraj , Chattariya Sirisamphanwong , Tanakorn Wongwuttanasatian , Shahariar Chowdhury , Sittiporn Channumsin , Manun Channumsin and Kuaanan Techato (2022), "Influence of Oil Palm Nano Filler on Interlaminar Shear and Dynamic Mechanical Properties of Flax/Epoxy-Based Hybrid Nanocomposites under Cryogenic Condition", *Coatings* 2022, 12, 1675. <https://doi.org/10.3390/coatings12111675>. (Scopus/WoS). **Impact Factor: 3.263 Q2 Journal**
101. Kaliappan, S., Arunadevi, B., Sateesh, N. et al. Effect of Amino Silane Grafted Cellulose and Kenaf Fibers in Mechanical, Impact Toughness and Drilling Characteristics of Epoxy Resin Composite. *Silicon* (2022). <https://doi.org/10.1007/s12633-022-02245-x>. (SCIE/Anna University Annexure-1/SCOPUS). Impact Factor:2.941 Q2 Journal
102. **S. Kaliappan**, Natrayan L, Pravin P, S. Socrates. (2022). Enhancement of a superheated turbine generator blade's cooling effect. *Computer Integrated Manufacturing Systems*, 28(12), 1626–1636. Retrieved from <http://cims-journal.com/index.php/CN/article/view/564>. (UGC Care/SCOPUS). Impact Factor:0.35 Q2 Journal
103. **S. Kaliappan**, Natrayan L, Pravin P, M. D. Raj Kamal. (2022). An experimental investigation of Interfacial contaminants in product portfolio IC engine oil pipelines using a theoretical foundation. *Computer Integrated Manufacturing Systems*, 28(12), 1616–1625. Retrieved from <http://cims-journal.com/index.php/CN/article/view/563>. (UGC Care/SCOPUS). Impact Factor:0.35 Q2 Journal
104. **S.Kaliappan**, S.Lakshmana Kumar, K.Thiruselvam, Arul Kulandaivel. (2022). Influence of different thermal conductivity on the mobility of airborne particulates in IC engine parallel plate convection circulation. *Computer Integrated Manufacturing Systems*, 28(12), 1637–1647. Retrieved from <http://cims-journal.com/index.php/CN/article/view/565>. (UGC Care/SCOPUS). Impact Factor:0.35 Q2 Journal
105. **S. Kaliappan** , S. Chezian Babu , M.D.Rajkamal , Ruchika Tondon(2022),” EXPERIMENTAL INVESTIGATIONS OF VERTICAL CHANNEL ANNULAR WITH CONTINUOUSLY DYNAMIC

MAGNETIC FIELD, MIXED CONVECTION AND WARMING IMPACTS”, ION EXCHANGE AND ADSORPTION, Vol. 22, Issue-01, 2022, pp.503-510 (UGC/SCOPUS). **Impact factor : 0.1, Q4 Journal.**

## AY-2021

106. Balaji Venkatesan, Kaliappan Seeniappan, Ezhumalai Shanmugam, Socrates Subramanian and Jayaseelan Veerasundaram (2021), “Characterization and effect of the use of safflower methyl ester and diesel blends in the compression ignition engine”, *Oil & Gas Science and Technology*, 76, 29 (2021) <https://doi.org/10.2516/ogst/2021011>. (Annexure-1 & WOS). **Q2 Journal**
107. Jayahari Lade, Kalluri Nagachary, Kuldeep K. Saxena, Kaliappan seeniappan & Ravindra Singh Rana (2021), “Mechanical Characterisation and Study of Nickel Based super alloy 718 at Subzero Temperatures”, *Advances in Materials and Processing Technologies* (Taylor and Francis) , 20th July 21, 2021(online). <https://doi.org/10.1080/2374068X.2021.1945315>. (SCOPUS, ESCI). **Q2 Journal**
108. R. Suryanarayanan, V. G. Sridhar, L. Natrayan, **S. Kaliappan**, Anjibabu Merneedi, T. Sathish, Alazar Yeshitla (2021), "Improvement on Mechanical Properties of Submerged Friction Stir Joining of Dissimilar Tailor Welded Aluminum Blanks", *Advances in Materials Science and Engineering*, vol. 2021, ArticleID 3355692, 6 pages, 2021. <https://doi.org/10.1155/2021/3355692>. (SCIE/WOS/SCOPUS). **Impact Factor:2.098 Q2 Journal.**
109. Elakkiyadasan R, Manoj Kumar P, Subramanian M , Balaji N, Karthick M & **Kaliappan S** (2021), “ Optimization of Shell and Tube Condenser for Low Temperature Thermal Desalination Plant”, *E3S Web of Conferences* 309, 01011,10 pages,2021. <https://doi.org/10.1051/e3sconf/202130901011>. (SCOPUS, WOS).
110. K. K. Arun, M. Bala Theja, L. Girisha, N. Arun Vignesh, N. S. Sivakumar, Ram Subbiah & **S. Kaliappan** (2021), “Time Dependent Behaviour of Amino Silane-treated Aramid Fibre and Waste Latex Rubber Powder Toughened Epoxy Composite”, *Silicon*, 19<sup>th</sup> October, 2021. <https://doi.org/10.1007/s12633-021-01456-y> (SCIE/Anna University Annexure-1/SCOPUS). **Impact Factor:2.941 Q2 Journal**
111. L. Natrayan, S. Balaji, G. Bharathiraja, **S. Kaliappan** ,Dhinakaran Veeman and Wubishet DegifeMammo (2021),“Experimental Investigation on Mechanical Properties of TiAlN Thin Films Deposited by RF Magnetron Sputtering”, *Hindawi, Journal of Nanomaterials*, Volume 2021, Article ID 5943486, 7pages, <https://doi.org/10.1155/2021/5943486>. (WOS/SCIE/Anna University Annexure-1). **Impact Factor:3.791 Q2 Journal**
112. Anjibabu Merneedi ,L. Natrayan ,**S. Kaliappan** ,Dhinakaran Veeman,S. Angalaeswari ,Chidurala Srinivas and Prabhu Paramasivam (2021), “Experimental Investigation on Mechanical Properties of Carbon Nanotube-Reinforced Epoxy Composites for Automobile Application”, *Hindawi Journal of Nanomaterials* Volume 2021, Article ID 4937059, 7 pages <https://doi.org/10.1155/2021/4937059>. (WOS/SCIE/Anna University Annexure-1). **Impact Factor:3.791 Q2 Journal**

113. **Kaliappan Seeniappan**, Balaji Venkatesan, Nithyanandan Navaneetha Krishnan, Thanigavel murugan Kandhasamy, Shanmugam Arunachalam, Raghuram Kandregula Seeta, Melvin Victor Depoures (2021), "A comparative assessment of performance and emission characteristics of a DI diesel engine fuelled with ternary blends of two higher alcohols with lemongrass oil biodiesel and diesel fuel", Energy & Environment, 1–26, DOI: 10.1177/0958305X211051323. (WOS/SCIE/Anna University Annexure-1). **Impact Factor:3.154 Q2 Journal**
114. L. Natrayan, Anjibabu Merneedi, Dhinakaran Veeman, **S. Kaliappan**, P. Satyanarayana Raju, Ram Subbiah, S. Venkatesh Kumar (2021), "Evaluating the Mechanical and Tribological Properties of DLC Nanocoated Aluminium 5051 Using RF Sputtering", Journal of Nanomaterials, vol. 2021, Article ID 8428822, 7 pages, 2021. <https://doi.org/10.1155/2021/8428822>.(WOS/SCIE/Anna University Annexure-1). **Impact Factor:3.791 Q2 Journal**
115. L. Natrayan, Anjibabu Merneedi, G. Bharathiraja, **S. Kaliappan**, Dhinakaran Veeman and P. Murugan (2021), "Processing and Characterization of Carbon Nano fibre Composites for Automotive Applications", Journal of Nanomaterials, Volume 2021, Article ID 7323885, 7 pages, <https://doi.org/10.1155/2021/7323885>. (WOS/SCIE/Anna University Annexure-1). **Impact Factor:3.791 Q2 Journal**

## AY-2020

116. **S. Kaliappan**, S. Mohanamurugan and P. K. Nagarajan (2020) , "Numerical Investigation of Sinusoidal and Trapezoidal Piston Profiles for an IC Engine" , Journal of Applied Fluid Mechanics, Vol. 13, No. 1, pp. 287-298, 2020. ISSN 1735-3572, EISSN 1735-3645. DOI: 10.29252/jafm.13.01.29881 (**Annexure 1/Scopus**). **Q2 Journal**
117. P.Ramanathan, R.Rajavel, A.R.Sivaram, **S.Kaliappan** (2020) , "Investigation of emission control in CI Engine using Aqua Silencer" , Test Engineering and Management , Vol.83,March - April 2020 ,pp. 15588 – 15597, ISSN: 0193-4120 (**Scopus**).
118. G. Ragothaman, T. Mothilal, M.D. Rajkamal, **S. Kaliappan** and S. Mathavan (2020), "Performance and Emission Characteristics of Diesel Blended with Sweet Lime Peel Oil and Corn Oil", Proceedings of International Conference on Recent Trends in Mechanical and Materials Engineering AIP Conf. Proc. 2283, 020036-1–020036-10; <https://doi.org/10.1063/5.0024898>. (**Scopus/WOS**).

## AY-2019

119. D. Balamurali , G. Sree Krishna , C. siva Kumar , S. Manigandan , R. Pradeep Kumar, **S. Kaliappan** (2019), "COMBO FIXTURE FOR AXIAL PROFILE FAN LEVER", Engineering Reports, Volume 2- Issue 1, 28/2/2019, PP.35-39.

## AY-2018

120. **S.Kaliappan**, J.Lokesh, P.Mahaneesh, M.Siva (2018), “Mechanical Design and Analysis of AGV for Cost Reduction of Material Handling in Automobile Industries”, INTERNATIONAL RESEARCH JOURNAL OF AUTOMOTIVE TECHNOLOGY (IRJAT) Volume 01-Issue 1, January 2018, PP.1- 7.
121. P.Krishna Teja, G. Moorthy, **S.Kaliappan (2018)**, “FINITE ELEMENT ANALYSIS OF PROPELER SHAFT FOR AUTOMOTIVE AND NAVAL APPLICATION”, INTERNATIONAL RESEARCH JOURNAL OF AUTOMOTIVE TECHNOLOGY (IRJAT) Volume 01-Issue 1, January 2018, PP.8-12.
122. T.Mothilal, M.D.Raj Kamal, **S.Kaliappan**, G.Jagadeesh Babu, S.Socrates (2018), “Experimental and Numerical Analysis of Wind Turbine”, INTERNATIONAL RESEARCH JOURNAL OF AUTOMOTIVE TECHNOLOGY (IRJAT) Volume 01-Issue 2, March 2018, PP.1- 8.
123. **S.Kaliappan**, Dr.S.Mohanamurugan, Dr. P.K.Nagarajan, M.D.Raj Kamal, (2018) “ANALYSIS OF AN INNOVATIVE CONNECTING ROD BY USING FINITE ELEMENT METHOD”, TAGA JOURNAL OF GRAPHIC TECHNOLOGY, Vol. 14 -2018, PP-1147-1152.
124. **S.KALIAPPAN**, G R Vignesh, N R Vigneshwaran, R Giritharan, Dr.T.Mothilal, M.D.Rajkamal (2018), “STATIC ANALYSIS OF CONNECTING ROD IN A SINGLE CYLINDER DIESEL ENGINE”, International Journal of Pure and Applied Mathematics (IJPAM) , Volume 119 No. 12 2018, 14037-14043.
125. **KALIAPPAN.S**, R.ARAVIND, T.DEEPAN, D.RANJITH KUMAR, R.THIRUMALAIIVASAN, Dr.T.MOTHILAL, M.D.RAJKAMAL (2018), “ERROR PROOF ANALYSIS OF CENTER PILLAR INNER ASSEMBLY BY USING PNEUMATIC SYSTEM”, International Journal of Pure and Applied Mathematics (IJPAM) , Volume 119 No. 12 2018, 13933-13937.
126. **Kaliappan S**, Revanth Raam AP , Charan B, Asswin S , Mohammed Ibrahim SM , Dr.T.Mothilal , M.D.Rajkamal (2018) , “MODAL AND KINEMATIC ANALYSIS OF A CONNECTING ROD FOR DIFFERENT MATERIALS” , International Journal of Pure and Applied Mathematics (IJPAM) , Volume 119 No. 12 2018, 14599-14608.
127. Mr. M.D.Rajkamal , M. Mani Bharathi , Shams Hari Prasad M, Santhosh Sivan.M, Karthikeyan.S H.Bahruteen Ali Ahamadu, **S.KALIAPPAN** , Dr.T.Mothilal (2018) ,“THERMAL ANALYSIS OF SHELL AND TUBE HEAT EXCHANGER”, International Journal of Pure and Applied Mathematics (IJPAM) , Volume 119 No. 12 2018, 14299-14306.
128. Dr.T.Mothilal , A.K.Manikandan , B.Aravind , J.Jayakumar , S.Arokyaraj , **S.Kaliappan** , M.D.Rajkamal (2018) ,“STRUCTURAL AND STATISTICAL ANALYSIS OF HORIZONTAL SPHERICAL END PRESSURE VESSEL”, International Journal of Pure and Applied Mathematics (IJPAM) , Volume 119 No. 12 2018, 13493-13501.
129. Dr T.Mothilal, P.Harish Krishna, G.Jagadeesh Babu, Ashwin Suresh, K.Baskar , **S.Kaliappan** , M.D.Rajkamal (2018) , “ CFD Analysis of Different Blades in Vertical Axis Wind Turbine ”, International Journal of Pure and Applied Mathematics (IJPAM) , Volume 119 No. 12 2018, 13545-13551.
130. H. Bahuruteen Ali Ahamadu, M.D Raj kamal, **S. Kaliappan (2018)**, “Design and analysis of air cooled radiator”, International Research Journal of Automotive Technology (IRJAT) Volume 01-Issue 4, 30th July 2018, PP.1-5.

131. D.Balamurali, ,K.Sivakumar, **S.Kaliappan**, S.Prabhukumar, L.Saikumar, S.A.Vijaimhadhava, S.Ashokkumar (2018) , “Design and Analysis of Composite Leaf Spring”, International Research Journal of Automotive Technology (IRJAT) Volume 01-Issue 4, 30th July 2018, PP.16- 20.

### **AY-2017**

132. M D Raj Kamal, **S.Kaliappan**, S.Socrates, G.Jagadeesh Babu ((2017) “CFD Analysis of Single Cylinder IC Engine Inlet Swirl Valve”, International Journal of Latest Engineering Research and Applications (IJLERA) ISSN: 2455-7137, Volume – 02, Issue – 08, August – 2017, PP – 34-46.
133. Dr T. Mothilal, **S. Kaliappan**, M. D. Raj Kamal, Vasanth Roy (2017), “Design of Turbocharger in Petrol Engine with Intercooler and Discharger Chamber”, International Journal of Latest Engineering and Management Research (IJLEMR) ISSN: 2455-4847 Volume 02 - Issue 12, December 2017, PP. 81-87.

### **AY-2016**

- 134. S. KALIAPPAN** , M. D. RAJKAMAL , V. G. GANESAN and P. MANIKANDAN (2016) , “EXPERIMENTAL INVESTIGATION ON SINGLE BASIN AND DOUBLE BASIN SOLAR DESALINATION”, International Journal of Chemical Sciences (IJCS) , Volume –14, Issue – 02, May– 2016, PP – 1121-1132 (**Scopus**).
- 135. S. KALIAPPAN**, M. D. RAJKAMAL and D. BALAMURALI (2016) , “NUMERICAL ANALYSIS OF CENTRIFUGAL PUMP IMPELLER FOR PERFORMANCE IMPROVEMENT ” , International Journal of Chemical Sciences (IJCS) , Volume –14, Issue – 02, May– 2016, PP – 1148-1156 (**Scopus**).

### **AY-2015**

136. **S.Kaliappan** R.Hari Nirmal, G.Parthasaarathy, D.Vijayakumar (2015) “ANALYSING THE LOSSES AFFECTING THE BOLIER EFFICIENCY”, International Journal of Applied Engineering Research (IJAR), Vol. 10 No.33, PP- 25873- 25879.
137. **S.Kaliappan**, M.D.Raj Kamal, Dr.S.Mohanamurugan, Dr. P.K.Nagarajan (2015) “Design of Innovative Conneting Rod of a Single Cylinder Diesel Engine-Review”, International Journal of Applied Engineering Research (IJAR), Vol. 10 No.33, PP-26063-26070.
138. Arun T.A , **Kaliappan S** (2015) “ PERFORMANCE TEST OF BIO-DIESEL USING JATROPHA AND PALM OIL ON A SINGLE CYLINDER DIESEL ENGINE WITH DOE “ , International Journal of Applied Engineering Research (IJAR), Vol. 10 No.33, PP- 25907- 25914.
139. M.Chandru, M.Durairaj, S.Saravanakumar, **S.Kaliappan** (2015) “INTERNAL FLOW ANALYSIS OF SUBMERSIBLE PUMP IMPELLER USING CFD”, International Journal of Applied Engineering Research (IJAR), Vol. 10 No.33, PP- 25937- 25944.
140. Kumaragurubaran.J Raj Kamal M.D **Kaliappan S** (2015) “INVESTIGATION OF JET NOISE REDUCTION USING FAN FLOW DEFLECTORS ON CFD “ , International Journal of Applied Engineering Research (IJAR), Vol. 10 No.33, PP- 26003- 26010.

141. Sivaram.S **Kaliappan.S** Raj Kamal M.D Suresh kumar R. BalamaniKanda Suthan K (2015) “ Performance Analysis of Gasifier on CFD “,International Journal of Applied Engineering Research (IJAR), Vol. 10 No.33, PP- 25880- 25889.
142. Raj Kamal M.D Socrates.S **Kaliappan S** (2015) “Aerodynamic Effects on Formula One Car Using CFD” , International Journal of Applied Engineering Research (IJAR) Vol. 10 No.33,, PP.28164-28172.

➤ **PATENT , BOOK CHAPTER & BOOKS:**

PATENT				BOOK CHAPTER	BOOK	
National		International			Applied	Published
Applied	Published	Published /Applied	Grant			
1	10	-	15	4	1	18

➤ **PATENT:**

➤ **National:**

1. A patent is **Published** in the title of “**CNC Coded Two Axis writing machine**” the Patent Office Journal No. 24/2020 Dated 12/06/2020 with IPR APPLICATION NUMBER of 202041022088 A.
2. A patent is **Applied** in the title of “**A SYSTEM FOR CLEANING TOILETS**” Dated 13/04/2020 with IPR APPLICATION NUMBER of 202041015888.
3. A patent is **Published** in the title of “**Hand Operated Water Pumping Machine**” Dated 19/02/2021 with IPR APPLICATION NUMBER of 202041039149 A.
4. A patent is **Published** in the title of “**A NOVEL METHOD - INTEGRATION OF INTERNAL COMBUSTION ENGINE WITH IOT DEVICE**” Dated 9/07/2021 with IPR APPLICATION NUMBER of 202141028823 A.
5. A patent is **Published** in the title of “**IoT based Automated Toll gate Tax Collection System using Cloud Database**” the Patent Office Journal No. 50/2021 Dated 10-12-2021 with IPR APPLICATION NUMBER of 202141054902 A.
6. A patent is **Published** in the title of “**A research on planning and accident prevention system for surface- vehicles for improving safety and efficiency**” Dated 4-2-2022 with IPR APPLICATION NUMBER of 202141058236 A
7. A patent is **Published** in the title of “**Implementation of advanced CAD CAE tools in engineering education A modern approach to industrial design**” Dated 11-3-2022 with IPR APPLICATION NUMBER of 202221002690 A
8. A patent is **Published** in the title of “**IoT, Artificial Intelligent and YOLOv3 based Infrared Anomaly Detection for Power Equipment**” Dated 25-2-2022 with IPR APPLICATION NUMBER of 202241007572 A.
9. A patent is **Published** in the title “**A Milk Boiling Vessel With A Milk Storage Container**” Dated 08-07-2022 with IPR APPLICATION NUMBER of 202211035107.

10. A patent is Published in the title “**MOBILE PHONE DEPOSIT MACHINE USING IOT & ARTIFICIAL INTELLIGENCE SYSTEM**” Dated 30-09-2022 with IPR APPLICATION NUMBER of 202241054856.
11. A patent is published in the title “**DEVELOPMENT OF BAMBOO FIBER WITH GRAPE STALK CELLULOSE FIBER COMPOSITE MATERIAL USING SMART MANUFACTURING PROCESS FOR HEALTHCARE APPLICATIONS**” Dated 14-03-2023 with IPR APPLICATION NUMBER of 202341017224

➤ **International:**

1. A patent is **granted** in the title of “**An approach to heterogeneous multi design based floor planning aware with thermal power delivery**”, with **8 years** from 22 August 2020 dated 22/08/2020 with APPLICATION NUMBER of 2020101942.
2. A patent is **granted** in the title of “**Design of a collapsible and portable lactation module for mothers**”, with **8 years** from 28 August 2020, dated 28/08/2020 with APPLICATION NUMBER of 2020102046.
3. A patent is **granted** in the title of “**DESIGN AND DEVELOPMENT OF A SMART SUITE FOR ASSISTING THE PREGNANT WOMEN**”, with **8 years** from 9 September 2020 dated 09/09/2020 with APPLICATION NUMBER of 2020102194.
4. A patent is **granted** in the title of “**Continuous energy supply to house hold appliances through uninterrupted power meter**”, with **8 years** from 20 September 2020 dated 20/09/2020 with APPLICATION NUMBER of 2020102346.
5. A patent is **granted** in the title of “**A NOVEL METHOD TO DESIGN A DYNAMO ELECTRIC VEHICLE**”, dated 15/10/2020 with APPLICATION NUMBER of 2020102727.
6. A patent is **granted** in the title of “**A Novel Method to Determine Enhanced Strength of Recycled Concrete based on Micro Filler Technique**”, dated 17/10/2020 with APPLICATION NUMBER of 2020102828.
7. A patent is **granted** in the title of “**ELECTRIC VEHICLE CHARGE MANAGEMENT AND MONITORING SYSTEM BASED ON IOT**”, dated 24/10/2020 with APPLICATION NUMBER of 2020102995.
8. A patent is **granted** in the title of “**AN NOVEL METHOD FOR A SMART CAR - ARTIFICIAL INTELLIGENCE BASED AUTONOMOUS STEERING CONTROL SYSTEM WITH VOICE ASSISTANCE**”, dated 01/11/2020 with APPLICATION NUMBER of 2020103161.
9. A patent is **granted** in the title of “**DESIGN FOR PARABOLIC SOLAR PANEL CONTROL SYSTEM WITH VIPER**”, dated 01/12/2020 with APPLICATION NUMBER of 2020103825.
10. A patent is **granted** in the title of “**REDUCTION OF HEAT FLUX AI WATER NANOFUIDS USED TO COOL THE ELECTRONIC PANELS**”, dated 11/12/2020 with APPLICATION NUMBER of 2020104017.

11. A patent is **granted** in the title of “**Analyzing patient health information based on IoT sensor with AI for improving patient assistance in the future direction**”, dated 06/01/2021 with APPLICATION NUMBER of 2021100048.
12. A patent is **granted** in the title of “**IOT BASED SOLAR ENERGY DETECTION WITH CRESCENT DUNES**”, dated 12/01/2021 with APPLICATION NUMBER of 2021100172.
13. A patent is **granted** in the title of “**A METHOD FOR THE MANUFACTURE OF THE BIO DEGRADABLE BOTTLE FROM THE POLY LACTIC ACID RESIN THROUGH THE APPLICATION OF THE INJECTION BLOW MOULDING PROCESS**”, dated 23/02/2021 with APPLICATION NUMBER of 2021100989.
14. A patent is **granted** in the title of “**ELECTRIC HYBRID POWER SOURCE FOR VEHICLES USING WEIGHTLESS INTERNAL COMBUSTION**”, dated 02/05/2021 with APPLICATION NUMBER of 2021102319.
15. A patent is **granted** in the title of “**ARTIFICIAL INTELLIGENCE BASED ENGINE EMISSIONS WITH EBP ON PERFORMANCE ASSESSMENT**”, dated 08/07/2021 with APPLICATION NUMBER of 2021103986.

➤ **BOOK CHAPTER PUBLISHED :**

- **Title:** Cyber-Physical Systems and Supporting Technologies for Industrial Automation

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**Chapter 14 :** Leveraging Health Care Industry through Medical IoT- its Implementation and case studies within India.

Authors: Mr.Mohamed Abu Basim, **Dr.S.Kaliappan**, Dr.V.Shanmugasundaram , Dr.Muthukumar.S

- **Kaliappan S. (Velammal Institute of Technology, Chennai, India)**, Raj Kamal M. D. (Velammal Institute of Technology, Chennai, India), Balaji V. (Loyola Institute of Technology, India), Socrates S. (Velammal Institute of Technology, Chennai, India) and Andrii Kondratiev (O.



M. Beketov National University of Urban Economy, Ukraine) **Source Title:** Handbook of Research on Aspects and Applications of Incompressible and Compressible Aerodynamics, 18 pages. DOI: 10.4018/978-1-6684-4230-2.ch003. IGI Global publisher.

**Chapter Titles:**

1. Viscous Flow and its Effect
2. Introduction to Two-Dimensional Inviscid Incompressible Flow

➤ **BOOK PUBLISHED – With ISBN Number:**

1. Dr. S. Kaliappan Book title is **Basic concepts of AI and Robotics** with ISBN No 978-93-90203-87-1 at 2023.
2. Dr. S. Kaliappan Book title is **Material Science and Engineering** with ISBN No 978-93-90203-30-7 at 2023.
3. Dr. S. Kaliappan Book title is **Fluid Mechanics An Introduction** with ISBN No 978-93-90203-31-4 at 2023.
4. Dr. S. Kaliappan Book title is **Python Programming** with ISBN No 978-93-91987-46-6 at 2022.
5. Dr. S. Kaliappan Book title is **C programming and Data Structures** with ISBN No 978-93-95211-41-3 at 2022
6. Dr. S. Kaliappan Book title is **Heat Power Engineering** with ISBN No 978-93-92992-70-4 at 2022.
7. Dr. S. Kaliappan Book title is **Industrial Engineering and Management** with ISBN No 978-93-92992-54-4 at 2022.
8. Dr. S. Kaliappan Book title is **Total Quality Management** with ISBN No 978-93-92992-65-0 at 2022.
9. Dr. S. Kaliappan Book title is **Production and Operation Management System** with ISBN No 978-93-94002-10-4 at 2022.
10. Dr. S. Kaliappan Book title is **Robotics** with ISBN No 9789391987831 at 2022.
11. Dr. S. Kaliappan Book title is **GE6152 Engineering Graphics** with ISBN No 9788195377183 at 2021.
12. Dr. S. Kaliappan Book title is **GE6253 Engineering Mechanics** with ISBN No 9788195377190 at 2021.
13. Dr. S. Kaliappan Book title is **ME6301 Engineering Thermodynamics** with ISBN NO 9788195377176 at 2021.
14. Dr. S. Kaliappan Book title is **ME6502 Heat and Mass Transfer** with ISBN No 9788195377145 at 2021.
15. Dr. S. Kaliappan Book title is **Kinematics of Machinery** with ISBN No 9789390967919 at 2021
16. Dr. S. Kaliappan Book title is **Manufacturing Technology –II** by Maruthi publications at 2020.
17. Dr. S. Kaliappan Book title is **Engineering Graphics** by Maruthi publications with ISBN No 9789393836106 at 2019.
18. S. Kaliappan Book title is **Engineering Practices Lab Manual** by Maruthi publications 2017

<b>STTP</b>	<b>FDTP</b>	<b>CONFERENCE</b>	<b>WORKSHOP</b>	<b>TECHNICAL</b>
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								SYMPOSIUM
Organized	Attended	Organized	Attended	Organized	Participated	Organized	Participated	Organized
1	3	5	6	2	4	4	3	5

➤ **SHORT TERM TRAINING PROGRAMME (STTP) - ORGANIZED:**

1. Organized a six days **virtual SHORT TERM TRAINING PROGRAMME (STTP)** Sponsored by **AICTE** titled ‘**Assessment in Engineering Education- A Pedagogical Approach**’ at **Velammal Institute of Technology**, Chennai-601204, in three slots, Slot-1 from 16.11.2020 to 21.11.2020, Slot-2 from 14.12.2020 to 19.12.2020 & Slot-3 from 04.01.2021 to 09.01.2021.

➤ **FACULTY DEVELOPMENT TRAINING PROGRAMME - ORGANIZED:**

1. Organized a seven days **Faculty Development Training Programme** approved by **Anna University** titled ‘**Engineering Thermodynamics**’ at **Velammal Institute of Technology**, Chennai-601204, from 17-06-2014 to 24-06-2014.
2. Organized a seven days **Faculty Development Training Programme** sponsored by **Anna University** titled ‘**Gas Dynamics and Jet Propulsion System**’ at **Velammal Institute of Technology**, Chennai-601204, from 01-12-2014 to 08-12-2014.
3. Organized a seven days **Faculty Development Training Programme** approved by **Anna University** titled ‘**Heat and Mass Transfer**’ at **Velammal Institute of Technology**, Chennai-601204, from 19-05-2017 to 29-05-2017.
4. Organized a seven days **Faculty Development Training Programme** approved by **Anna University** titled ‘**Power Plant Engineering**’ at **Velammal Institute of Technology**, Chennai-601204, from 21-05-2018 to 28-05-2018.
5. Organized a six days **Faculty Development Training Programme** approved by **Velammal Institute of Technology** titled ‘**Engineering Mechanics**’ at **Velammal Institute of Technology**, Chennai-601204, from 05-12-2019 to 10-12-2019.

➤ **FACULTY DEVELOPMENT TRAINING PROGRAMME - ATTENDED:**

1. Attended a Faculty Development Programme at **College of Engineering, Gundy, Anna University** on **COMPUTATIONAL FLUID FLOW AND HEAT TRANSFER**, from 30-05-2005 to 04-06-2005.
2. Attended a Faculty Development Programme at **College of Engineering, Gundy, Anna University** on **GAS DYNAMICS AND JET PROPULSION**, from 07-06-2010 to 13-06-2010.
3. Attended a Faculty Development Programme at **Er. Perumal Manimekalai College of Engineering, Hosur**, sponsored by **Anna University of Technology Coimbatore** on **COMPUTATIONAL FLUID DYNAMICS**, from 30-11-2010 to 04-12-2010.
4. Attended a Faculty Development Programme at **Velammal Institute of Technology Chennai** Sponsored by **AICTE-ISTE** in **CAREER ADVANCEMENT BY TECHNICAL TEACHING SKILLS AMPLIFICATION**, from 07-05-2018 to 12-05-2018.

5. Attended a Faculty Development Programme at **R.M.K Engineering College** on **Finite Element Analysis** , from 03-12-2018 to 15-12-2018.
6. Attended a Faculty Development Programme at **Vel Tech High Tech Dr.Rangarajan Dr. Sakunthala Engineering College, Avadi** on **Advances in Computational Fluid Dynamics (CFD)** , from 18-06-2019 to 22-06-2019.

➤ **CONFERENCE/ WORKSHOP-ORGANIZED:**

3. Organized a one day workshop titled '**The Automobile Workshop**' at **Velammal Institute of Technology**, Chennai-601204 on 10/02/2012.
4. Organized a one day workshop titled '**Computational Fluid Dynamics**' at **Velammal Institute of Technology**, Chennai-601204 by **Airmak Aerospace Technologies, Chennai** on 13.08.2012.
5. Organized two days' workshop titled '**Material Outreach Program (MOP)**' on '**Automotive Materials Science and Technologies**' at **Velammal Institute of Technology**, Chennai-601204 by **IIT Bombay – Padarth & EXPERTSHUB**, from 16-08-2013 to 17-08-2013.
6. Organized a one day workshop titled '**Utkraanti 17**' in association with **IIT Madras** at **Velammal Institute of Technology**, Chennai-601204 by **Wingfotech** on 1-2nd September 2016.
7. Organized one day International Conference titled '**International Conference on Automation and Computing Technologies (ICACT'18)**' at **Velammal Institute of Technology**, Chennai-601204 by **EEE , ECE & Mechanical Engineering Department**, on 17-03-2018.
8. Organized two days International Conference titled ',**International Conference on research Advancements & Challenges in engineering Sciences (ICRACE'20)**' , at **Velammal Institute of Technology**, Chennai-601204 jointly organized by the CSE, IT,ECE,EEE, H&S and Mechanical Engineering Department on 06<sup>th</sup> & 07<sup>th</sup> March 2020.

➤ **CONFERENCE/ WORKSHOP-PARTICIPATED:**

1. Presented a paper titled '**Parametric studies on the impact of piston velocity profile on the performance of single cylinder diesel engine**' in National Conference on '**Emerging Trends in Industrial Automation (ETIA-2010)**' organized by the Department of Mechanical Engineering, **Velammal Engineering College**, Chennai-66 on 26-03-2010.
2. Presented a paper titled '**Performance Analysis of a Single Cylinder Diesel Engine Using CFD**' in '**International Conference on Advances in Mechanical Engineering (ICAME-2015)**' organized by Department of Mechanical Engineering, **University College of Engineering Villupuram (ANNA UNIVERSITY)**.
3. Presented a paper titled '**Parametric Studies of the Performance of A Single Cylinder Diesel Engine-Review**' in Indo-Brazil Bilateral International Conference on Advanced Materials and Manufacturing - **ICAMM 2015** organized by the Department of Mechanical Engineering, **Cape Institute of Technology**, Levenjipuram – 627114 on March 27-28, 2015.

4. Presented a paper titled '**Analysis of an Innovative Connecting Rod by Using Finite Element Method**' in '**National Conference on Contemporary Research in Advanced Material Science**' (CRAMS

2016) organized by Department of Mechanical Engineering, at **Karpaga Vinayaga College of Engineering & Technology**, Kanchipuram

5. Participated in **one day** workshop on '**RESEARCH EXCELLENCE –RSE 2012**' organized by the Department of Mechanical and Aeronautical Engineering, **GKM College of Engineering & Technology**, Chennai-600063 on 11-05-2012.
6. Participated in **2 Weeks** '**ISTE Workshop on Computational Fluid Dynamics**' under the National Mission on Education (MHRD) through ICT conducted by **IIT Bombay** at **National Institute of Technology**, Tiruchirapalli-620 015, from 12-06-2012 to 22-06-2012.
7. Participated in **3 days** Short Term Course on '**Applications of Finite Element Method in Academic and Industrial Research**' conducted by **Department of Mechanical Engineering , National Institute of Technology**, Tiruchirapalli-620 015 under the sponsorship of **TEQIP Phase-II** , from 06-06-2013 to 08-06-2013.

➤ **TECHNICAL SYMPOSIUM -ORGANIZED:**

1. Organized one day National Level Technical Symposium - **AVIATOR-2K10** at **SAMS College of Engineering and Technology, Chennai**.
2. Organized one day National Level Technical Symposium – **EKALAIVA 2K13, 2K14, 2K15, 2K16 & 2K18** at **Velammal Institute of Technology, Chennai-601204**.

➤ **FACULTY OUTSIDE PARTICIPATION:**

1. Given **lecture** in **Engineering Thermodynamics** in **Faculty Development Training Programme** at Velammal Institute of Technology on 18-06-2014.
2. Given **lecture** in **Gas Dynamics and Jet Propulsion System** in **Faculty Development Training Programme** at Velammal Institute of Technology on 05-12-2014.
3. Given **lecture** in **Heat and Mass Transfer** in **Faculty Development Training Programme** at Velammal Institute of Technology on 20-05-2017.
4. Given motivational talk for CADD INDIA Employees on their annual meet on 02-04-2018.
5. Given **lecture** in **Power Plant Engineering** in **Faculty Development Training Programme** at Velammal Institute of Technology on 25-05-2018.
6. Given **Guest lecture** in **Heat and Mass transfer** at **J.N.N Institute of Engineering** on 18-08-2018.
7. Attended CADDAspire event organized by CADD CENTER on 24<sup>th</sup> August 2018.
8. Given **lecture** in **Engineering Mechanics** in **Faculty Development Training Programme** at Velammal Institute of Technology on 10-12-2019.
9. Served as an **External Evaluator** for valuation of paper at various Universities like **Anna , Dr.M.G.R University, Bharath University, Sathyabama University , St.Peter's University & AMET University** etc.,
10. Served as an **External Evaluator** for Practical Examinations at various Universities like **Anna , Dr.M.G.R University, Bharath University** etc.,

11. Served as a **Resource Person for Question Paper Setting** for the **Dr.M.G.R University, Bharath University & AMET University & Saveetha University** .
12. Acted as a **Chief Superintendent (CS)** for **University Theory Examination** conducted by **Anna University**, academic year 2014-15.
13. Served as **SQUAD** for **University Theory & Practical Examination** conducted by **Anna University**.
14. Served as **Anna University Representative (AUR)** for **University Theory Examination** conducted by **Anna University**.
15. Served as a **Resource Person** for **Interview panel member** for selection of faculty at **AMET University**.
16. Acted as a **Judge** for **Paper presentation** of **Third National Level Technical Symposium** held at **GOJAN School of Business & Technology**, Chennai-52.
17. Acted as a **Judge** for **Paper presentation** of **National level technical symposium** held at **T.J.S. Engineering College**, Puthuvayal, Chennai.

➤ **PROFESSIONAL MEMBERSHIP:**

1. Life member in **Indian Society for Technical Education** (LM 42717).
2. Life member in **International Association of Engineers** (IAENG) (216948).
3. A fellow member in **Universal Association of Mechanical and Aeronautical Engineers (UAMAE)** of **INSTITUTE OF RESEARCH ENGINEERS AND DOCTORS (theIRED)** (SM10100060657) from 30/01/2019 to 30/01/2022.
4. Member in **Society of Automotive Engineers INDIA (SAEINDIA)** Membership No 7230410311 from 1<sup>st</sup> July 2023 to 30<sup>th</sup> June 2023.

➤ **AWARD :**

In **InSc awards-2021**, I was selected for “**Young Researcher Award**” for my research journal of title “**Numerical Investigation of Sinusoidal and Trapezoidal Piston Profiles for an IC Engine**” ,Which is published in the **Journal of Applied Fluid Mechanics**.

**GOOGLE .SCHOLAR ID:**

<https://scholar.google.com/citations?hl=en&user=iMRnKOkAAAAJ>

**WEB OF SCIENCE RESEARCHER ID : AAI-5212-2020**

<https://publons.com/researcher/3347884/dr-s-kaliappan/>

**RESEARCH GATE :**

<https://www.researchgate.net/profile/Kaliappan-Seeniappan/publications>

**SCOPUS ID:**

<https://www.scopus.com/authid/detail.uri?authorId=57189892434>

**Vidwan ID:**

<https://vidwan.inflibnet.ac.in/profile/268209>

**ORCID ID:**

<https://orcid.org/0000-0002-5021-8759>