	1.Arulprakasajothi M ociateship For Resear Professor/Me	ch Excellen	ce fellow-2022		ERB)		
KC	G College of Technol		•	India			1001
ORCID ID:0000-00		ogy, chenn	SCOPUS ID		503		0
	rakasajothi@projects.i	itmandi ac					
-	llege.com/mapj08@gr		+918925653		у-т/	d	
Research Areas						V.	6
	and nanomaterials for the more than the more the more than		ems, EV battery	thermal ma	anagement		
Projects & Publica	ations Summary						
Project	Publication Co	unt	Cita	ation Count			Impact Factor
Ongoing 01	SCI	023		Google	SCOPUS		55.446/
Submitted 02	SCOPUS	031	Citations	1863	1656		World's top 2%
			i-index	23	21		Scientist
Research Project	W	veb of Scier	ce ID: HIZ-947	4-2022			
SANCTIONED: 0)1						
Collaborator: Dr SUBMITTED: 02	TARE/2021 Budget: F . Viswanath Balakrish	nan, Assoc	ate Professor, I			for	r superior thermal
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Scher Budget: Rs 36,22,6 2. Title: Developm	. Viswanath Balakrish ne coated on copper me: Advanced Materia	nan, Association -tungsten of als and Ener salination se	ate Professor, Il omposite 3D gy Storage Tec tup using 3d pri	porous het hnology (A	ndia. erostructure MEST) Prog ic membrane	gram	n (DST)
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics	. Viswanath Balakrish ne coated on copper me: Advanced Materia 96 ent of hybrid solar des d heat exchanger. Sch	nan, Associ t-tungsten of als and Ener salination se eme: RE-R	ate Professor, Il omposite 3D gy Storage Tec tup using 3d pri FD-2022 Budge	porous het hnology (A	ndia. erostructure MEST) Prog ic membrane	gram	n (DST)
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th	. Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des	nan, Association sector als and Energy application fransfer (Program y application gy (Program of humank	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri <u>TD-2022 Budge</u> ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value educ	porous het hnology (A inted ceram et: Rs 38,42 am Elective ective and In nstitute Elec- ration elective	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)	gram e coa	n (DST) ated with graphene,
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th	Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des d heat exchanger. Sch ermodynamics, Heat roduction to Thermal nomaterials for energy lar Thermal Technolo e unpredictable future e Psychology of Habit	nan, Association sector als and Energy application fransfer (Program y application gy (Program of humank	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri <u>TD-2022 Budge</u> ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value educ	porous het hnology (A inted ceram et: Rs 38,42 am Elective ective and In nstitute Elec- ration elective	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)	gram e coa	n (DST) ated with graphene,
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th • Th	Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des d heat exchanger. Sch ermodynamics, Heat roduction to Thermal nomaterials for energy lar Thermal Technolo e unpredictable future e Psychology of Habit	nan, Association -tungsten of als and Ener salination se eme: RE-R Fransfer (Pr managemen y applicatio gy (Program of humank ts Formation	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri FD-2022 Budge ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value education)	porous het hnology (A inted ceram et: Rs 38,42 am Elective ective and In nstitute Elec- tration elective	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve))	gram e coa	n (DST) ated with graphene,
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th • Th • Th	Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des d heat exchanger. Sch ermodynamics, Heat 7 roduction to Thermal nomaterials for energy lar Thermal Technolog e unpredictable future e Psychology of Habit ars - KCG College of	nan, Association -tungsten of als and Ener salination se eme: RE-R Transfer (Pr managemen y applicatio gy (Program of humank ts Formation of Technolo	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri <u>TD-2022 Budge</u> ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value education) (Value education) gy, Chennai, 10	porous het hnology (A inted ceram et: Rs 38,42 ram Elective ective and In nstitute Elec- ation elective ion elective	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)) o Till date	gram	n (DST) ated with graphene,
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Scher Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th • Th • Th • Th • Th	Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des d heat exchanger. Sch ermodynamics, Heat 7 roduction to Thermal nomaterials for energy lar Thermal Technolog e unpredictable future e Psychology of Habit ars - KCG College of	nan, Association sectors and Energy and Energy application gy (Program of humank ts Formation) for Technolo arajan Dr S	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri <u>TD-2022 Budge</u> ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value education) (Value education) gy, Chennai, 10	porous het hnology (A inted ceram et: Rs 38,42 ram Elective ective and In nstitute Elec- ation elective ion elective	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)) o Till date	gram	n (DST) ated with graphene,
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Scher Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th • Th • Th • Th • Th	Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des d heat exchanger. Sch ermodynamics, Heat 7 roduction to Thermal nomaterials for energy lar Thermal Technolog e unpredictable future e Psychology of Habit ars - KCG College of - Vel Tech Rang 20.01.2020 to 0	nan, Association second als and Energialination second energialization second energialization second energialization and the second energial s	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri TD-2022 Budge ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value education) gy, Chennai, 10 agunthala R&D	porous het hnology (A inted ceram et: Rs 38,42 am Elective ective and Ir nstitute Elec- tration elective cation elective 0.05.2023 to Institute of	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)) o Till date c Science and	gram e coa tive)	n (DST) ated with graphene,
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th • Th • Th • Th • Th • Th • Th • Th	Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des d heat exchanger. Sch ermodynamics, Heat 7 roduction to Thermal nomaterials for energy lar Thermal Technolog e unpredictable future e Psychology of Habit ars - KCG College of - Vel Tech Rang 20.01.2020 to 0	r-tungsten of als and Ener salination se eme: RE-R Transfer (Pr managemen y applicatio gy (Program of humank ts Formation of Technolo garajan Dr S 08.05.2023 garajan Dr S	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri TD-2022 Budge ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value education) gy, Chennai, 10 agunthala R&D	porous het hnology (A inted ceram et: Rs 38,42 am Elective ective and Ir nstitute Elec- tration elective cation elective 0.05.2023 to Institute of	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)) o Till date c Science and	gram e coa tive)	n (DST) ated with graphene,
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th • Th • Th • Th • Th • Th • Th • Th	Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des <u>d heat exchanger. Sch</u> ermodynamics, Heat roduction to Thermal nomaterials for energy lar Thermal Technolo e unpredictable future e Psychology of Habit ars - KCG College of - Vel Tech Rang 20.01.2020 to 0 or - Vel Tech Rang 06.01.2016 to 2	r-tungsten of als and Ener salination se eme: RE-R Transfer (Pr managemer y applicatio gy (Program of humank ts Formation of Technolo arajan Dr S 08.05.2023 arajan Dr S 20.01.2020	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri <u>TD-2022 Budge</u> ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value educati gy, Chennai, 10 agunthala R&D	porous het hnology (A inted ceram et: Rs 38,42 am Elective ective and In nstitute Elec- cation elective 0.05.2023 to Institute of Institute of	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)) o Till date ' Science and	gram e coa tive)	n (DST) ated with graphene,
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th • Th • Th • Th • Th • Th • Th • Th	Viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des <u>d heat exchanger. Sch</u> ermodynamics, Heat 7 roduction to Thermal nomaterials for energy lar Thermal Technolog e unpredictable future e Psychology of Habit ars - KCG College of - Vel Tech Rang 20.01.2020 to 0 or - Vel Tech Rang 06.01.2016 to 2 or - Mohamed Sath	nan, Association second als and Energials an	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri <u>TD-2022 Budge</u> ogram Core) t system (Progr ns (Program Ele n Elective and II nd (Value educati gy, Chennai, 10 agunthala R&D agunthala R&D	porous het hnology (A inted ceram et: Rs 38,42 am Elective ective and Ir nstitute Elec- tration elective cation elective 0.05.2023 to Institute of Institute of ring, Chenn	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)) o Till date Science and ai, 21.8.201	gram e coa tive) d Tec d Tec 5 to	n (DST) ated with graphene, ated with graphene, chnology, Chennai, chnology, Chennai 04.01.2016.
Collaborator: Dr SUBMITTED: 02 1. Title: Graphen management. Schen Budget: Rs 36,22,6 2. Title: Developm auxiliary heater, an Academics • Th • Int • Na • Sol • Th • Th • Th • Th • Th • Th • Th • Th	 Viswanath Balakrish viswanath Balakrish e coated on copper me: Advanced Materia 96 ent of hybrid solar des d heat exchanger. Sch ermodynamics, Heat 7 roduction to Thermal nomaterials for energy lar Thermal Technologie enpredictable future e Psychology of Habit ars KCG College of Vel Tech Rang 20.01.2020 to 0 or Vel Tech Rang 06.01.2016 to 2 or Mohamed Sath ty 	rtungsten of als and Ener salination se eme: RE-R Transfer (Pr managemer y applicatio gy (Program of humank ts Formation of Technolo garajan Dr S 08.05.2023 garajan Dr S 20.01.2020 tak A.J. Col ute of Technolo	ate Professor, Il omposite 3D gy Storage Tec: tup using 3d pri <u>TD-2022 Budge</u> ogram Core) t system (Progr ns (Program Ele n Elective and In nd (Value educati gy, Chennai, 10 agunthala R&D agunthala R&D lege of Engineet ology, Tiruchir	porous het hnology (A inted ceram et: Rs 38,42 am Elective ective and In nstitute Elec- ation elective 0.05.2023 to Institute of Institute of ring, Chenn appalli, 22.0	ndia. erostructure MEST) Prog ic membrane ,696. e) nstitute Elect ctive) ve)) o Till date ^c Science and ^c Science and ai, 21.8.2011 08.2014 to 2	gram e coa tive) d Tea d Tea 5 to 11.07	n (DST) ated with graphene, ated with graphene, chnology, Chennai, chnology, Chennai, 04.01.2016. 7.2015

Assistant Professor	- Sathyabama University, Chennai, 16.07.2007 to 30.04.2011	
Lecturer	- Dr.M.G.R Educational and Research Institute, Chennai, 31.01.2006 to 10.07.2007	

Education:

PhD	-	Heat Transfer,	Jawaharlal Nehru	Technological	University,	Anantapur, AP,	January 2016
-----	---	----------------	------------------	---------------	-------------	----------------	--------------

- Title Performance analysis on convective heat transfer characteristics of nanofluids for cooling application
- M.E Thermal Power Engineering (First class), Annamalai University Chidambaram. November 2005
- B.E Mechanical Engineering (First class), Annamalai University Chidambaram, April 2001

Patents

- Patent "A Halbach Array Attachment", Ref. no. 202021008344 (Submitted)
- Patent "Convex lens solar concentrator with parabolic tracking mechanism", Ref. no. 202021042890 (submitted)
- Patent "A solid fluid heater system", Ref. no. 202141052738 (submitted)

PhD Guidance

TID Guidance				
Scholar Name	Thesis Title	University	Status	Year
1. K V Srinivasan	Development of Porous Regenerator for Stirling	Vel Tech, Avadi	Completed	2020
	Cryocooler using Additive Manufacturing Technique		Completed	2020
	Isotherm Identification on the Surface of Gas Turbine			
2. Rupesh P L	Engine Hot components Using Temperature Indicating	Vel Tech, Avadi	Completed	2021
	Paint through Image Processing Algorithm.			
3. Attar Ajaj	Design and development of steam community cooking	Vel Tech, Avadi	Completed	2021
Rashid	system, integrating reliable and low-cost solar system	ver reen, Avaur		

Recent SCI Publications

- Arulprakasajothi, M., Poyyamozhi, N., Chandrakumar, P., Dilip Raja, N., & D, Y. (2023). Experimental investigation of salinity gradient solar pond with nano-based phase change materials. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 45(2), 5465–5480. IF:2.902
- Balakrishnan, R., Govindaraj, K., Mahalingam, A., & Devarajan, Y. (2023). Analysis of the thermal management of electronic equipment by employing silicon carbide nano-pcm-based heat sink. Environmental Science and Pollution Research. IF:5.190
- Arulprakasajothi, M., Srinivasan, K. V., Arolkar, V. A., & Jaison, K. A. (2022). Experimental investigation of axial pressure drop analysis on the additively manufactured porous regenerator. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, IF: 2.311
- Arulprakasajothi, M., Rupesh, P. L., Rana, H. K., & Elangovan, K. (2022). Colour-changing material for the estimation of flue gas radiation on the miniature gas turbine surface. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, 14644207211045520. IF: 2.311
- Mohamed Iqbal Shajahan, Christopher Stephen, Jee Joe Michael, M. Arulprakasajothi, P. Rathnakumar, Parthasarathy M, (2022) Heat transfer investigations of in-line conical strip inserts using MWCNT/water nanofluid under laminar flow condition, International Journal of Thermal Sciences, Volume 183,107844, IF: 4.779
- Nagappan Beemkumar, Devarajan Yuvarajan, Mahalingam Arulprakasajothi, Kariappan Elangovan, *Thirugnanasambandam Arunkumar*, (2020) Control of room temperature fluctuations in the building by incorporating PCM in the roof, *Journal of Thermal Analysis and Calorimetry*, IF: 2.471

Srinivasan, K. V., Manimaran, A., Arulprakasajothi, M., Pokale, R. D., & Arolkar, V. A. (2019). Theoretical analysis on pressure drop across porous cryocooler regenerator in evaluating the optimum regenerator porosity. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 1–16. doi:10.1080/15567036.2019.1649321 I F: 1.184

Reviewer:

Applied thermal engineering, Elsevier (SCI)/Energies, MDPI. (SCI)/Journal of Thermal Engineering, (SCOPUS)//Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, (SCI)

National/International Collaboration

- West Virginia University, USA EV thermal management
- The University of Tokyo, Japan Thermal management of heat sink
- IIIT, Mandi Nanomaterials for thermal systems/TIFR, Mumbai Cryogenic systems
- Anna University, Chennai Membrane desalination

List of Publications in the SCI-indexed Journals:

- Arulprakasajothi, M., Poyyamozhi, N., Chandrakumar, P., Dilip Raja, N., & D, Y. (2023). Experimental investigation of salinity gradient solar pond with nano-based phase change materials. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 45(2), 5465–5480. IF:2.902
- 2. Balakrishnan, R., Govindaraj, K., **Mahalingam, A**., & Devarajan, Y. (2023). Analysis of the thermal management of electronic equipment by employing silicon carbide nano-pcm-based heat sink. Environmental Science and Pollution Research. **IF:5.190**
- Mohamed Iqbal Shajahan, Christopher Stephen, Jee Joe Michael, M. Arulprakasajothi, P. Rathnakumar, Parthasarathy M, (2023) Heat transfer investigations of in-line conical strip inserts using MWCNT/water nanofluid under laminar flow condition, International Journal of Thermal Sciences, Volume 183,107844, Impact Factor: 4.779
- 4. Arulprakasajothi, M., Srinivasan, K. V., Arolkar, V. A., & Jaison, K. A. (2022). Experimental investigation of axial pressure drop analysis on the additively manufactured porous regenerator. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 14644207211052172. Impact Factor: 2.311
- Arulprakasajothi, M., Rupesh, P. L., Rana, H. K., & Elangovan, K. (2022). Colour changing material for the estimation of flue gas radiation on the miniature gas turbine surface. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 14644207211045520. Impact Factor: 2.311
- **6.** Syed Jafer Kutbudeen, Kamaraj Logesh, Arulprakasajothi Mahalingam & I Vinoth kanna (2021) Performance enhancement of solar collector using strip inserts and with water based Al2O3/DI water nanofluids, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, DOI: 10.1080/15567036.2021.1872745 **Impact Factor: 1.184**
- 7. Nagappan Beemkumar, Devarajan Yuvarajan, **Mahalingam Arulprakasajothi**, Kariappan Elangovan, Thirugnanasambandam Arunkumar, (2020) Control of room temperature fluctuations in the building by incorporating PCM in the roof, Journal of Thermal Analysis and Calorimetry, doi: 10.1007/s10973-019-09226-0 **Impact Factor: 2.471**
- Shajahan MI, Michael JJ, Arulprakasajothi M, Suresh S, Nasr EA, Hussein HMA. Effect of Conical Strip Inserts and ZrO2/DI-Water Nanofluid on Heat Transfer Augmentation: An Experimental Study. Energies. 2020; 13(17):4554. <u>https://doi.org/10.3390/en13174554</u> Impact Factor: 2.702
- 9. Beemkumar, N., Yuvarajan, D., Arulprakasajothi, M., Ganesan, S., Elangovan, K., & Senthilkumar, G. (2019). Experimental investigation and numerical modeling of room

temperature control in buildings by the implementation of PCM in the roof. Journal of Solar Energy Engineering, 1–29. doi:10.1115/1.4044564. **Impact Factor: 1.367**

- Arulprakasajothi, M., Beemkumar, N., Parthipan, J., & Battu, N. raju. (2019). Investigating the Physio-chemical Properties of Densified Biomass Pellet Fuels from Fruit and Vegetable Market Waste. Arabian Journal for Science and Engineering. doi:10.1007/s13369-019-04294-8 Impact Factor: 1.518
- Arulprakasajothi, M., Dilip Raja, N., Beemkumar, N., & Elangovan, K. (2019). Experimental study on Al2O3 /H2O nanofluid with conical sectional insert in concentric tube heat exchanger. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1–13. doi:10.1080/15567036.2019.1649753. Impact Factor: 1.184
- Jafar, K. S., Arulprakasajothi, M., Beemkumar, N., & Elangovan, K. (2019). Effect of conical strip inserts in a parabolic trough solar collector under turbulent flow. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1–13. doi:10.1080/15567036.2019.1650850 Impact Factor: 1.184
- Srinivasan, K. V., Manimaran, A., Arulprakasajothi, M., Pokale, R. D., & Arolkar, V. A. (2019). Theoretical analysis on pressure drop across porous cryocooler regenerator in evaluating the optimum regenerator porosity. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 1–16. doi:10.1080/15567036.2019.1649321 Impact Factor: 1.184
- Arulprakasajothi, M., Elangovan, K., Chandrasekhar, U., & Suresh, S. (2018). Performance study of conical strip inserts in tube heat exchanger using water based titanium oxide nanofluid. Thermal Science, 22(1 Part B), 477–485. doi:10.2298/tsci151024250a. Impact Factor: 1.574
- Arulprakasajothi, M., Elangovan, K., Chandrasekhar, U., & Suresh, S. (2018). Experimental Studies of Water-based Titanium Oxide Nanofluid in a Circular Pipe under Transition Flow with Conical Strip Inserts. Heat Transfer Research, 49(5), 439–456. doi:10.1615/heattransres.2018015783. Impact Factor: 1.199
- Arulprakasajothi Mahalingam, Munuswamy, D. B., Devarajan, Y., & Radhakrishnan, S. (2018). Emission and performance analysis on the effect of exhaust gas recirculation in alcoholbiodiesel aspirated research diesel engine. Environmental Science and Pollution Research, 25(13), 12641–12647. doi:10.1007/s11356-018-1522-4 Impact Factor: 3.056
- Arulprakasajothi Mahalingam, (2018). Investigation on The Emission Reduction Technique In Acetone-Biodiesel Aspirated Diesel Engine. Journal of oil Palm Research. Doi:10.21894/Jopr.2018.0020 Impact Factor: 0.427
- Devarajan, Y., Munuswamy, D. B., & Arulprakasajothi Mahalingam, (2018). Influence of nano-additive on performance and emission characteristics of a diesel engine running on neat neem oil biodiesel. Environmental Science and Pollution Research, 25(26), 26167–26172. doi:10.1007/s11356-018-2618-6 Impact Factor: 3.056
- Devarajan, Y., Arulprakasajothi Mahalingam, Munuswamy, D. B., & Nagappan, B. (2018). Emission and combustion profile study of unmodified research engine propelled with neat biofuels. Environmental Science and Pollution Research, 25(20), 19643–19656. doi:10.1007/s11356-018-2137-5 Impact Factor: 3.056
- 20. Devarajan, Y., Arulprakasajothi Mahalingam, Munuswamy, D. B., & Arunkumar, T. (2018). Combustion, Performance, and Emission Study of a Research Diesel Engine Fueled with Palm Oil Biodiesel and Its Additive. Energy & Fuels, 32(8), 8447–8452. doi:10.1021/acs.energyfuels.8b01125 Impact Factor: 3.421
- Devarajan, Y., Munuswamy, D. B., & Arulprakasajothi Mahalingam, (2017). Performance, combustion and emission analysis on the effect of ferrofluid on neat biodiesel. Process Safety and Environmental Protection, 111, 283–291. doi:10.1016/j.psep.2017.07.021 Impact Factor: 4.384

- 22. Devarajan, Y., Munuswamy, D. B., Arulprakasajothi Mahalingam, & Nagappan, B. (2017). Performance, Combustion, and Emission Analysis of Neat Palm Oil Biodiesel and Higher Alcohol Blends in a Diesel Engine. Energy & Fuels, 31(12), 13796–13801. doi:10.1021/acs.energyfuels.7b02939 Impact Factor: 3.421
- Arulprakasajothi, M., Elangovan, K., Hema Chandra Reddy, K., & Suresh, S. (2015). Experimental investigation on heat transfer effect of conical strip inserts in a circular tube under laminar flow. Frontiers in Energy, 10(2), 136–142. doi:10.1007/s11708-015-0389-z. Impact Factor: 2.657

Scopus- indexed Journals:

- 1. Thanigaitambi, R., Ramesh, S., **Arulprakasajothi**, **M**., Devarajan, Y., Sundaram, M., & Subbaiyan, N. (2023). Thermal management using nano coated heat sink for electric vehicle battery cooling. Environmental Quality Management. Portico.
- 2. Ugle, V. V., **Arulprakasajothi**, **M**., Padmanabhan, S., Devarajan, Y., Lakshmaiya, N., & Subbaiyan, N. (2023). Investigation of heat transport characteristics of titanium dioxide nanofluids with corrugated tube. Environmental Quality Management. Portico.
- Rupesh, P.L., Arulprakasajothi, M. & Raja, K. Isotherm recognition on a V-notch specimen by color identification method. International Journal of Information Technology. 14, 1455– 1465 (2022).
- Sahadev Murlidhar Jadhav, Arulprakasajothi Mahalingam, Vikas Vasantrao Ugle and Logesh Kamaraj, (2022)Increasing the waste heat absorption performance in the refrigeration system using electromagnetic effect, Int. J. Simul. Multidisci. Des. Optim., 13 20 DOI: https://doi.org/10.1051/smdo/2022010
- 5. Arulprakasajothi, M., Susanth, B., Kumar, K. N., & Reddy, A. M. M. (2021). Thermal management on external surfaces by thermochromic materials. Materials Today: Proceedings.
- 6. Arulprakasajothi, M., Sudheer, K. P., Vijaydharan, S., & Venkateswarlu, B. (2021). Role of nano materials in battery thermal management. Materials Today: Proceedings.
- 7. Gangadhara Rao, B., Elangovan, K., Chandra Reddy, K., & **Arulprakasajothi, M**. (2021). THERMAL ELECTRIC ANALYSIS OF 3-D SANDWICH COMPACT BUSBAR WITH CLASS-B AND CLASS-F INSULATION. Frontiers in Heat and Mass Transfer (FHMT), 16.
- 8. Jadhav, S. M., **Arulprakasajothi, M**., Beemkumar, N., & Elangovan, K. (2021). Experimental analysis on diffusion absorption refrigeration cycle with the magnetic field. International Journal of Ambient Energy, 1–5. doi:10.1080/01430750.2021.1873855
- K. V. Srinivasan, Arulprakasajothi Mahalingam and R. Metla, "Numerical and Experimental Analysis of Additive Manufactured Porous Regenerator for Stirling Cryocooler," 2020 IEEE 10th International Conference Nanomaterials: Applications & Properties (NAP), Sumy, Ukraine, 2020, pp. 1-5, doi: 10.1109/NAP51477.2020.9309642.
- Rupesh, P. L., Arulprakasajothi, M., Raja, K., & Sandeep Bhagavan, E. N. V. (2020). Examination of heat load at different zones of a Nimonic alloy combustor liner of different configurations by finite element method. Materials Today: Proceedings. doi:10.1016/j.matpr.2020.11.473
- Attar, A., & Arulprakasajothi, M. (2020). Impact of magnetic field strength generated by Halbach array on hard water for solar applications. International Journal of Ambient Energy, 1–7. doi:10.1080/01430750.2020.1824947
- 12. Arulprakasajothi, M., & Rupesh, P. L. (2020). Surface temperature measurement of gas turbine combustor using temperature-indicating paint. International Journal of Ambient Energy, 1–4. doi:10.1080/01430750.2020.1731709
- 13. Srinivasan, K. V., Manimaran, A., **Arulprakasajothi**, **M**., Revanth, M., & Arolkar, V. A. (2019). Design and development of porous regenerator for Stirling cryocooler using additive

manufacturing. Thermal Science and Engineering Progress, 11, 195–203. doi:10.1016/j.tsep.2019.03.013

- 14. Vinoth Kanna, I., **Arulprakasajothi, M**., & Eliyas, S. (2019). A detailed study of IC engines and a novel discussion with comprehensive view of alternative fuels used in petrol and diesel engines. International Journal of Ambient Energy, 1–9. doi:10.1080/01430750.2019.1614994
- Arulprakasajothi M, Chandrasekhar U, Elangovan K, Yuvarajan D. (2018) Influence of conical strip inserts in heat transfer enhancement under transition flow. International Journal of Ambient Energy. Informa UK Limited; 2018 May 21;1–6. Available from: http://dx.doi.org/10.1080/01430750.2018.1472651
- Arulprakasajothi M, Chandrasekhar U, Yuvarajan D, Teja MB. (2018) An analysis of the implications of air pollutants in Chennai. International Journal of Ambient Energy Informa UK Limited; 2018 Apr 11;1–5. Available from: http://dx.doi.org/10.1080/01430750.2018.1443504
- Arulprakasajothi Mahalingam, A., Devarajan, Y., Radhakrishnan, S., Vellaiyan, S., & Nagappan, B. (2017). Emissions analysis on mahua oil biodiesel and higher alcohol blends in diesel engine. Alexandria Engineering Journal. https://doi.org/10.1016/j.aej.2017.07.009
- Yuvarajan, D., Ramanan, M. V., Selvam, D. C., Arulprakasajothi, M., & Kumar, N. B. (2017). Emission Analysis of Mustard Oil Methyl Oil Methyl Ester at Varying Injection Timing. Indian Journal of Science and Technology, 9(S1). https://doi.org/10.17485/ijst/2016/v9is1/103312
- 19. Arulprakasajothi Mahalingam Kadayam Venkatraman Srinivasan, Manimaran Arunachalam, (2017), Operational Up-Gradation of Stirlin-8 Liquid Nitrogen Plant, Engineering and Technology,4-2,http://www.aascit.org/journal/archive2?journalId=896&paperId=4769

 Arulprakasajothi, M., Elangovan, K., Hemachandra Reddy, K., & Suresh, S. (2015). Experimental Study of Preparation, Characterisation and Thermal Behaviour of Water-Based

- Nanofluids Containing Titanium Oxide Nanoparticles. Applied Mechanics and Materials, 766-767, 348–354. https://doi.org/10.4028/www.scientific.net/amm.766-767.348
- Arulprakasajothi, M., Elangovan, K., Reddy, K. H., & Suresh, S. (2015). Heat Transfer Study of Water-based Nanofluids Containing Titanium Oxide Nanoparticles. Materials Today: Proceedings, 2(4-5), 3648–3655.https://doi.org/10.1016/j.matpr.2015.07.123

International Conferences:

- P LRupesh, M. ArulPrakasajothi, Isotherm Recognition on a V-Notch Specimen by Color Identification Method, Multidisciplinary Technologies & Challenges in Industry 4.0 (Icmtci-4.0) 2020, 18th and 19th September 2020, East Point College of Engineering and Technology, Bangalore.
- 2. P LRupesh, **M. ArulPrakasajothi**, Thermal Distribution on Gas Turbine Blade using Thermal Paint, IDAD_2020, 22nd -24th Febraury 2020, Vel Tech Rangarajan Dr sagunthala R&D Institute of science and technology, Chennai
- 3. K.Logesh, **M.Arulprakasajothi**, R.Rohith Renish, M.Venkatasudhahar, N.Dilip Raja, Impact of water-based TiO2 nanofluid on heat transfer under transition flow, ICMPC_2018,16-18, March2018, GRIET, Hydrabad.
- 4. S.Mohamed Iqbal, **M.Arulprakasajothi**, N.Dilip Raja,S.Monison John Bosko, M Bhanu Teja, Investigation on the Thermal Behaviour of Titanium Dioxide Nanofluid, ICMPC_2018,16-18, March2018, GRIET, Hydrabad.
- R.Santhana Krishnan, M.Arulprakasajothi, K.Logesh, N.Dilip Raja, Mycherla Rajendra Analysis and Feasibilty of Nano-Lubricant in Vapour Compression Refrigeration System, ICMPC_2018,16-18, March2018, GRIET, Hydrabad.
- V.Balaji , M.Arulprakasajothi , K.Logesh , B.Tharunpillai Assessment of heat transfer behavior of water based alumina nanofluid, ICMPC_2018,16-18, March2018, GRIET, Hydrabad

- 7. N.Dilip Raja, **M.Arulprakasajothi**, K.Logesh, M.Karthick, A study on the thermophysical properties of SiO2/H2O nanofluid, IDAD_2018, 22nd -24th Febraury 2018, Vel Tech Rangarajan Dr sagunthala R&D Institute of science and technology, Chennai.
- Sahadev M. Jadhav, M.Arulprakasajothi, U. Chandrasekhar, D.Yuvarajan, Experimental Investigation of Vapour Absorption Refrigeration Cycle for Automobile Cabin Cooling, IDAD_2018, 22nd -24th Febraury 2018, Vel Tech Rangarajan Dr sagunthala R&D Institute of science and technology, Chennai.
- P LRupesh, M. ArulPrakasajothi, U. Chandrasekhar, Rajendra Mycherla, MaradanaBhanu Teja, Study on Temperature Indicating Paint for Surface Temperature Measurement- A Review, IDAD_2018, 22nd -24th Febraury 2018, Vel Tech Rangarajan Dr sagunthala R&D Institute of science and technology, Chennai.
- K V Srinivasan, A Manimaran, M.Arul Prakasajothi Study on Stirling Cryocooler, presented in NAFEMS International Conference on Engineering Modelling, Analysis Simulation and 3D Printing, NAFEMS-3D, Bangalore, 29-31, August 2016.

National Conferences:

- Mycherla Rajendra, KuchuSisindri, M.Arulprakasajothi, D.Yuvarajan, Development on strirling engine with various heat Recourse, presented in National level Conference on Design, Materials & Construction- NCDMC-17, 21&22 April ,2017, Vel Tech Rangarajan Dr sagunthala R&D Institute of science and technology, Chennai.
- 2. Bhanu Teja Maradana,S. Monisan John bosko, **M.Arulprakasajothi**, R.Varatharajan ,T.Ramesh ,The changing Face of Ambient Air quality in tamil Nadu the Effects of the pollutants. presented in National level Conference on Design, Materials & Construction-NCDMC-17, 21&22 April ,2017, Vel Tech Rangarajan Dr sagunthala R&D Institute of science and technology, Chennai.
- 3. **M.Arulprakasajothi** "Effect of different tube inserts in Tube Heat Exchanger" in NAFEMS Regional Conference held at Chennai, February 06-08, 2015.
- 4. **M.Arulprakasajothi** "High Density Fuel from Agro/Forest Residue Using Torrefaction" Paper presented at National Conference on Energy security for Rural Development (ESRD) 2009, Gandhigram Rural University, Dindugal.

Consultancy Project Details:

Title	: Thermal characterization, Heat transfer and pressure drop on SLM Component		
	1		
Name of the Industry	: M/S Galvano casting PVT Ltd, Bangalore		
Amount	: Rs.50, 000		
Year	: 2019		
Status	: Completed		
I Tech Soud Fund Project Details.			

Vel Tech Seed Fund Project Details:

Title	: Combustion Surface temperature measurement on micro gas turbine Combustor using thermal paint
Fund Sanctioned	: Rs.96, 000
Year	: 2019
Status	: Completed

Online Courses:

• **Our Energy Future**, University of California, San Diego and offered through Coursera, 2018

- **Programming for Everybody (Getting Started with Python)**, University of Michigan and offered through Coursera, 2020.
- Materials Science: 10 Things Every Engineer Should Know, University of California, Davis and offered through Coursera, 2020.
- Learning How to Learn: Powerful mental tools to help you master tough subjects, University of California San Diego and offered through Coursera, 2020.
- The Science of Well-Being, Yale University and offered through Coursera, 2020.
- Influencing People, University of Michigan and offered through Coursera, 2020.

FDP/Workshops attended:

- Attended Two Weeks Course on "Efficient Heat Transfer Utilizing Liquid / Vapor Phase Change" Dr. Manfred Groll, emeritus professor of University of Stuttgart, Germany, December 9 – 21, 2019 organized by Department of Mechanical Engineering, IIT Madras.
- Attended Faculty Development Programme on "Applications Of Nanotechnology In Solar Systems" 26 th November to 08 th December 2018 organized by Department of Mechanical Engineering National Institute of Technology Tiruchirappalli - 620 015, Tamil Nadu
- Attended Workshop on Utilisation Techniques of Renewable Energy Sources 06 09, June 2016 organized by Department of Mechanical Engineering National Institute of Technology Tiruchirappalli 620 015, Tamil Nadu

FDP/Workshops conducted:

- Seminar on Engine emissions and after treatment Challenges and opportunities, 02 August, 2018, Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Chennai.
- National Seminar on Advances in Cryogenics and Cryo-materials sponsored by Science and Engineering Research Board (SERB), Department of Science and Technology. 10 &11 November 2017, Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Chennai
- Three Day Workshop on Computational Fluid Dynamics 23-25, February, 2017, Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Chennai
- Two Day Workshop on Hands on Experience in HEATING, VENTILATION AND AIR CONDITIONING (Preparation for Accreditation by NBA), 2&3, March, 2017, Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Chennai.

Lab Visited:

- Visited Center for Alternative Fuels, Engines and Emissions (CAFEE) lab, West Virginia University, USA, June, 2018.
- Laser Additive Manufacturing Laboratory, Raja Ramanna Centre for Advanced Technology (**RRCAT**), Indore, March 2018.
- Low temperature facility lab, Tata Institute for Fundamental Research(**TIFR**)-DAE, 26&27, September -2016
- Cryogenic facility **IGCAR** on 29th July, 2016.

Membership:

- SAE-India (Society of Automotive Engineers- India) Membership ID: 7180410806
- SSSS (Society for Small Satellite Systems) Life Member Number: LM 116

Invited Talk/ Conference Chaired

- Session Chairman- International Conference on Advanced Research in Mechanical Engineering (IC-ARME2019)"- April 29th & 30th 2019 in the MVJ College of Engineering, Bangalore, Karnataka, India.
- Session Chairman NAFEMS India Regional Conference on Engineering Modeling, Analysis, Simulation & 3D Printing 2018 during 20-21 July 2018 Bangalore.
- **Guest lecture** Thermal engineering during 21 Feb and 4 September 2017, organized by Thangavelu engineering college, Chennai.
- Resource Person Faculty Development Training Program approved by anna university Chennai on ME 6502 Heat and Mass Transfer conducted by VelTech Engineering College. May 15-21, 2017.
- Session Chairman National Mechanical Engineering (NCAME' 17), 25 March, 2017 organized by Misrimal Navaiee Munoth Jain Engineering College, Chennai.
- Jury- National level technical symposium (Techfinix 2016), 29&30 September,2016 organized by Paavai Engineering college, Selam.
- Session chairman-International NAFEMS Conference on **3D Engineering Modeling**, **Analysis, Simulations & 3D Printing, Bangalore**, 29 -31 August, 2016.

References:

Dr. K. Elangovan	Dr. Viswanath Balakrishnan,
Assistant Director,	Associate Professor,
MHRD's Innovation Cell, AICTE,	School of Engineering- IIT(Mandi),
Delhi. India.	Himachal Pradesh, India.
elangovan.kariappan@gov.in	viswa@iitmandi.ac.in
Dr. Sivasankaran Harish	Dr. Arvind Thiruvengadam
Principal Researcher,	Associate Professor,
Department of Mechanical Engineering,	Department of Mechanical
The University of Tokyo, Hongo,	Engineering
Bunkyo-ku, Japan.	West Virginia University, USA.
harish@photon.t.u-tokyo.ac.jp	arvind.thiruvengadam@mail.wvu.edu

Declaration

I hereby confirm that the above information is correct and true to the best of my knowledge.

Thanking You,

Yours truly

Place: Chennai Date: 20.05.2023

(Dr M.Arulprakasajothi)