

Dr. A. Brusly Solomon, M.E., Ph.D.,
Associate Professor,
Department of Mechanical Engineering,
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Education

- PhD in Mechanical Engineering, Karunya University, 2014
 Thesis: Studies on Heat Pipes using Nanofluids and Coated Surfaces
- o M. E in Thermal Engineering, Karunya University, 2006 Thesis: Numerical modeling of mixing enhancement in the scramjet combustor.
- o B.E in Mechanical Engineering, Bharathiar University, 2004 Thesis: Design, fabrication and simulation of a thrust chamber for a liquid propulsion system,

Teaching and Research experience

Duration	Position held/Affiliation	Nature of work	
21st July, 2018 to till date	Associate Professor, Department of Mechanical Engineering, Karunya Institute of Technology and Sciences, Coimbatore	Teaching & Research	
4 th April 2017 to 20 th July 28, 2018	Assistant Professor, Department of Mechanical Engineering, Karunya Institute of Technology and Sciences, Coimbatore	Teaching & Research	
4 th Oct 2015 to 31 st Mar 2017	Postdoctoral Fellow, University of Pretoria, Pretoria, South Africa.	Research	
25 th Sep2015 to 31 st Sep 2015	Assistant Professor, Department of Mechanical Engineering, Karunya Institute of Technology and Sciences, Coimbatore	Teaching & Research	
3 rd Nov 2008 to 25 th Sep 2015	Scientific Officer Dean Research Office, Karunya Institute of Technology and Sciences, Coimbatore	Research	
July 13, 2006 to 3 rd Nov 2008	Research Associate, Dean Research Office, Karunya Institute of Technology and Sciences, Coimbatore	Teaching & Research	
Total	Total Experience: 14 years and six months		

Courses Taught

Heat and Mass Transfer, Refrigeration and Airconditioning, Thermal Engineering,
 Fluid Mechanics and Machinery, Computational Fluid Dynamics

Research Interest

Heat Transfer	 Natural Convection and Phase change heat transfer in Nanofluids & Ferrofluids
	o Development and Testing of lightweight Heat pipes & Thermosyphons for various cooling applications
	o Cooling of electronic components
Computational Fluid Dynamics	o Numerical Modelling of Heat pipes & Vapour chambers

Professional Recognition

Associations/Awards

- o American Society of Mechanical Engineers, Student Member (2014-2015)
- o Won UP Post-Doctoral Fellowship, University of Pretoria, South Africa.
- o Received "Young Achievers Award in 2015" from Karunya University.
- Won the "Young Scientist Award" in 2015 from the Department of Science and Technology.
- o Member of The Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE), Since Aug 2021, Membership No : 60897

Editor

- Guest editor for the Journal of "Frontiers in Energy Research", IF: 2.746;
 Topic: Enhancing Heat Transfer by Using Nanofluid to Improve the Efficiency of Thermal Systems, www.frontiersin.org
- Guest editor for the "Journal of Process Mechanical Engineering", IF:1.62
 Topic: Applications of nanofluids in heat transfer systems, https://journals.sagepub.com/page/pie/virtualspecialcollections?pbEditor=true&

Reviewership

S.N	Journal	Publisher	Year
1	Energy Conversion and Management	Elsevier	2014
2	ASME Journal of Heat Transfer	ASME	2015
3	Heat Transfer- Asian Research	Wiley	2015
4	Journal of Enhanced Heat Transfer	Begell House	2015 onwards
5	International Journal of Heat and Mass Transfer	Elsevier	2016 onwards
6	Experimental Thermal and Fluids Science	Elsevier	2016 onwards

Patents

S. N	Title	Status	Application Number	Indian/ Internationa I
1	Magnetically Assisted Heat Pipe for Thermal Control	Published	202041011073	Indian
2	Anodized micro fins for enhanced heat transfer in heat pipes with ammonia as working fluid	Published	202041020927	Indian
3	A friction stir welding device and the method involved thereof	Published	202041037266	Indian

Funded Projects

Title of the Project	Funding Agency	Year	Cost (Rs)	Status
Development and Characterization of Anodized Heat Pipes for Electronic Cooling Applications	DST-SERB	2017-2021	23,18,000	Completed
Development of Flexible Heat Pipes for Space Application	ISRO-RESPOND	2022-2024	17,76,000	Ongoing

Book Published

 SJ Vijay, A. Brusly Solomon, JP Meyer, Advanced Materials for Heat Transfer, Woodhead Publishing Series in Energy, *Elsevier*, eBook ISBN: 9780323904995, Paperback ISBN: 9780323904988, https://doi.org/10.1016/B978-0-323-90498-8.00001-4

Book chapters

- 1. L. Sriram Sudhan and A. Brusly Solomon, Effect of Temperature on the Surface Characteristics of Anodized Aluminium Tubes, *Trends in Manufacturing and Engineering Management*, Lecture Notes in Mechanical Engineering, Springer Nature Singapore Pte Ltd. 2020, 591-600. https://doi.org/10.1007/978-981-15-4745-4 52
- Stephen E.N., Asirvatham L.G., Ramachandran K., Solomon A.B., RamKumar P. (2021) Feasibility of Al₂O₃/Water Nanofluid in a Compact Loop Heat Pipe. In: Akinlabi E., Ramkumar P., Selvaraj M. (eds) *Trends in Mechanical and Biomedical Design*. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-4488-0 40
- 3. Ajith, K., A. Brusly Solomon, and Mohsen Sharifpur. "Nanofluids for heat transfer augmentation." Chapter 1. Advanced Materials for Heat Transfer Systems, Elsevier Woodhead Publishing Series in Energy, 1st edition-November 26,2022

- 4. Sudhan, AL Sriram, K. Ramachandran, A. Brusly Solomon, and S. J. Vijay. "Oxide coatings for phase change heat transfer enhancement." 213. Advanced Materials for Heat Transfer Systems, Elsevier –Woodhead Publishing Series in Energy, 1st edition-November 26,2022
- 5. Anand, R. S., C. P. Jawahar, and A. Brusly Solomon. "Al₂O₃/HFE based thermosyphon for heat transfer enhancement." 199. Advanced Materials for Heat Transfer Systems, Elsevier –Woodhead Publishing Series in Energy, 1st edition-November 26,2022

Publications in International Journals

S.N	Details of Journals	I.F.
1.	A. Brusly Solomon, N. Joel Arun, K.N. Shukla and B.C. Pillai, <i>Steady State Performance of Rotating Heat Pipes</i> , <i>AIAA-2008-1293</i> . 07 - 10 January 2008, DOI: 10.2514/6.2008-1293	-
2.	K.N. Shukla, A. Brusly Solomon , B.C. Pillai, <i>Experimental Studies of Rotating Heat Pipes</i> , <i>Heat Transfer-Asian Research</i> , Vol. 38 (8), 2009, pp. 475-484 .	-
3.	A. Brusly Solomon, K.N. Shukla, B.C. Pillai and A. Mohammed Ibrahim, <i>Thermal Performance of Cylindrical Heat Pipe using Nanofluids</i> , <i>AIAA-2010-1371</i> ., eISBN: 978-1-60086-959-4, DOI: 10.2514/6.2010-1364	-
4.	K.N. Shukla, A. Brusly Solomon , B.C. Pillai and A. Mohammed Ibrahim, <i>Thermal Performance of Cylindrical Heat Pipe using Nanofluids, Journal of Thermo physics and Heat transfer</i> , Vol. 24, No. 4, October-December 2010, pp.796-802	1.3
5.	A. Brusly Solomon, K. Ramachandran, B.C. Pillai, <i>Thermal performance of heat pipe operated with nanoparticle coated wick, Applied Thermal Engineering</i> , Vol. 31 (1) (2012), pp.106-112.	5.295
6.	K.N Shukla, A. Brusly Solomon , B.C. Pillai, B. Jacob Ruba Singh and S. Saravana Kumar, <i>Thermal Performance of Heat Pipe with suspended Nano-particles</i> , <i>Heat and Mass Transfer</i> , Vol. 48 (2012), pp. 1913–1920.	2.464
7.	K.N Shukla, A. Brusly Solomon , B.C. Pillai, <i>Thermal performance of vapor chamber with nanofluids, Frontiers in Heat Pipes (FHP)</i> , 3, 033004 (2012) DOI:10.5098/fhp.v3.3.3004	-
8.	A. Brusly Solomon, Arun Mathew, K. Ramachandran, B.C. Pillai and V.K. Karthikeyan, <i>Thermal performance of anodized two phase closed thermosyphon (TPCT), Experimental Thermal and Fluid Science</i> , Vol. 48, 2013, pp. 49-57.	3.232
9.	A. Brusly Solomon, K. Ramachandran, L. Godson Asirvatham and B.C. Pillai, Numerical analysis of Screen mesh wick heat pipe with Cu/water nanofluid as a working fluid, International Journal of Heat and Mass Transfer, Vol. 75 (8), 2014, pp. 523-533.	5.584

10.	V. K. Karthikeyan, K. Ramachandran, B. C. Pillai and A. Brusly Solomon , Effect of nanofluids on thermal performance of closed loop pulsating heat pipe, <i>Experimental Thermal and Fluid Science</i> , Vol. 54, 2014, pp. 171-178	3.232
11.	V. K. Karthikeyan, K. Ramachandran, B. C. Pillai and A. Brusly Solomon , Effect of number of turns on the temperature pulsations and corresponding thermal performance of pulsating heat pipe, Journal of Enhanced Heat Transfer , Vol. 20, 2013, pp. 443-452.	1.406
12.	A. Brusly Solomon, R. Roshan, Walter Vincent, V. K. Karthikeyan, L. Godson Asirvatham, Heat transfer performance of an anodized two-phase closed thermosyphon with refrigerant as working fluid, <i>International Journal of Heat and Mass Transfer</i> , Vol. 82, 2015, pp. 521-529	5.584
13.	V. K. Karthikeyan, K. Ramachandran, B. C. Pillai, A. Brusly Solomon, Understanding thermo-fluidic characteristics of a glass tube closed loop pulsating heat pipe: flow patterns and fluid oscillations, <i>Heat Mass Transfer</i> , Vol.51(12) (2015), pp. 1669-1680.	2.464
14.	R. Renjith Singh, V. Selladurai, P.K. Ponkarthik, A. Brusly Solomon , Effect of anodization on the heat transfer performance of flat thermosyphon, <i>Experimental Thermal and Fluid Science</i> , Vol. 68 (2015), pp. 574–581.	3.232
15.	R. Renjith Singh, V. Selladurai, A. Brusly Solomon, S. Emerald Ninolin, Performance of Flat Two Phase Closed Thermosyphon with Porous Surface, International Journal of Applied Engineering Research, Vol. 10 (85), ISSN-0973-4562.	-
16.	A. Brusly Solomon, M. Sekar and S-H. Yang, Analytical expression for thermal conductivity of heat pipe, <i>Applied Thermal Engineering</i> , Vol. 100 (2016), pp. 462-467.	5.295
17.	A. Brusly Solomon, A. M. Ram Kumar, K. Ramachandran, B. C. Pillai1, C. Senthil Kumar, Mohsen Sharifpur, Josua P. Meyer, Characterisation of a grooved heat pipe with an anodised surface, <i>Heat and Mass Transfer</i> , Vol. 53(3) (2017) pp. 753-763.	2.464
18.	Jogi Krishna, P.S. Kishore, A. Brusly Solomon , Heat pipe with Nano enhanced-PCM for electronic cooling application, <i>Experimental Thermal and Fluid Science</i> , Vol. 81 (2017), pp. 84-92.	3.232
19.	A. Brusly Solomon, V. Arul Daniel, K. Ramachandran, B.C. Pillai, R. Renjith Singh, M. Sharifpur, J.P. Meyer, Performance enhancement of a two-phase closed thermosiphon with a thin porous copper coating, <i>International Communications in Heat and Mass Transfer</i> , Vol. 82, 2017, pp. 9-19.	5.683
20.	A. Brusly Solomon, M. Sharifpur, Tanja Ottermann, Carla Grobler, Michael Joubert and Josua P. Meyer, Natural convection enhancement in a porous cavity with Al ₂ O ₃ -Ethylene glycol/water nanofluids, <i>International Journal of Heat and Mass Transfer</i> , Vol. 108, Part B, (2017), pp. 1324-1334.	5.584

21.	A. Brusly Solomon, H. Gavisiddayya, K. Ramachandran, Pavan K. Sharma and B.C. Pillai, Development of a heat flux sensor Based on Heat Pipe as Thermal Sink, <i>Heat Pipe Science and Technology an International Journal</i> , Vol.5, Issue 1-4, pp.655-662.	-
22.	J.C. Joubert, M. Sharifpur, A. Brusly Solomon, J. P. Meyer, Enhancement in heat transfer of a ferrofluid in a differentially heated square cavity through the use of permanent magnets, <i>Journal of Magnetism and Magnetic Materials</i> , Vol. 443,(2017), pp. 149-153.	2.993
23.	A. Brusly Solomon, Josh van Rooyen, Martin Rencken, M. Sharifpur, Josua P. Meyer, Experimental study on the influence of the aspect ratio of square cavity on natural convection heat transfer with Al2O3/Water nanofluids, <i>International Communications in Heat and Mass Transfer</i> , Volume 88 (2017), pp. 254-261.	5.683
24.	Jogi Krishna, P.S. Kishore, A. Brusly Solomon , Experimental and Numerical Investigations on Al ₂ O ₃ – Tricosane based Heat Pipe, Thermal Energy Storage, <i>International Journal of Engineering</i> , Volume 36 (6) (2018), pp.980-985	-
25	Mohsen Sharifpur, A. Brusly Solomon, Tanja Linda Ottermann and Josua P. Meyer, Optimum concentration of nanofluids for heat transfer enhancement under natural convection with TiO2 – water mixture, <i>International Communications in Heat and Mass Transfer</i> , Volume 98 (2018), pp. 297-303	5.683
26	Emerald Ninolin Stephen, Lazarus Godson Asirvatham, Ramachandran Kandasamy, Brusly Solomon , Gnana Sundari Kondru, Heat transfer performance of a compact loop heat pipe with alumina and silver nanofluid, A comparative study, <i>Journal of Thermal Analysis and Calorimetry, Volume</i> 136 (2019), pp. 211–222.	4.626
27	Senthil kumar Chandrasekaran, Krishnan A.S., A. Brusly Solomon, Effect of thin-porous copper coating on the performance of wickless heat pipe with R134a as working fluid, <i>Journal of Thermal Analysis and Calorimetry</i> , Vol. 139 Issue 2, page 963-973, https://doi.org/10.1007/s10973-019-08176-x.	4.626
28	I. Kantharaj, M. Sekar, A. Brusly Solomon , Nallapaneni Manoj Kumar, Kalakanda Alfred Sunny, U-drill embedded with phase change heat transfer device for machining applications, Case Studies in Thermal Engineering, Available online 11 September 2019 , Article 100533	4.724
29	S Anand, C P Jawahar, A Brusly Solomon , Varghese Benson, Ashie Alan K, K P Vignesh Nair, V Abraham Alan, Experimental studies on thermosyphon using low global warming potential refrigerant HFE7000 and nanorefrigerant HFE7000/Al ₂ O ₃ , <i>Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering</i> , Volume: 235 issue: 3, page: 707-717, https://doi.org/10.1177/0954408919896690	1.6
30	A. Brusly Solomon, Akhilesh Kumar Mahto, R. Catherine Joy, Albert Rajan Dubey Abhishek Jayprakash, Abhinav Dixit, Abhinav Sahay, Application of bio-wick in Compact Loop Heat Pipe, <i>Applied Thermal Engineering</i> , Volume 169, 25 March 2020, 114927	5.295

31	Allen Varughese, A. Brusly Solomon , Benny Raj, Mohsen Sharifpur, Josua P Meyer, Heat transfer characteristics and flow visualization of anodized flat thermosiphon, <i>Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering</i> , Vol 234, Issue 2, 2020.Pages 182-192	1.6
32	S. Sivakumar, C. Velmurugan, D.S. Ebenezer Jacob Dhas, A. Brusly Solomon, K. Leo Dev Wins, Effect of nano cupric oxide coating on the forced convection performance of a mixed-mode flat plate solar dryer, <i>Renewable Energy</i> , Vol. 155 (2020), pp. 1165-1172	8.001
33	S Veeramachaneni, SK Pisipaty, DR Vedula, AB Solomon , Characterization of flat miniature loop heat pipe using water and methanol at different inclinations, <i>Experimental Heat Transfer</i> , 34:7, 639-661, DOI: 10.1080/08916152.2020.1800136	4.058
34	RS Anand, CP Jawahar, AB Solomon , E Bellos, A review of experimental studies on cylindrical two-phase closed thermosyphon using refrigerant for low-temperature applications, <i>International Journal of Refrigeration</i> , Volume 120, December 2020, Pages 296-313.	3.629
35	K. Ajith, Archana Sumohan Pillai, A. Brusly Solomon , I. V. Muthu Vijayan Enoch, Effect of magnetic field on the thermophysical properties of low-density ferrofluid with disk-shaped MgFe2O4 nanoparticles, <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , Volume 613, 20 March 2021, 126083	4.539
36	Research progress on performance enhancement of heat pipes: a review, Sudhan, A.L.S., Ramachandran, K., Solomon, A.B. , Jawahar, C.P. Journal of Thermal Analysis and Calorimetry, 2021, https://doi.org/10.1007/s10973-021-10732-3	4.626
37	K.Ajith, Archana Sumohan Pillai, I.V.Muthu Vijayan Enoch, M.Sharifpur, A. Brusly Solomon, J.P.Meyer, Effect of the non-electrically conductive spindle on the viscosity measurements of nanofluids subjected to the magnetic field, Colloids and Surfaces A: Physicochemical and Engineering Aspects Volume 628, 5 November 2021, 127252	4.539
38	Sireesha Veeramachaneni, Srinivas Kishore Pisipaty, Dharma Rao Vedula, A. Brusly Solomon & V. Sree Harsha, Effect of copper–graphene hybrid nanoplatelets in a miniature loop heat pipe. <i>Journal of Thermal Analysis and Calorimetry</i> (2021). https://doi.org/10.1007/s10973-021-10873-5	4.626
39	Anand, R.S., Jawahar, C.P., Solomon, A.B. , Sharifpur, M., Heat transfer enhancement in an modified cylindrical thermosyphon using environmental friendly refrigerant water, <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2021, 43:23, 3101-3118, DOI: 10.1080/15567036.2021.1889075	3.447
40	A. L. Sriram Sudhan, A. Brusly Solomon and I. Darwin Immanuel, Comparative study on the heat transfer performance of micro-grooved anodized thermosyphon with R134a, R600a and R717 for low-temperature applications, <i>Journal of Mechanical Science and Technology</i> 35 (11) 2021. https://doi.org/10.1007/s12206-021-1038-62021.	1.734
41	A.L. Sriram Sudhan, A. Brusly Solomon , Shyam Sunder, Heat transport limitations and performance enhancement of anodized grooved heat pipes charged with ammonia under gravity and anti-gravity condition, <i>Applied Thermal Engineering</i> Vol 200(5), 2022, 117633	5.295

42	Zhang, T., Guo, X., Solomon, B., Sharifpur, M., Zhang, LZ. A hydrophobic-hydrophilic MXene/PVDF composite hollow fiber membrane with enhanced antifouling properties for seawater desalination (2022) 644, art. no. 120146	8.742
43	Anand RS, Jawahar CP, Brusly Solomon A , Bellos E, Ajay Vasanth X. Experimental investigation of a two-phase closed thermosyphon with Al2O3/R134a nanorefrigerant. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. April 2022. doi:10.1177/09544089221093975	1.8
44	R.S. Anand, C.P. Jawahar, A. Brusly Solomon , Shibin David, Evangelos Bellos, Zafar Said, Experimental investigations on modified thermosyphons using R134a/Al2O3 and comparative machine learning analysis, <i>Applied Thermal Engineering</i> , Volume 212, 2022, 118554.	6.465
45	Senthilkumar C, Krishnan AS, Solomon AB , Mohanraj M., Efficacy of refrigerants in thin metallic coated wickless heat pipes – A comparative study. Proceedings of the Institution of Mechanical Engineers, <i>Part E: Journal of Process Mechanical Engineering</i> . 2023;0(0). doi:10.1177/09544089231166653	1.8
46	Veeramachaneni, S, Pisipaty, SK, Brusly Solomon , A, Vadisa, VC, Vedula, R, Srinivasa Rao, D. Effect of low thermal conductivity wick on the performance of compact loop heat pipe. Heat ransfer. 2023; 52: 2715- 2742. doi:10.1002/htj.22802	0.7
47	Ajith, Archana Sumohan Pillai, Muthu Vijayan Enoch, Li-Zhi Zhang, Brusly Solomon , Mohsen Sharifpur, Josua Meyer, Deepak Tudu, Morphological effects on natural convection heat transfer of magnesium ferrite ferrofluid, <i>Heat Transfer Engineering</i> , Tailor and Francis, DOI: 10.1080/01457632.2023.2227806 (Accepted)	2.43
	Cumulative Impact Factor	151.54

Publications in International Conferences

S.N	Details of conference papers
1.	A. Brusly Solomon, H. Gavisiddayya, K. Ramachandran, Pavan K. Sharma and B.C. Pillai, Development of a heat flux sensor Based on Heat Pipe as Thermal Sink, 17 th international Heat pipe conference, IIT Kanpur, India, October 14 – 17, 2013.
2.	A. Brusly Solomon, M. Noel, B. C. Pillai, K. Ramachandran, V. K. Karthikeyan, Anodization and evaluation of an aluminium thermosyphon with anodized inner wall surface, Proceedings of the 23rd National Heat and Mass Transfer Conference and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference, IHMTC2015, 17-20 December, 2015, Thiruvananthapuram, India.
3.	R. Renjith Singh, V. Selladurai, A. Brusly Solomon , T. Balakrishnan, <i>Effect of Nucleation's site on the Performance of Anodized Thermosyphon</i> , Proceedings of the 23rd National Heat and Mass Transfer Conference and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference, IHMTC2015, 17-20 December, 2015, Thiruvananthapuram, India.

- 4. Mohsen Sharifpur, A. Brusly Solomon, Josua P. Meyer, J.S. Ibrahim and Barki Immanuel, *Thermal conductivity and viscosity of Mango bark/water nanofluids*, 13th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, 17-19 July 2017, Slovenia
- 5. **A. Brusly Solomon**, Mohsen Sharifpur, Josua P. Meyer, J.S. Ibrahim and Barki Immanuel, *Natural convection heat transfer with water based mango bark nanofluids,* 13th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, 17-19 July 2017, Slovenia
- Jogi Krishna, P.S. Kishore, A. Brusly Solomon, Experimental Study of Thermal Energy Storage Characteristics using Heat Pipe with Nano-Enhanced Phase Change Materials, International Conference on Materials, Alloys,& Experimental Mechanics an IOP Science conference organized by Narasimha Reddy Engineering College, Hyderabad, Telungana, India during 3& 4th July 2017 (Scopus indexed).
- 7. Emerald Ninolin Stephen, Lazarus Godson Asirvatham, Ramachandran, **Brusly Solomon**, Kondru Gnana Sundari" Comparative study on the heat transfer performance of compact loop heat pipe with Al₂O₃ / water and Ag/water nano fluid" *International conference on Thermal Analysis and Energy Systems 2018*" held at Hindusthan college of Engineering and Technology, Coimbatore, during 12th and-13th April 2018
- 8. R Catherine Joy, A Albert Rajan, A. Brusly Solomon, K Ramachandran and B C Pillai, Experimental investigation on the critical heat flux of Cu-water, Al-water nanofluids for precise cooling of electronic systems, *International Conference on Material Science and Manufacturing Technology 2019 (ICMSMT 2019)* between 13-13, April 2019 held at Hotel Aloft, Coimbatore.
- 9. A. Brusly Solomon, Catherine Joy, A. Albert Rajan, S. Emerald Ninolin, Jocin Varghese, Performance study of flat heat pipe with metallic copper hierarchical structure as wick, *Proceedings of International Conference cum Exhibition on* ENERGY AND ENVIRONMENT (ICEE2019) April 11th & 12th 2019
- 10. A.L. Sriram Sudhan, A. Brusly Solomon, Effect of temperature on the surface characteristics of anodized aluminium tubes, *International Conference on Mechanical Engineering Design (ICMech D)*, Organized by Sri Sivasubramaniya Nadar College of Engineering Chennai, India during 25-26 April 2019 sponsored by Springer
- 11. K.Ajith, I.V.Muthuvijayan Enoch, **A.Brusly Solomon**, Archana SumohanPillai, Characterization of magnesium ferrite nanofluids for heat transfer applications, *Materialstoday: Proceedings*, Elsevier, Volume 27, Part 1, 2020, Pages 107-110.
- 12. R.S.Anand, C.P.Jawahar, A. Brusly Solomon, ShibinDavid, Prediction of Al₂O₃/R134a nanorefrigerant based modified thermosyphon performance using random forest algorithm, *Materialstoday: Proceedings*, Elsevier, https://doi.org/10.1016/j.matpr.2021.03.315
- 13. A.L. Sriram sudhan, A. Brusly Solomon, K.Ramachandran, C.P.Jawahar,_Application of environment-friendly refrigerants in anodized grooved thermosyphon at high heat loadsy, *Materialstoday: Proceedings*, Elsevier, Volume 46, Part 1, 2021, Pages 138-140.
- 14. R.S.Anand, C.P.Jawahar, A. Brusly Solomon, Joel SureshKoshy, Johan C.Jacob, Moncy M.Tharakan, Heat transfer properties of HFE and R134a based Al₂O₃ nano refrigerant in thermosyphon for enhancing the heat transfer, *Materialstoday: Proceedings*, Volume 27, Part 1, 2020, Pages 268-274.

15.	P.S. Kishore, V. Sireesha, V. Sree Harsha, V. Dharma Rao, A. Brusly Solomon, Preparation, characterization and thermo-physical properties of Cu-graphene nanoplatelets hybrid nanofluids, Materials Today: Proceedings , Volume 27, Part 1, 2020, Pages 610-614.
16.	Stephen, E.N., Asirvatham, L.G., Ramachandran, K., Solomon, A.B., RamKumar, P., Feasibility of Al2O3/Water Nanofluid in a Compact Loop Heat Pipe, Lecture Notes in Mechanical Engineering , 2021, pp. 467–483
17.	Solomon, A.B. , Joy, C., Rajan, A.A., Ninolin, S.E., Varghese, J., Performance study of flat heat pipe with metallic copper hierarchical structure as a wick, <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 872(1), 012079

Publications in National Conferences

S.N	Details of conference papers
1.	A.M. Ramkumar, A. Brusly Solomon , C. Senthilkumar, <i>Heat transfer Performance in a Grooved Heat Pipe for Different Fill Ratios and Inclination Angles</i> , National Level Conference on "Advances in Design and Manufacturing of Mechanical Systems-ADAMMS '15 on 26 th and 27 th of March 2015 Organised by Sri Krishna College of Engineering and Technology, Coimbatore.
2.	R.S.Anand, C.P.Jawahar, A.Brusly Solomon , Arun babu, Antony Dominic, E.C.John, T.D.Rayon, <i>Heat transfer enhancement of a modified thermosyphon using r134a as working fluid</i> , 6th National Conference on Refrigeration and Air Conditioning Indian Institute of Technology Madras Chennai, 20-22 Feb 2020
3.	R.S.Anand, C.P.Jawahar, A.Brusly Solomon , <i>Effect of filling ratio on the performance of a modified cylindrical two phase closed thermosyphon using r134a as working fluid</i> , 6th National Conference on Refrigeration and Air Conditioning Indian Institute of Technology Madras Chennai, 20-22 Feb 2020

Academic Visits/ Lectures

S.N	Details
1.	Resource Person for the "Engineering Refresher Course on Computational Fluid Dynamics [CFD]" Conducted by Academic Staff College, Christ University at the Faculty of Engineering, Bangalore during 25 th April 2012 to 1 st May 2012.
2.	Resource Person for the Two Week Refresher Programme on "Computational Fluid Dynamics" Conducted by Karunya University at the School of Mechanical Sciences during 1st -12th June 2015.
3.	Resource Person for the "Colloquium on Research Practices" Organised by Karunya University on 8 th of April 2017.
4.	Delivered a guest lecture on "Over view of Heat Pipes" in the Department of Mechanical Engineering, SMK Fomra Institute of Technology, Chennai.
5.	Delivered a talk on "Application of Mathermatics in the field of Mechanical Engineering" in the 30 hours online <i>Value added Course on Application of Mathematics and Programming in Science and Technology</i> Conducted by the Department of Mathematics, Karunya Institute of Technology and Sciences, Coimbatore held from 1st June 2021 to 11June 2021

Program Organized

S.N	Details of Program		
1.	Assisted to organize the "DST Project Review Meeting" and a Brainstorming Meeting		
	on Rejuvenation of Traditional Crafts of Tamil Nadu State at Karunya University during 22 nd Nov 2013 to 23 Nov 2013.		

Workshop and conference participation/Presentation

S.N	Details of Program		
1.	National conference on " <i>Advanced Materials and Characterization</i> " conducted by VIT University on 23 rd -25 th July 2008.		
2.	International seminar and workshop on " <i>Medical and Pharmaceutical Nano Technology</i> " conducted by Anna University, Tiruchy on 25 th – 26 th September 2008		
3.	International workshop on " <i>Thermal design and management in electronics</i> " organized by <i>SAMEER Chennai & IIT Mumbai</i> , on 7 th – 8 th January 2010.		
4.	International workshop on "Thermal management and reliability in electronic systems" organized by SAMEER Chennal during 15 th – 16 th July 2010 in Bangalore.		
5.	An awareness program on "Intellectual Property Rights (IPR)" organised by Karunya University on 18 th Nov 2011.		
6.	International workshop on "Advances in Heat pipe Technology" organized by Government Collage of Technology, Kannur, Kerala on March 24, 2012.		
7.	Paper presentation in 23 rd National and 1 st International ISHMT-ASTFE Heat and Mass Transfer Conference Organized by ISRO held at Trivandrum, Kerala, India during 17 th to 19 th December 2015.		
8.	One day joint workshop on Patent Filing Procedure jointly conducted by Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) , Nagpur and Karunya Institute of Technology and Sciences, Coimbatore on 7 th June, 2018		
9.	Two day workshop on Question Paper setting organized by the KCDC of Karunya Institute of Technology and Sciences, Coimbatore during 7 th and 8 th of June 2018.		
10.	Presented a paper in the First International Conference on Material Science and Manufacturing Technology 2019 (ICMSMT 2019) between 13-13, April 2019 held at Hotel Aloft, Coimbatore, Tamilnadu.		

Project Guidance - Undergraduates

S.N	Name	Title	Year
1	Mark Jude Isaac (06AB024)	Experimental investigation of heat transfer through rotating heat pipes using nanofluids	2009-2010

2	Saurabh Kant Toppo (06AB033)	Study of heat transfer of hot spots in electronic circuits using vapor chamber	2009-2010
3	R. C. Shyam Sachin (UR10ME012)	Development and testing of grooved heat pipe using a refrigerant as a working fluid.	2013-2014
4	Dubey Abisheik Jay Prakash (UR14ME009), Akhilesh Kumar Mahto (UR14ME075) Abhinav Sahay UR14ME101), Abhinav Dixit UR14ME117),	Preparation, Charecterization, and Testing of carbon-based wick structure in the compact loop heat pipe.	2017-2018
5	Ribin Varughese (UT14ME074) Jithu Saju (UR14ME088) Amal Alxander (UR14ME090) Antony Joseph (UR14ME233)	Development and Testing of heat pipe based square cavity for natural convection heat transfer	2017-2018
5	Darwin Immanuel (UL15ME006)	Performance comparison of Aluminium grooved heat pipe with R134a and R600a as working fluid	2018-2019
6	Ashish K Sam (UR15ME176)	Design and fabrication of cylindrical loop heat pipes	2018-2019
7	Sanjay Santhosh Cherian (UR15ME083), Joshua Prince (UR15ME104)	Experimental Investigation on a Magnetically variable conductance thermosyphon	2018-2019
8	Yenni Kaushik Raj (UR15ME263)	Performance Studies on Thermosyphon working with magnetic nanofluids	2018-2019
9	P.Stanley (UR15ME189)	Power Generation using Thermoelectric generator from Solar energy.	2018-2019

Project Guidance - postgraduates

S.N	Name	Title	Year
1	R. Roshan (PR12ME1020)	Performance studies of anodized aluminum thermosiphon with refrigerant as working fluid.	2013-2014
2	S. Paul Arokiam (PR12ME1015)	Development and Testing of Heat pipes with copper dendrite structures as a wick structure.	2013-2014
3	V. Arul Daniel (PR12ME1004)	Performance of two-phase closed thermo-siphon with thin metallic porous coating.	2013-2014

4	Allen Varughese (PR13ME1003)	Heat transfer characteristics and flow visualization of anodized flat thermo-siphon.	2014-2015
5	Jocin Varghese (PR13ME1010)	Visualization and study of heat transfer characteristics in wickless heat pipe and electrochemically wicked heat pipe.	2014-2015
6	Benny Ajith (PRK17ME6004)	Experimental Investigation on the performance of compact looped heat pipes with copper dendritic as wick structure	2017-2018
7	Mallu Jesse Aron (PRK17ME6006)	Natural convection studies with magnetic nanofluids	2017-2018
8	Biswajit Nath (PRK28ME6002)	Numerical analysis of the convective heat transfer coefficient in an anodized tube under laminar condition	2018-2019
9	J.Raja Palavesamuthu (PRK18ME6003)	Effect of inclination angle on the heat transfer performance of anodized grooved heat pipe	2018-2019
