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Date of Birth : 8th April 1967
Nationality : Malaysian
Place of Birth : Pasir Bandar, Kelantan, Malaysia.
Marital Status : Married, Three Children
Current Position : Dean/Professor
Field of Specialization : CFD, Fluid Mechanics, Heat Transfer
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Academic Qualification

1. Bachelor of Engineering (B. Eng.) : University of Wales, Swansea UK, 1990
(Mechanical Engineering)
2. Master Of Science (M. Sc) : University of Strathclyde, UK, 1993
(Thermodynamics and Fluid Mechanics)
3. Doctor of Philosophy (Ph. D) : University of Strathclyde, UK, 1996
(Fluid Dynamics)

Professional Membership

1. Corporate member of IEM : MIEM (Membership No.: 72903)
2. Professional Engineer : Mechanical (Reg. No.: C117026)

Professional Experience

Sep. 1990 - Jul. 1992 : Production Superintendent
Malaysian Sheet Glass Berhad

Jan. 1997 –Dec 2002 : Lecturer (Thermo Fluids)
Universiti Sains Malaysia

Jan 2003 – July 2010 : Associate Professor
Universiti Sains Malaysia

Aug 2010 – Till Date : Professor
Universiti Sains Malaysia

Mar. 1998 – Feb. 2000 : Program Chairman (Postgraduate Studies)
Universiti Sains Malaysia

Mar. 2000 – Feb. 2003 : Program Chairman (Thermo Fluids)
Universiti Sains Malaysia

Apr. 2003 – Dec. 2009 : Deputy Dean
(Academic And Student Development)

Jul. 2015 – Now : Dean, School of Aerospace Engineering
Universiti Sains Malaysia

Subjects Taught : Fluid Mechanics, Design III,
Fluid Dynamics, Applied Thermodynamics,
Numerical Methods for Engineers
Engineering Drawing,

Design II, Aerodynamics,
Gas Dynamics and Jet Propulsion System,
Thermofluids, Design IV etc.

Various Positions Held

- | | | |
|-----|---|-------------|
| 1. | Deputy Dean (Academics and Student Development) | 2003 - 2009 |
| 2. | Program Chairman for Thermodynamics and Fluid Mechanics | 2000 - 2003 |
| 2. | Program Chairman for Post-Graduate Studies, School of Mechanical Engineering. | 1998 - 2000 |
| 3. | Member of Post-Graduate and Research Committee, School of Mechanical Engineering. | 1998 - Now |
| 4. | Member of Dean Executive Committee School of Mechanical Engineering. | 1998 - 2009 |
| 5. | School of Aerospace Engineering Representative Member | 1997 - 2009 |
| 6. | Member of Time Tabling Committee | 1998 - 2001 |
| 7. | Member of Computer Aided Instruction Committee Universiti Sains Malaysia. | 1998 - 2000 |
| 8. | Coordinator of Computer Facility and Software, School of Mechanical Engineering. | 1999 - 2000 |
| 9. | Member of Safety Committee for Laboratory, School of Mechanical Engineering. | 1998 |
| 10. | Coordinator of Engineering Laboratory I | 1997 - 1998 |
| 11. | Member of Tendering Committee, School of Mechanical Engineering
Preparing specification of equipment for 7 th . Malaysia Plan | 1998 |
| 12. | Member of Laboratory Planning in Thermodynamics and fluid Mechanics Section for 8 th . Malaysia Plan | 1999 |

Research Area

1. Electronic Packaging in 3D packaging and TSV
2. Advanced electronic cooling for high heat flux
3. Porous medium burner for domestic applications

Publications

1. International/National Journals

1. Z. Husain, Z. Alimuddin, Z. Abdullah, 'Briquetting of Palm Fibre and Shell from the processing of palm nuts to palm oil', Int. Journal of Biomass and Bioenergy, 22(6), 2002, pp. 505-509, (ISI IF= 1.77)

2. Z. Husain, Z. Alimuddin and M. Zulkifly, 'Analysis of Biomass-Residue-Based Cogeneration System in Palm Oil Mills', *Int. Journal of Biomass and Bioenergy*, 24(2), 2003, pp.117-124, (ISI IF= 1.77)
3. M. Z. Abdullah, Z. Husain and S. L. Yin Pong, 'Analysis of Cold Flow Fluidization Test Results for Various Biomass Fuels', *Int. Journal of Biomass and Bioenergy*, 24, 2003, pp.487-494, (ISI IF= 1.77)
4. Fraser, S. M., Abdel Razak, A. M. and Abdullah, M. Z., 'Computational and Experimental Investigation in a Cyclone Dust Separator', *Proc. Instn. Mechanical Engrs.*, 1997, Vol. 211, Part E, pp. 247-257 (ISI IF= 0.463).
5. K. O. Lim, Z. A. Zainal Alauddin, G. A. Quadir and M. Z. Abdullah 'Plant Based Energy Potential and Biomass Utilization in Malaysia', *Int. Energy Journal*, Vol. 1, No. 2, December 2000, (ISI IF= 1.726)
6. K. O. Lim, Z. A. Zainal Alauddin, G. A. Quadir and M. Z. Abdullah 'Energy Potential and Utilization of Plantation Crops in Malaysia', *ASEAN Journal on Science and Technology for Development*, Vol.17, No. 2, pp. 1-16, December 2000.
7. M. Z. Abdullah, Y. C. Yau and Z. A. Zainal Alauddin, 'Effect of pressure on thermal contact resistance for rough mating surfaces', *ASEAN Journal on Science and Technology for Development*, Vol.18, No. 2, December 2001.
8. A. Jaafar, Z. Husain, Z. Mohd Ripin, M. Z. Abdullah, R. Ahmad 'Aerodynamic Characteristics of Canard, Wing of Low Speed Aircraft', *Journal of Institute of Engineers Malaysia*, 62, 2, pp 3-7, 2001.
9. Z. Husain, M. Z. Abdullah and T. C. Yap, 'CFD 2-Dimensional Analysis of Tandem/Staggered Arranged Airfoils', *Int. J. of Mechanical Engineering Education*, Vol. 33 (3), July 2005, pp. 195-207.
10. M. Z. Abdullah, Z. Husain, T. C. Yap and S. M. Fraser, 'Application of Deswirl Blade in Cyclone Dust Separator', *Journal of Institute of Engineers Malaysia*, Vol. 63 (2), 2002, pp. 25-34.
11. M. Z. Abdullah, Z. Husain, T. C. Yap and S. M. Fraser, 'Application of Deswirl Device in Cyclone Dust Separator', *ASEAN Journal on Science and Technology for Development*, Vol. 20(3&4), March 2003, pp. 203-216.
12. Z. Husain, M. Z. Abdullah, T. C. Yap and M. Y. Idroas, 'Effect of Free Stream Turbulence on The Performance of NACA 0015 Airfoil', *ASEAN Journal on Science and Technology for Development*, Vol. 20(2), June 2003, pp. 117-124.
13. M. Z. Abdullah, Z. Mohd Ali, Z. Husain, 'Aerodynamic Performance of a Remotely Piloted Vehicle', *Journal of Institute of Engineers Malaysia*, 66(4), December 2005.
14. B. Jayakumar, G. A. Quadir, M. Z. Abdullah and K. N. Seetharamu, 'Three Dimensional CFD Conjugate Analysis of Two Inline PLCC package Horizontally Mounted', *Int. J. of Microelectronics and Packaging Society*, 28 (4), 4th Qtr, 2004.
15. Mohd. Zulkiefly Abdullah, T. Kouta, Takuma Kamijo, Makoto Yamamoto, Shinji Honami and Shoji Kamiuten, 'Numerical Investigation on Bottom Gap of Micro Flow Sensor', *Journal of Computational Fluid Engineering*, Vol. 10(1), March 2005, pp. 73-79.
16. K. A. Ahmad, M. Z. Abdullah and J. K. Watterson, 'CFD Simulation of Oscillating Sub-boundary layer Vortex Generators for Diffuser Flow Separation Control', *Int. Journal of Engineering and Technology (IN PRESS)*
17. D. H. Hussein, H. Gitano-Briggs and M. Z. Abdullah, Design Analysis and Performance Prediction of the Cardiac Axial Blood Pump, *Research Journal of Biological Sciences*, Vol. 4 (6), pp. 637-643, 2009.
18. D. H. Hussein, H. Gitano-Briggs and M. Z. Abdullah, Cardiac Axial Blood Pump Analysis and Performance Prediction, *ASME: Journal of Medical Devices*, Vol. 3, June 2009.
19. M. K. Abdullah, M. Z. Abdullah, S. Kamaruddin and Z. M. Ariff. Three-dimensional mold flow in stacked-chip scale packages (S-CSP), *Int. Com. In Heat and Mass Transfer*, 34, 2007, pp. 820-828, (ISI IF= 1.332)
20. M. A. Ismail, M. Z. Abdullah and M. A. Mujeebu, CFD-Based Experimental Analysis on the Effect of Free Stream Cooling on the Performance of Micro Processor Heat Sinks, *Int. Comm. Heat Mass Transfer*, Volume 35, Issue 6, July 2008, pp. 771-778, (ISI IF= 1.332)
21. M. A. Mujeebu, S. Jayaraj, S. Ashok, M. Z. Abdullah and M. Khalil (2008). Feasibility Study of Cogeneration in a Plywood Industry with Power Export to Grid, *Applied Energy*, Volume 86, Issue 5, May 2009, pp 657 – 662, (ISI IF= 1.371)

22. M.Khalil Abdullah, M. Z. Abdullah, M.A. Mujeebu, S. Kamaruddin and Z. M. Ariff (2008). A Study on the Effect of Epoxy Moulding Compound (EMC) Rheology during Encapsulation of Stacked-Chip Scale Packages (S-CSP). *Journal of Reinforced plastic & Composites*, Volume 28, Number 20, 2009, pp 2527-2538, (ISI IF= 0.573)
23. M.K. Abdullah, M. Z. Abdullah, C. Y. Khor, Y. Ooi, M. V. Ramana, K. A. Ahmad, M. A. Mujeebu and Z. Mohd Ripin (2008). Effect of Piezoelectric Fan Height on Flow and Heat Transfer for Microelectronic Cooling Applications, *International Communications in Heat and Mass Transfer*, Volume 36, Issue 1, January 2009, pp 51-58, (ISI IF= 1.332)
24. C. S. Ramesh, R. Noor Ahmed, M. A. Mujeebu, M. Z. Abdullah, Fabrication and Study on Tribological Characteristics of Cast Copper-TiO₂- Boric acid hybrid Composites, *Journal of material design*, Volume 30, Issue 5, May 2009, pp 1632-1637, (ISI IF= 1.107)
25. C S Ramesh, R Noor Ahmed, M A Mujeebu, M Z Abdullah, Development and Performance Analysis of Novel Cast Copper-SiC-Gr hybrid Composites, *J Material Design*, Volume 30, Issue 6, June 2009, pp 1957 – 1965, (ISI IF= 1.107)
26. M.A Mujeebu, M.Z Abdullah, M.Z Abu Bakar, R.M.N Muhad, M. Khalil (2008). Combustion in porous media and its applications- A comprehensive survey, *Journal of Environmental Management*, Volume 90, Issue 8, June 2009, pp 2287 – 2312. (ISI IF= 1.109).
27. M.A Mujeebu, M.Z Abdullah, M.Z Abu Bakar, M. Khalil (2008). A Review of investigations on liquid fuel combustion in porous inert media, *Progress in Energy and Combustion Science*, Volume 35, Issue 2, April 2009, pp 216 – 230. (ISI IF= 11.2).
28. Hegde Pradeep, Seetharamu, K.N., Aswatha Narayana, P.A., Quadir, G. A., and Abdullah M.Z. Thermal Analysis of Micro-channel Heat Exchangers with Two Phase Flow using FEM. *Int. J. Num. Methods for Heat & Fluid Flow*, 15(1), 2005, pp. 43-60, (ISI IF= 0.685)
29. Hegde Pradeep, Seetharamu, K.N., Aswatha Narayana, P.A. and Abdullah Zulkifly. (2005). Two-Phase Stacked Micro channel Heat Sinks for Microelectronics Cooling. *IMAPS-Journal of Microelectronics and Electronic Packaging*. 2(2):122-131.
30. Hegde Pradeep, Abdullah. M. Z., Seetharamu, K.N., Aswatha Narayana, P.A. Counter and Parallel Two-Phase Flow Micro channel Heat Sinks for Electronics Cooling. *International Journal of Heat Exchangers* 2006; Vol. VII, pp. 57-14.
31. Hegde Pradeep, Abdullah. M.Z., Hassan, A.Y. and Seetharamu, K.N. Artificial Neural Network Trained One Dimensional FEM Model to Predict Two Phase Flow Characteristics in Mini/Micro Channels. *International Journal of Heat Exchangers* 2007; Vol VIII, pp.1-14.
32. M. V. Ramana, I. P. Almanar, M. Z. Abdullah, Z. Mohd Ripin and K. N. Seetharamu, Design and optimization of piezoelectric fans cooling of microelectronics devices, *Int. Journal of Microelectronics and Packaging Society*, 4 (3), 3rd Qtr, 2007.
33. M.Khalil Abdullah, M. Z. Abdullah, M.A. Mujeebu, S. Kamaruddin and Z. M. Ariff (2008). A Study on the Effect of Stack Thickness during Encapsulation of Stacked-Chip Scale Packages (S-CSP). *Int. Journal of Microelectronics & Packaging* 2008; vol. 5 (2) pp. 62-67
34. Mazlan Mohamed, Rasdi Deraman, M.Z. Abdullah, M.A. Mujeebu, M. K. Abdullah, Three-Dimensional CFD Simulation for 8 PLCC Packages Mounted in Line on a Printed Circuit Board, *ESTEEM*, (Journal published by UiTM, Malaysia) Vol. 4 (1), 2008.
35. M. Abdul Mujeebu, M.Z, Abdullah, M.Z Abu Bakar, A.A Mohamad, M.K. Abdullah, Applications of Porous Media Combustion Technology – A Review, *Applied Energy*, Volume 86, 2009, pp 1365-1375, (ISI IF= 1.731).
36. S. Yusoff, M. Mohamad, K.A. Ahmad, M.Z. Abdullah, M.A Mujeebu, Z. Mohd Ali, F. Idrus, Y. Yaakob, 3-D Conjugate Heat Transfer Analysis of PLCC Packages Mounted In-line on a Printed Circuit Board, *Int. Communications in Heat and Mass Transfer*, Volume 36, Issue 8, October 2009, pp 813-819, (ISI IF= 1.332).
37. C.Y.Khor, M. Abdul Mujeebu, M. Z. Abdullah, F. Che Aini, Finite Volume based CFD Simulation of Pressurized Flip-chip Underfill Encapsulation Process, *Microelectronics Reliability*, Vol. 50, pp. 98-105, 2010 (ISI IF= 1.4).
38. C.Y. Khor, Z.M. Ariff, F. Che Aini, M. Abdul Mujeebu, M. K. Abdullah, M. Z. Abdullah, M. A. Joseph, Three-dimensional Numerical and Experimental Investigations on Polymer Rheology in Meso-scale

- Injection Molding, *Int. Communications in Heat and Mass Transfer*, Vol. 37, pp. 131-139, 2010 (ISI IF= 1.332).
39. C.Y. Khor, Z.M. Ariff, F. Che Aini, M. Abdul Mujeebu, M. K. Abdullah, M. Z. Abdullah, FVM Based Numerical Study on The Effect of Solder Bump Arrangement on Capillary Driven Flip Chip Underfill Process, *Int. Communications in Heat and Mass Transfer*, Vol. 37, pp. 281-286, 2010 (ISI IF= 1.332).
 40. M. A. Mujeebu, M. Z. Abdullah, M. Z. Zakaria , A. A. Mohamed, Mesoscale Premixed LPG Burner with Surface Combustion in Porous Ceramic Foam, *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, Vol. 34, 2012, pp. 9-18 (ISI IF= 0.868).
 41. M. Khalil Abdullah, M. Z. Abdullah, M. A. Mujeebu, Z. M. Ariff and K. A. Ahmad, Three-Dimensional Modelling to Study the Effect of Die-Stacking Shape on Mould Filling During Encapsulation of Microelectronic Chips, *IEEE Transactions on Advanced Packaging*, Vol. 33 (2), May 2010, (ISI IF= 1.253).
 42. D. H. Hussein, H. Gitano-Briggs and M. Z. Abdullah, Design Analysis and Performance Prediction of the Cardiac Axial Blood Pump, *Research Journal of Biological Sciences*, Vol. 4 (6), pp. 637-643, 2009.
 43. D. H. Hussein, H. Gitano-Briggs and M. Z. Abdullah, Cardiac Axial Blood Pump Analysis and Performance Prediction, *ASME: Journal of Medical Devices*, Vol. 3, June 2009.
 44. M. K. Abdullah, M. Z. Abdullah, M.A. Mujeebu, H. Gitano, Z. M. Ariff, R. Razali and K. A. Ahmad, Three-Dimensional Modelling of Mould Filling in Microchip Encapsulation Process in Matrix Array Arrangement, *ASME: Journal of Electronic Packaging*, Vol. 132, March 2010, (ISI IF= 0.827).
 45. M. Abdul Mujeebu, M. Z. Abdullah and S. Ashok, Viability of Biomass Fueled Steam Turbine Cogeneration with Power Export for Asian Plywood Industry, *Energy Exploration and Exploitation*, Vol. 27 (3), pp. 213-224, 2009, (ISI IF= 0.271).
 46. R. M. N. Muhad, M. Z. Abdullah, A. A. Mohamad, M. A. Mujeebu, M. Z. Abu Bakar and R. Zakaria, 3-D Numerical Modeling and Experimental Investigation of Partial-Premix Type Porous Medium Burner Using LPG Fuel, *Journal of Porous Media*, Vol. 13 (9), 2010, (ISI IF= 1.731).
 47. M. Sri Raj Rajeswari, K.A.M. Azizli, S.F.S. Hashim, M.K. Abdullah, M. Abdul Mujeebu, M.Z. Abdullah, CFD Simulation and Experimental Analysis of Flow Dynamics and Grinding Performance of Opposed Fluidized Bed Air Jet Mill, *International Journal of Mineral Processing*, Vol. 98, pp. 94-105, 2011, (ISI IF= 1.3)
 48. C. Y. Khor, M. K. Abdullah, M. Z. Abdullah, M. Abdul Mujeebu, D. Ramdan, M. F. M. A. Majid, Z. M. Ariff, Effect of vertical stacking dies on flow behavior of epoxy molding compound during encapsulation of stacked-chip scale packages, *Heat and Mass Transfer*, Vol. 46, pp. 1315-1325, 2010 (ISI IF= 0.7)
 49. M. Abdul Mujeebu, M. Zulkifly Abdullah, A. A. Mohamad, M. Z. Abu Bakar, Trends in modeling of porous media combustion, *Progress in Energy and Combustion Science*, Vol. 36, pp. 627-650, 2010 (ISI IF= 11.2)
 50. M. Zubair, V. N. Riazuddin, M. Z. Abdullah, R. Ismail, I. L. Shuaib, S. Abdul Hamid, K. A. Ahmad, Airflow inside the nasal cavity: visualization using computational fluid dynamics, Vol. 4 (4), pp. 657-661, August 2010 (ISI IF= 0.4).
 51. N. F. Zulkefli, F. Hussin, M. Z. Abdullah, K. A. Ahmad, Numerical investigations of flow field structure induced by sub-boundary layer vortex generators (SBVG), *Int. Review of Aerospace Engineering (I.RE.AS.E)*, Vol. 3 (1), February 2010.
 52. M. A. Mujeebu, M. Z. Abdullah and S. Ashok, Husk-Fuelled Steam Turbine Cogeneration for a Rice Mill with Power Export- A Case Study, *Energy Sources Part A: Recovery, Utilization, and Environmental Effects* Volume 33 Issue 8 (2010), 724.
 53. M.K. Abdullah, M. Z. Abdullah, M. V. Ramana, C. Y. Khor, K. A. Ahmad, M. A. Mujeebu Y. Ooi, and Z. Mohd Ripin. Numerical and experimental investigations on effect of fan height on the performance of piezoelectric fan in microelectronic cooling, *International Communications in Heat and Mass Transfer* 36 (2009) 51–58.
 54. M.Khalil Abdullah, M. Z. Abdullah, M.A. Mujeebu, S. Kamaruddin and Z. M. Ariff , Three-Dimensional Modelling on Effect of Multi Die-Stacking Shape in Mould Filling during Encapsulation of Microelectronic Chips, *IEEE Transactions on Advanced Packaging* 2010; 33 (2): 438 – 446 (ISI IF: 1.086).

55. S. Yusoff, M. Mohamed, K. A. Ahmad, M. Z. Abdullah, M. A. Mujeebu, Z. Mohd Ali, F. Idrus, Y. Yaakob, 3-D Conjugate Heat Transfer Analysis of PLCC Packages Mounted In-line on a Printed Circuit Board, *International Communications in Heat and Mass Transfer* 36 (2009) 813–819.
56. C.Y. Khor, M. Z. Abdullah, M.A. Mujeebu, M. K. Abdullah and Z. M. Ariff, Three dimensional numerical and experimental investigations on polymer rheology in meso-scale injection molding, *International Communications in Heat and Mass Transfer*, 37 (2010) 131–139.
57. C.Y. Khor, M. Abdul Mujeebu, M. Z. Abdullah and F. Che Ani, Finite volume based CFD simulation of pressurized flip chip underfill encapsulation process, *Microelectronics Reliability* 50 (2010) 98–105.
58. R.M.N. Muhad, M.Z. Abdullah, M.A. Mujeebu, M.Z. Abu Bakar, R. Zakaria, A.A. Mohamad. Development and performance analysis of partially premixed LPG porous medium combustor, *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, Vol. 33, 2011, pp. 1260-1270.
59. M.A Mujeebu, M.Z Abdullah, M.Z. Abu Bakar, A.A. Mohamad. Development of premixed burner based on stabilized combustion within discrete porous medium, *Journal of Porous Media* (in press).
60. N.F.Zulkefli, E.N.Tai, M.A. Mujeebu, M.Z.Abdullah, K.A.Ahmad, Numerical and experimental investigations of passive flow control devices on a backward facing step, *International Journal of Engineering and Technology*, Vol. 6, No. 2, 2009, pp. 21-29.
61. Mazlan Mohamed, M.Z. Abdullah, M.A. Mujeebu and M. K. Abdullah, Numerical Investigation of Heat Transfer in Plastic Leaded Chip Carrier (PLCC) Packages in In-line Arrangement, *Journal of Modeling, Design & Management of Engineering Systems*, 5(1):11 – 22.
62. C.Y. Khor, M.K. Abdullah, M.Z. Abdullah, M. Abdul Mujeebu, D. Ramdan, M.F.M.A. Majid, Z.M. Ariff and M.R Abdul Rahman. Numerical analysis on the effects of different inlet gates and gap heights in TQFP encapsulation process, *Int. J. Heat and Mass Transfer*, vol. 54, No. 9-10, 2011, pp. 1861-1870 (ISI IF= 1.943).
63. M. K. Abdullah, B. H. Murni, M. Z. Abdullah, M. Abdul Mujeebu, F. Hussin, H. Yusoff, N.C. Ismail, K. A. Ahmad, and Z. Mohd Ripin. Heat transfer enhancement using piezoelectric fan in electronic cooling - experimental and numerical observations. *ISI Bilimi ve Teknigi Dergisi-Journal of Thermal Science and Technology* (in press) (ISI IF= 0.179).
64. Mohamed H A Elnaggar, M. Z. Abdullah and M. Abdul Mujeebu. Experimental Analysis and FEM Simulation of Finned U-shape Multi Heat Pipe for Desktop PC Cooling. *Energy Conversion and Management* 52 (2011) 2937–2944 (ISI IF: 2.072)
65. S. F. Shaker, M.Z. Abdullah, M. Abdul Mujeebu, K.A. Ahmad and M.K. Abdullah. Study on the Effect of Number of Film Cooling Rows on the Thermal Performance of Gas Turbine Blade. *ISI Bilimi ve Teknigi Dergisi-Journal of Thermal Science and Technology*, 32(1), April 2012 (ISI IF= 0.179).
66. M. Abdul Mujeebu, M. Z. Abdullah, A. A. Mohamad. Development of energy efficient porous medium burners on surface and submerged combustion modes, *Energy*, Vol. 36, No. 8, 2011, pp. 5132-5139 (ISI IF= 3.565)
67. D. Ramdan, C.Y. Khor, and M.Z. Abdullah. Plastic Ball Grid Array Encapsulation Process Simulation on Rheology Effect. *TELKOMNIKA*, Vol.9, No. 1, April 2011, pp. 29~38
68. C. Y. Khor, M. Z. Abdullah and F. Che Ani, Study on the fluid/structure interaction at different inlet pressures in molded packaging, *Int. J. Microelectronic Engineering*, 88(10), 2011, pp. 3182-3194.
69. C.Y. Khor, M.Z. Abdullah, H.J. Tony Tan, W.C. Leong, D. Ramdan, Investigation of the fluid/structure interaction phenomenon in IC packaging, *Int. J. Microelectronic Reliability* (In press).
70. Abdullah MK, Ismail NC, Abdullah MZ, Mujeebu MA, Ahmad KA, Ripin Z. Mohd (2011) Effects of Tip Gap and Amplitude of Piezoelectric Fans on the Performance of Heat Sinks in Microelectronic Cooling. *Heat and Mass Transfer* (In Press) (ISI IF: 0.7)
71. W.C. Leong, M.Z. Abdullah and C.Y. Khor, Application of flexible printed circuit board (FPCB) in personal computer motherboards: Focusing on Mechanical Performance, *Microelectronics Reliability* Volume 52, Issue 4, April 2012, Pages 744-756. (ISI IF: 1.101)
72. W. C. Leong, M. Z. Abdullah, M. Abdul Mujeebu, "Flow induced deflection and stress on flexible printed circuit board (FPCB) in fan-cooled electronic systems: FSI approach," *IEEE Transactions on Components, Packaging and Manufacturing Technology*, Vol. 2 (4), April 2012 (ISI IF: 1.086)

73. Riazuddin VN, Zubair M, Abdullah MZ, Ismail R, Shuaib IL, Abdul Hamid S, Ahmad KA (2011) Numerical Study of Inspiratory and Expiratory Flow in a Human Nasal Cavity, *Journal of Medical and Biological Engineering*, Volume 31, No. 3, pp 201-206 (ISI IF: 0.42).
74. R.M.N. Muhad, M.Z. Abdullah, M.A. Mujeebu, M.Z.A. Bakar, R. Zakaria, A.A. Mohamad, The development and performance analysis of partially premixed LPG porous medium combustor, *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, Volume 33, Issue 13, January 2011, pp. 1260-1270 (ISI IF: 0.843).
75. M.S.R Rajeswari, K.A.M. Azizli, S.F.S. Hashim, M.K. Abdullah, M.A. Mujeebu, M.Z. Abdullah, CFD simulation and experimental analysis of flow dynamics and grinding performance of opposed fluidized bed air jet mill, *International Journal of Mineral Processing*, Volume 98, Issue 1-2, 17 January 2011, Pages 94-105 (ISI IF: 1.082).
76. C. Y. Khor, M. Z. Abdullah, W. C. Leong, Fluid/structure interaction analysis of the effects of solder bump shapes and input/output counts on moulded packaging, *IEEE Transactions on Components, Packaging and Manufacturing Technology*, Vol. 2 (4), April 2012 (ISI IF: 1.086).
77. D. Ramdan, M. Z. Abdullah, and M. A. Mujeebu, W. K. Loh, C. K. Ooi, R. C. Ooi, FSI simulation of wire sweep PBGA encapsulation process considering rheology effect, *IEEE Transactions on Components, Packaging and Manufacturing Technology*, Vol. 2 (4), April 2012 (ISI IF: 1.086).
78. C.S. Lau, M.Z. Abdullah, F. Che Ani, Computational fluid dynamic and thermal analysis for BGA assembly during forced convection reflow soldering process, *Soldering & Surface Mount Technology*, Vol. 24 (2), pp. 77-91, 2012. **(IF: 0.659)**
79. C.S. Lau, M.Z. Abdullah, F. Che Ani, Optimization modeling of the cooling stage of reflow soldering process for ball grid array package using the gray-based Taguchi method, *Int. J. of Microelectronics Reliability*, Vol. 52 (6), 2012, pp. 1143-1152 (ISI IF: 1.101).
80. C.S. Lau, M.Z. Abdullah, F. Che Ani, Three-Dimensional Thermal Investigations at Board Level in a Reflow Oven Using Thermal-Coupling Method, *Soldering & Surface Mount Technology*, Vol. 24 (3), 2012, pp. 167-182 **(IF: 0.659)**.
81. C.Y. Khor, M.Z. Abdullah and M. Abdul Mujeebu, (2012) Influence of Gap Height in Flip Chip Underfill Process with Non-Newtonian Flow between Two Parallel Plates, *ASME Journal of Electronic Packaging*, 134, March 2012, pp. 011003-1-011003-5 **(IF: 0.564)**.
82. C.Y. Khor, M.Z. Abdullah, Z.M. Ariff and W.C Leong, Effect of stacking chips and inlet positions on the void formation in the encapsulation of 3D stacked flip-chip package, *International Communication in Heat and Mass Transfer*, Vol. 39, 2012, pp. 670-680 **(ISI IF: 1.609)**
83. C. Y. Khor, M. Z. Abdullah, Modelling and analysis of the effect of stacking chips with TSVs in 3D IC package encapsulation, *Maejo Int. J. of Science and Technology*, Vol. 6(2), 2012, pp. 159-185. **(ISI IF: 0.2)**
84. D. Ramdan, C.Y. Khor, M. Abdul Mujeebu, M. Z. Abdullah, W. K. Loh and C. K. Ooi, FSI Analysis of Wire Sweep in Encapsulation Process of Plastic Ball Grid Array Packaging, *ISI Bilimi ve Teknigi Dergisi-Journal of Thermal Science and Technology*, (Accepted on 13 October 2011). **(IF: 0.179)**
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3. Engineering Applications of Computational Fluid Dynamics, CFD Applications in Electronic Packaging, International Energy and Environment Foundation (IEEF), 2012, pp. 97-150.

Short Courses Conducted

1. **Abdullah, M. Z.**, 'Steam Properties and Instrumentation', As a Speaker in Short Course on Steam Plant Operation, 1997-2000
2. **Abdullah, M. Z.**, 'Application of Energy Audit Software', As a Speaker in Short Course on Energy Audit. 1998
3. **Abdullah, M. Z.**, 'Fluid Mechanics', As a Speaker in Radio 3 Ipoh on Distance Learning. 1998-2000
4. **Abdullah, M. Z.**, 'Thermal Contact Resistance in Electronic Packaging', As a Speaker in a program at **Agilant** Technology Bhd. (Penang). 2000
5. **Abdullah, M. Z.**, 'Thermal Contact Resistance in Electronic Packaging', As a Speaker in a talk at **Intel (M)** Sdn. Bhd. (Penang). 2001
6. Conducted a short course on 'Steam Plant Operation for Steam Engineer Grade I and II at Kota Kinabalu 2001
7. Conducted an in house short course on 'Steam Plant Operation for Steam Engineer Grade II' at Lumut Power Plant. 2001
8. Conducted a short course on 'Steam Plant Operation for Steam Engineer Grade I and II' at Penang 2002
9. Conducted a short course on 'Thermomechanical in Electronic Packaging at Intel Technology Sdn. Bhd. Kulim 2012

Keynotes/Invited Lectures

1. M. K. Abdullah, **M. Z. Abdullah**, M. A. Mujeebu and Z. M. Ariff, 2008, CFD Challenges in Multi Stacked Microchips During Encapsulation Process, ENERGY 2008, National Institute of Calicut, India (Keynote speaker)

2. M. K. Abdullah, **M. Z. Abdullah** and M. A. Mujeebu, 2008, CFD: Application in Electronic Industries, ISTE Chapter, Mangalore, India (Invited Lecture).
3. M. K. Abdullah, **M. Z. Abdullah** and M. A. Mujeebu, 2008, Advances in Electronic Cooling, Bhatkal, India (Invited Lecture).
4. M. K. Abdullah, **M. Z. Abdullah**, M. A. Mujeebu and Z. M. Ariff, 2008, Persatuan Sains Matematik Malaysia (PERSAMA), USM (Invited Lecture).
5. **Mohd Zulkifly Abdullah**, 2008, New Engineering Accreditation Council (EAC) Manual, USM Engineering Campus (Invited Lecture).
6. **Mohd Zulkifly Abdullah**, 2013, One Day International Seminar, Universitas Medan Area, Indonesia (Invited Lecture).
7. **M. Z. Abdullah**, C. Y. Khor, C. S. Lau, 2013, 2nd International Conference on Automatic Control and Mechatronic Engineering (ICACME 2013), Bangkok, Thailand (Keynote Speaker).
8. M. S. Abdul Aziz, **M. Z. Abdullah**, C. Y. Khor, 2013, 1st International Conference on Engineering of Tarumanagara 2013, Jakarta, Indonesia (Keynote Speaker).
9. **Mohd Zulkifly Abdullah**, 2013, Seminar at Dept. Of Mechanical and Manufacturing Engineering, Manipal Institute of Technology, Manipal, India (Invited Lecture).
10. **M. Z. Abdullah**, 2014, International Conference on Environment and Sustainable Technologies – 2014 (iCEST-2014), Manipal, India (Keynote Speaker).
11. **M. Z. Abdullah**, 2015, International Conference on Mechatronics, Electronics and Automation Engineering – 2015 (ICMEAE-2015), Bangkok, Thailand (Keynote Speaker).
12. M. A.M. Najib, **M.Z. Abdullah**, A.A. Saad, Z. Samsudin, S. Damian, The 37th International Electronics Manufacturing Technology & 18th Electronics Materials and Packaging Conference - IEMT-EMAP2016 20-22 September 2016, Georgetown, Penang (Invited Speaker).
13. A. A. Hussien, N. Md Yusop, **M. Z. Abdullah**, M. A. Al-Nimr, C. Nuntadusit, Hybrid Nanofluids: Advantages and challenges in electronic cooling, 15th Asian Congress in Fluid Mechanics (15ACFM) 2016, 21-23 November 2016, Kuching, Sarawak (Keynote Speaker).
14. A. A. Hussien, N. Md Yusop, **M. Z. Abdullah**, M. A. Al-Nimr, C. Nuntadusit, Innovative hybrid nanofluids for future cooling fluids. The 4th International Conference on Mechatronics and Mechanical Engineering (ICMME2017), 28-30 November 2017, Kuala Lumpur (Keynote Speaker).
15. A. A. Hussien, N. Md Yusop, **M. Z. Abdullah**, M. A. Al-Nimr, C. Nuntadusit, Hybrid Nanofluids: Applications and challengers for heat transfer enhancement. The International Conference on Emerging Trends in Mechanical Engineering 2017, 27-28 December 2017, Mandya, Karnataka, India (Keynote Speaker).

External Examiner (Programmes)

1. External Examiner for B. Eng in Mechanical Engineering Program, Multimedia University, Melaka 2016-2018
2. External Examiner for B. Eng in Mechanical Engineering Program, Multimedia University, Melaka 2013-2016.
3. External Examiner for Master of Manufacturing Systems Engineering, Universiti Putra Malaysia, 2014/2015.
4. External Examiner for Master of Engineering Management, Universiti Putra Malaysia, 2014/2015.

Memberships

- | | | |
|----|---|-----------|
| 1. | Member of Malaysian Energy Institute (Institute Tenaga Malaysia) | 1998-Now |
| 2. | Member of International Microelectronics and Packaging Society (IMAPS). | 1998-1999 |
| 3. | Member of CPMT | 2000-2004 |
| 4. | Corporate Member of IEM | 2014- Now |
| 5. | Professional Engineer of Malaysia | 2016- Now |

Research Projects Guided

PhD : 28 Completed, 6 Ongoing

MSc (by research) : 35 Completed, 3 Ongoing

Sponsored Research Projects Undertaken

Date	Research Title	Grant Title
1 Nov. 1998 – 31 Oct. 1999	Die casting thermal modeling	IRPA short term
1 Nov. 1999 – 2003	Aerodynamic, material and vibration characteristic for new eagle aircraft using computer modeling and experimentation	IRPA long term
1 June 2001 – 2005	Design, Development and Construction of Remotely Piloted Vehicle (RPV) for Civil Sector	IRPA long term
1 June 2000 – 1 March 2003	LDA measurement and computer simulation of natural convection from non-isothermal surface	USM short term
1 March 2002 – 1 Jun 2005	Experimental and Numerical Studies of Thermal Contact Resistance for Hard Mating Materials	USM short term
1 Aug. 2005 – 31 Mar. 2009	Design, construction and testing of ultra-low NOx, CO and UBC porous burner	EARPA – Long Term
15 Jan. 2009 – 31 Mar. 2011	Modeling of bubble rising in a vertical column with different liquid viscosity	RU Fundamental (USM)
1 Jan. 2009 – 31 Dec. 2011	Effect of using piezoelectric fans cooling of microelectronic systems	RU Golden Goose (USM)
15 Jan. 2009 – 14 Jan. 2012	Development and performance analysis of premixed porous medium burner	RU Golden Goose (USM)
1 Sep. 2009 – 31 Aug. 2011	Study of fluid/structure interaction of epoxy flow during stacked chip encapsulation process	Intel Research Grant
1 Sep. 2011 – 31 Aug. 2013	FSI analysis of the effect of stacked-chip with TSV's in encapsulation process of 3D IC integrated package	Intel Research Grant
1 Aug. 2011 – 31 Jul. 2013	Fluid/structure interaction and thermal analysis during reflow soldering process	FRGS – MOHE Grant
1 Nov. 2011 – 31 Oct. 2013	Prototype development of porous medium burner for household applications	PRGS – MOHE Grant
1 Jun 2012 – 31 May 2014	A study on thermo photovoltaic (TPV) generation of electricity in a waste cooking oil-fired porous burner	FRGS – MOHE Grant
1 Apr 2014 – 31 Mac 2016	FSI analysis of the effect of die thickness and aspect ratio of stacked chip in encapsulation process of moulded underfill packaging	CREST

Consultancy Works

1. 1997 - 2000: Study for The Improvement on Electroplating process – Consultancy Work for Dynacraft Sdn. Bhd.
2. 1997 - 1998: Design of the Fibre Explosion Process – Consultancy Work for Sabutek Sdn. Bhd.

3. 1999 - 2000: Development of computer program for the selection of Facellen as insulation material for air conditioning ducting, chill water pipe and water tanks (hot and cold) – Consultancy Work for Facell Foam (M) Sdn. Bhd.
4. 1999 – 2002: Equipments Consultant for Universiti Technology Petronas.
5. 2000 – 2001: Aerodynamic analysis of the cup-fin model on different shapes – Consultancy Work for IEV Group of Companies.
6. 2001: Sound measurement for different type of materials – Consultancy Work for Facell Foam (M) Sdn. Bhd.
7. 2001 – 2003: Design of Water Fertilizer Spaying System – Consultancy Work for Felcra Bhd. (Perak Branch).
8. 2011 – 2012: Requisition of Product Air Performance Measurement Services – Escatec Technology Sdn. Bhd.
9. 2016-2017: Gated Spillway Hydraulic Modelling of SAB Dam and The Structural analysis of Tilting Gate – Consultancy work for TNB Research Sdn. Bhd.
10. 2016-2017: Study on the Potential of Wind Tunnel Effect on Transmission Towers and The Development of Wind Hazard Map for Selected TNB Transmission Lines – Consultancy work for TNB Research Sdn. Bhd.
11. 2017: CFD Simulation of Coal Particles and Heated Air Flow in a Pre-Combustion Chamber – Consultancy work for TNB Research Sdn. Bhd.
12. 2017: Computational Fluid Dynamics Simulation of Empty Fruit Bunch Combustion in a Stoker Boiler – Consultancy work for TNB Research Sdn. Bhd.

Industrial Related Projects

1. Study on void problem during reflow soldering process, Jabil Sdn Bhd, 2019-2021
2. Die attached, wire bond and LED packaging, CREST-OSRAM_UNIV, 2019-2021
3. Solder paste printing performance for different component sizes, Celestica Sdn Bhd, 2016-2020
4. Effect of self-alignment of solder during reflow process for different silver content, Jabil Sdn Bhd, 2013-2018
5. Study on soldering performance in wave soldering process, Celestica Sdn Bhd, 2010-2014
6. Study of fluid/structure interaction of epoxy flow during stacked chip encapsulation process, Intel Sdn Bhd, 2009-2011
7. FSI analysis of the effect of stacked-chip with TSV's in encapsulation process of 3D IC integrated package, Intel Sdn Bhd, 2011-2013