

## FACULTY PROFILE



**Dr.K.VIJAYA RAJA**

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Area of Specialization

Gas Dynamics, High Speed Jets, Aircraft Materials

### Educational Qualification

Degree	University	Subjects/Specialization	Year of passing
Ph.D	M.I.T- ANNA UNIVERSITY	AEROSPACE ENGG (Aerodynamics)	2009
M.E	MADURAI KAMARAJAR UNIVERSITY	THERMAL ENGG.	2001
B.TECH	M.I.T- ANNA UNIVERSITY	AERONAUTICAL ENGG.	1995
B.Sc.	MADURAI KAMARAJAR UNIVERSITY	PHYSICS	1991

### Professional Experience

Teaching			
Designation	From – To	Institution	Years of Experience
Professor and Head	May 2016-Till Date	KCG.College Technology, Chennai.	2.5
Professor and Head	July 2014-April 2016	P.B.College Engineering, Chennai.	2.0
Professor and Head	May 2011 – June2014	Tagore Engineering College, Chennai.	3.0

Professor and Head	June 2008 – April 2011	P.B.College Engineering, Chennai.	3.0
Assistant Professor	July 2005 – May 2008	Tagore Engineering College, Chennai.	3.0
Assistant Professor	October 1995– June	Mohamed Sathak Engineering College, Kilakarai.	10.0

### **Professional Member**

- Life Member of Aeronautical Society of India (MAeSI)
- Life Member of Institution of Engineers -India (MIE)
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### **Professional Services**

- Editorial Board Member for the International journal of STM
- Treasurer -- Aeronautical Society of India (AeSI) Chennai chapter.2017- Till Date.
- Joint secretary –Aeronautical Society of India (AeSI) Chennai chapter.2013-2015.
- NPTEL Single Point of contact (SPOC) for KCG College of Technology.
- Anna University paper valuation Committee Chairman.
- Anna University Result passes Board Committee Chairman.
- Anna University Syllabus Committee Board Member.
- Convener for the International Conference on Engineering Materials and Processes (ICEMAP 2013) conducted during 23rd –24th May 2013.
- International conference attended and paper published - International Symposium on space Technology and Science (ISTS 2009) –JAPAN.
- Organized the Short Term Course on "Gas Dynamics for Engineering Faculty & Scientists", Resource Person – Prof E. Rathakrishnan, Aerospace Engineering, IIT Kanpur, 12 – 17 May 2008.
- Convener for the International Conference on Innovation & Discoveries in Science, Engineering and Technology (ICIDSET-18) conducted during 17th –18th April 2018.
- Appreciation Award received from Institution of Engineer (India),Hosur local centre on 26th November 2016.
- Technical board member for the International Conference on High Energy Materials (HEMCE – 07) in collaboration with The High Energy

## Research Publications

1. K. Vijayaraja C. Senthilkumar S. Elangovan and E. Rathakrishnan, Base Pressure Control with Annular Ribs. International Journal of Turbo & Jet-Engines. Volume 31, Issue 2, (June 2014) pp111–118.
2. Ragothaman, A. Vijayaraja, K., Mudhukrishnan, M. Multi-Criteria Optimization Using Grey Relational Analysis in Drilling of Glass/Epoxy Polymeric Composites. International journal of scientific net material science and Engineering. Trans Tech Publications, Switzerland PP 336 – 344. Sep-14, 2014
3. Ragothaman, A. Vijayaraja, K., Mudhukrishnan, M. EFFECT OF PROCESS PARAMETERS ON DRILLING OF WOVEN GLASS FIBRE / POLYESTER COMPOSITES. INDIAN JOURNAL OF ENGINEERING.
4. Ragothaman, A. Vijayaraja, K., Mudhukrishnan. M. Experimental investigation on drilling of glass fibre reinforced plastic composite. National journal on Advances in Building and Mechanics – Sathyabama University
5. Ragothaman, A. Vijayaraja, K., Mudhukrishnan, M. “Multi-criteria optimization using Grey relational analysis in drilling of Glass/Epoxy polymeric composites”. International conference on engineering materials and processes. 2013 pp 112.
6. Ragothaman, A. Vijayaraja, K., Mudhukrishnan, M. “Analysis of drilling characteristics in Glass/Polyester composite through Grey relational algorithm”. International conference on engineering materials and processes. 2013 pp 119.
7. M. Sundararaj, K. Vijayaraja, S. Elangovan Effect of Location of Annular Rib on Suddenly Expanded Flow Characteristics. International conference on engineering materials and processes. 2013 pp 131.
8. K Subash, K. Vijayaraja, An analysis of the performance of wankel rotary engines in tropical environment. International conference on engineering materials and processes. 2013 pp 124.
9. Ragothaman, A. Vijayaraja, K., Mudhukrishnan, M. “Multi-criteria optimization using Grey relational analysis in drilling of Glass/Epoxy polymeric composites”. Advanced Materials Research vol. 984-985 (2014) pp 336-344. Trans Tech Publications, Switzerland.

- 10.N.I. Haroon Rashid- India; K.Vijayaraja-., S. Nadaraja Pillai C.Senthilkumar "Peak Wind Pressure Characteristics of HAWT Tower systems"has been accepted for NCWT4 conference.(2015).
- 11.K SubashVinu R Dr K Vijayaraja "Performance Enhancement of Frontline Squadron through Comprehensive Operational and Maintenance Monitoring using Barcode Identity" International Conference on Recent Trends in Engineering & Technology (ICoRTET 2016)3 - 5th October, 2016, Kochi.
- 12.K.Vijayaraja ,Mr.A.Aswin Raj Aerodynamic Efficiency of Counter Vortex Winglet. International Journal of Applied Engineering Research (IJAER) pp. 5259-5267. Volume 9, Number 22 (2014) Special Issues.
- 13.K.Vijayaraja, Dr.M.Sundararaj Numerical Analysis of Drilling Characteristics InGfrp Composite Using Grey Relational Algorithm. International Journal of Applied Engineering Research (IJAER) Volume 9, Number 22 (2014) Special Issues. pp. 5340-5347.
- 14.Subash , Dr K Vijayaraja. "Performance Optimization of Aircraft in Frontline Squadrons" " Aircraft Engineering and Aerospace Technology " (Emerald Group Publishing Limited, UK). (DOI: 10.1108/AEAT-07-2015-0178.R3).
- 15.K SubashVinu R Dr K Vijayaraja "Optimal Utilization of Life Jackets by Integrating Automatic Identification Techniques in Inspections" RCVEWC 2016.
- 16.Ragothaman A Vijayaraja K "Edge Features and Threshold Based Defect Detection of Glass Fiber Reinforced Plastic" Pensee 130-142 79 10 0031-4773 Oct-14 0.063 Serial No: 24948Anna University Annexure-I (2014-15 list); Serial No:10304
- 17.Ragothaman A Vijayaraja K Nair's Test Method during Drilling of GFRP for Optimization of Cutting Parameters on Delamination WSEAS Transactions on Applied and Theoretical Mechanics WSEAS 112-117 101 1991-8747 Sep-14 0.17 Serial No: 32911 Anna University Annexure-II (2014-15 list); Serial No:20468
- 18.Ragothaman A Vijayaraja K Statically Test Method during Drilling of GFRP for Optimization of Cutting Parameters on Delamination IJAR in Mechanical and Production Engineering and Development ISR National Journal 123-134 2320-7256 Sep-14.
- 19.K subash Dr Vijayaraja K Reduction of Aircraft Downtime using Concurrent Maintenance Philosophy and Condition based Maintenance

Journal of Balkan Tribological Association , Bulgaria Ref. No 1575/30.03.2016 in JBTA....Cover page of book 4, Vol. 21 (2015) 29 May 2016 Listed in Web of Knowledge Annexure I

- 20.K SubashVinu R Dr K Vijayaraja " Optimization of Aircraft Maintenance and Utilization factor by Implementation of Effective Inventory Management " Thirtieth National Convention of Aerospace Engineers and National Seminar on" Aerospace Technology: Future Trends and Developments"Hosur Local Centre, The Institution of Engineers (India).25-26 Nov 2016.
- 21.Manigandan S, Vijayaraja K. Flow Mixing and Screech Characteristics of Elliptical Supersonic Jet. International Journal of Turbo & Jet-Engines. DOI: 10.1515/tjj-2018-0006.March 2018. ISSN: 21910332.
- 22.Manigandan S, Vijayaraja K. Flow field and acoustics characteristics of elliptical jet. Aircraft Engineering and Aerospace Technology. DOI: AEAT-04-2017-0111. ISSN:17488842 (Accepted).
- 23.Manigandan S, Vijayaraja K. Flow field and acoustic characteristics of elliptical throat CD nozzle. International Journal of Ambient Energy. DOI: 10.1080/01430750.2017.1360205 August 2017, PP: 1-6. ISSN: 01430750.
- 24.Manigandan S, Vijayaraja K. Energy decay characteristics of a non-circular supersonic jet. International Journal of Ambient Energy. DOI: 10.1080/01430750.2018.1437558. Feb 2018, PP: 1-6. ISSN: 01430750.
- 25.Manigandan S, Vijayaraja K. Mixing Characteristics of Elliptical Jet Control with Crosswire. InIOP Conference Series: Materials Science and Engineering 2018 Feb (Vol. 310, No. 1, p. 012163). IOP Publishing. ISSN: 17578981.
- 26.Manigandan S, Vijayaraja K, DurgaRevanth and Anudeep. Mixing and Entrainment Characteristics of Jet Control with Crosswire. Advances in Machine Learning and Data Science. Springer (Accepted). ISBN: 978-981-10-8568-0.
- 27.Manigandan S, Vijayaraja K. Acoustic and mixing characteristic of CD nozzle with inverted triangular tabs. International Journal of Ambient Energy. DOI: 10.1080/01430750.2017.1354328 July 2017, PP: 1-6. ISSN: 01430750.
- 28.Manigandan S, Vijayaraja K. Mixing characteristics of elliptical throat sonic jets from orifice and nozzle. International Journal of Ambient

Energy. DOI: 10.1080/01430750.2017.1399461 Nov 2017, PP: 1-6.  
ISSN: 01430750.

**Google Scholar link**

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