

Biodata

Name	Dr.P.Sasikumar
	Scientist/Engineer, Vikram Sarabhai Space Centre, ISRO Trivandrum, Kerala
Educational Back Ground	HSC- CSI boys higher secondary school (1991-1998) B.E- Mechanical- KSRCT- Periyar university (1998-2002) M.E- PSG Tech-Anna university (2002-2004) PhD- IITM, Chennai (2009-2015)
Brief Job Profile & Past Experience	Working as a quality assurance engineer for launch vehicle composite products since 2004 in VSSC.
Email Id	writersasibooks@gmail.com
Award:	
<ol style="list-style-type: none"> 1. Best outgoing student in Master of engineering in 2004. 2. Young scientist award from department of space in 2011. 3. Team excellence award for development of near net shaped ablative components in 2015. 4. Innovative Student Projects Award at doctoral level by Indian national academy for engineers INAE in 2016. 	
Work Experience:	
<p>Working as quality assurance engineer for various composite products of ISRO since 2004. As part of official assignments contributed in the following</p> <ol style="list-style-type: none"> 1. As a convener and member of quality audit team carried out periodic audit of external industries which supplies composite components to VSSC. 2. Participated in vendor qualifications of composite processing industries. 3. Processing trails of various ablative components. 	
Technical lectures:	
<ol style="list-style-type: none"> 1. As part of world space week visited more than 100 schools in past 16 years and presented topics related to rocketry and space sciences. 2. Delivered number of science lectures in schools and colleges in Tamil and English. 3. Delivered lectures related to probability, stochastic modeling, composites and quality control principles in various professional bodies. 	
Area of interest	
<ul style="list-style-type: none"> • Composite materials, Carbon-carbon composites , Ablative composites • Stochastic modelling and Stochastic FEM (SFEM) • Uncertainly quantification • Probabilistic engineering • Statistical analysis • Quality assurance and control 	
Association with Professional bodies:	
<p>Actively contributing professional bodies as a life member and in various position such as Treasure, Executive member, organizing committee member etc. for the following for more than 15 years.</p> <ol style="list-style-type: none"> 1. ISAMPE: Indian society for advancement of materials and process engineering. 2. ISNT: Indian society for non-destructive testing 	

3. **AeSI** : The Aeronautical Society of India
4. **ASI**: Astronautical society of India
5. **SAQR**: Society for aerospace quality & reliability
6. **NIQR**: National Institution for Quality & Reliability
7. **SAME**-Society of Aerospace Manufacturing Engineers
8. **INSARM**: Indian National Society for Aerospace and Related Mechanisms
9. **IIM**: Indian Institute of Metals

As a Guide

	Completed	Ongoing
B.Tech projects	2	
M.Tech project	3	
PhD	1	2


Publication:

Books published in English

1.	P. Sasikumar, B. Aravind		250/-
	Sky riders,		
	Indian university Press		
	English, July 2023		
2.	P. Sasikumar, M Jothi Mani		100/-
	Unlocking the mysterious of "rocket science"		
	Indian university Press		
	English, July 2023		
3.	P. Sasikumar, R. Sheela Banu		140/-
	Your Goal is within Your Reach		
	Notion press		
	English, Mar 2023		
4.	P. Sasikumar, M Jothi Mani		160/-
	Unveiling the Unseen: The Art and Science of Non-Destructive Testing		
	English, Sep 2023		

Books published in Tamil

5.	P. Sasikumar, B. Aravind விண்வெளி மனிதர்கள் (VInveli Manidharkal), பாரதி புத்தகாலயம் (Bharathi Puthakalayam) Tamil , Apr 2021.		270/-
6.	P. Sasikumar, வானவாசிகள், பாரதி புத்தகாலயம் (Bharathi Puthakalayam) Tamil , August 2021.		120/-
7.	P. Sasikumar தரமே தாரக மந்திரம், Tamilnadu science fourm (TNSF), Tamil, December 2021)		100/-
8.	P. Sasikumar, கைத்தறியும் கணிப்பொறியும் பாரதி புத்தகாலயம் (Bharathi Puthakalayam) Tamil , February 2022		90/-
9.	P. Sasikumar, விண்ணூர்தி, ராக்கெட் தொழில்நுட்பம் பாரதி புத்தகாலயம் (Bharathi Puthakalayam) Tamil , February 2022		135/-
10.	S. Harikrishnan, P. Sasikumar ரயிலே ரயிலே பாரதி புத்தகாலயம் (Bharathi Puthakalayam) Tamil , February 2022		170/-
11.	P. Sasikumar நில் கவனி அறிந்துகொள் பரிதி பதிப்பகம் Tamil , July 2022		150/-
12.	P. Sasikumar கையெட்டும் தூரத்தில் இலக்கு Tamilnadu science fourm (TNSF), Tamil , July 2022		65/-
13.	P. Sasikumar ஆதியும் அந்தமும் (பிரபஞ்சத்தின் வரலாறு) Vigyan Prasar (VP) Tamil , Sep 2022		230/-
14.	P. Sasikumar		

	உடைக்காமல் என்னைக் கண்டுபிடி		175/-
	விசம்பு பதிப்பகம்		
	Tamil , Jan 2023		

15.	P. Sasikumar		35/-
	மிதிவண்டி		
	விசம்பு பதிப்பகம் Tamil , June 2023		
16.	P. Sasikumar		35/-
	விமானம்		
	விசம்பு பதிப்பகம் Tamil , June 2023		
17.	P. Sasikumar		35/-
	ஏவூர்தி		
	விசம்பு பதிப்பகம் Tamil , June 2023		
18.	P. Sasikumar		35/-
	கப்பல்		
	விசம்பு பதிப்பகம் Tamil , June 2023		
19.	P. Sasikumar		35/-
	தொடர்வண்டி		
	விசம்பு பதிப்பகம் Tamil , June 2023		
20.	Kasturi Venkateswaran, P. Sasikumar		600/-
	அதல பாதாளம் முதல் ஆகாயம் வரை		
	எழிலினி பதிப்பகம் Tamil , June 2023		

Journal publications:

1. Aravind Jithin A. J., S. K. Panigrahi, **Sasikumar. P.**, K. Shreedhar Rao, Krishnakumar G., 'Synergetic effects of silica fibre and nano-silica particles on thermophysical and ablative properties of hybrid silica phenolic ablative nanocomposite for high-temperature applications', (Submitted).
2. Aravind Jithin A. J., S. K. Panigrahi, **Sasikumar. P.**, K. Shreedhar Rao, Krishnakumar G., 'Ablative properties, thermal stability, and compressive behaviour of hybrid silica phenolic ablative composites', Journal of Polymer Degradation and Stability, Volume 203, September 2022.
3. Aravind Jithin AJ., SK. Panigrahi, **Sasikumar P.**, K. Shreedhar Rao, Shabeeb Ali TK., Krishnakumar G., 'Thermophysical properties of hybrid silica phenolic ablative composite: Theoretical and

experimental analysis', Journal of Polymer Composites, Volume 43, Issue 10 / 7044-7061, October 2022.

4. **Sasikumar P**, Suresh R and S Gupta, Stochastic model order reduction in uncertainty quantification of composite structures. *Composite Structures*, 2015; 128:21–34.
5. **Sasikumar P**, A Venketeswaran, Suresh R and S Gupta, A data driven polynomial chaos based approach for stochastic analysis of CFRP laminated composite plates. *Composite Structures*, 2015;125:212–227.
6. **Sasikumar P**, Suresh R, Vijayaghosh PK and S Gupta, Experimental characterization of random field models for CFRP composite panels. *Composite Structures*, 2015; 120:451-471 .
7. **Sasikumar P**, Suresh R and Sayan Gupta, Analysis of CFRP Laminated plates with Spatially Varying Non-Gaussian Inhomogeneities using SFEM. *Composite Structures* 2014; 112:308-326.
8. **Sasikumar P**, Suresh R and Sayan Gupta, Stochastic Finite Element Analysis of Layered Composite Beams with Spatially Varying Non-Gaussian Inhomogeneities, *Acta Mech.* 2014; 225:1503–1522.
9. **P.Sasikumar**, PSS Prasad, Reliability optimization of complex systems using genetic algorithm, *National journal of technology*, ISSN-0973-1334, 2006,4 (2):67-72.

Conference publications:

1. **P.Sasikumar**, PK Vijayaghosh, SS Manna and B Valsa, Quantitative Assessment of Aerospace Components for Risk Analysis, *Asset Integrity Management (AIM 2017)*, New Delhi,18-19 of Aug 2017.
2. **P Sasikumar**, PK Vijayaghosh, Uncertainty Quantification of Hydroclave Cured Silica Phenolic Composite Materials, 14th ISAMPE National Conference on Composites (INCCOM-14), Hyderabad January 22-23, 2016.
3. **Sasikumar P**, Suresh R and S Gupta, Failure probability of laminated composite beams in flexure: SFEM predictions and experimental validation. *ISAMPE National Conference on Composite*, INCCOM-13, Trivandrum, 14-15 November, (2014).
4. A. Venketeswaran, **P. Sasikumar** and S. Gupta, A multi-scale approach for uncertainty quantification of layered composite beams. MA04, ICOSAR, New York, June 16-20,2013
5. **Sasikumar P**, Suresh R, Sayan Gupta and Vijayaghosh PK, Stochastic Modelling Of Uncertainties In Layered Composites,4th international conference on recent advances in composite materials ICRACM-2013,OP-70,Goa,18-21 Feb 2013
6. **Sasikumar P**, Suresh R and Sayan Gupta, A Stochastic Finite Element Approach to Failure Probability Analysis of Laminated Composite Beam, *ISAMPE National Conference on Composites – INCCOM 10*,Pune, November 18-19,2011
7. **P.Sasikumar**, PSS Prasad, Reliability optimization of series parallel system using genetic algorithm, *Advances in Materials and Manufacturing Technology CAMMT 2004* at Indian Institute of Technology, Madras. April 2, 2004.
8. **P.Sasikumar**, PSS Prasad, Reliability Prediction of Automobile Cluster,National Conference on Challenges in Achieving Global Quality CAGQ 2004, Thiagarajar College of Engineering, May 24-25, 2004.