Dr. Mathew John



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Dept. of Mechanical Engineering
College of Engineering Trivandrum
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Education:

	Specialization	*Institute / University*
Ph.D	Machine Design	IIT Madras
M. Tech	Mechanical Design	IIT Madras
B. Tech	Mechanical stream Automobile Engg.	University of Kerala

(B.Tech University 4th Position)

Research Areas: Research Guide - approved by APJ Abdul Kalam Technological University

- Composite Materials/Structures
- Fracture Mechanics, Fatigue and Failure Analysis
- Design of Machine Elements, Product Design
- Mechanics of Materials, Material Characterization

Professional Experience:

- **2022-** *till date*
  Professor *(CAS)* in Mechanical Engineering
  College of Engineering Trivandrum

- **2019- 2022**
  Associate Professor (*CAS)* in Mechanical Engineering,
  Govt. Engineering College Barton Hill, Thiruvananthapuram

- **2006- 2019**
  Assistant Professor in Mechanical Engineering
  Govt. Engineering Colleges under Directorate of Technical Education, Kerala

- **2005 -2006**
  Jr. Engineer, SQAE (EE), DGQA, Ministry of Defence, Govt. of India

Membership in Professional Bodies:

Srl. No	*Professional Body*	*Year of Registration*	*Life Membership Number*
1	ISTE	2012	LM-80772
2	InSIS	2016	LM-2016028
3	SFA	2018	FLM-SFA-0873
4	ASME	2023	103765492

FDP/ STTP Courses organised:

- ***Pressure Vessels and Piping,*** 09 -13 May 2022, TEQIP-II sponsored STTP organized at Govt. Engineering College Barton Hill, Thiruvananthapuram
- ***Research Methodology for Engineers***, 23-27 June 2014, TEQIP-II sponsored STTP organized at Govt. Engineering College Barton Hill, Thiruvananthapuram.
- Certificate course on ***Piping Engineering***, June 05-19, 2013 organized under CCEK at Govt. Engineering College Barton Hill, Thiruvananthapuram.

FDP/STTP/Workshops attended: 30 Nos.

Conferences attended for paper presentation:

- International Conference on Reliability, Safety and Hazard (ICRESH-2019*)* organised by BARC and IIT Madras, January 11-13, 2019 at **IIT Madras**, Chennai.
- Second International Conference On Structural Integrity, Organised by IGCAR and Society for Failure Analysis held during December 14-17, 2018 at **IIT Madras**.
- Indo Japan Bilateral Symposium on Futuristic Materials & Manufacturing (IJBSFMM2018) – held during 16-17 July 2018 at **IIT Madras**, Chennai, India.
- 3rd International Conference on Composite Materials and Material Engineering (ICCMME 2018), 26-28 Jan 2018 at **National University of Singapore**, Singapore.
- International Conference on Advances in Materials & Processing: Challenges & Opportunities (AMPCO-2017) , 30 Nov- 02 Dec 2017 at **IIT Roorkee**, India
- Participated as delegate (InSIS Life Member) in the First Structural Integrity Conference and Exhibition (SICE 2016) held at Bangalore from 04-06 July 2016 organized by **Indian Structural Integrity Society (InSIS), IIT Madras and IISc Bangalore.**
- ASME International Mechanical Engineering Congress &Exposition IMECE 2012, Houston, Texas, USA

Publications (*Refereed International Journals/Book chapters*)

- **Manu Mohan Vijayamohanan, Bindu Kumar Karthikeyan, Mathew John**, (2024) An investigation into the joint performance of interference fit rivets and failure analysis of aircraft fuselage skin in aerospace applications, *Journal of the Brazilian Society of Mechanical Sciences and Engineering* (2024) 46:1 https://doi.org/10.1007/s40430-023-04588-x
- **Raghu V. Prakash, Mathew John** and **Michele Carboni A.,** (2020) Estimation of damage due to fatigue, impact loading in CFRP laminates through Multi-sampling image analysis technique. *In book: Reliability, Safety and Hazard Assessment for Risk-Based Technologies,* Springer Publication, DOI: 10.1007/978-981-13-9008-1_32
- **Raghu V. Prakash** and **Mathew John, (2019)** Post- Impact Fatigue Damage Analysis of Quasi Isotropic CFRP Laminates through Infrared Thermography, *Journal of Fracture and Structural Integrity* (*Frattura ed Integrità Strutturale*), 49 (2019) 536-546; DOI: 10.3221/IGF-ESIS.49.50.
- **Mathew John** and **Raghu V. Prakash,** (2018) Quantification of Fatigue Damage in Carbon Fiber Composite Laminates through Image Processing, *Materials Today Proceedings, Elsevier*, ISSN: 2214-7853, 5, pp. 16995-17005. DOI: 10.1016/j.matpr.2018.04.104.

- **Mathew John** and **Raghu V. Prakash**, (2018) Void Content Measurement in Fiber Reinforced Plastic Composites by X-ray Computed Tomography, *Materials Science Forum*, ISSN: 1662-9752, Vol. 928, pp. 38-44. DOI: 10.4028/www.scientific.net/MSF.928.38.
- **Raghu V. Prakash, Mathew John**, **Sudevan D., Andrea Gianneo** and **Michele Carboni**, (2017) Fatigue Studies on Impacted and Unimpacted CFRP Laminates, *ASTM STP Fatigue and Fracture Test Planning, Test Data Acquisitions and Analysis*, http://dx.doi.org/,10.1520/STP1598201600946, ISBN: 978-0-8031-7639-3, **ASTM STP-1598**, pp. 94–118, ASTM International, West Conshohocken, PA.

Publications *(International/National Conferences)*

- **Raghu V. Prakash, Mathew John** and **Michele Carboni,** A multiple-loading single-sample exploratory method of estimating damage in polymer composite materials through analysis of X-ray tomography images, *Proceedings of the ASME **2018** Pressure Vessels and Piping Conference*, Prague, Czech Republic, Volume 6B, DOI:10.1115/PVP2018-84411, 2018.
- **Mathew John** and **Raghu V. Prakash,** Load sequence effect on the damage progression of impacted quasi-isotropic CFRP laminates under variable amplitude loading, Proceedings *of Indian Conference on Applied Mechanics*, MNNIT Allahabad, July **2017** *[ISBN:978-93-80635-28-6]*.
- Jiyas N., **Mathew John**, Bindukumar K., Synthesis and Mechanical Characterisation of Woven Banana and Glass Fibre Reinforced Epoxy Composites, *Proceedings of the National Conference on Emerging Technologies- NCET **2015***, GEC Barton Hill, Thiruvananthapuram, Page Nos. 35-40.
- Akash Rajan, Hari Vijayan V., **Mathew John,** and Jayaraj Kochupillai**,** FE Modeling of Piezoelectrics for Vibration Control of Flexible Structures, *Proceedings of International Congress on Computational Mechanics and Simulation, ICCMS-**2014** Chennai, India, Page Nos-1150 to 1159*, ISBN:978-981-091139-3.
- **Mathew John,** Raghu V. Prakash and Velmurugan R, The Interlaminar Fracture and Mechanical behaviour of Nanoalumina Modified Glass Fiber/Epoxy Composite, *Proceedings of ASME International Mechanical Engineering Congress & Exposition IMECE **2012**, Houston, Texas, USA*, Volume 3, Paper No. IMECE2012-87791, pages 649-656,ISBN 948-0-7918-4519-6.
- **Mathew John,** Raghu V. Prakash and Velmurugan R, The effect of Nano-Alumina addition upon the Mechanical Properties of Glass Fiber/ Epoxy Composite, *Proceedings of International Conference on ' Advancements in Polymeric Materials' APM-2011- Innovations in Materials and Product development at CIPET, Govt. of India, Chennai, March **2011***.